ESPON 2006 Programme Action 1.1.4:

THE SPATIAL EFFECTS OF DEMOGRAPHIC TRENDS AND MIGRATION

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Chapter 0 Executive Summary

0.1 Points of Departure

The point of departure for this summary is the "guidelines for interim report" from 19 June 2003. The recommendation in the guidelines is that the whole report should be disposed in two parts (A and B)with but this have in some cases been very difficult to fulfil as the recommended structure in much follows the Work Package division. Concepts, methodologies and typologies are instead discussed in each chapter according to the special topics that are analysed. Instead the recommended structure is applied to this summary.

The points of departure for this interim report are primarily the tender bid, the first interim report, the instructions in the addendum for the contract for ESPON project 1.1.4 "The spatial effects of demographic trends and migration", the recommendations from the evaluation of the tender ad the first interim report, the Crete guidance paper and the "urgent demands" from the Commission and the "common platform" ESPON, including e.g. integrated database, comparable data, common understanding of different core indicators and trends, and identifying driving forces behind the spatial development in general and the polycentric development in particular. These instructions and recommendations have also been followed as far as possible – things that are missing in this report will be handled in the future reports.

Even if there are no watertight bulkheads between the different Work Packages, the second interim report is written in a way that it shall be possible to read the different chapters and Work Packages separately. This results perhaps in some overlapping and repeated parts but is a necessary evil in this case.

0.2 Part 1 : Preliminary results including policy recommendations

0.2.1 Natural Population Development, Aging and Dependency Rates (WP2)

To draw a European demographic landscape it is necessary to start with the population change. Map 2.1 is showing the areas of demographic growth and decline. One can clearly see the central European growth zones and the areas of declining population at the edges of Europe. This pattern on EU29-level is consequence of low and decreased fertility rates and migratory movements. From the EU29 point of view there seems to be more signs of population concentration and monocentric development than a polycentric one. From a functional urban areas´ point of view there are instead signs of peri-urbanisation and then also signs of a more polycentric urban development in differing parts of Europe.

The European growth zones are affected by surplus of migration. Population growth can only be explained by migration because the balance of birth and death is negative or - in the best cases – equal. In these areas the population dynamic is more and more driven by migration and less by the surplus of birth. They are attractive for migrants in great numbers which fill out all gaps. Some European peripheries are affected by population decline due to a negative migration balance and a surplus of death over birth. These peripheries are not attractive enough for migrants and therefore the population change is to some parts dramatic. In Bul-

garia for example the overlay of a negative migration balance and a significant drop in fertility produce a sharp decline in the population number. The same is true for Baltic regions, for regions in Hungary but also for the northern part of Spain and some peripheral areas in Greece.

More than half of the regions – 52 percent – had a natural population decrease during the second half of the 1990s. 20 percent of the regions were expansive regions in the sense that they experienced a population increase as a consequence of net in-migration. This means that 32 percent were regions where natural population decrease also was combined with net out-migration that accentuated the population decrease in these regions..

In order to estimate the connection between total population change and the "driving forces" – natural population change and net-migration – some regression have been don. From these estimations it can be seen the strongest correlation is between net-migration and total population change. This is not especially surprising as in-migration areas are supposed to be dynamic and expansive while out-migration areas stagnating and retarding. It must, however, be kept in mind that these estimations are no indications of the income level or standard of living in the different regions as most of the migratory movements are domestic and not international. This means that there are large differences in GDP/cap between different regions in EU29 depending of the localisation of the regions. Instead the correlation between net-migration and total population change is rather an illustration of differences in living conditions within the countries than between them. Anyhow, it is obvious that regions that have experienced population increase also are in-migration areas and vice versa even if there are large differences in income and living standard.

The *ageing process* is a consequence of different development patterns. One is the low fertility rates that in the log run will result in a lopsided age structure with a lot of elderly people in the population structure. This is lopsided age structure are also – in many cases – reinforced by out-migration of young people. This means that regions with a high share of elderly people also often are out-migration areas. Lower fertility and higher mobility has thus resulted in a situation where the ageing process more is a function of out-migration of young people than of low fertility. External migratory movements affect the age structure and the ageing process more than natural population change - births and deaths – that also increasingly has been a consequence of in- and out-migration of people in younger and fertile ages.

Even here some regression analyses have been done in order to estimate the connection between ageing and total population change, natural population change and net-migration. From these estimations, there seems to be no correlation at all between ageing and total population change and this is also valid between ageing and net-migration. Between ageing and natural population change there may be some tendency to a correlation even if it is very weak. It should, however, be kept in mind that these regressions cover the whole EU29 with the exception of Cyprus, Malta, Luxemburg, Ireland, Switzerland and some parts of United Kingdom.

In order to check if the pattern changes with a split in other regional categories some other regressions have been done. The above regressions have then been split up with regard to four other regional levels. These are the Northern Europe, Central Europe, southern Europe and the Candidate Countries. The Candidate Countries has also been estimated with regard to the Northern, Central European and the Balkan countries.

The result is that the pattern will be quite different when the above estimations are broken up in new regional ones. Central Europe seems in much to decide the estimations for the whole EU29 as a consequence of the large number of regions. In the Candidate Countries, the Northern and Southern Europe the ageing process seem to have impact on total population change but the impact on the components seems to differ between them. With regard to natural populations change the ageing process seems to be especially significant for the population development in Southern Europe where ageing and low TFR seem to reinforce each other. The impact on net-migration is, however, not so pronounced. It is only in the Nordic countries that there may be a small connection between ageing and net-migration in the sense that ageing regions also are out-migration ones.

With a split of the Candidate Countries it is obvious that the Baltic States are more like Central Europe than Northern Europe. There seems not be any connections at all between ageing on the one side and total and natural population on the other. The same is valid with regard to net-migration. Instead the central European candidate countries remind of the development pattern in Southern Europe and the same is also applicable to the Balkan countries. In both cases it is especially the impact on natural population change that is of importance for the total population development in the ageing regions.

High *dependency rate* implies often that the precondition for economic growth is weaker than a low dependency rate. From a regional point of view this means, *ceteris paribus*, that regions with high dependency rates are in an economic in a more problematic situation than regions with low dependency rates. It can also be shown that there seems to be a connection between regions with high dependency rates and stagnating or depopulation areas. This part will be discussed more in the next interim report.

With regard to *policy implications* and *policy recommendations* in WP2 the following conclusions can be done.

Demographic changes have consequences on regional development that are central for sustainability, competitiveness, cohesion and polycentrism. Regions characterised by depopulation are often associated with stagnation and retardation, while regions that experience a positive population development are regarded as expansive and dynamic. These differing processes have effects on the investment and location pattern, as well as on renewal and expansion of the local or regional economy. The labour force - and especially the highly educated part - has increasingly been a location factor in the post-industrial society with respect to the mobile capital and the 'new' economy. The regional labour markets diverge and new mental maps are created. This could be a hampering factor with regard to localisation of new firms and in-migration in depopulation and ageing areas, but also as a reinforcing factor for in-migration areas, which are considered dynamic and expansive with young inhabitants and many possibilities. In this way, demographic development with population redistribution as a consequence of low TFRs, ageing and out-migration accentuates the polarisation process between various regions – a polarisation that is even more accentuated as a consequence of the drop in TFR especially in out-migration and depopulating areas.

The primary policy implications are that these processes hamper also the development towards a polycentric development in Europe and reinforce the monocentric tendencies at the macro level. From an ESPON point of view where a polycentric and balanced development is desirable, the population redistribution will result in a regional polarisation instead of a balanced and sustainable development. A polycentric development can bee observed within

some expanding areas of Europe where functional urban areas and regional enlargement – larger local labour markets – can be a driving force with regard to population redistribution. These polycentric growth poles may thus hamper a monocentric development in the sense that labour shortage may be solved and the population redistribution will both has a concentrating effect with regard to the whole EU29 and a decentralising effect within the expanding zones.

In order to stimulate a polycentric development in the whole EU29 it is of greatest importance that the gap in living standard and living conditions will be diminished and in the long run even closed. This means that the EU regional development policy – including e.g. infrastructure, education possibilities and agricultural policy - will be of utmost importance even in the future in order to stimulate the preconditions for endogenous growth. From a cohesion point of view this is of great importance if the risk for future concentration and social exclusion shall be avoided. These policy implications will be central ingredients in the next interim report and hopefully also result in more explicit policy recommendations.

0.2.2 Migration within and between the European Countries (WP3)

The preliminary analysis of the migratory balances indicates four main trends and specific geographical and socioeconomic patterns:

(1) The borders are still determining as regards migration flows, for it is inside the national space that the economic or environmental differences still account for contrasted migration balances between regions, while inequalities between two countries, though often more important, do not generate such intense flows. Within the national borders the flows are the most intense and the migration balances contrasts the most significant.

(2) Economic inequalities have always been a determining driving force explaining population movements. During the 60s in Europe the latter could still be explained to a large extent by such imbalances between central and peripheral areas. In each country, metropolises were the most attractive poles which absorbed the workforce from the less developed parts of the country.

However, after the 60s, the simple relation between the migratory process and the economic realities, in particular the standard of living and the job market have the tendency to smoothen out. It would be wrong however to deduct that the economic factors have lost all their explicative values of those big structuring waves which, as we have seen, are the principal components of the intra-European migratory flows at a macro-geographic scale.

(3) Suburbanisation evokes massive internal migratory processes. Another process can be observed in some cases: when the administrative division separates central towns and their peripheries, we can observe that the migratory balance is negative in the centre and positive in the periphery. This process of suburbanisation and peri-urbanisation is active in all Europe but can only be observed where the administrative division permits it.

Population movements between cities and the surrounding countryside are another major evolution of the last decades: while the dense metropolitan areas would still be the most attractive in the 60s, today, at least in the European centre, the relationship has reversed itself between population density and migration balance. In other words, in the dense areas of the European centre, all other things being equal, territories are all the more attractive as they are

less dense (peri-urbanisation and counter-urbanisation process).Environmental factors (sea, sun, and mountains seen as positive factors, industrial landscapes as a repulsive one for instance), along with the lower cost of land, explain this reversed movement.

(4) The rural exodus is still an important part of the European migratory process. Yet the old mechanisms of rural exodus are still a reality in some peripheral parts of Europe such as the centre of Spain, the inner part of Portugal, the North of Scandinavia or a large part of Eastern Europe. In those low density areas, the opposite flows are to weak to make up for the departure of young active people to the dense active areas of the country. With regard to the macro-regional flows, the Scandinavian countries set out a model, which looks like the one generally known in the 60s to most of the European countries. Indeed, the migrations remain dominated by the movements between peripheral regions, in particular in the northern part, towards metropolitan zones. These flows have rather been reinforced in the 90s; they have become more massive in the second half of this decade.

In Eastern Europe the rural urban migration is also of great importance. The metropolitan regions (in all cases mostly the capital) are the attractive regions whereas rural isolated regions (eastern Poland for example) and industrial regions (such as Silesia) have negative migratory balances. But inside metropolitan areas, all centres have a rapid peri-urbanisation process too.

A statistical analysis permits us also to gather together some age classes characterized by the same behaviour: students and young active people (20-29 years old), middle age classes (30-44 years old), and old active people and pensioner (50-64 years old). With this ultimate class, results are subject to caution because of some data of mortality by ages are uncertain. So we publish here only maps for the two first mentioned categories.

The age group 20-29 years is characterized by a very high mobility and by important contrasts especially inside countries. This age group has thus a very different behaviour from the others in terms of the region they are attracted to. In fact, most of the young people are attracted to towns, in particular big university metropolitan areas. This age group is the one that best illustrates intra-national economic contrasts, for example between the North and South of Italy, between the East and West of Germany, or between the North and South of England (the young represent 90 % of the migratory deficit of the North with the South at the end of the nineties). The spatial pattern is also heavily influenced by exterior migrations which mostly concern young population. The young foreigners are attracted to big metropolitan areas because they can find a large range of employments, superior schools and often the presence of fellow country men that help with their integration.

The weaker mobility of the ages 30-44 (in comparison to the 20-29 years old) is illustrated by lower geographical contrasts. The geography of migratory balances of this age group is also very different and in fact is more like the geographic pattern of the total migratory balance: the migrations of this age group are related to those of their children, and has some correlation with older age groups attracted to the same kind of environment. Urban areas are very repulsive to these age groups, which are looking for less expensive space and a more pleasant environment. However, this age group, on the contrary of the young pensioners, is still constrained by the labour market: they settle in the peripheries of the towns, keeping their jobs in the centres or in regions which are economically dynamic and offer high environmental quality (e.g. in the south of France and England, Mediterranean coast of

Spain). It is only in Eastern Europe and Scandinavia that the metropolitan areas are attractive for this age group, even if the centres are avoided.

With regard to *policy implications* and *policy recommendations*, some tendencies in the migratory movement are visible at this stage of the analysis. Different levels in income and education are strong push and pull factors for migratory movement. This is a well known fact, both theoretical and empirical analyses of migration. With regard to young people the urban lifestyle and education possibilities in the metropolitan areas are also pull-factors of great importance. The metropolitan regions are also in-migration areas with regard to foreigners and immigrants. Here there are a lot of signs of ghetto living and segregation that also results in social conflicts and problems.

By reducing the regional and national differences regarding income and education more balanced migratory movements will take place, promoting a more symmetrical economic development in the EU27+2 area. Furthermore, reducing the regional and national differences in income and education will be an effective means to promote a polycentric development and even stimulate symmetrical migration flows even within different age groups and social categories. Regional enlargement with larger local labour markets and functional urban areas will also stimulate a polycentric development where perhaps the infrastructure will be even more important and a precondition fro and a "driving force" in this development

0.2.3 Fertility, Migration and Depopulation (WP4)

The preliminary results from the analysis show that in the Nordic countries there is a pattern where the less central regions have the most negative development and the most central ones the strongest growth. In Germany the most marked regional differentiation is between the western part, with generally positive development, and the former GDR, where the development is mostly negative, except for in the suburban belt around the major cities. In the western part of Germany, in the BeNeLux-countries, Ireland, south England, south and western France and coastal Portugal most of the regions are within the two top quartiles. In Italy the very regions with the most negative tendencies regarding indirect depopulation are to a great extent the ones with the most positive population development in the latter half of the 1990s. The regional population change in east Europe is probably hampered by the lack of a properly functioning housing market, and perhaps also due to a greater share of migrations not being registered than in the rest of EU29. Even so, much of Poland shows a very positive population change, not least the regions around Warsaw and Gdansk and south of Krakow.

The most negative change is found in the least densely populated regions in France, Spain and Portugal, the northern and southern parts of east Europe, and in peripheral regions of Sweden and Finland.

Among the ten percent most declining NUTS 3 regions in the last half of the 1990s the regions of 18 counties are represented. Of the 133 "most declining regions" as many as 64 regions are German, 18 regions are Bulgarian, 8 regions are part of United Kingdom, 6 regions are Romanian and 5 regions are Portuguese. The rest of the 18 countries are represented with 1-4 regions (Austria, Switzerland, Estonia, Spain, Finland, Greece, Hungary, Italy, Latvia, Netherlands, Norway, Poland, and Sweden).

All the countries with very low fertility rate (Sweden, Germany, Switzerland, Austria, Portugal, Slovakia, Greece, Rumania, Poland and Lithuania) have at least some depopulation regions, but no one (per definition) with very strong depopulation. All regions in Lithuania are in the depopulation categories. With the exception of the territories around Leipzig, the whole of the former GDR shows depopulation or strong depopulation, as does the Ruhr area, and territories close to the former GDR border from Lower Saxony to Bavaria.

Very strong depopulation is generally found in territories in the countries with extremely low total fertility rate, Spain, Italy, Slovenia, Bulgaria, Hungary, the Czech Republic, Latvia and Estonia. In the Baltic states, Hungary and Bulgaria, all regions are in one of the three depopulation categories. In Latvia, all the regions have very strong depopulation.

Depopulation is often a function of low fertility rates and natural population change and net out-migration. For many depopulation regions this result in vicious circles that result in eroding preconditions for endogenous growth end development. From a *policy point of view* this is problematic as many of these regions have since long time been out-migration regions and the policy means have not been succeeded to change this negative spiral. These development paths are, however, undesirable from a cohesion point of view even if there can be conflicts with regard to the growth perspective. This dilemma is of utmost importance with regard to the EU cohesion policy and will be discussed more in detail in the next reports from project 1.1.4.

0.2.4 Ageing, Labour Shortage and 'Replacement Migration' (WP5)

In 2000, the United Nations published a report on immigration as a solution to the population ageing and decline. The term *replacement migration* was used and defined as the international migration to be needed to offset declines in the size of population, declines in the population working ages as well as to offset the overall aging of population. The report concluded that Europe would need an immigration of 1,356 million persons for the period 1995-2050 (an average of 25.2 million a year) to maintain the support potential ratio. Such a massive migration has never been observed in the past, and it is unlikely that they will take place in the future. A population decline seems to be inevitable. Furthermore, approximately 75 per cent of the European population in 2050 would be post-1995 immigrants or their descendants.

While increased immigration would certainly have an immediate impact on the working-age population, in the long-term, migration is not a solution to population ageing, because immigrants themselves age, and need be replaced. Furthermore, although a commissioned OECD study refer higher fertility rates of immigrant women, compared to native women, these fertility levels tend to converge in the long term.

The gains of immigration are difficult to calculate, and results depend very much on the used method, the assumptions and in the spatial context. In general, immigration confers small net gains, in terms of per capita output, to the host country. However, the distribution of the benefits is not even and depends, to a large extent, on the qualifications structure of the immigrants and the native workforce. So far the net impact at national levels on government expenditures and revenues seems to have been negligible for most countries.

In brief, we came to the conclusion that migration is and should be considered an important ingredient in a diversified approach to respond to demographic trends in Europe. However, a long-term and integrated view is indispensable here, both because population policy deals

with long time periods (at list one generation) and because uncertainty and lack of planning for the future lead to fear among European citizens.

The local or regional impact of an immigration responding to declines in the population in working ages can differ from the impact on aggregate level. Regions with a very labour intensive sector and population decline need labour to reduce the bottle-necks in the production. Some actors can replace labour for capital, but this is difficult in several labour intensive agriculture tasks, many personal services (e.g. domestic activities, elderly care, etc.) and other unskilled and low-paid jobs which are refused by the native population, who have increasing skills and expectancies.

An increased immigration would certainly have an immediate impact on the working-age population. However, in the long-term, migration is not a solution to population ageing, because immigrants themselves age, and need be replaced. Furthermore, although the fertility rate of immigrant women is higher, compared to native women, the fertility level tends to converge in the long term.

From a *policy implication and policy recommendation* point of view it is obvious that under these circumstances, it can be argued that no complete policy solution is possible. Governments should respond to demographic change and to potential labour shortage with a variety of policies and instruments, depending on the specificities of each particular country or region. Five broad categories of interventions are available:

1. Encouraging higher workforce participation through retraining of the unemployed, discouraging early retirement, increase female activity rate, by making it easier for women to combine work with childcare;
2. Postponing retirement ages, a process facilitated by longer active lives;
3. Improve labour productivity levels, by increasing capital investment and promoting the development innovation both in technology and organization capacity;
4. Immigration policies;
5. Encouraging increase in fertility

0.3 Short presentation of concepts, indicators and methodologies

Project 1.1.4 has in this second interim report primarily worked with demographic concepts as births, deaths, migration, fertility rates, age structure. This means that economic and social variables are not explicitly used in the description and in the analyses up to now. Instead many of the explanations and the analyses are based on differing theories – implicitly and/or explicitly – in order to get a hint of the "driving forces" behind the development patterns. Instead some statistical methods such as regression analyses have been used in order to find the connections between different variables. It should, however, be kept in mind that these methods are more of a descriptive character than of analytical and shall be seen as first steps in the analyses. Despite this restriction the regressions are helpful in producing hypotheses with regard to the analytical process.

Central concepts, indicators and temporal scope are (see Table 0.1):

Table 0.1. Indicators, Scale and Temporal Scope

	Territorial level*	**Temporal scope**
Basic indicators (depopulation process):		
Total population	NUTS 3 (2)	1980/90-1999 (latest)
Area	NUTS 3 (2)	---
Population density	NUTS 3 (2)	1990-1999(latest)
Total area of urban settlements**	NUTS 3 (2)	1999 (latest)
Population in urban settlements**	NUTS 3 (2)	1990-1999 (latest)
Indicators on degree of urbanisation	NUTS 3 (2)	1990-1999 (latest)
In-migration	NUTS 2	1990-1999 (latest)
Out-migration	NUTS 2	1990-1999 (latest)
Net migration	NUTS 2	1990-1999 (latest)
Number of births	NUTS 3	1990-1999 (latest)
Number of deaths	NUTS 3	1990-1999 (latest)
Natural population growth	NUTS 3	1990-1999 (latest)
Population in "functional"/"strategic" age groups	NUTS 3 (2)	1990-1999 (latest)
Total Fertility Rate	NUTS 3 or 2	1990-1999 (latest)
Indicators on relations to spatial structures and change, from activity 1.1.1 and 1.1.2 (polycentrism, FUA, urban/rural types, urban-rural relations; typologies)	Cf. Terms of Reference. General cross-activity indicators and typologies	
Indicators of territorial characteristics/regional context (vulnerability):		
Population density (cf. above)**	NUTS 3 (2)	2000 (latest)
Indicators on relative remoteness, central/peripheral location (natural geography, travelling distances)	NUTS 3 (2)	2000 (latest)
Indicators on degree of rural-urban structure**	NUTS 3 (2)	2000 (latest)
Indicators on causal and effect processes:		
Demographic change rates, components of demographic change, recruitment (net migration/natural growth), population potential/fertility (see above)	NUTS 3	1990-1999 (latest)
Socio-demographic performance ratios (ageing, dependency, sex composition, labour market pressure), educational level**	NUTS 3	1990-1999 (latest)
Indicators on economic and socioeconomic performance (participation rate/employment, unemployment, GDP, labour productivity, sector mix/restructuring, service provision)**	NUTS 3 (2)	1990-1999 (latest)

* EU27+2

** To be assessed and elaborated further in the next reports

0.4 Typologies

With regard to population development six different typologies have been used (see Table 0.2 below).

Table 0.2 Six typologies with regard to total population change, natural population and net-migration 1996-1999.

1	PT>0	PM>0	PN>0	In-migration and young population/"high" TFR
2	PT>0	PM>0	PN<0	In-migration but low fertility rate
3	PT>0	PM<0	PN>0	Out-migration but young population/"high" TFR
4	PT<0	PM<0	PN<0	Out-migration and old population/"low" TFR, depopulation?
5	PT<0	PM>0	PN<0	In-migration and old population/"low" TFR
6	PT<0	PM<0	PN>0	Out-migration but still young population/"high" TFR

PT=Total population development
PM=Net migration
PN=Natural population development

The first three categories have experienced a positive population development in the sense that the population has increased between 1996 and 1999. The most favourable case is the first one where both the natural population change and the net-migration were positive and reinforced each other with the result that population increased. This does not, however, automatically lead to the conclusion that the regions in case 1 have the sharpest population increase – instead this is of course a function of the relation between natural population change and net-migration. In the second case the in-migration effect neutralised the negative effect of natural population change and in the third one the opposite was the fact. In all three cases there has thus been a population growth even if the combinations of the "driving forces" differ.

The same reasoning is valid with respect to the next three cases – any conclusions about the strongest population decline can not be drawn. Instead, only the preconditions about the population development differ. The least favourable case with regard to development and dynamics is case 4 where natural population decrease is reinforced by out-migration that can result in a viscous circle and a negative spiral process. The regions in case 4 can be characterised as depopulation areas as both natural population change and net-migration are negative. Even case 5 and case 6 can perhaps be seen as depopulation areas but here the preconditions are different to some degree as case 5 is an in-migration area even if the natural population change is negative and case 6 a positive natural population change. In the latter case there is, however, an obvious risk that this phenomenon will change in the future as a consequence of out-migration of young people and then the preconditions for a future natural population increase will be eroded. The typologies are presented in Table A1 in the Appendix.

With regard to ageing and its impact on the population development the same kind of typologies are used (see Table 0.3) where the share (%) of people of 65+ are combined with total population change, net-migration and natural population change. This results, thus, in six different typologies where the ageing regions are defined as regions where the share of people of 65+ are 18 percent or more.

Table 0.3. Six typologies with regard to total population change, natural population and net migration 1996-1999 for regions with a high share of elderly people (at least 18 percent of the population 65+).

Type	Total	Mig	Natural	% (N=49)
1	PT>0	PM>0	PN>0	20,5
2	PT>0	PM>0	PN<0	32,6
3	PT>0	PM<0	PN>0	0,0
4	PT<0	PM<0	PN<0	18,4
5	PT<0	PM>0	PN<0	22,4
6	PT<0	PM<0	PN>0	6,1

PT=Total population development
PM=Net migration
PN=Natural population development

As can be seen from Table 3.3 about half the ageing regions experience population increase and half the opposite between 1996 and 1999. A third of the regions are in the category 2; population increase, negative natural population change and in-migration. The opposite is true for the combination total population increase, positive natural population change and out-migration (no observation)**.** The latter demonstrates the fact that ageing has a negative impact on the natural population development partly as a consequence of low fertility rates, partly of the lop-sided age structure that many cases is an effect of out-migration since long time.

Among the regions with population decrease the most observations are found in type 5 – population decrease, in-migration and natural population decrease. This type is probably regions that attract elderly people as a consequence of climate and other amenities that are pull-factors for elderly people. This fact can probably be explained by the fact that the age structure hampers the natural increase.

Type 4 seems on the other hand to be typically depopulation areas. Almost one fifth of the ageing regions are localised in this category. Here a combination of out-migration and natural decrease reinforce the negative population development.

With regard to *depopulation* two kinds of typologies are used. One is based on the main components of population change and the other on direct indicators. For a more thorough and exhaustive discussion, see chapter 5 (WP4) in this report. The first one is based on the same classifications as can be seen in Table 0.2 (see also below).

Table 0.4 Typology Matrix

1	PT>0	PM>0	PN>0
2	PT>0	PM>0	PN<0
3	PT>0	PM<0	PN>0
4	PT<0	PM<0	PN<0
5	PT<0	PM>0	PN<0
6	PT<0	PM<0	PN>0

PT=Total population development
PM=Net migration
PN=Natural population development

The second typology is more refined and based on indicators at different territorial scales. The logic behind this typological sketch - with two alternatives - is that the recent (short-term: 1995-1999, total population change) demographic development of a smaller territorial unit may have different interpretations according to demographic development characteristics of the larger region of which it is a part, and even the demographic situation of the nation as a whole. In our approach the NUTS 3 level represents the smaller territorial units and the NUTS 2 level represents the larger regions. The national Total Fertility Rates (TFR) may indicate dramatically different national demographic scenarios and regional-demographic dynamics, and therefore represent important frame conditions for determining prospective regional demographic change. This indicator has therefore been given some weight in the typological approach.

The approach is "hierarchical" in the sense that population change in small territorial units is "weighted" by the population change situation of the larger region, and in its turn by the national demographic prospects (assuming no migration), indicated by the Total Fertility Rate. Total Fertility Rates at sub-national territorial levels are very hard to come by, and are also relatively unstable figures. Some effort will be made to estimate TFR or a similar indicator at NUTS 2 level, however (cf. WP 2). The logic is illustrated in Table 0.5 below:

Table 0.5 Total fertility rate and recent population decline

NATIONAL	**NUTS 2-regions**	**NUTS 3-units**	**NUMBER OF NUTS 3-units**	**Code**
Total Fertility Rate	Recent population decline	Recent population decline	1995-1999 "Europe 29" (excl. CY & MT)	
<1,3 (Extremely low)	Change rate <0 or share of pop. in declining units >25%	Change rate <0	**122**	111
		ELSE	46	112
	ELSE	Change rate <0	**6**	121
		ELSE	65	122
1,3 – 1,5 (Very low)	Change rate <0 or share of pop. in declining units >25%	Change rate <0	**213**	211
		ELSE	155	212
	ELSE	Change rate <0	**45**	221
		ELSE	295	222
>1,5 (<1,9) (Low)	Change rate <0 or share of pop. in declining units >25%	Change rate <0	**78**	311
		ELSE	61	312
	ELSE	Change rate <0	**15**	321
		ELSE	255	322

The typological exercise may take different paths depending on the relative weights assigned to the influence of the different hierarchical levels. Below, two slightly different examples are given, however both giving a certain emphasis to the national "frame" indicator. The typological sketches are schematically presented, followed by one map for each preliminary typology in chapter 5:

Table 0.6 Preliminary typology, alternative 1 (based on direct indicators of ”depopulation”):

CODE, composit indicator (”typology”) of ”depopulation”	TERRITORIAL LEVEL/Indicator			Code, cf. scheme above
	NATION Total Fertility Rate 1999	NUTS 2 Recent population change/share of population in declining NUTS 3 units >25% of population in NUTS 2 region (1995-1999)	NUTS 3 Recent population change (1995-1999)	
1 (Very strong depopulation)	Extremely low	Decline	Decline	111
2 (Strong depopulation)	Very low	Decline	Decline	211
3 (Depopulation)	Extremely low	Decline	Not decline	112
	Extremely low	Not decline	Decline	121
	Very low	Decline	Not decline	212
	Very low	Not decline	Decline	221
4 (Possible depopulation	Low	Decline	Decline	311
	Low	Decline	Not decline	312
	Low	Not decline	Decline	321
5 (No depopulation)	Extremely low	Not decline	Not decline	122
	Very low	Not decline	Not decline	222
	Low	Not decline	Not decline	322

Table 0.7 Preliminary typology, alternative 2 (Based on direct indicators of ”depopulation”):

CODE, composit indicator (”typology”)	TERRITORIAL LEVEL/Indicator			Code, cf. scheme above
	NATION Total Fertility Rate 1999	NUTS 2 Recent population change/share of population in declining NUTS 3 units > 25% of NUTS 2 population (1995-1999)	NUTS 3 Recent population change (1995-1999)	
1 (Depopulation 1)	Extremely low	Decline	Decline	111
2 (Depopulation 2)	Very low	Decline	Decline	211
3 (Depopulation 3)	Extremely low	Decline	Not decline	112
	Extremely low	Not decline	Decline	121
	Very low	Decline	Not decline	212
	Very low	Not decline	Decline	221
	Low	Decline	Decline	311
4 (No depopulation)	Extremely low	Not decline	Not decline	122
	Very low	Not decline	Not decline	222
	Low	Decline	Not decline	312
	Low	Not decline	Decline	321
	Low	Not decline	Not decline	322

0.5 Indicators and Data

In accordance with the Crete Guidance Paper and Urgent Demands, the focus for the Second Interim Report on the data collection of indicators has been on age structure, natural population change, net migration, total population change and total fertility rate. Most of the data come from the REGIO-database, which provides many demographic data for different entities and years. Nevertheless, complementary data from other sources are needed because the REGIO-database contains a lot of missing data for different entities and years. Besides this, the REGIO-database contains no data for Norway and Switzerland. Basically all data for Cyprus and Malta is missing. To create a relevant data set for this project, by using REGIO data and data from the national statistics offices, other ESPON projects and the BBR, is quite time consuming.

Each partner has informed WP1 and the TPG whether it is possible to obtain the group of variables listed in the First Interim Report – all of them or just some – for the countries of its area of influence. This means that we have created an inventory of the available variables, indicating the level of disaggregation and the years (or time periods) for which the data is available.

We expect that it will, in some cases, be necessary to adjust the requirements somewhat with regard to temporal scope and territorial level. For the stated time periods (temporal scope), the selection of a few "representative" years may prove necessary and satisfactory in relation to the overall purpose. This will have to be determined following a more comprehensive evaluation of data availability and some initial analysis of selected country data. Especially in the area of "causal and effect processes" and "territorial characteristics/regional contexts" a further assessment and elaboration of the indicators and data availability etc. is necessary. In these indicator areas different sources should also be considered, e.g. the OECD Territorial Data Base.

0.6 Application of the Common Platform

Most of the elements (1-7) of the common platform have been carried out in the report.

1. Core indictors have been included even if some data have been missing as a consequence of the lack of data at sub-national territorial levels (NUTS3-level).
2. Typologies have been created with regard to population change (WP2), migration (WP3), depopulation (WP4) and discussions have been started with respect to WP5 (replacement migration). All these typologies will be elaborated further in the next interim report.
3. A lot of maps are presented in the interim report (see "contents of maps").
4. Demographic trends have been visualised and analysed in form of maps, figures and tables for most of the relevant variables.
5. The operational definitions and measurements of policy goals have started and will be more thorough elaborated in next interim report.
6. The same is valid with regard to the assessment and evaluation of the results with reference to policy goals and concepts even if this already has started in this report.
7. We have tried to draw policy relevant conclusions in the report. Even this point will, however, be more pronounced in the next interim report (see chapter 7. "Outlook and time schedule").

0.7 CU Response of the First Interim Report

The CU response of the first interim report has integrated in the second interim report as far as possible.

0.8 Networking Undertaken Towards Other TPG:s

Most frequent contacts and cooperation has been undertaken with Action 1.1.3 "Particular effects of enlargement and beyond for the polycentric spatial tissue". In this project ITPS is participating both as input deliver and as ECP. The cooperation has been concentrated to convergence/divergence topics with special relevance for migratory movements and then a discussion of symmetrical and asymmetrical migratory flows as a measure of integration or polarisation. Input from 1.1.1, 1.1.2 and 3.1 have been taken from their second interim reports. Cooperation with and inputs from these projects will be more accentuated in the next interim report especially with regard to functional urban areas and polycentric development.

0.9 Part 2: Points in the Addendum

The following points are mentioned in the Addendum as central for the second interim report:

(d)) Preliminary results on the basis of available territorial indicators, including European maps showing, as far as possible, the existing spatial structure of population in relation to types of regions (prepared by the other ESPON projects in particular 1.1.1.) as well as problems and dynamics in different parts of the European territory.

This has been done as far as possible. The missing point here is that the types of regions from project 1.1.1 has not yet been integrated as a consequence of the preliminary versions and lack of data.

(e) A first overview on concepts and methodology and possible final results. A fist overview has been done and possible final results are indicated.

(f) Establishment of a new database, so far based on indicators available and with the ability to produce European maps related to polycentrism.

A new database has been established based on available indicators. Maps have been produced but the missing point here is the lack of data with regard to a polycentric urban structure. As mentioned above (point d) this will be done in the next interim report.

(g) A second revised and extended request for further indicators to be collected (mainly) at Eurostat, the EEA, National Statistical Institutes and National Mapping Agencies.

This has been done as far as possible within the second interim report. New indicators will be developed and gathered and old ones will be upgraded in the next reports.

Chapter 1 Introduction

The points of departure for this interim report are primarily the tender bid, the first interim report, the instructions in the addendum for the contract for ESPON project 1.1.4 "The spatial effects of demographic trends and migration", the recommendations from the evaluation of the tender ad the first interim report, the Crete guidance paper and the "urgent demands" from the Commission and the "common platform" ESPON, including e.g. integrated database, comparable data, common understanding of different core indicators and trends, and identifying driving forces behind the spatial development in general and the polycentric development in particular. These instructions and recommendations have also been followed as far as possible – things that are missing in this will be handled with in the future reports.

Even if there are no watertight bulkheads between the different Work Packages, the second interim report is written in a way that it shall be possible to read the different chapters and Work Packages separately. This results perhaps in some overlapping and repeated parts but is a necessary evil in this case.

1.1 Brief overview of Work Packages

Below follows a short description of the content in the different Work Packages that shall be carried out and analysed in the study "The spatial effects of demographic trends and migration". These WPs will be carried out in close contact with other ESPON project and especially then with 1.1.1, 1.1.2, 1.1.3 and 3.1. Some of these topics have been analysed and dealt with in this second interim report. The missing points will be integrated in the third interim report and – of course – in the final report.

WP1 Data, indicators and concepts

1. Specification and agreement of relevant definitions and indicators (common demographic data, explanatory variables)
2. Agreement on methods, sources and timing of data collection
3. Develop/employ map-making procedures
4. European wide typologies of regions and cities according to demographic development

WP2 Natural Population Development and Ageing

1. Demographic processes behind ageing and regional demographic polarisation (esp. components explaining natural population development)
2. Fluctuations (and correlates of fluctuations) in birth/fertility rates
3. Impacts of point 2 on spatial demographic development
4. Impacts of ageing on reproductive and economic development of regions
5. Relevance of gender and age structures
6. Relevance of demographic cycles/waves
7. Scenarios of spatial development

WP3 Migration within and between European Regions

1. Determinant factors, e.g. different level policies (on migration/population movements).

2. Internal migration and spatial development/relations
3. Age, skills, education: Accentuated polarization?
4. Effects of EU enlargement (east-west migration)
5. Immigration from outside EU
6. Implications of growing regions for policy/planning
7. Marginalisation/ghetto formation
8. Scenarios based on changing migration patterns

WP4 Fertility, Migration and Depopulation

1. The concept and phenomenon of 'depopulation' – dimensions, dynamics, implications
2. Crude picture of the geography and principal features of 'depopulation' processes in EU+
3. Identify and evaluate different demographic determinants and dynamics of 'depopulation', and their implications
4. Typological approach to analysis of variation in determinants, context/vulnerability, effects/implications, possible policy responses
5. Scenarios based on a few selected type-areas

WP5 Ageing, Labour Shortage and Replacement Migration

1. Ageing trends in EU regional populations (cf. WP2, WP3, WP4)
2. Needs and actual/potential imbalances in the labour market
3. Geography of/regional disparities in development of labour market needs and ageing
4. Migration of skilled persons from east to west
5. Regional effects of "replacement" (peripheral regions, modifying ageing process)
6. Scenarios/policy issues

WP6 Policy Implications and Policy Recommendations
Point of departure: the ESDP document will be in focus when the policy implications and policy recommendations will be written. This is valid not only for WP6 – the policy orientations of ESDP will have high priority even in the other WPs.

1.2 Labour division within project 1.1.4

Below is a schematic representation of the analytical project organisation or the Work Packages. It should be kept in mind that there are no watertight bulkheads between the six Work Packages. Instead, all Work Packages are designed to provide specific feedback to one another throughout the whole project in order to guarantee a successful fulfilment. The organisation of the different Work Packages is shown in the table below.

Table 1.1 The organisation of the different Work Packages

WP0: Management and administration	WP leader: ITPS
WP1: Data gathering, indicators and conceptualisation	WP Leader: ITPS Central role: ULB Inputs: All partners
WP2: Natural population development and ageing	WP Leader: ITPS Central role: NIBR Input: All partners
WP3: Migration within and between European countries	WP Leader: ULB Central role: University d'Annunzio, University of Vienna, VATI (especially, candidate countries) Inputs: All partners
WP4: Fertility, migration and depopulation	WP Leader: NIBR Central role: CEG Inputs: All partners
WP5: Ageing, labour shortage and 'replacement migration'	WP Leader: CEG Central role: University d'Annunzio Inputs: All partners
WP6: Population, migration and spatial development – policy recommendations. Final report	WP Leader: ITPS Inputs: All partners

Chapter 2 Indicators and Data (WP1)

2.1 Objectives

The aim of WP1 is to identify and gather existing indicators, propose new indicators, collect data and develop map-making methods to measure and display the state, trends and impacts of the developments referred above. A compilation of National Studies on demographic trends with a European focus is also an aim of WP1.

2.2 List of Indicators and Indicator Area

Most of the data come from the REGIO-database, which provides many demographic data for different entities and years. Nevertheless, complementary data from other sources are needed because the REGIO-database contains a lot of missing data for different entities and years. Besides this, the REGIO-database contains no data for Norway and Switzerland. Basically all data for Cyprus and Malta is missing. To create a relevant data set for this project, by using REGIO data and data from the national statistics offices, other ESPON projects and the BBR, is quite time consuming.

Each partner has informed WP1 and the TPG whether it is possible to obtain the group of variables listed in the First Interim Report – all of them or just some – for the countries of its area of influence. This means that we have created an inventory of the available variables, indicating the level of disaggregation and the years (or time periods) for which the data is available.

A simple scheme for the indicators, regional level and temporal scope was presented in the First Interim Report. Since the First Interim Report we have started to work after this scheme. Table 1 summarises the work on indicators, scale and temporal scope at time being. However, we are well aware of the fact that further adjustments, assessments and elaborations are needed.

Especially in the area of "causal and effect processes" and "territorial characteristics/regional contexts" a further assessment and elaboration of the indicators and data availability etc. is necessary. In these indicator areas different sources should also be considered, e.g. the OECD Territorial Data Base.

We expect that it will, in some cases, be necessary to adjust the requirements somewhat with regard to temporal scope and territorial level. For the stated time periods (temporal scope), the selection of a few "representative" years may prove necessary and satisfactory in relation to the overall purpose. This will have to be determined following a more comprehensive evaluation of data availability and some initial analysis of selected country data.

Table 2.1: Indicators, Scale and Temporal Scope

	Territorial level*	Temporal scope
Basic indicators (depopulation process):		
Total population	NUTS 3 (2)	1980/90-1999 (latest)
Area	NUTS 3 (2)	---
Population density	NUTS 3 (2)	1990-1999(latest)
Total area of urban settlements	NUTS 3 (2)	1999 (latest)
Population in urban settlements	NUTS 3 (2)	1990-1999 (latest)
Indicators on degree of urbanisation	NUTS 3 (2)	1990-1999 (latest)
In-migration	NUTS 2	1990-1999 (latest)
Out-migration	NUTS 2	1990-1999 (latest)
Net migration	NUTS 2	1990-1999 (latest)
Number of births	NUTS 3	1990-1999 (latest)
Number of deaths	NUTS 3	1990-1999 (latest)
Natural population growth	NUTS 3	1990-1999 (latest)
Population in "functional"/"strategic" age groups	NUTS 3 (2)	1990-1999 (latest)
Total Fertility Rate	NUTS 3 or 2	1990-1999 (latest)
Indicators on relations to spatial structures and change, from activity 1.1.1 and 1.1.2 (polycentrism, FUA, urban/rural types, urban-rural relations; typologies)	Cf. Terms of Reference. General cross-activity indicators and typologies	
Indicators of territorial characteristics/regional context (vulnerability):		
Population density (cf. above)	NUTS 3 (2)	2000 (latest)
Indicators on relative remoteness, central/peripheral location (natural geography, travelling distances)	NUTS 3 (2)	2000 (latest)
Indicators on degree of rural-urban structure	NUTS 3 (2)	2000 (latest)
Indicators on causal and effect processes:		
Demographic change rates, components of demographic change, recruitment (net migration/natural growth), population potential/fertility (see above)	NUTS 3	1990-1999 (latest)
Socio-demographic performance ratios (ageing, dependency, sex composition, labour market pressure), educational level**	NUTS 3	1990-1999 (latest)
Indicators on economic and socioeconomic performance (participation rate/employment, unemployment, GDP, labour productivity, sector mix/restructuring, service provision)***	NUTS 3 (2)	1990-1999 (latest)

* EU27+2

** To be assessed and elaborated further

*** To be assessed and elaborated further

2.3 Results

In accordance with the Crete Guidance Paper and Urgent Demands, WP1 has focussed on the data collection of indicators regarding age structure, natural population change, net migration, total population change and total fertility rate.

2.3.1 Population and Area

The data for population and area in the REGIO-database contain information about the population by sex and age on 1 January each year. For the present 15 EU member countries

the REGIO-database claims to have data at NUTS2-level for the period 1980-2001, and for the candidate countries (all except Cyprus and Malta) the REGIO-database claims to have data at NUTS2- and NUTS3-level for the period 1990-2001. In reality there is a lot of missing data for different entities and years for the present member countries as well as for the candidate countries. Complementary data from other sources are needed to create an appropriate set of data. It will not be possible for us to create a data set for all EU29 countries at the NUTS3-level. This is has also been a huge and time-consuming problem in the data gathering process with regard to this interim report – a problem that will persist during the whole problem but must be solved in order to the challenges in Table 2.1.

The missing data for different age-groups result in difficulties to calculate *the share of the population over the age of 80*. We find it especially troublesome that the REGIO-database as well as most of the national statistics offices in the candidate countries only publish an age-group of 70+ years: it is impossible for us to calculate the share of the total population that is over the age of 80 due to this.

2.3.2 Population Change

The data for population change contain information on births, deaths, and deaths by age. For the present 15 EU member countries the REGIO-database claims to have data at NUTS2- and NUTS3-level for the period 1977-2000, and for the 12 candidate countries at NUTS2- and NUTS3-level for the period 1989-2000. In reality there is a lot of missing data for different entities and years. Complementary data from other sources are needed to create an appropriate set of data.

Calculations for the *natural population change* (births and deaths) have been made at NUTS3-level 1990, 1995 and 1999 for most countries in the EU29 area.[1] For the natural population development 1996-1999 the data for NUTS3 regions is complete.

Calculations for the *total population change* have been made at NUTS3-level 1990, 1995 and 1999 for most countries in the EU29 area.[2] For the total population development 1996-1999 the data for NUTS3 regions is complete.

In the case of *total fertility rate* (TFR) there is no data at all on the TFR in the REGIO-database. Some national statistics offices have calculated the TFR at NUTS2- and NUTS3-levels, others have not. For most of the present 15 EU members, data on the number of births by the age of the mother at NUTS2 and NUTS3 is available in the REGIO-database, as well as the number of females by age at NUTS2 and NUTS3. This enables us to calculate the TFR for these countries. Only a few of the national statistics offices in the candidate countries have calculated TFR at NUTS2- or NUTS3-levels. For many of the candidate countries (except Cyprus and Malta) relevant data from the national statistics offices is missing to enable us to calculate the TFR.[3]

[1] Missing data for entities and years for Norway, Switzerland, Germany, Ireland, Italy and Slovakia on births and deaths.
[2] Missing data for entities and years for Norway, Switzerland, Germany, Ireland, Italy and Slovakia on births and deaths.
[3] At the moment we have no data on TFR on NUTS2 or NUTS3-level for Estonia, Latvia, Lithuania, Hungary, Slovakia and Slovenia. It is possibly to buy data from the national statistics office of Bulgaria.

2.3.3 Migration

2.3.3.1 Domestic Migration

The migration statistics are troublesome. The REGIO-database contain information on internal migration for 11 present EU member countries (France, Greece, Ireland and Luxembourg excluded) and 7 candidate countries (Bulgaria, Cyprus, Latvia, Lithuania and Malta excluded) at NUTS2-level by age and sex for the period 1990-1999. This data enables us to detect the internal migration flows between NUTS2-regions. As a consequence of the huge amounts of flows any matrices between regions have not been estimated in this report.

At the moment we have complete data for domestic migration, with no data missing for entities or years, for 6 present EU member[4] countries and 3 candidate countries[5] at NUTS2-level for the 1990's. We have data with no missing entities, but missing years, for 3 present member countries[6], and 3 candidate countries at NUTS2-level.[7] Three countries contain incomplete data (data is missing for both entities and years)[8], and 11 countries have no available information at all in the REGIO-database.

However, there is a lot of missing data for different entities and years. Furthermore, the NUTS2-scale is too large: we are convinced that large migration flows take place below the NUTS2-level, but, unfortunately, it is impossible for us to detect all of them. Data at NUTS3-level from some national statistics offices confirm this.

2.3.3.2 International Migration

The migration statistics on international migration contain data for 13 present EU member countries (France and Luxembourg excluded) and 8 candidate countries (Bulgaria, Cyprus, Latvia, Malta, Poland and Slovenia) at NUTS2-level by age and sex for the period 1990-2000.

Beside missing data for different entities and years, this data do not contain any information from which NUTS2-region of another EU29 country an immigrant comes from or if it is immigrant from outside the EU29 area. The same problem is present for emigrants: we know how many people at NUTS2-level who emigrated during the year, but not the place of destination. This is a restriction especially in estimating changed flows and then also with regard to analyses of the convergence/divergence processes within EU29. This is a problem that also has been discussed with the members in the "enlargement project", ESPON action 1.1.3.

At the moment we have complete data for international migration, with no data missing for entities or years, for 5 present EU member[9] countries and 2 candidate countries[10] at NUTS2-level for the 1990's. We have data with no missing entities, but missing years, for 5 present member countries[11], and 4 candidate countries at NUTS2-level.[12] One country contains

[4] Belgium, Spain, Netherlands, Finland and Sweden at NUTS2-level, and Denmark at NUTS3.
[5] Estonia, Hungary and Poland.
[6] Italy, Austria (NUTS3) and Portugal.
[7] Czech Republic, Slovakia (2000) and Romania (2000).
[8] Germany, United Kingdom and Slovenia.
[9] Denmark (NUTS3), Greece, Spain, Netherlands, and Finland.
[10] Estonia (NUTS3) and Hungary.
[11] Belgium, Germany, Italy, Austria (NUTS3) and Portugal.
[12] Czech Republic, Latvia, Slovakia (2000) and Romania (2000).

incomplete data (data is missing for both entities and years)[13], and 12 countries have no available information at all in the REGIO-database.

Without any data on the place of origin and the place of destination it is very difficult to distinguish an intra-EU29 migrant from an extra-EU29 migrant, and if the migratory movements are caused by labour migration between the countries of EU29 area or by refugees and return migration by refugees. Without information on the place of origin and the place of destination it will be impossible to analyse the international migration flows.

2.3.3.3 Net Migration Rate

Without the net migration rate for all entities and years it is difficult to calculate the total population change. However, there is a way to estimate the net migration. The methodology used to make an assessment of the migration balances at the regional level (NUTS2 and/or NUTS3) is the natural movement method. The principle is simple: one calculates the difference between, on the one hand, population at the end and at the beginning of a period, and the natural population development (births minus deaths) during that very period, on the other hand. This method provides us with the *net migration rate* on NUTS2 and NUTS3-levels, and this method is relatively safe as the statistics on these three indicators are globally reliable.

So far, we have calculated the net migration rate for all NUTS3-regions in the EU29 area during 1996-1999.

2.3.4 Regions and Scale

The NUTS2 division for Switzerland has changed between 1995 and 1999, something which causes problems e.g. when making maps. In Norway an official NUTS2 division was made in 1994, but seldom used. Instead, the official Norwegian county classification of 7 regions is used.[14] Again, this is causing problems in map-making. In this interim report we have chosen only to publish data for Norway and Switzerland which we know will not cause any problems.

In some countries data at the national statistics offices are only available at NUTS5-level. Since we do not know what NUTS5 areas which belong to every NUTS3, the data is of limited use at the moment.

2.4 Outlook and further work

At present we will try to collect data for the missing entities and years from the national statistics offices, BBR, other ESPON projects, OECD data etc. This is a very time consuming work.

The collection of data for the specified indicators, regional level and temporal scope will continue. We expect that further adjustments, assessments and elaborations are needed before we can fill Table 2.1 with complete data.

[13] Sweden.
[14] The offical Norwegian name for this is ”Landsdelsinndelningen” (REGINN2).

Chapter 3 Natural Population Development, Ageing and Dependency Ratios (WP2)

3.1 Objectives

The main objective in WP2 is the description of the variety of the demographic situation in Europe differentiated by regions. WP2 draws the complex demographic landscape of Europe with areas of stagnation and depopulation on the one side and population growth on the other side. But WP2 will not only describe these landscape it will also try to explain the different demographic situations by external economical, political and geographical factors.

The pure and general demographic changes have consequences on the regional development in various ways. Regions characterised by depopulation are often associated with stagnation and retardation, while regions that experience a positive population development are regarded as expansive and dynamic. These differing processes have effects on the investment and location pattern, as well as on renewal and expansion of the local or regional economy. The labour force – and especially the highly educated part – has increasingly been a location factor in the post-industrial society with respect to the mobile capital and the `new´ economy. The regional labour markets diverge and new mental maps are created. This could be a hampering factor with regards to localisation of new firms and in-migration in depopulation and ageing areas, but also as a reinforcing factor for in-migration areas, which are considered dynamic and expansive with young inhabitants and many possibilities. In this way, demographic development with population redistribution as one result accentuates the polarisation process between various regions – a polarisation that is even more accentuated as a consequence of the drop in TFR especially in out-migration and depopulating areas.

3.2 Concepts, Definition and Theoretical Approach

The WP2 “Natural population development, ageing and dependency ratios" is more closely related on the principal equation in demography - linking birth, death and migration – than the other work packages.[15] WP2 put the natural population development (the development of births and deaths), ageing and dependency rates in focus and is therefore in the core area of regional demography located.

Birth, death and migration are analysed in demography by different theories and models. A unified and general theory of these demographic processes does not exist. Although the theoretical approaches to birth, death and migration are quite different in terms of explanatory power and nomothetic value, all of them are important to select indicators and to argue for certain analyses. In the pre-industrial society with small migratory movements the population increase was predominantly a function of the natural population increase. Today, with higher mobility, low fertility rates, and in many cases natural population decrease the population development with regard to size and structure have increasingly been dependent of external migratory movements.

[15] The population in a certain time and region is equal to the population in a time period before plus the birth and the immigrants within this period minus death and the emigrants.

The development of birth is the central explanandum in the model of the fertility decline and this is essential in the model of the demographic transition.[16] It argues that with the change of the economic structure from an agrarian to an industrial and post-industrial society, the value of having many children has changed fundamentally. In a pre-industrial period children were useful and welcome additions to the work force. However in the industrial and post-industrial societies children are cost factors in a twofold way: there are direct costs for schooling and maintaining children up to the time when they leave the common household and there are indirect costs when the mother (in rare cases the father) has to give up their employment to stay at home and to take care of the child. With the ongoing rationalisation process in the modern society, the changing function and societal value of children has become apparent and reduction of births the consequence. Modern contraceptives are instruments not the cause for the reduction of the birth.[17]

The ongoing rationalisation process does not lead to the reduction of fertility only, but also to postpone the first birth. The average age of women having their first baby has increased trendily during the past decades. Women consciously avoid childbearing and 'children-dependency' in young ages in order to improve career possibilities, investment in higher education and a more independent life-style. The rise of the female labour force participation and investment in higher education has resulted in higher family incomes and the also in two contradictory effects with regard to childbearing – one income effect and one price or substitution effect. The income effect should result in higher fertility as households with higher incomes have more money to spend on children than households with lower incomes. The price or substitution effect, however, implies that higher incomes also result in an increase in the relative price of children. This, in its turn, reduces the demand for children and increases the demand for other commodities.[18]

In reality the substitution effect seems to have had a greater impact on childbirth than the income effect, at least during the past decades. Investment in higher education has also a decreasing effect of its own: having invested in a higher education, you are more oriented to capitalise your investment in human capital, even if the return is not as high, *ex post*, as it was supposed to be, *ex ante*. Education and working life should consequently also be included in the utility functions that differ between various categories on the labour market. This also means that the same income increase/decrease or the same income levels have different effects on TFR depending on the satisfaction with the working life.

Another trend factor is the increase of "singles" or one-person households.[19] The proportion of 'singles' or one-person households is significantly higher in the post-industrial than in the industrial and agrarian one – the share of one-person households has increased during the past decades in most parts of Europe. The life-long marriage has dropped during the past decades as a consequence of the rise in divorces. On the other hand, there has been a sharp rise in non-marital cohabitation. This looser relation results also in a rise in the share of 'singles' since many of these relations are not so long-lived as the traditional marital cohabitation. Nevertheless the obvious significant negative correlation between the share of singles and childbirth is not surprising.[20]

[16] See e.g. Leibenstein, 1954, 1957, 1974; Becker, 1960, 1965, 1993; Schultz, 1974; Woods 1982, Schmid 1984, Birg 1996.
[17] See Van de Kaa 1987.
[18] Becker, 1960, 1965, 1993.
[19] The rise in the share of 'singles' is, however, not only an effect of changed values, urbanisation and higher female labour force participation. Instead, much of the rise in the share of 'singles' is a function of the ageing process with its implication on the household structure – there has been a long-term rise especially in the share of widows. This has, however, no consequences for migration and fertility.
[20] This is at least very obvious in Sweden but ought to be valid even in other parts of Europe. In the Swedish case, there are differences between various regions. In metropolitan areas and university regions, the share of "singles" is higher than in industrial or rural areas

Following these theoretical thoughts it is essential to include several indicators in the analyses of WP2 to measure the number of births in a valid manner and to explain it in a theoretically satisfying way. It is necessary to use age-standardised indicators – e.g. TFR – for the level of birth. [21] Other indicators like a CBR (Crude Birth Rate) are sensitive concerning the age structure of mothers. For the number of birth it is essential if the potential mothers are relatively young or old. Therefore CBR could be more affected by the age structure than by fertility. The theoretical construct of a total fertility rate expressing how many children a female will bear in her life is therefore a very useful indicator and will be preferable used in WP2.

Besides the indicators of fertility it is also necessary to measure the social environment to explain regional differences in fertility. The possibility to combine work with maternity is an important factor in lowering the indirect costs of a child. Therefore indicators dealing with childcare infrastructure, the quality of maternity leave or with the possibilities of having a part time job are valid and will – as far as possible - be incorporated in the final report and data base.

The development of death is conceptualised in the model of epidemiological transition, which can be also seen as a part of the model of demographic transition.[22] It explains the very characteristic decline of several diseases (like infectious diseases), the increase of other diseases (like cancer, heart diseases) and the overall decline of mortality. Better nutrition and the improvement of the public infrastructure (water, waste and sewage) were the main factors in the fight against epidemic. The progress in medicine leads to a significant expansion of the life expectancy. In particular, the decline of the infant mortality and death in the first year of a child's life, were essential to explain the increasing life expectancy.

Similar to birth, it is important to define a death rate that eliminates the effect of the age structure. If not, age structure will be measured rather than different mortality in the regions. A crude death rate is therefore not the proper measurement, but the given life expectancy at birth or at a specific age can be used for regional disparities in mortality. To integrate mortality into an explanatory model following the theoretical ideas it is necessary to use relevant indicators like nutrition, lifestyle habits, medical infrastructure and the healthcare system. (If possible, WP2 will in the following reports invest some efforts to prove which variables could be useful and are available in the European statistics).

The third demographic event is migration. In analogy to birth and death, a model of a migration transition was developed.[23] This model describes the significant change of specific migration types but it is a very heuristic model without any explanatory effort. The model of migration transition emphasises the increase or decrease of migration from rural to urban regions, from urban to urban areas, or from urban to rural areas but it avoids linking these migration flows to explanatory variables.

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especially in childbearing ages. The 'single' gap has, however, also diminished during the recent decades as a consequence of the societal transformation in all regions. The fact that rural families always have been larger than urban ones is partly a consequence of a higher share of "singles" in urban areas, especially the metropolitan ones (see e.g. Johansson, 1999).

[21] The total fertility rate is a theoretical measure and is defined as the number of birth related to the number of women in the childbearing ages and is standardised for variances in cohort sizes. TFR is in most cases defined in the following way: $TFR_t = \sum_{x=16}^{49} f_x$ where t = year and x = age. This measure differs thus from the crude birth rate that is defined as the number of births per thousands of total population.

[22] See: Phillips 1994, Rockett 1999

[23] See Zelinsky 1971. The Zelinsky hypothesis of 'mobility transition' states that mobility varies according to the society´s degree of industrialisation and modernisation.

More explanatory power can be attributed to traditional and new approaches in migration theory such as the push-and-pull model, the microeconomics of migration or the migratory system approach including political variables. For the purpose of WP2 the push-and-pull model is useful because it takes into account regional disparities concerning income and employment. In the push-and-pull model the differences in wages and of job opportunities are the decisive factors to explain the size and the direction of interregional migration. Low income and high unemployment are push-factors in a certain region and high income and good employment opportunities act as pull-factors. While the basic is simple, the explanation in reality is complicated. It can be shown that regional disparities are not sufficient to trigger migration. It is necessary that disparities surpass a certain but unknown threshold in order for migration to take place. Additionally it is necessary to introduce further variables like housing prices or purchasing power to judge the possible gain of migration in a correct way. Finally it is necessary to build other explanatory models for migration flows that do not belong to labour migration (e.g. retirement migration, consumption migration, marriage migration, refugee migration).

Conceptualising migration as an empirical phenomenon one has to ask first for a practical definition of migration. Compared to birth and death, migration is a more "unclear phenomenon". Following the international definition, migration is the change of the place of living by crossing national or international borders and with the intention to stay for a minimum time period. It can be measured by using flow statistics (e.g. number of migrants per time period), stock statistics (e.g. number of persons born outside the region) or it can be derived as a residual from the change of the population in two time periods including death and birth (migration balance). In the WP3 the different methods and the availability of data will be discussed in detail.

Migration can be separated into out- and in-migration, or in the case of international migration, into immigration and emigration. In both cases it is useful – simultaneously to the fertility rate – to separate the effect of the age structure from the propensity to migrate. In doing so it is possible to demonstrate regional differences independent from the age structure. Finally it is necessary to imbed the migration variable in a set of explanatory variables which are – following the push-and pull model – mainly economic indicators (unemployment rate, average wages, GDP/cap, labour market segmentation, etc.). Once again in WP3 the different indicators will be discussed in detail.

That the connection between migration and total development is strong is a well-known fact but there are also connections between migration and natural population development as a consequence of the changed female age structure in the out- and in-migration areas. Generally speaking, the changes in the number of births are, as mentioned above, consequences of the development of the birth rates and of the size of the cohorts of childbearing age. Standardised for changes in age-specific fertility rates, large cohorts of childbearing age result in large new cohorts and vice versa.

The differences in the population structure are, thus, not only a function of the differences in fertility rates. It is rather the migratory movements that cause the regional differences in age structure. Migration intensities are highest in ages 20-30, which have differing impacts on in- or out-migration regions. This also means that the "population crisis" can take quite different shapes in various parts of a country or within the EU. In some regions, low fertility rates have traditionally dominated, while in other parts the problems have been connected with out-

migration and lopsided age structures – out-migration of especially younger women. During the 1990s, declining TFR and out-migration has, however, reinforced each other in many European regions and communities resulting in an accentuated population decrease.

The fact that population development affects economic development is well confirmed from many studies and theories.[24] As mentioned above, large cohorts have stronger effects on the development than smaller ones and this phenomenon has a tendency to follow the cohorts over the life cycle. Large cohorts give rise to spin-off effects on the economy from birth to death – from childcare to elderly care and other things in between, e.g. the building and construction cycle. Large cohorts in the ages of 20-30 act also as a reinforcing factor with regard to mobility and migration and then also as fuel and lubricant in the economic machinery. This approach also has similarities with the 'long wave' theories that put demography in focus with regard to the long-term economic development.

The developments in different regions regarding labour market performance, education possibilities and values have impacts on both geographic mobility and birth rates – CBR as well as TFR. The impact on migratory movements is most pronounced in younger ages. Moreover, many of the internal migrants today seem to move for other reasons than labour market ones. These reasons are primarily higher education and changed 'mental maps' among younger people. The consequences are that many regions are drained of younger people. On the other hand, some other regions – metro areas and university towns – gain with regard to these ages where the migration propensities are as highest. This also has impacts on the gender distribution, since younger women have higher migration intensities than men, especially in traditional out-migration and depopulation areas. The shortage of women will moreover have impacts on the marital status in these regions, as a higher share of the women includes those married or living in cohabiting relation. From a demographic point of view, the effects of these inter-regional processes are thus that the gender, marital and age structure are changed in both the out- and in-migration areas.

These factors have impacts on the natural population increase. Even if TFR still is somewhat higher in out-migration areas compared to in-migration ones, the number of women of childbearing age is so small that it is difficult to maintain the lead of births over deaths. The effects of ageing and lop-sided age structure in these areas have also been reinforced by the decline of TFR during the past decades - a decline that has resulted in a TFR that is below the natural reproduction rate in many European regions.

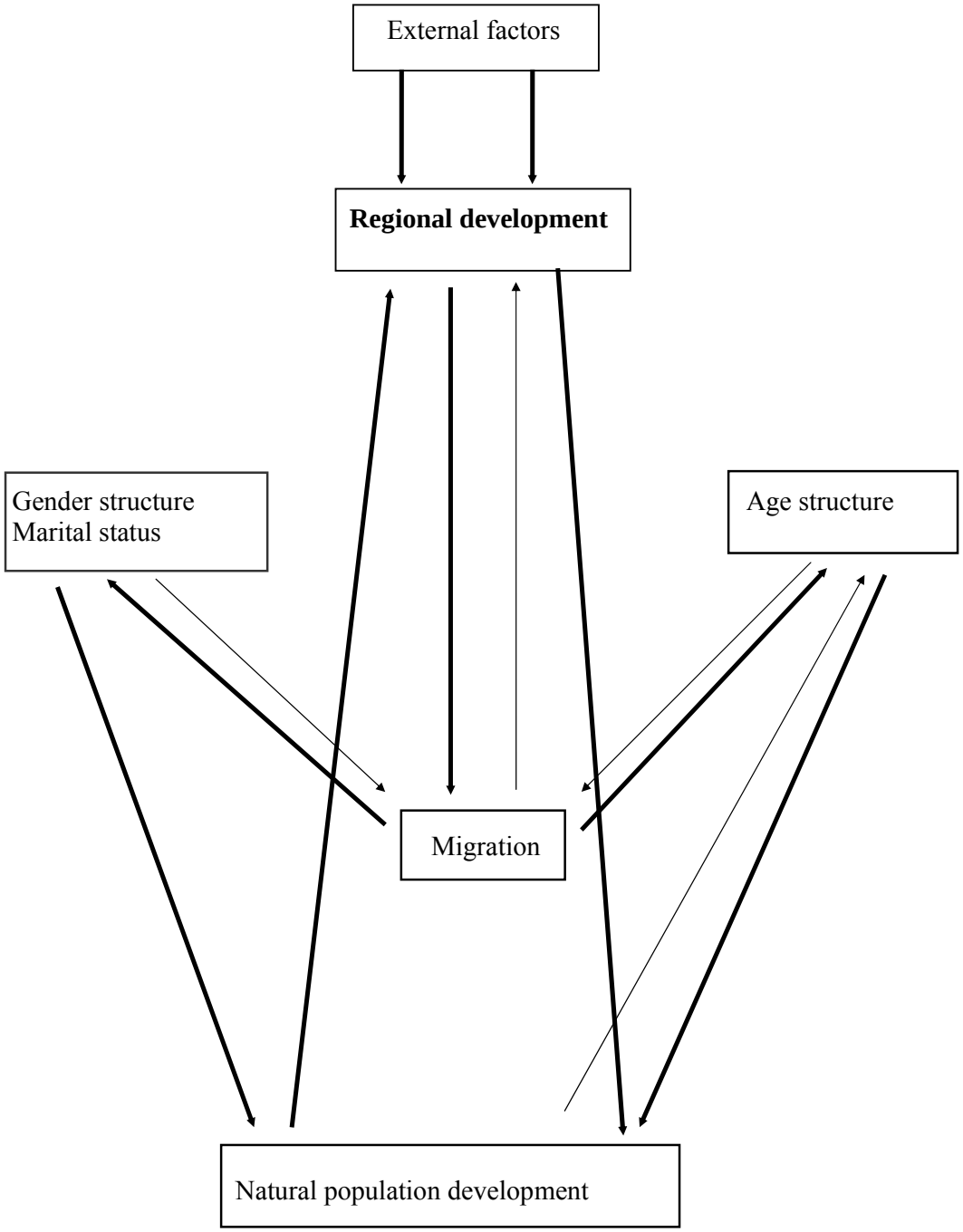
Even if TFR is below the reproduction rate, there are regions, towns and municipalities with a natural population increase – especially then in the metropolitan and big city areas. The reason is not a high TFR – this rather is very low in many of these areas - but rather the fact that the proportion of women of childbearing age are over-represented compared to the other regions as a consequence of in-migration of young people. The beneficial age structure in these areas is, as mentioned above, hampered by the fact that relatively many of the women in childbearing ages are living as 'singles'. Despite this, as mentioned above, there has been a natural population increase in many of these expanding and fast growing regions.

The connections discussed above are illustrated in a schematic way in Figure 3.1 where the impact of migration on age structure and gender distribution is explicitly mentioned and then also the consequences for natural population development. It should be noticed that the processes in Figure 3.1 illustrate both vicious and virtuous circles with regard to regional

[24] See e.g. Hansen, 1939; Myrdal, 1940, Kuznets, 1958, Easterlin 1968, 1980.

development and natural population change. This figure can also be seen – in a simplistic way - as a point of departure for the analyses in the different WPs in the report.

Figure 3.1. A schematic view of connections between demographic change and regional development



3.3 Data and Sources

Most of the data come from the REGIO-database, which provides many demographic data for different entities and years. Nevertheless, complementary data from the national statistics offices are needed because the REGIO-database contains a lot of missing data for different entities and years. Besides this, the REGIO-database contains no data for Norway and Switzerland. Basically all data for Cyprus and Malta is missing. To create a relevant data set for this project, by using REGIO data and data from the national statistics offices, is quite time consuming.

The data for population and area in the REGIO-database contain information about the population by sex and age on 1st January each year. For the present 15 EU member countries the REGIO-database claims to have data at NUTS2-level for the period 1980-2001, and for the candidate countries (all except Cyprus and Malta) the REGIO-database claims to have data at NUTS2- and NUTS3-level for the period 1990-2001. In reality there is a lot of missing data for different entities and years for the present member countries as well as for the candidate countries. Complementary data from the national statistics offices are needed to create an appropriate set of data.

The data for population change contain information on births, deaths, and deaths by age. For the present 15 EU member countries the REGIO-database claims to have data at NUTS2- and NUTS3-level for the period 1977-2000, and for the 10 candidate countries (except Cyprus and Malta) at NUTS2- and NUTS3-level for the period 1989-2000. In reality there is a lot of missing data for different entities and years. Complementary data from the national statistics offices are needed to create an appropriate set of data.

The missing data for different entities and years result in difficulties to calculate e.g. the share of the population over the age of 80. We find it especially troublesome that the REGIO-database as well as most of the national statistics offices in the candidate countries only publish an age-group of 70+ years: it is impossible for us to calculate the share of the total population who is over the age of 80 due to this.

In the case of total fertility rate (TFR) there is no data at all in the REGIO-database. Some national statistics offices have calculated the TFR at NUTS2- and NUTS3-levels, others have not. For some of the present 15 EU members, data on the number of births by the age of the mother at NUTS2 and NUTS3 is available in the REGIO-database, as well as the number of females by age at NUTS2 and NUTS3. This enables us to calculate the TFR for these countries. Only a few of the national statistics offices in the candidate countries have calculated TFR at NUTS2- or NUTS3-levels. For Germany, the national statistics office has no calculations on the TFR at NUTS2- or NUTS3-level, neither any data on the number of births by the age of the mother at NUTS2 and NUTS3 or the number of females by age at NUTS2 and NUTS3. For most of the candidate countries (except Cyprus and Malta!) relevant data from the national statistics offices is missing to enable us to calculate the TFR. If only the last year is missing on NUT2 orNUT3 level TFR is estimated by using the national change rate between e.g. 1995 and 1999. This deviation to the real value will, however, not be especially large if there have not been any exceptional changes in some of the regions.

Furthermore, the NUTS2 division by the REGIO database for some countries (e.g. Norway and Switzerland) differ from the NUTS2 division of the national statistics offices. In some

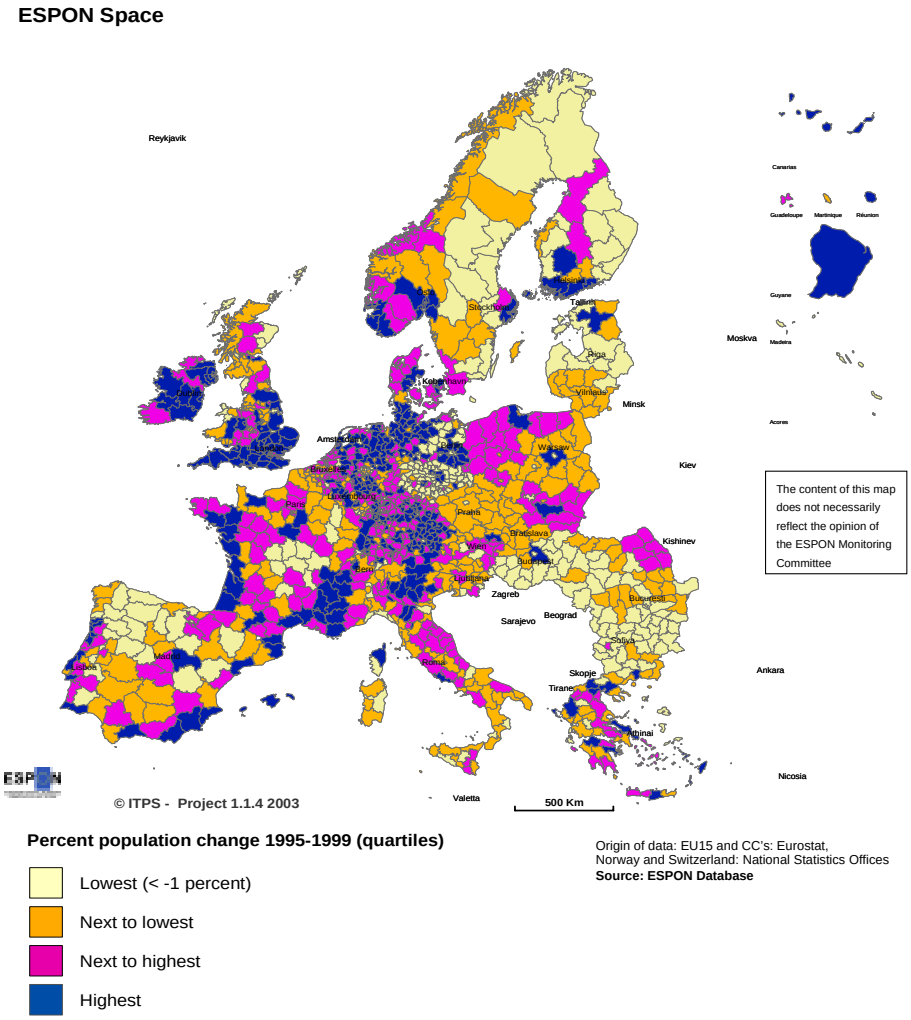
countries data at the national statistics offices are only available at NUTS5-level (e.g. Estonia). Since we do not know what NUTS5 areas which belong to every NUTS3, the data is of limited use at the moment.

At present we try to collect data for the missing entities and years from the national statistics offices, OECD data etc. This is a time consuming work. Hopefully, we will be able to present a better data set in the Third Interim Report.

3.4 Results

To draw a European demographic landscape it is necessary to start with the population change. Map 3.1 is showing the areas of demographic growth and decline. One can clearly see the central European growth zones and the areas of declining population at the edges of Europe. This pattern on EU29-level is consequence of low and decreased fertility rates and migratory movements. From the EU29 point of view there seems to be more signs of population concentration and monocentric development than a polycentric one. From a functional urban areas´ point of view there are instead signs of periurbanisation and then also signs of a more polycentric urban development in differing parts of Europe (see also WP3 and for a more thorough discussion and description ESPON 1.1.4).

Map 3.1. Population Change 1996-1999. Source. Estimations from New Cronos. See also Table A6.



The European growth zones are affected by surplus of migration. Population growth can only be explained by migration because the balance of birth and death is negative or - in the best cases – equal. This can be observed in Germany, in the Scandinavian countries, in northern Italy and southern England. In these areas the population dynamic is more and more driven by

migration and less by the surplus of birth (see Figure 3.2 – 3.4 below). They are attractive for migrants in great numbers which fill out all gaps.

Some European peripheries are affected by population decline due to a negative migration balance and a surplus of death over birth (see also WP4). These peripheries are not attractive enough for migrants and therefore the population change is to some parts dramatic: In Bulgaria for example the overlay of a negative migration balance and a significant drop in fertility produce a sharp decline in the population number. The same is true for Baltic regions, for regions in Hungary but also for the northern part of Spain and some peripheral areas in Greece.

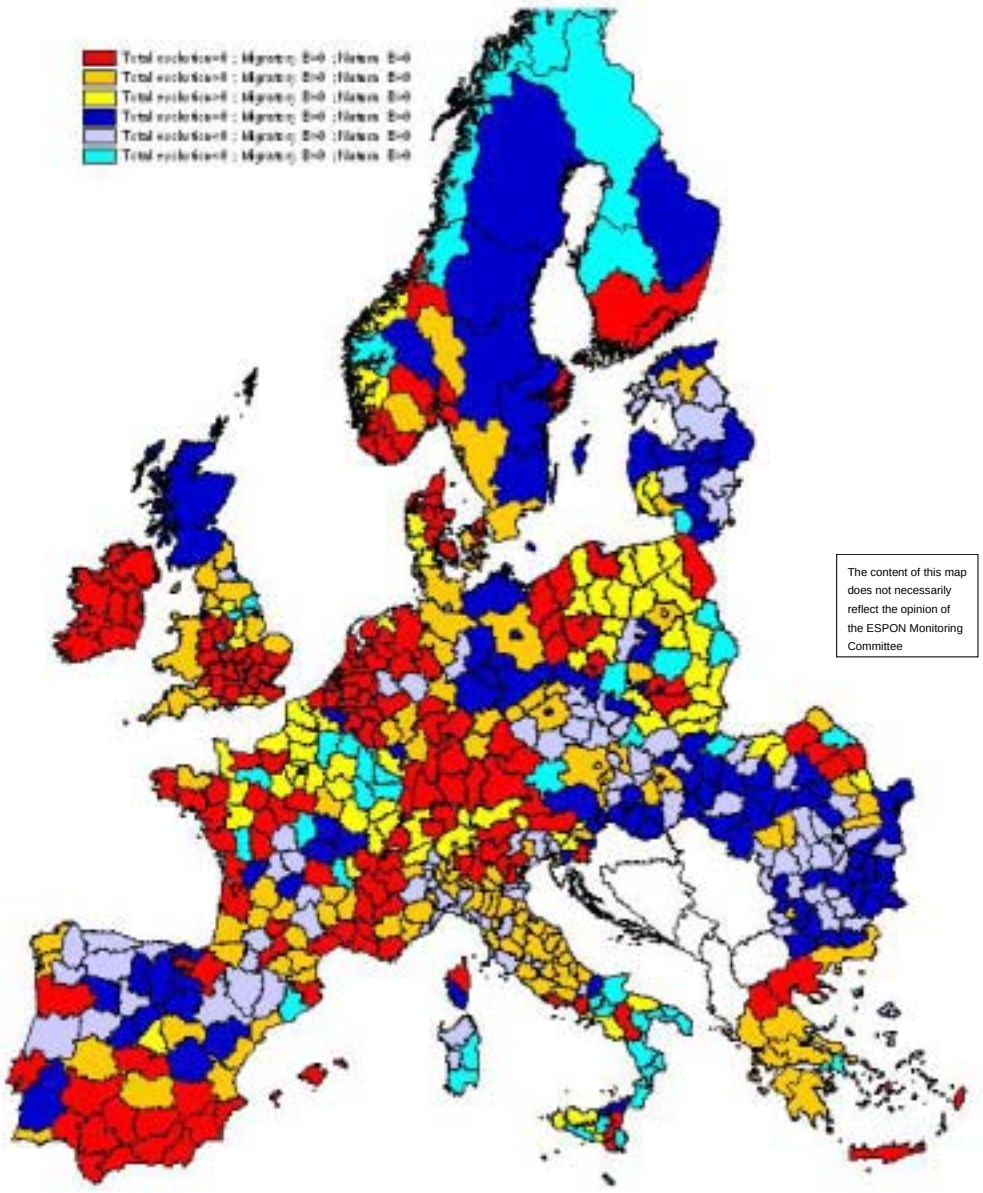
In contrast to this situation in some European peripheries the response to economic decline is a surprising increase in birth. The crisis regions seem thus to be more sensitive to changing labour market conditions and the metro areas less. In the first mentioned regions, the image of apathy and resignation is often a central ingredient. As a consequence of this reasoning, higher unemployment results in higher fertility since one solution for many younger women seems to be marriage or non-marital cohabitation and then also motherhood. This phenomenon can, however, be hampered by the "income effect" – a reduction in incomes and wages and then the standard of living may result in more hesitation to childbearing and more children. With regard to this it can be supposed that the different traditions and family networks in various parts of Europe have impact on the fertility development.

It can, also, be supposed that short-term unemployed persons have another approach to childbirth than long-term unemployed. If childbearing and children are hampering factors with regard to a 'come-back' on the labour market it can be presumed that women in this category are more hesitating to get a baby than others. For many of the short-term unemployed it is very important to get a foothold on labour market as soon as possible in order to avoid stigmatisation and problems to coming back that often are consequences of long-term unemployment. This also means that long-term unemployed are not so sensitive to changing labour market conditions, since they already have given up re-entering the labour market and – as a result – also are more disposed to get a baby.

3.4.1 Typologies

In order to classify the regions with respect to total population development, natural population development and migration six different combinations are constructed. In the right column a try to characterise the different cases have been done and in Appendix, Table A3. Different NUTS2 and NUTS3 are characterised according to this scheme. The six cases are illustrated in Table 3.1 and Map 3.2.

Map 3.2 Six typologies with regard to total population change, natural population and net migration 1996-1999. Source: Estimations from New Cronos. See also Table A7.



The content of this map does not necessarily reflect the opinion of the ESPON Monitoring Committee

Origin of data: EU15 and CC's: Eurostat, Norway and Switzerland: National Statistics Offices
Source: ESPON Database

Table 3.1 Six typologies with regard to total population change, natural population and net migration 1996-1999. See also Table A7.

1	PT>0	PM>0	PN>0	In-migration and young population/"high" TFR
2	PT>0	PM>0	PN<0	In-migration but low fertility rate
3	PT>0	PM<0	PN>0	Out-migration but young population/"high" TFR
4	PT<0	PM<0	PN<0	Out-migration and old population/"low" TFR, depopulation?
5	PT<0	PM>0	PN<0	In-migration and old population/"low" TFR
6	PT<0	PM<0	PN>0	Out-migration but still young population/"high" TFR

PT=Total population development
PM=Net migration
PN=Natural population development

The first three categories have experienced a positive population development in the sense that the population has increased between 1996 and 1999. The most favourable case is the first one where both the natural population change and the net-migration were positive and reinforced each other with the result that population increased. This does not, however, automatically lead to the conclusion that the regions in case 1 have the sharpest population increase – instead this is of course a function of the relation between natural population change and net-migration. In the second case the in-migration effect neutralised the negative effect of natural population change and in the third one the opposite was the fact. In all three cases there has thus been a population growth even if the combinations of the "driving forces" differ.

The same reasoning is valid with respect to the next three cases – any conclusions about the strongest population decline can not be drawn. Instead, only the preconditions about the population development differ. The least favourable case with regard to development and dynamics is case 4 where natural population decrease is reinforced by out-migration that can result in a viscous circle and a negative spiral process. The regions in case 4 can be characterised as depopulation areas as both natural population change and net-migration are negative (for a more thorough discussion about depopulation, see WP4). Even case 5 and case 6 can perhaps be seen as depopulation areas but here the preconditions are different to some degree as case 5 is an in-migration area even if the natural population change is negative and case 6 a positive natural population change. In the latter case there is, however, an obvious risk that this phenomenon will change in the future as a consequence of out-migration of young people and then the preconditions for a future natural population increase will be eroded. The typologies are presented in Table A1 in the Appendix.

The majority of the regions – 60 percent – at NUTS1, NUTS2 and NUTS3 level experienced a population increase between 1996 and 1999. Most of the growing regions can be placed in case 1, where both the natural population change and net-migration were positive (28 percent). Case 2 involves 20 percent of the regions and 12 percent are placed in case 3.

Among the retarding regions the most regions are classified in case 4 that also is the most unfavourable one and can be characterised as a depopulation case. 17 percent of the regions are classified in this category. 15 percent are in case 5 and the rest – 8 percent – in case 6.

More than half of the regions – 52 percent – had a natural population decrease during the second half of the 1990s. 20 percent of the regions were expansive regions in the sense that they experienced a population increase as a consequence of net in-migration. This means that 32 percent were regions where natural population decrease also was combined with net out-migration that accentuated the population decrease in these regions. In Figure 3.2 – 3.4 correlations - based on cross-section data at NUTS 1-3 level - between the above mentioned factors are presented.

As can be seen the strongest correlation is between net migration and total population change. This is not especially surprising as in-migration areas are supposed to be dynamic and expansive while out-migration areas stagnating and retarding. It must, however, be kept in mind that these estimations are no indications of the income level or standard of living in the different regions as most of the migratory movements are domestic and not international. This means that there are large differences in GDP/cap between different regions in EU27+2 depending of the localisation of the regions. Instead the correlation between net migration and total population change is rather an illustration of differences in living conditions within the countries than between them. Anyhow, it is obvious that regions that have experienced population increase also are in-migration areas and vice versa even if there are large differences in income and living standard.

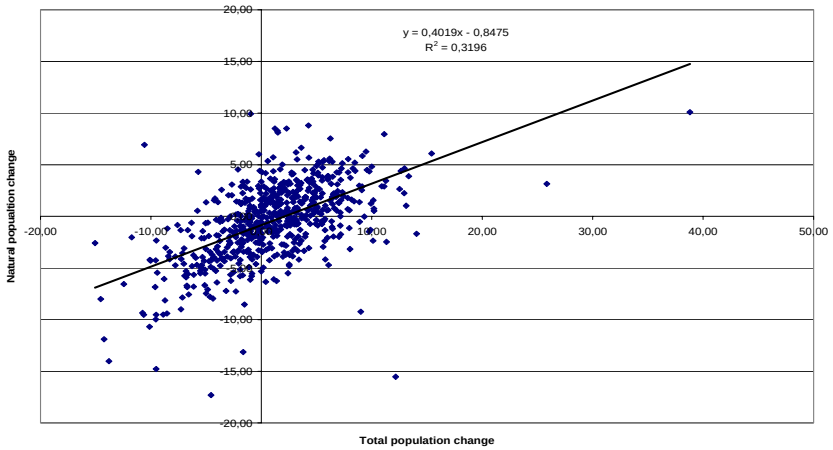


Figure 3.2. The connection between total population change (x) and natural population change (y) 1996-1999. Nuts1-3, not overlapping. N=638. Per mille. Source: Estimations from New Cronos

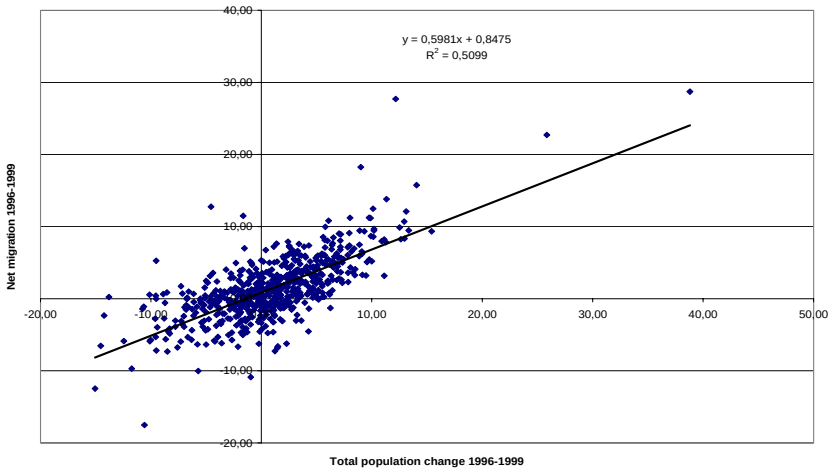


Figure 3.3 The connection between total population change (x) and net migration (y) 1996-1999. Nuts1-3, not overlapping. N=638. Per mille. Source: Estimations from New Cronos

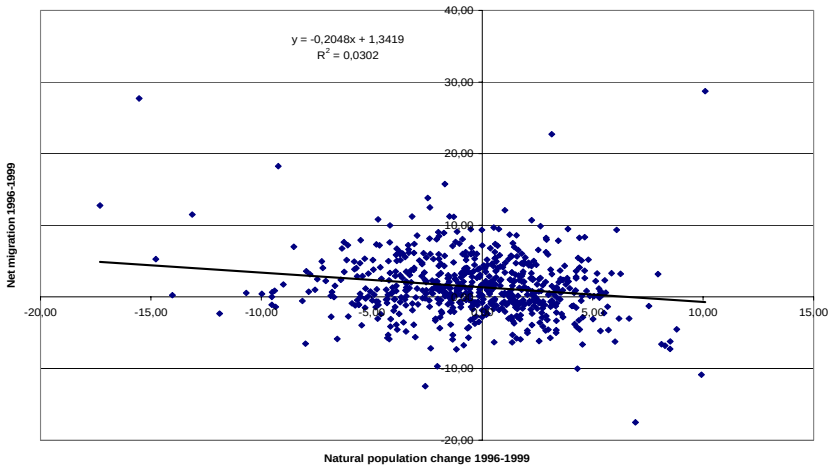
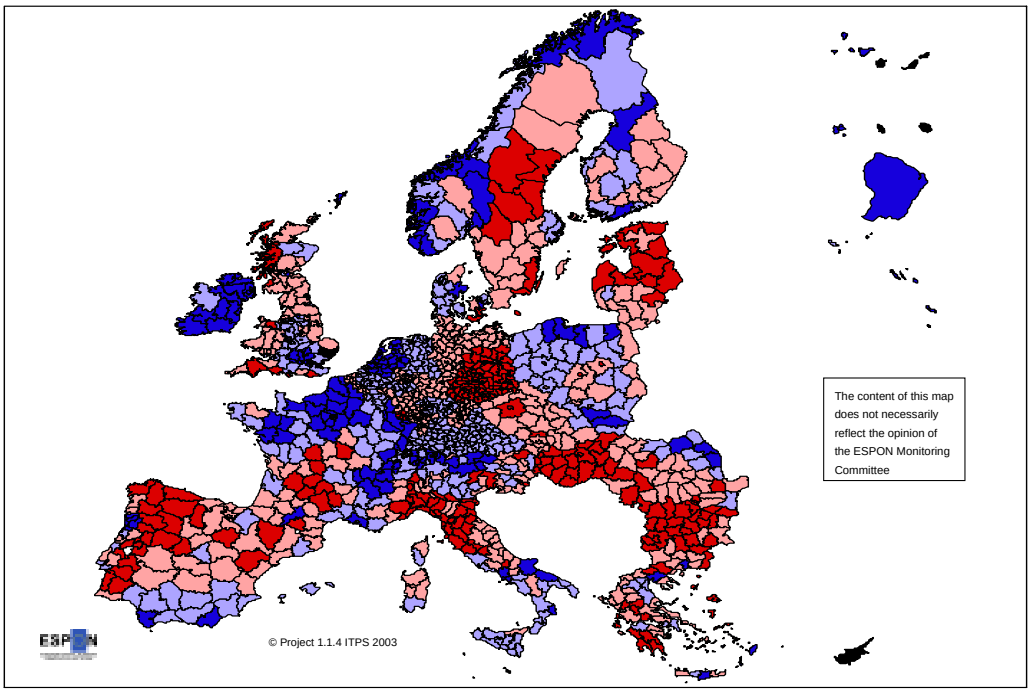


Figure 3.4 The connection between natural population change (x) and net migration (y)1996-1999. Nuts1-3, not overlapping. N=638. Per mille. Source: Estimations from New Cronos

The tendencies of fertility decline and the growing negative population change started in some parts of Europe and spread out during the 90s. The following three maps illustrate this process of diffusion.

Map 3.3 Natural population change / total population per thousand. Year 1999. Source: Estimations from New Cronos.

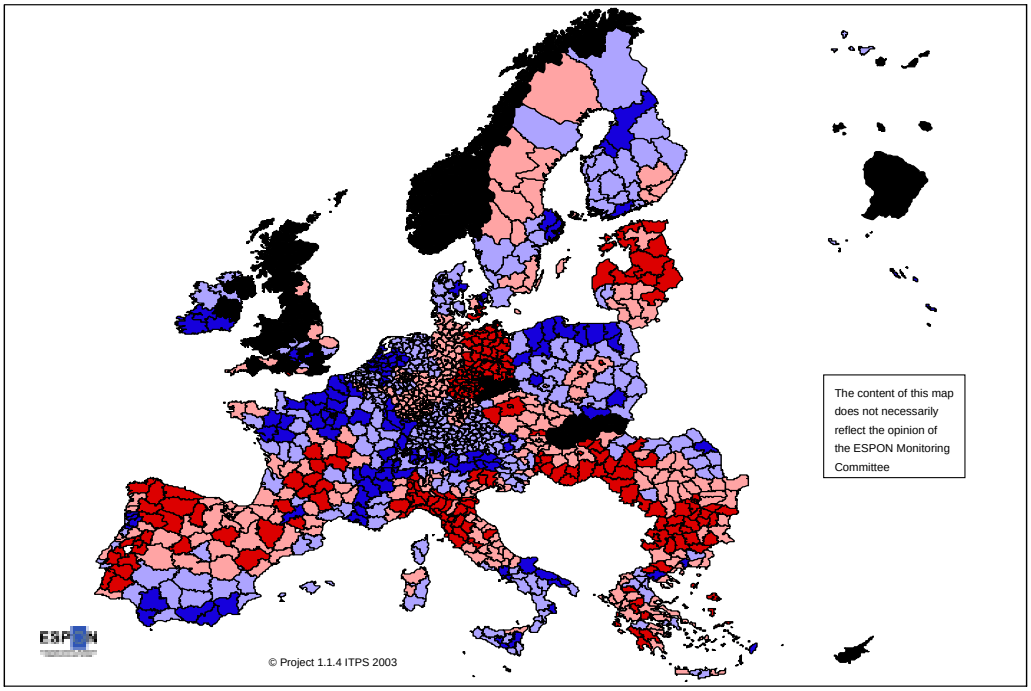


Regional disparities in natural population change.
Year 1999.

Origin of data: EU15 and CC's: Eurostat,
Norway and Switzerland: National Statistics Offices
Source: ESPON Database

No data
< -3
-3 - 0
0 - 3
> 3

Map 3.4. Natural population change / total population per thousand. Year 1995. Source: Estimations from New Cronos.

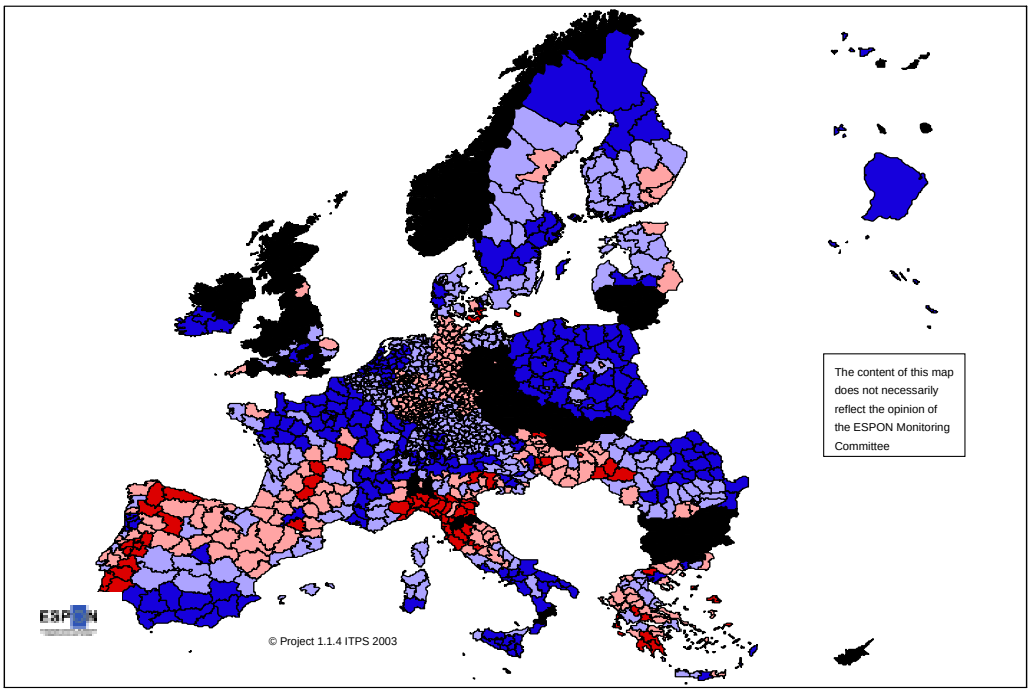


Regional disparities in natural population change.
Year 1995.

Origin of data: EU15 and CC's: Eurostat,
Norway and Switzerland: National Statistics Offices
Source: ESPON Database

- No data
- < -3
- -3 - 0
- 0 - 3
- > 3

Map 3.5. Natural population change / total population per thousand. Year 1990. Source: Estimations from New Cronos.



3.4.2 TFR and population change – trends and processes

The general background of the "renewed" interest in population decline and depopulation is the recent fertility decline which in most countries took place from the middle of the 1960s to the middle of the 1970s (with some earlier as well as some later starters among the countries of the "different Europe's"). After a major fall in fertility rates, fertility tended to remain stable or to decline more slowly. There are no European examples of enduring upward shifts (see Figure 3.5).

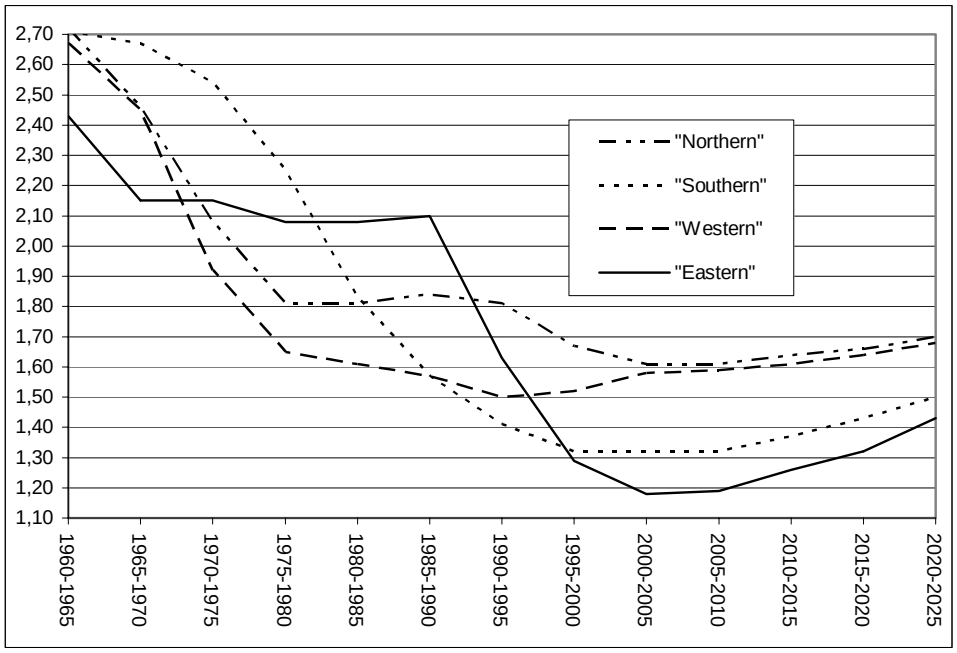


Figure 3.5. Total fertility rates (TFR) for groups of European countries 1960-2025. Five years average. Historical numbers and medium variant projections. Source: World Population Prospects, the 2002 Revision. UNs Population Division, Population Database.

The recent events may be linked to long-term demographic development, dating back at least a couple of centuries. This period includes what is known as «the demographic transition»; a major and lasting shift from high to low mortality and fertility that was most pronounced in the nations of Europe, North America, Japan, Australia and New Zealand. Increments in human longevity culminated in an unparalleled rise in life expectancy during the first sixty years of the twentieth century. Fertility declined dramatically in the countries of transition; on the order of 50 percent between 1870 and 1940.

The former century as a whole by and large saw a continuation of this tendency, although significant fluctuations occurred with the world economic crises in the 1930s and the World War II. The development since the middle of the 1960s in many countries brought an end to almost two decades of post-war «baby-boom» and took fertility levels back to the long-term downward trend.

Even if many common national demographic trends among the European countries are well documented, we should remember that the extent to which the various countries experienced these trends is not always the same, and that the outcomes may differ in important ways. During the period from the late 1960s to the early 1980s fertility fell well below replacement level (ca. 2,1) in most European countries. However, the courses of decline differed and the fertility levels varied substantially among the countries in the decades following the steepest decline, pointing towards very differentiated demographic prospects in the years to come (see figure 3.5).

The patterns are even more heterogeneous when we move to sub-national territorial entities. Studies in several countries have documented that the timing, pace and courses of

development in fertility change varied substantially between different types of local communities and regions, for instance according to dimensions commonly associated with rural-urban, centre-periphery etc. At sub-national levels the mechanisms of regional-demographic change – especially the phenomenon and role of migration – in many places were strongly influenced by the emergence of a regional-demographic zero-sum, or even minus-sum, game.

Eurostat compiled regional population scenarios (projections) at NUTS 2 level in 1997, covering the period 1995-2025. According to the so-called base-line scenario, described as a continuation of current trends, the EU-15 population as a whole will continue to grow at a very low rate, and start declining around 2020. While around thirty NUTS 2 regions faced a declining population in the latter half of the 1990s, mostly concentrated to the former eastern Germany and southern Europe, the number of regions with a negative rate of population change is expected to have tripled by the year 2025. Regions experiencing population decline will be widely spread across the EU territory, comprising around half of the EU population. The scenario clearly illustrates the implications of uneven regional-demographic processes and the growing sensitivity to migration balances.

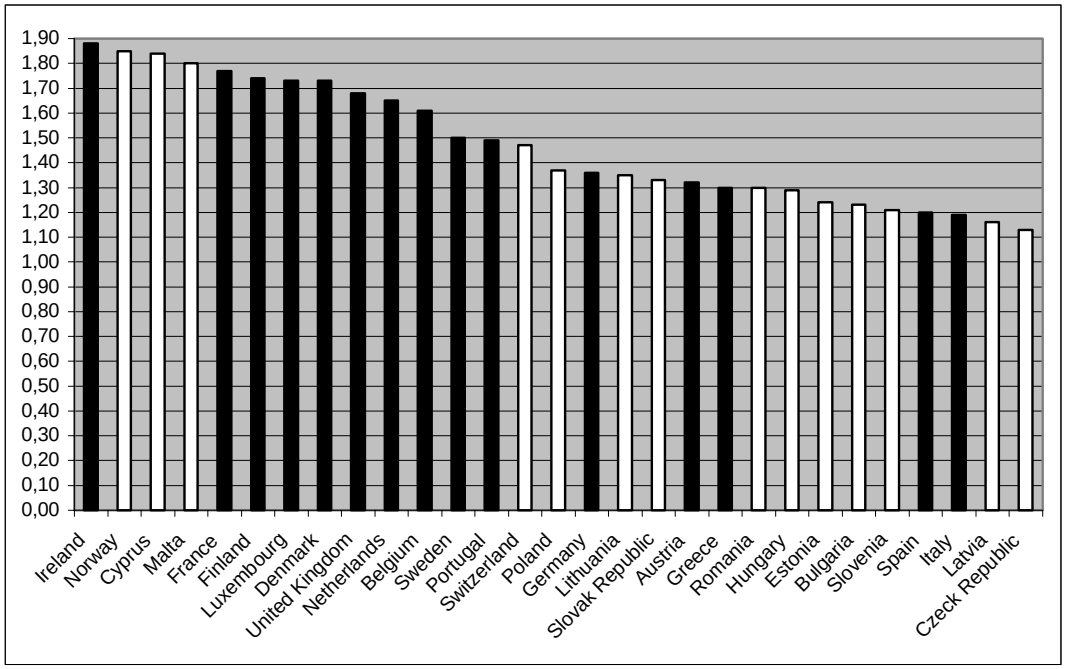


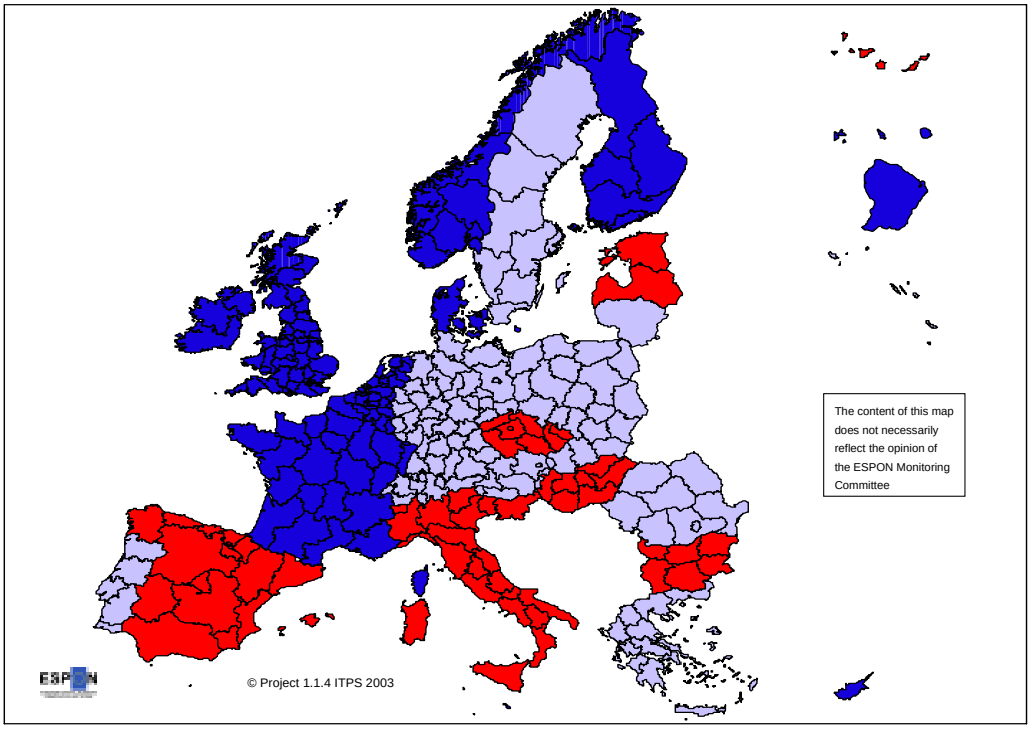
Figure 3.6. Total fertility rate (TFR) 1999 in the countries of "Europe 29". Black = EU-members. Source: Recent Demographic Developments in Europe 2000. Council of Europe.

In the entire Europe – the Europe stretching from Lisbon to Vladivostok – the recent rapid drop in the rate of population growth is remarkable. In the period 1950-1975 the average annual rate of growth was 8,3 per 1000 population. In the most recent quarter-century this index had fallen to 2,9 per 1000. Around the turn of the century negative natural population growth rates appeared in 17 European countries (the number of deaths exceeded the number of births). These countries were Belorussia, Bulgaria, Croatia, the Czeck Republic, Estonia, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Moldova, Romania, Russia, Slovenia, Sweden and Ukraine. In addition the following countries had close to zero natural growth: Austria, Poland, Slovakia and Spain[25].

Among the 29 ESPON-countries as many as 17 countries were within the span of Total Fertility Rates by the end of the former century, that – according to the short-hand description by the French demographer Jean-Claude Chesnais – may have the following implications: "Heavy and structural contradiction, which digs a deep hole at the basis of the age pyramid and consequently compromises the future of the society at large. Limited chance to get a return to equilibrium; evaporation of population number"[26].

[25] This paragraph is based on Demeny (2003).
[26] Chesnais (2000).

Map 3.6 Total fertility rate in different parts of Europe (NUTS0-NUTS2, not overlapping)



Regional disparities in total fertility rates. Year 2000.

Origin of data: EU15 and CC's: Eurostat, Norway and Switzerland: National Statistics Offices
Source: ESPON Database

< 1.3
1.3 - 1.5
> 1.5

The regional disparities during the 1990s are shown in Maps 3.4- 3.6. Here the low TFRs especially in the Southern parts of Europe and in some parts of the Candidate countries are obvious. This phenomenon is perhaps even more pronounced in Tables A.3 and A.5 in Appendices where it can be seen that it is only few regions that are over or around the reproduction rate (2,1) today. As data are missing at regional level from most of the Candidate Countries (forthcoming in the third interim report) there can be some other regions that have TFRs over the reproduction rate. It is however not probable that this will change the picture of a Europe that is going to experience a population crisis in the future (see also Figure 3.5).

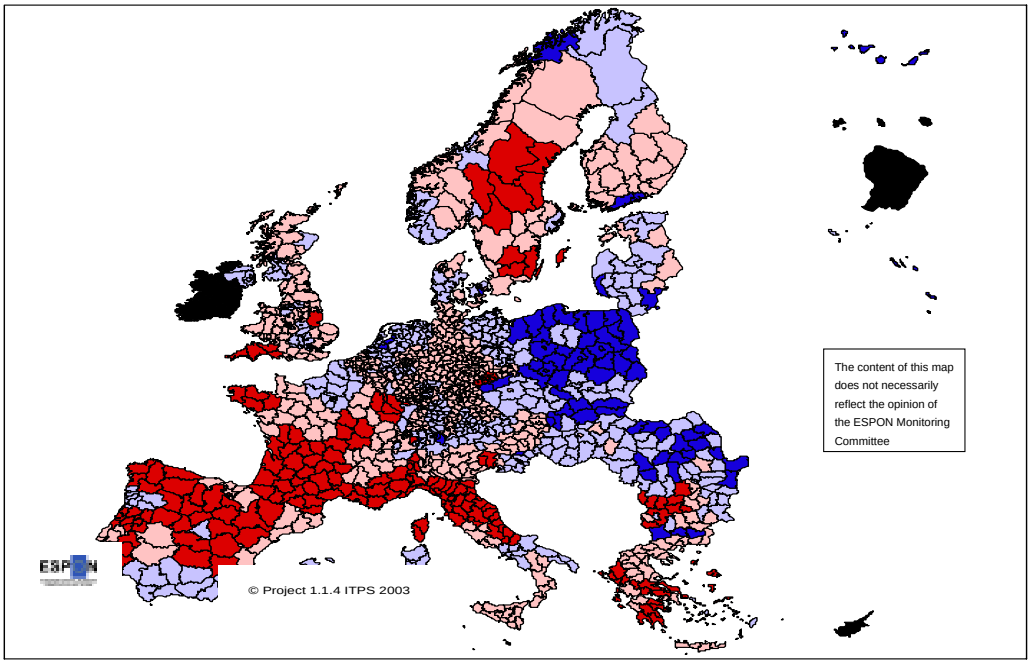
3.4.3 Ageing

As mentioned above, birth rates are so low today that they result in a population decrease within the European territory - the number of deaths is larger than the number of births. This is, however, not only a result of the low birth rates – instead it is in many cases a consequence of the lopsided age structure that hampers the natural population increase. Even if ageing is a more or less general ingredient in the population development in Europe, this process has progressed to various stages in different regions and nations. Ageing and its relation to the labour force is also one of the most discussed topics today with respect to labour market problems of today and in the future.

The ageing process is a consequence of different development patterns. One is the low fertility rates that in the log run will result in a lopsided age structure with a lot of elderly people in the population structure. This is lopsided age structure are also – in many cases – reinforced by out-migration of young people. This means that regions with a high share of elderly people also are out-migration areas. Lower fertility and higher mobility has thus resulted in a situation where the ageing process more is a function of out-migration of young people than of low fertility. External migratory movements affect the age structure and the ageing process more than natural population change - births and deaths – that also increasingly has been a consequence of in- and out-migration of people in younger and fertile ages.

On the other side, many regions with a high share of elderly people are also in-migration areas with regard to this category – many of these regions can be characterised as “retirement paradises” that attract people who have been pensioners and then move to areas where the climate and other amenities are favourable for elderly people. These areas differ thus a lot from the traditional ageing areas that instead may be characterised as depopulation areas.

Map 3.7 Regions in EU29 with different age structures. Year 1999.



Regional disparities in share of population aged 65 or above.
Year 1999.

Origin of data: EU15 and CC's: Eurostat,
Norway and Switzerland: National Statistics Offices
Source: ESPON Database

- No data
- < 12%
- 12 - 15%
- 15 - 18%
- > 18%

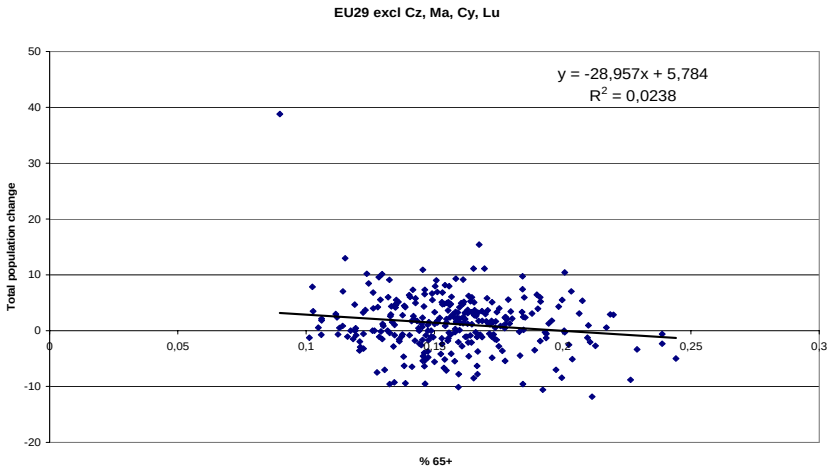


Figure 3.7. The connection between ageing (percent 65+ in population) 1999/2000 and total population change 1996-1999 (y). NUTS 1-3, not overlapping. N=277. Per mille. Source: Estimations from New Cronos and estimations from various national statistic bureaus.

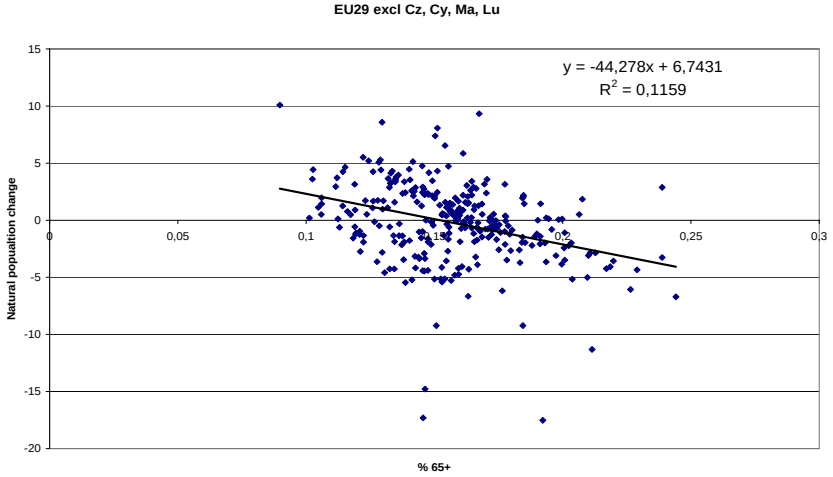


Figure 3.8. The connection between ageing (percent 65+ in population) 1999/2000 and natural population change 1996-1999 (y). NUTS 1-3, not overlapping. N=277. Per mille. Source: Estimations from New Cronos and estimations from various national statistic bureaus.

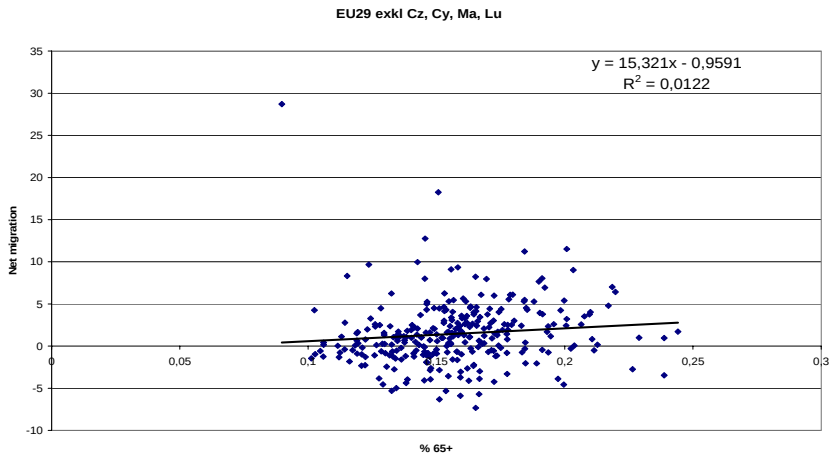


Figure 3.9. The connection between ageing (percent 65+ in population) 1999/2000 and net migration 1996-1999 (y). NUTS 1-3, not overlapping. N=277. Per mille. Source: Estimations from New Cronos and estimations from various national statistic bureaus.

As can be seen from Figure 3.5 - 3.7 there seems to be no correlation at all between ageing and total population change and also between ageing and net-migration. Beside this unexpected result and even if there is no significant correlation between ageing and net-migration the β-sign is "wrong" – slope of the trend line is positive. Between ageing and natural population change there may be some tendency to a correlation even if it is very weak. Here the β-sign is also "right" in the sense that the slope is negative. It should, however, be kept in mind that these regressions cover the whole EU29 with the exception of Cyprus, Malta, Luxemburg, Ireland, Switzerland and some parts of United Kingdom. In order to check if the pattern changes with a split in other regional categories some other regressions have been done.

The above regressions have been split up with regard to four other regional levels. These are the Northern Europe, Central Europe, southern Europe and the Candidate Countries. The Candidate Countries has also been estimated with regard to the Northern, Central European and the Balkan countries. The results are shown on in Appendix A.8 but here the equations and R2-coeffeficients are presented below (Table 3.2).

As can be seen from Table 3.2, the pattern will be quite different when the above estimations are broken up in new regional ones. Central Europe seems in much – a lot of regions - to decide the estimations for the whole EU29. In the Candidate countries, the Northern and Southern Europe the ageing process seem to have impact on total population change but the impact on the components seems to differ between them. With regard to natural populations change the ageing process seems to be especially significant for the development in Southern Europe where ageing and low TFR seem to reinforce each other. The impact on net-migration is, however, not so pronounced. It is only in the Nordic countries that there may be a small connection between ageing and net-migration in the sense that ageing regions also are out-migration ones. This is, however, more pronounced if Norway is excluded in the estimations – this is also valid with regard to both total and natural population change.

With a split of the Candidate Countries it is obvious that the Baltic States are more like Central Europe than Northern Europe. There seems not be any connections at all between ageing

on the one side and total and natural population on the other. The same is valid with regard to net-migration. Instead the central European candidate countries remind of the development pattern in Southern Europe and the same is also applicable to the Balkan countries. In both cases it is especially the impact on natural population change that is of importance for the total population development in the ageing regions.

Table 3.2. The connection between ageing (% 65+) 1999 (x) and total population change, natural population change and net migration (y). 1996-1999. Source: Estimations from New Cronos and estimations from various national statistic bureaus.

Regions	Ageing vs.	Constant	β-coefficient	R^2	N
EU27+2	Total population	5,78	-28,96	0,024	296
Excl Cz, Cy, Ma, Lu	Natural population	6,74	-44,28	0,116	296
	Net migration	-1,15	15,88	0,013	296
Northern Europe	Total population	29,38	-170,59	0,435	48
	Natural population	18,35	-112,68	0,327	48
	Net migration	11,03	-57,91	0,124	48
Central Europe	Total population	7,43	-31,76	0,034	90
	Natural population	8,61	-47,44	0,166	90
	Net migration	-1,18	15,68	0,011	90
Southern Europe	Total population	11,77	-58,84	0,259	54
	Natural population	14,26	-84,35	0,849	54
	Net migration	-2,49	25,51	0,069	54
Candidate Countries	Total population	12,78	-111,46	0,304	72
	Natural population	15,00	-127,46	0,417	72
	Net migration	-2,22	16,00	0,009	72
Balticum: Ee, Lt, Lv	Total population	-2,66	-9,44	0,001	15
	Natural population	8,36	-93,20	0,057	15
	Net migration	-11,02	83,76	0,027	15
Central: Cz, Hi, Pl, Sk	Total population	10,48	-87,35	0,344	35
	Natural population	12,80	-105,31	0,466	35
	Net migration	-2,33	17,96	0,065	35
Balkan: Bg, Ro, Sl	Total population	12,50	-114,29	0,406	21
	Natural population	14,28	-120,55	0,665	21
	Net migration	-1,78	6,26	0,004	21

Below six different types of regions illustrates the ageing process within EU27+2 1999 where the share (%) of people of 65+ are combined with total population change, net-migration and natural population change (Table 3.3, see also Table A8 - A9). The ageing process is illustrated by the percentage of the ages 65+. This results, thus, in six different typologies where the ageing regions are defined as regions where the share of people of 65+ is 18 percent or more. In Table 3.3 these six typologies of ageing regions are shown with regard to year 1999.

Table 3.3. Six typologies with regard to total population change, natural population and net migration 1996-1999 for regions with a high share of elderly people (at least 20 percent of the population 65+). Source: Estimations from New Cronos. See also Table A8 - A9.

Type	Total	Mig	Natural	% (N=49)
1	PT>0	PM>0	PN>0	20,5
2	PT>0	PM>0	PN<0	32,6
3	PT>0	PM<0	PN>0	0,0
4	PT<0	PM<0	PN<0	18,4
5	PT<0	PM>0	PN<0	22,4
6	PT<0	PM<0	PN>0	6,1

PT=Total population development
PM=Net migration
PN=Natural population development

As can be seen from Table 3.3 about half the ageing regions experience population increase and half the opposite between 1996 and 1999. A third of the regions are in the category 2; population increase, negative natural population change and in-migration. The opposite is true for the combination total population increase, positive natural population change and out-migration (no observation)**.** The latter demonstrates the fact that ageing has a negative impact on the natural population development partly as a consequence of low fertility rates, partly of the lop-sided age structure that many cases is an effect of out-migration since long time.

Among the regions with population decrease the most observations are found in type 5 – population decrease, in-migration and natural population decrease. This type is probably regions that attract elderly people as a consequence of climate and other amenities that are pull-factors for elderly people. This fact can probably be explained by the fact that the age structure hampers the natural increase.

Type 4 seems on the other hand to be typically depopulation areas. Almost one fifth of the ageing regions are localised in this category. Here a combination of out-migration and natural decrease reinforce the negative population development.

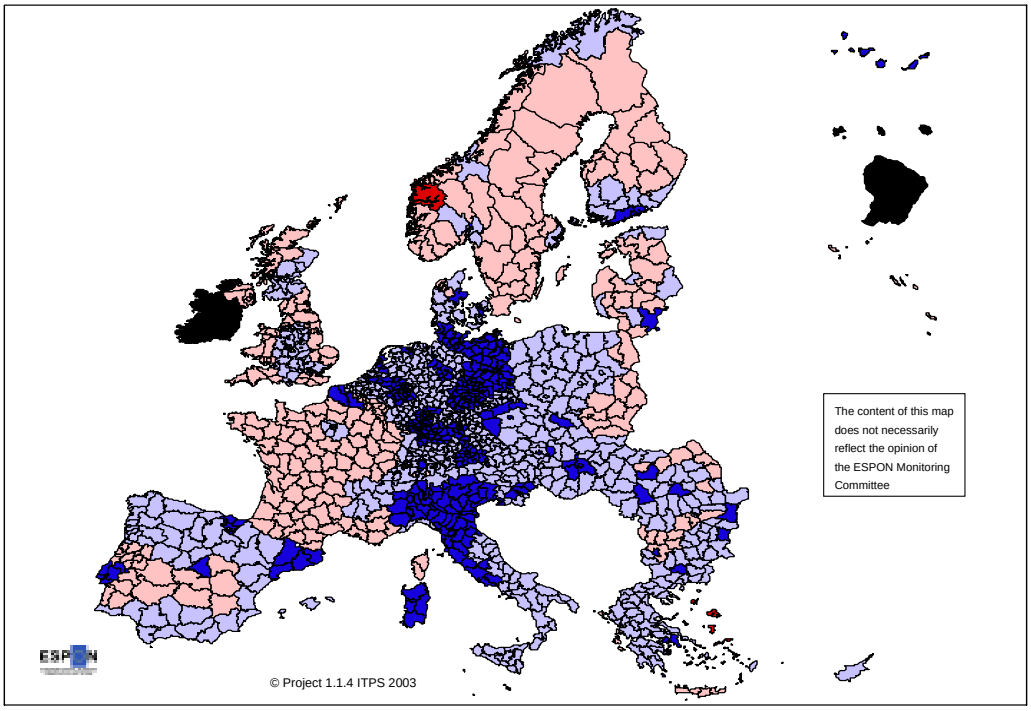
3.4.4 Dependency rates 1990, 1995 and 1999

The dependency rates – here defined as total population in relation to the population in the ages 20-64 – is a function of the size of the young age groups (0-19) and the older age groups (65+). This means that the effect of ageing can be neutralised by low fertility rates in the estimation of dependency rates. With regard to estimations and scenarios of future population development this is an important thing to keep in mind – same dependency rates can be a function of different demographic processes.

High dependency rate implies often that the precondition for economic growth is weaker than a low dependency rate. One reason is that the part of population that is in productive ages are low and this means also that the economic "burden" is higher. This must be compensated by a larger labour supply and/or higher productivity. The dependency rates have also consequences for e.g. taxes, social welfare, care and schooling. High dependency rates imply that fewer people take care of more people compared to the opposite situation. From a regional point of

view this means, *ceteris paribus*, that regions with high dependency rates are in an economic in a more problematic situation than regions with low dependency rates. It can also be shown that there seems to be a connection between regions with high dependency rates and stagnating or depopulation areas (see also WP4). One explanation to this is the fact that these areas have a lop-sided age structure with a high share of elderly people, out-migration of younger people in active ages (18-30 years) and, today, low TFRs. These processes reinforce each other and accentuate the ageing process and thus also the dependency rates in the out-migration regions.

Map 3.8 Dependency rates 1999. Defined as total population / population aged 20-64 years. Source: Estimations from New Cronos and some national statistical bureaus.

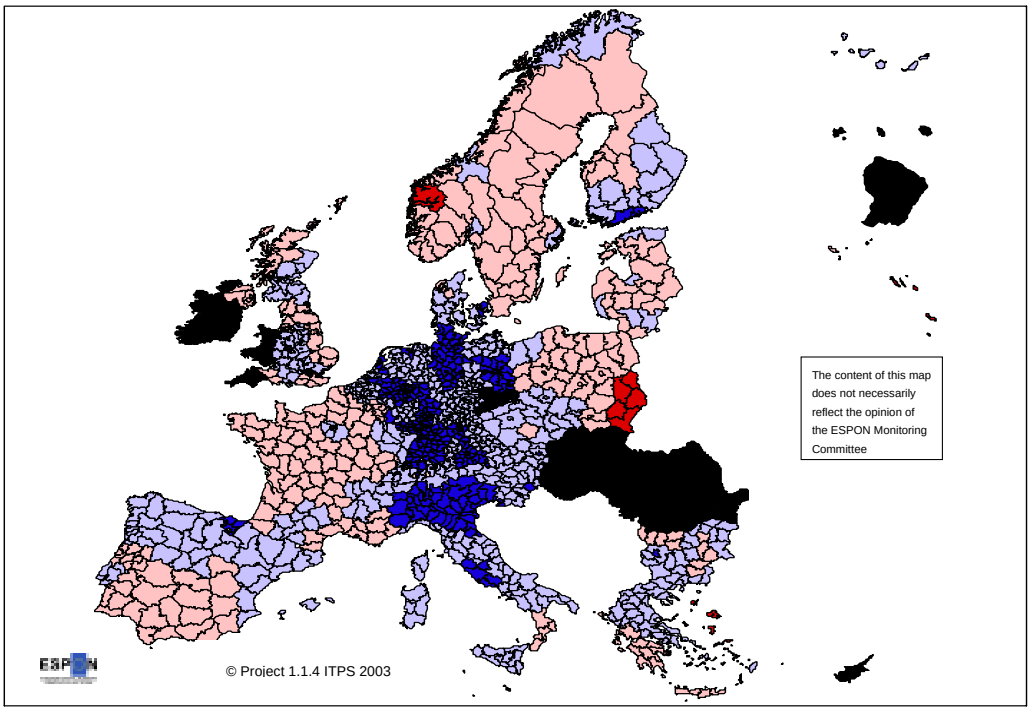


Regional disparities in dependency rates.
Year 1999.

Origin of data: EU15 and CC's: Eurostat,
Norway and Switzerland: National Statistics Offices
Source: ESPON Database

- No data
- < 1.60
- 1.60 - 1.70
- 1.70 - 1.80
- > 1.80

Map 3.9 Dependency rates 1995. Defined as total population / population aged 20-64 years. Source: Estimations from New Cronos and some national statistical bureaus.



Regional disparities in dependency rates.
Year 1995.

Origin of data: EU15 and CC's: Eurostat,
Norway and Switzerland: National Statistics Offices
Source: ESPON Database

- No data
- < 1.60
- 1.60 - 1.70
- 1.70 - 1.80
- > 1.80

3.5 Outlook and Policy Implications

Demographic changes have consequences on regional development. Regions characterised by depopulation are often associated with stagnation and retardation, while regions that experience a positive population development are regarded as expansive and dynamic. These differing processes have effects on the investment and location pattern, as well as on renewal and expansion of the local or regional economy. The labour force - and especially the highly educated part - has increasingly been a location factor in the post-industrial society with respect to the mobile capital and the 'new' economy. The regional labour markets diverge and new mental maps are created. This could be a hampering factor with regard to localisation of new firms and in-migration in depopulation and ageing areas, but also as a reinforcing factor for in-migration areas, which are considered dynamic and expansive with young inhabitants and many possibilities. In this way, demographic development with population redistribution as a consequence of low TFRs, ageing and out-migration accentuates the polarisation process between various regions – a polarisation that is even more accentuated as a consequence of the drop in TFR especially in out-migration and depopulating areas.

The primary policy implications are that these processes hamper also the development towards a polycentric development in Europe and reinforce the monocentric tendencies at the macro level. From an ESPON point of view where a polycentric and balanced development is desirable, the population redistribution will result in a regional polarisation instead of a balanced and sustainable development. A polycentric development can bee observed within some expanding areas of Europe where functional urban areas and regional enlargement – larger local labour markets – can be a driving force with regard to population redistribution. These polycentric growth poles may thus hamper a monocentric development in the sense that labour shortage may be solved and the population redistribution will both has a concentrating effect with regard to the whole EU29 and a decentralising effect within the expanding zones. These topics and their policy implications will also be central ingredients in the next interim report and hopefully also result in policy recommendations. This means that both depopulation and expansive and fast growing regions will be – among other things - analysed from the following point of view:

- Fluctuations in birth rates and births and its impacts on the spatial development.
- Ageing and low TFRs and their impacts on the reproduction of population in different regions.
- Ageing and its economic consequences for the spatial development.
- Different gender and age structures and their impacts on the polycentric urban structure and urban-rural relations and the spatial development. Contacts and cooperation with ESPON 1.1.1, 1.1.2 and 1.1.3 are here necessary preconditions for a successful work.
- Polycentric development and regional enlargement – a way out of the "population crisis"?
- "Demographic cycles" and their impacts on regional development – a long wave perspective.
- Policy implications and policy recommendations.

Chapter 4 Migration Within and Between European Regions (WP3)

4.1 Principles and aims

The principal objectives of WP 3 "Migration within and between European regions" are threefold: First, it is necessary to prepare a new database measuring migratory flows for regions within the EU, because none of the existing databases can provide similar information; Second, we want to give an overview of the migration flows within the EU countries on different regional scales and thirdly WP 3 will offer an analysis to explain the different flows. The general aim is to study migratory movements concerning Europe, on international level as well as inside the European Union. The specificity of this study is to look at migratory movements at a relatively fine scale (nuts 3 and nuts 2 level), and not limit ourselves to this sole scale but to use bigger as well as smaller scale in function of the problems that we are studying.

Migratory flows are seldom studied on a regional level if one considers the whole of the EU countries. However, this relatively fine scale is the one on which it is most relevant to examine the evolution of migratory flows in relation to the regional economic structures and their positioning within the major socio-economic trends. One such scale is yet less satisfying to understand a wide range of essential migratory processes (international migrations, intra-urban migrations…). This is why this study will not be limited to a single scale but will look into migrations from the finest to the largest scales available.

4.2 Concepts, theories and explanatory factors

4.2.1 Concepts

Conceptualizing migration as an empirical phenomenon one has to ask first for a practical definition of migration. Compared to birth and death migration is a more "unclear phenomena". Following the international definition migration is the change of the place of living by crossing national or international borders and with the intention to stay for a minimum time period. It can be measured by using flow statistics (e.g. number of migrants per time period), stock statistics (e.g. number of persons born outside the region) or it can be derived as a residual from the change of the population to two time periods including death and birth (migration balance). In the WP3 the last method will be applied.

Migration can be separated into out- and in-migration or in the case of international migration into immigration and emigration. In both cases it is useful – simultaneously to the fertility rate – to separate the effect of the age structure from the propensity to migrate. In doing so it is possible to demonstrate regional differences independent from the age structure. Finally it is necessary to imbed the migration variable in a set of explanatory variables which are – following the push-and pull model – mainly economic indicators (unemployment rate, average wages).

4.2.2 Theories

The *neoclassical macro-economic* theory on migration focuses on labour markets and wage differentials in the country of origin and in destination countries and the process of economic development can explain the development of labour migration[27]. Wage differentials induce persons, especially workers, to move from low wage countries to high wage countries, resulting in a decreased wage differential between the two countries.[28]

In the *neoclassical micro-economic* theory the individuals are assumed to undertake cost-benefit calculations, not only about deciding whether to move or not, but also where to move. The decision on when and where to move include variables such as wage differentials, unemployment rates, travel costs, efforts in adapting to a new country, psychological aspects of leaving friends and family etc.[29] Individual characteristics (education, experience, training, language skills etc) produce different outcomes regarding the decisions to migrate and where to migrate[30]

According to the *new economics of migration*, families and household, rather than individuals induces migration.[31] The aim with migrating is not only to maximise the income, but also to minimise risks.[32] In the absence of collective and social insurances, as well as inefficient markets, a diversification of household resources through migration will create a diversification of risks. The family members abroad will bring in remittances to the family or household. Economic development will not necessarily reduce the pressure on international migration, since a second distinguished characteristic of migration, according to the new economics of migration theory, is relative deprivation. The need of risk diversification and minimisation is dependent on the perceived functioning of markets and the perceived relative deprivation.[33]

The *dual labour market theory* stresses that the intrinsic demand of labour in modern industrial societies creates a constant need for workers at the bottom of the social hierarchy.[34] The labour market is divided in two sectors, one with formal and secure high-skilled jobs, and a second with informal low-status, insecure and low-skilled jobs as well as wages, work conditions etc.[35] When natives leave the bottom of social hierarchy, and thereby leave the low paid low status jobs without social mobility perspectives, somebody must fill the vacancies. Only immigrants are willing to accept these jobs since they want to improve their social status in their country of origin rather than at destination.[36] The need of labour at the bottom of the social hierarchy induces migration, international as well as national and regional.[37]

So far only the voluntary migration, in the form of an economically motivated movement of workers, has been discussed. The politically induced *movement of refugees* is usually seen as an involuntarily migration. In most cases the classification of economic and political migrants is an oversimplification, since political and economic causes of migration often stem from the

[27] E.g. Lewis (1954), Ranis & Fei (1961), Harris & Todaro (1970), Todaro (1976).
[28] Massey et al. (1993).
[29] Sjaastad (1962), Todaro (1969, 1976, 1989), Burda (1993).
[30] Schoorl (1995).
[31] Lauby & Stark (1988).
[32] Stark (1984, 1991), Katz & Stark (1986), Taylor (1986).
[33] Stark & Levhari (1982), Stark & Taylor (1989, 1991), Stark & Yitzhaki (1988), Stark, Taylor & Yitzhaki (1986).
[34] E.g. Piore (1979).
[35] Doeringer & Piore (1971).
[36] Piore (1979).
[37] Massey et al. (1993).

same factors. Besides this, the freedom of choice has many gradations, which makes it difficult to fix how voluntary a voluntary movement is and how involuntary an involuntary move is.[38] Underlying predisposing factors (e.g. extreme inequalities between countries and political instability) and structural constraints (e.g. border controls) influence reactive migration, as well as immediate precipitating events (e.g. war, ethnical conflicts, and violations of human rights) and enabling circumstances (e.g. individual resources) will influence the volume and destination of migration.[39]

The factors initiating migration can be quite different from those that perpetuate migration over time and space. Schoorl points out that the direction of migration is a relatively neglected research field.[40] Former colonial bonds, family reunion, migrant networks and former migration usually trigger continued migration.[41]

In the *network theory*, migrant networks are usually defined as sets of interpersonal ties that connect migrants, former migrants and non-migrants in areas of origin and destination through kinship, friendship and shared community origin.[42] Network connections can be regarded as a form of social capital that people can use to gain access to foreign employment. When the number of migrants reaches a critical threshold, the expansion of network will reduce the costs and risks of migration, which causes the likelihood of migration to rise. This will cause additional migration, which further expands the networks and so on.[43]

The *institutional theory* points out that the flows of immigrants become more institutionalised and independent of the factors that originally induced it when private institutions, entrepreneurs and voluntary organisations develop to satisfy the demand of moving to certain countries. The process of institutionalisation of migration is difficult for governments to regulate since a part of the immigration is illegal.[44]

Once started, the migration process alters circumstances both at origin and destination, which often increases the probability of future migration. This phenomenon is termed *cumulative causation*.[45] There are six major socio-economic factors potentially affected by migration in a cumulative fashion: the distribution of income, the distribution of land, the organisation of agriculture, culture, the regional distribution of human capital, and the social meaning of work.[46]

The network theory, institutional theory and the theory of cumulative causation suggest that migration flows need stability and a structure over space and time to enable an identification of international migration systems. According to the *migration systems theory*, these systems are characterised by a relatively intense exchange of goods, capital and people between some countries and less intense exchanges between others. The migration systems are characterised by a core receiving region (one country or a group of countries) and a set of countries linked to it by unusually large flows of immigrants.[47] Multi-polar systems are possible and when

[38] E.g. Kunz (1981), Zolberg et al. (1989).
[39] Richmond (1993).
[40] Schoorl (1995)
[41] E.g. Castles & Miller 1993.
[42] Boyd (1989), Massey et al (1993).
[43] Hugo (1981), Taylor (1986), Massey & García España (1987), Massey (1990), Gurak & Caces (1992).
[44] Massey et al. (1993).
[45] Massey (1990b).
[46] Stark, Taylor & Yitzhaki (1986), Taylor (1992).
[47] Fawcett (1989), Zlotnik (1992).

economic and political conditions change, systems will evolve. Countries will drop out or join a migration system as a response to social, economic or political change.[48]

4.2.3 Explanatory Factors

In the WP3 different indicators will be discussed in detail. There we are following in theoretical lines the push-and-pull model which is useful because it argues with regional disparities concerning income and employment. In the push-and-pull model the differences of wages and of job opportunities are the decisive factors to explain the size and the direction of interregional migration. Low income and high unemployment are push-factors in a certain region and high income and good employment opportunities act as pull-factors. As simple as the basic approach is, as complicated will be the explanation in reality. It can be shown that regional disparities are not sufficient to trigger migration. It is necessary that disparities surpass a certain but unknown threshold in order for migration to take place. Additionally it is necessary to introduce further variables like housing prices or purchasing power to judge the possible gain of migration in a correct way. Finally it is necessary to build other explanatory models for migration flows that do not belong to labour migration (e.g. retirement migration, consumption migration, marriage migration, refugee migration).

Migratory movements reflect, to a varying degree, the economic and social (specifically political) conditions, in both the regions of origin as in the regions of arrival but one should argue in a too simplistic way, a-historical and very mechanical, as was the case with the neo-classical theory of migrations that attempted to establish the existence of a rational logic between the flow of capital and work in function of the respective endowments in the regions concerned. We see migratory movements as the result of more complex phenomena, of which the components vary over time, in function of the evolution of the standard of living and its consumer models and depending upon the regions on its class structure and the age groups implied. They are most definitely not the product of, and increasingly less, a sole logic, merely expressed in monetary terms and its relations to work.

In its turn, migratory movements, when they are sufficiently massive, modify these same economic and social conditions: increase of jobs available in the area of immigration, ageing or feminization of the active population in certain regions of emigration, but also the development of ethnic economic niches in a more a less informal way or of the development of service industries based on the needs of pensioned migrants; demographic impact, cultural impact, indeed environmental, as with the outlying suburbs or on the sunny beaches, but also in the deeply rural regions, revived by the better migratory movements after long decades of intense rural exodus.

One main conceptual and empirical and to some extent theoretical problem too in WP 3 is the lack of valid data. Statistics of migratory flows are not available or are full of missing values. Eurostat provides data of flows between regions, mostly at nuts-2 level, inside national spaces. But these files are unfortunately very incomplete and has to be completed with national sources. Therefore we have to develop an alternative approach to develop a database containing comparable flows both on national and international level. We compare population stocks at two time points and consider the balance of birth and death during the time period. The change of population is a function of the natural population balance on the one side and of the migration balance on the other side. The population stocks is a well known number as

[48] Massey et al. (1993).

well as the number of birth and death. The result of the calculation is the unknown migration balance.

The calculated migration balance is a synthetic indicator that allows measuring the attractivity (or non attractivity) of a region. But this balance hides contradictory movements or levels of mobility that can be very diverse and can only be measured through flows. The migratory balance can also be segmented so that we can evaluate the attractivness of a territory for different categories of the population: migratory balances by ages, or by socio-economic status. The migratory balance can also be segmented geographically: interior balance (balance of a region with the rest of the country), exterior balance (balance of a region with foreign countries).

Flows are exchanges of population between different territories. They allow us to better apprehend the complexity of migratory processes. For example, a migratory balance near to zero can in fact hide intense migratory movements with the rest of the country and with foreign countries. These exchanges can be very unbalanced and compensate each other: the same region can be attractive for one part of the country and send part of its population to other regions. Every country presents a pattern of migratory flows which indicates among other things the spatial pattern of the country. If we compare France to Germany, it is quite relevant: in France, the Ile-de-France region includes alone more than 40% of migratory flows of the country; in Germany, these flows are much more balanced.

It is obvious that we cannot solve al the problems which are connected with incomplete migration statistics. We are calculating migratory movements by using official statistics therefore clandestine immigration cannot be included as well as tourists which staying or working illegally in Western Europe. Also all problems connected to the increasing mobility of the European population due to second residences are not included. Nevertheless our method is valid and reasonable approach to study migration within Europe.

4.3. Data, methods and sources

The methodology here adopted to make up an assessment of the migration balances at the regional level is the natural movement method. The principle is simple: one calculates the difference between, on the one hand, population at the end and at the beginning of a period, and the natural balance (births less deaths) during that very period, on the other hand. This method is relatively safe as the statistics on these three indicators are globally reliable. Nevertheless "some relatively small errors relating to the population at the beginning and the end of the period, above all in the countries with no population register, can bring about a much bigger error on the assessment of the final balance, especially if they are of opposite mathematical signs".[49]

A general calculation of migratory balances at nuts-3 level and for the all Europe has been made for the second half of the 90s. Before this date, the matrix includes only Western Europe. We also use of a matrix of the previous decades, which permits to describe the evolution in a long term perspective. Eurostat is the main source of the data but when necessary, we complete the files with data from national institutes. For this indicator as for the others, the territorial division is very important and may change if not the result at least its interpretation. For example, in some countries or some towns of a country, the central towns

[49] Decroly & Vanlaer (1991).

are separated from their suburbs while for most towns this is not the case. Most of these centres have negative migratory balances and therefore can give the impression that the metropolitan area is not attractive. There is no simple solution to the heterogeneity of the geographic divisions but we have to be very careful in the interpretation of the data and the maps.

Progress we reached by separating a general migration balance into age-specific migration balances. We have assessed the migratory balances from the age structures (by groups of 5 years) and the mortality data by age. The principle consists in following an age group on a 5-year interval and deducting the deaths from the final population: the comparison between real and assessed final population represents the migratory balance by age. Nevertheless, the balance does not relate to the initial or final age class but to the average of both.

This estimation can be formalised as follows:

Migratory balance of a age group n = population (n+1,a+1) – population (n,a) + (deaths (n+1) + deaths (n))/2

n = age group
a = year

The migratory balance of the age group of the 2,5-7,5-year-old population for the 1995-2000 period is the difference of the stocks of the 0-5 year population at 1995 and the 5-9-year-old population at 2000 minus half of the deaths of the two age groups during 1995 to 2000. When the mortality in the age group 0-4 respective 5-9 during the time period 1995 to 2000 is very uneven distributed then the migratory balances could be biased. But the probability that this is the case is not very high. Nevertheless the statistical problems mentioned above, especially second homes and clandestine immigration, take a larger signification as the populations concerned are concentrated in some age groups: clandestine immigrants are mainly young, while the owners of second homes are above all active older people or pensioners.

Within the WP 3 the following statistics of the stocks of population and of the birth and death have been collected by using the NewCronos data base and by using national statistics. The matrix of migratory balances by age groups at nuts-2 level is completed for the 1995-2000 period and for the whole of Europe.

By using flows at national levels, we can evaluate the interior migratory balance, which is the migratory balance of a region with the rest of the country. The difference between global migratory balance and interior balance is an evaluation of the exterior balance (between the region and foreigner countries.

We dispose of a matrix of internal and external migratory balances for the nineties for Western Europe but some countries are missing. For Eastern Europe, most of the countries only have data after 1995, or don't have data at all.

Nevertheless we have to take the advantages and fallacies by using migratory balances as a residuum of the change of stocks and natural population balance. Migratory balance could be the same for regions with many arrivals and departures and for regions with very little movements and the implications could be very different. The mobility of the population of a region is measured dividing arrival and departures by the total population (so we know the

part of the population which is moving). The level of mobility is normally relatively easy to evaluate at national level but data are missing for some countries to include international movements. Unfortunately, the level of mobility is very dependent to the scale and the administrative divisions it is very important to keep that in mind.

4.4. Main preliminary results

4.4.1 A general overview

A general analysis of the maps of migratory balances will confirm four main trends and specific geographical and socioeconomic patterns.

1. The important role of international borders. The borders are still determining as regards migration flows, for it is inside the national space that the economic or environmental differences still account for contrasted migration balances between regions, while inequalities between two countries, though often more important, do not generate such intense flows. Within the national borders the flows are the most intense and the migration balances contrasts the most significant.

2. Prosperous economic areas are gaining migration. Economic inequalities have always been a determining driving force explaining population movements. During the 60s in Europe the latter could still be explained to a large extent by such imbalances between central and peripheral areas. In each country, metropolises were the most attractive poles which absorbed the workforce from the less developed parts of the country.

The evolution of the relation between the migratory balances and the GNP/inhabitant is the most significant given: inside the Western Europe regions, whereas there clearly was a relation in the 60s, it becomes negligible as from the 80s. This simple observation allows us to confirm the conclusions drawn in the previous paragraph: after the 60s, the simple relation between the migratory process and the economic realities, in particular the standard of living and the job market have the tendency to smoothen out.

It would be wrong however to deduct that the economic factors have lost all their explicative values of those big structuring waves which, as we have seen, are the principal components of the intra-European migratory flows at a macro-geographic scale. They rather come more and more within the scope of a complexity that includes the determinants of standard of living, environment, etc. But the differences of standard of living and the gaps between the unemployment levels remain important explicative factors of the major intra-national flows at the macro-geographic level (let's say nuts 1). This is confirmed by the fact that these migratory flows are largely determined by migrations of people pertaining to the active workforce, very often the youngest.

In Germany with regard to the East – West migrations and in the U.K., the North – South balance can be attributed to the huge economic gap between these regions. The older industrial regions of the North, including certain parts of Scotland, still undergo a structural crisis, whereas the service sector economies of the South, in particular that of the greater London region, is visibly more dynamic. This results in a relatively important migration from the North to the South. The importance of the economic factor is confirmed by the

weight of the young people in these movements (more 90% of the north-south flow in England).

The Italian case is quite similar, the gaps between the development in the North – one of the richest regions in the European Union – and the South explain the persisting net migration in favour of the North. The development policies installed in favour of the Mezzogiorno could not reduce those gaps in development.

The case is France can be closely compared: the crisis in the old industrial regions of the North, as in the Nord-Pas-de-Calais or the Lorraine, can explain a net migratory balance there whereas the middle South has positive balances. But these migrations appear to be less direct in the case where residents of the old industrial regions migrate toward the Paris regions whereas the inhabitants of the latter tend to migrate to the South or to the West. In France, the southern regions (with of course sub-regional nuances) benefit at the same time from a good image in terms of quality of life and of a relative economic dynamism.

This is true especially in comparison with the old industrial regions of the North. They attract all age classes, in particular the young pensioners, but also young families with children; they are only less attractive, and sometimes repulsive for the youth between 20 and 30 years, because they offer little possibilities of higher education and insertion in the job market. The South of West Germany, the South of England or coastal Spain equally combines both favourable factors. In Italy, there is more of a contradiction between the environmental and economic factors, the standard of living which is lower and the unemployment rate which is higher in the South explain a very negative balance there for the active ages; the quality of life which is sometime better in the South (environment, climate) does not bring about important North-South movements, apart from the return of pensioners with origins in the South.

3. Suburbanisation evokes massive internal migratory processes. Another process can be observed in some cases: when the administrative division separates central towns and their peripheries, we can observe that the migratory balance is negative in the centre and positive in the periphery. This process of suburbanisation and peri-urbanisation is active in all Europe but can only be observed where the administrative division permits it.

Population movements between cities and the surrounding countryside are another major evolution of the last decades: while the dense metropolitan areas would still be the most attractive in the 60s, today, at least in the European centre, the relationship has reversed itself between population density and migration balance. In other words, in the dense areas of the European centre, all other things being equal, territories are all the more attractive as they are less dense (peri-urbanisation and counter-urbanisation process).Environmental factors (sea, sun, and mountains seen as positive factors, industrial landscapes as a repulsive one for instance), along with the lower cost of land, explain this reversed movement.

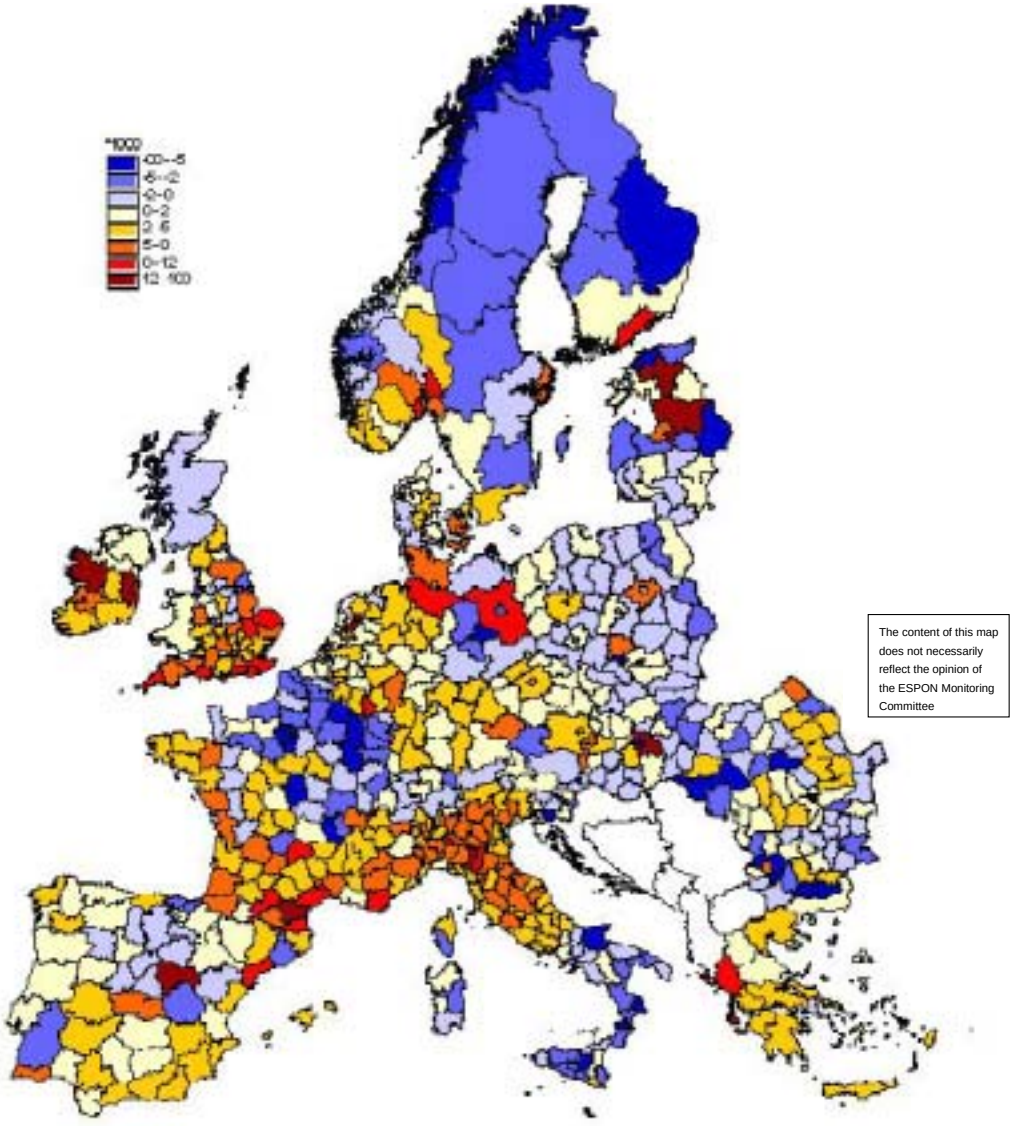
But these environmental factors are more and more intrinsically related to economic factors in order to explain the big macro-geographic tendencies of the interior migratory flows. More and more activities are implanted in function of qualitative environmental considerations, when it is not the case where they directly live of them, as is the case for tourism. Migrants privilege environmental factors before looking for employment or favour regions with a good, agreeable reputation in case of equal economic conditions. To this we have to add the increasingly more numerous migrations of young pensioners.

4. The rural exodus is still an important part of the European migratory process. Yet the old mechanisms of rural exodus are still a reality in some peripheral parts of Europe such as the centre of Spain, the inner part of Portugal, the North of Scandinavia or a large part of Eastern Europe. In those low density areas, the opposite flows are to weak to make up for the departure of young active people to the dense active areas of the country.

With regard to the macro-regional flows, the Scandinavian countries set out an original model, which looks like the one generally known in the 60s to most of the European countries. Indeed, the migrations remain dominated by the movements between peripheral regions, in particular the Great North, towards metropolitan zones. These flows have rather been reinforced in the 90s; they have become more massive in the second half of this decade.

In Eastern Europe the rural urban Migration is also of great importance. The metropolitan regions (in all cases mostly the capital) are the attractive regions whereas rural isolated regions (eastern Poland for example) and industrial regions (such as Silesia) have negative migratory balances. But inside metropolitan areas, all centres have a rapid peri-urbanisation processes too.

Map 4.1 Migratory Balance 1996-1999



The content of this map does not necessarily reflect the opinion of the ESPON Monitoring Committee

Origin of data: EU15 and CC's: Eurostat, Norway and Switzerland: National Statistics Offices
Source: ESPON Database

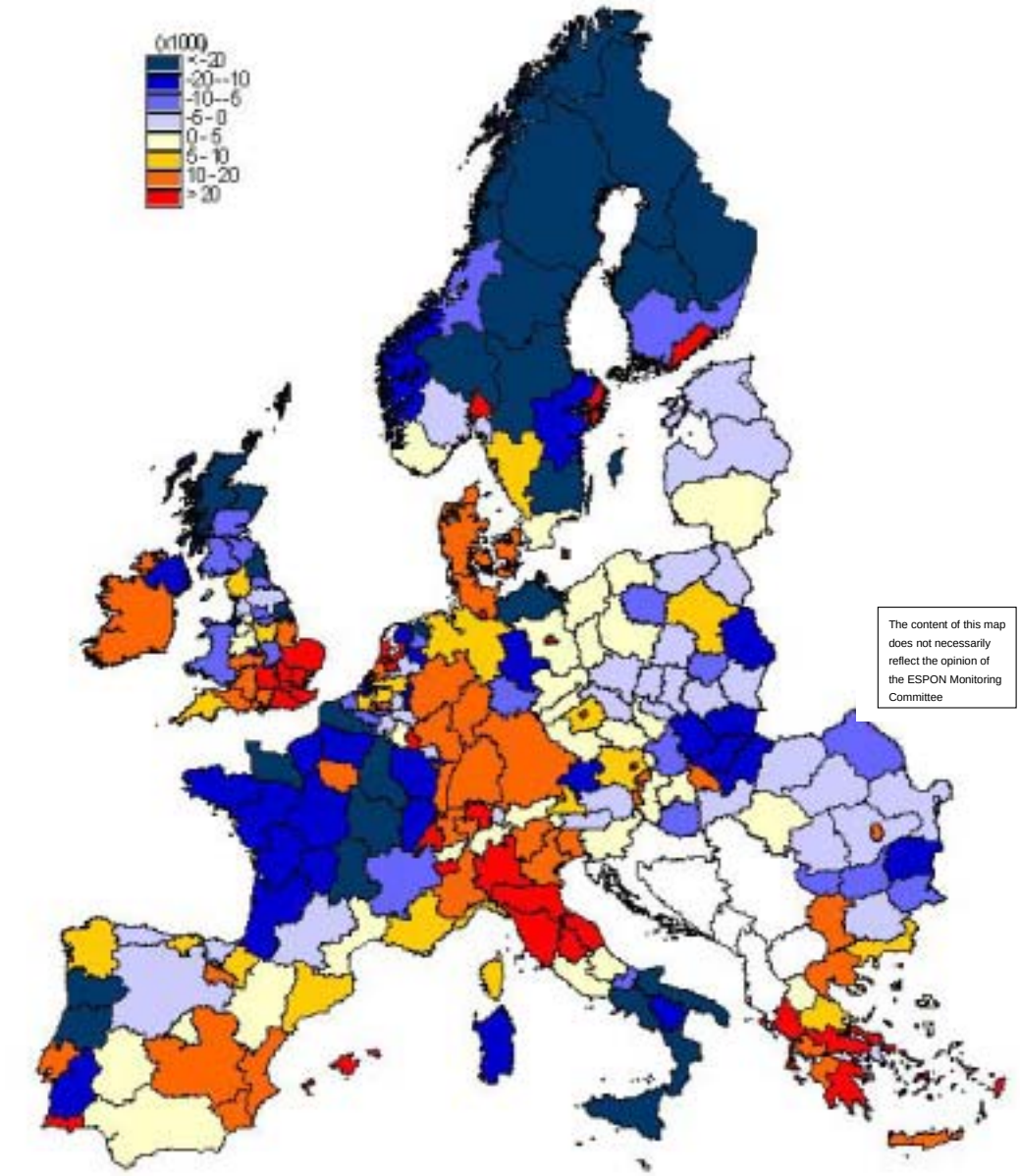
4.4.2 Migratory balances by ages

A statistical analysis permits us to gather together some age classes characterized by the same behaviour: students and young active people (20-29 years old), middle age classes (30-44 years old), and old active people and pensioner (50-64 years old). With this ultimate class, results are subject to caution because of some data of mortality by ages are uncertain. So we publish only the two first maps. For Germany, results are only available at nuts 1 level, which implies very big territorial units that may weaken territorial contrasts.

4.4.2.1 Migratory balances of the young people (20-29 years old)

This age group is characterized by a very high mobility and by important contrasts especially inside countries. This age group has thus a very different behaviour from the others in terms of the region they are attracted to. In fact, most of the young people are attracted to towns, in particular big university metropolitan areas. This age group is the one that best illustrates infra national economic contrasts, for example between the North and South of Italy, between the East and West of Germany, or between the North and South of England (the young represent 90 % of the migratory deficit of the North with the South at the end of the nineties). The spatial pattern is also heavily influenced by exterior migrations which mostly concern young population. The young foreigners are attracted to big metropolitan areas because they can find a large range of employments, superior schools and often the presence of fellow country men that help with their integration.

Map 4.2 Annual average migratory balance 1996-1999 (20-29 years).

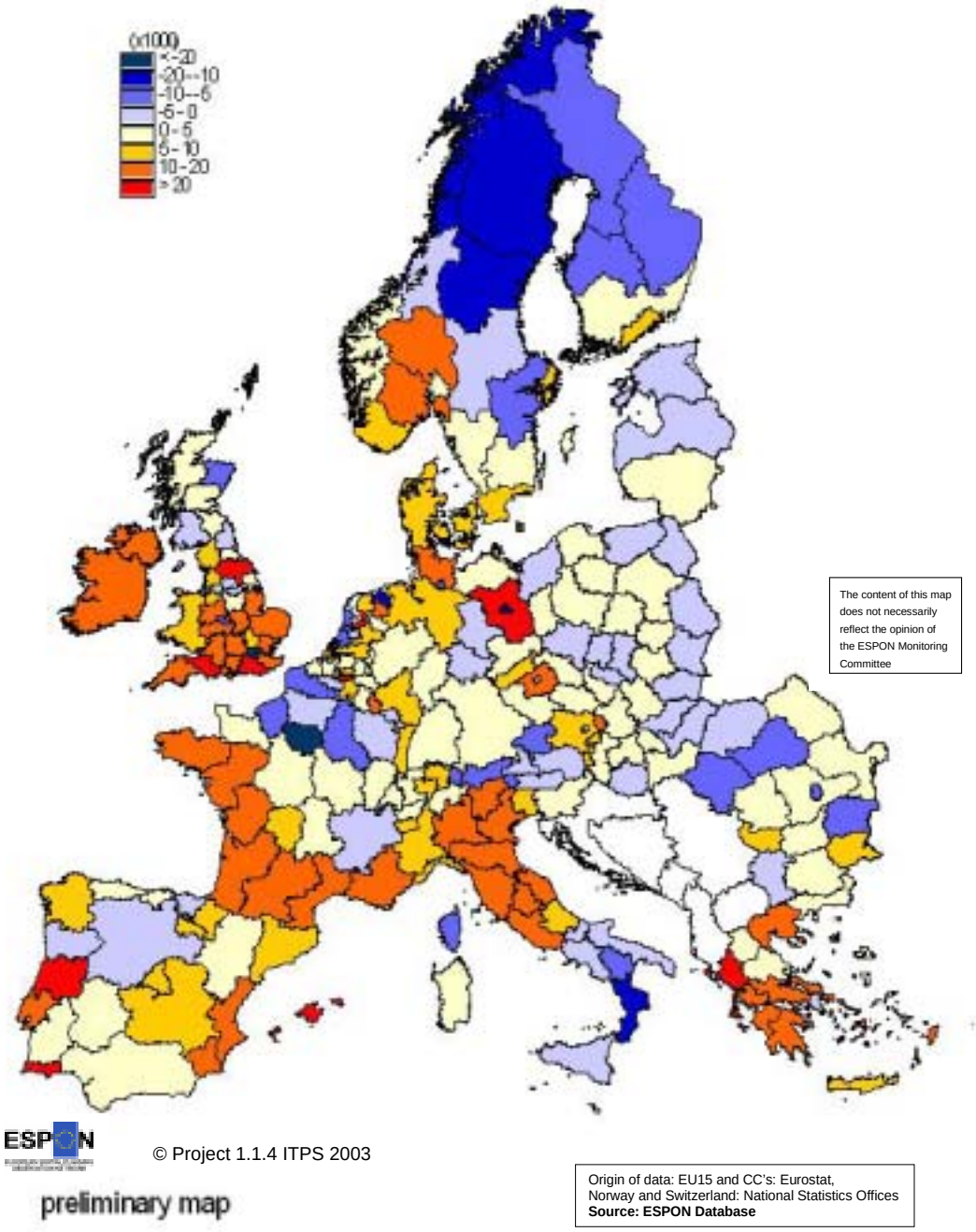


preliminary map

Origin of data: EU15 and CC's: Eurostat, Norway and Switzerland: National Statistics Offices
Source: ESPON Database

4.4.2.2 Migratory balances of middle age groups (30-44 years old)

Map 4.3 Annual average migratory balance 1995-2000 (30-44 years).



The weaker mobility of this age group (in comparison to the 20-29 years old) is illustrated by lower geographical contrasts. The geography of migratory balances of this age group is also very different and in fact is more like the geographic pattern of the total migratory balance:

the migrations of this age group are very related to those of their children, and has some correlation with older age groups attracted to the same kind of environment. Urban areas are very repulsive to these age categories which are looking for less expensive space and a more pleasant environment. However, this age group, on the contrary of the young pensioners, is still constrained by the labour market: they settle in the peripheries of the towns, keeping their jobs in the centres or in regions which are economically dynamic and offer high environmental quality (south of France and England, Mediterranean coast of Spain,…). In Eastern Europe and Scandinavia, the metropolitan areas are the only attractive regions for this age group, even if centres are indeed avoided.

4.5 Further research

4.5.1 Search for explanatory factors

Scale is a determining factor when it comes to measure and explain the migration flows. A comprehensive analysis is required to determine the most relevant scales, keeping in mind that the processes measured and the interpretations vary in function of the scale : the peri-urbanisation process (nuts 3, if not nuts 4) is to be measured on a fine scale while the flows generated by economic differences are measured on a much rougher scale (nuts 2).

A variance analysis should help us in our reflection on scale but this will have to be validated and result from the whole of the work.

According to the selected scales, we shall test different explanatory factors in order to understand the migratory balances: Gross domestic product per inhabitant, unemployment, population density.

For big age groups, we will try to apply explanatory factors which are not working anymore to explain global migratory balances. For example, we know that economic indicators such as GDP per inhabitant or the level of unemployment doesn't explain very well global migratory balances. But may be it does explain the migratory balances of the active people.

4.5.2 Typologies

4.5.2.1 Typology based on migratory balances by ages

The objective is to distinguish the regions in function of age groups that they are attracting or rejecting.

It is based on the most significant ages in terms of migratory balances: young people (20-29 years old), middle age people (30-44 years old) and old active people and pensioners (50-64 years old). For each age-groups, the balance can be positive (more than 7.5 for thousands for middle and old people, and more than 10 for young people) , negative (less than –7.5 for thousands for middle and old, or less than –10 for thousands for the young) or neutral.
If we combine, there are 27 possibilities but in the reality only 19 possibilities exist and some concern very few regions.

Ages/Types	20-29	30-44	50-64
1	+	-	-
2	+	0	-
3	+	+	-
4	+	+	+
5	+	0	+
6	+	+	0
7	+	0	0
8	-	0	-
9	-	-	0
10	-	+	+
11	-	0	+
12	-	+	
13	-	0	0
14	0	-	-
15	0	+	-
16	0	+	+
17	0	0	+
18	0	+	0
19	0	0	0

Table 1 Description of the 19 types
+ = balance > 7,5 or 10 for thousands
- = balance < -7,5 or –10 for thousands
0 = balance between –7,5 (or10) and 7,5 (or 10) for thousands.

4.5.2.2 Crossed typology of migratory balances and of mobility level

The objective is to distinguish between attractive regions with many movements or few movements. The mobility can measured as the sum of inflow and the outflow in function of the total population.

Some types can be distinguished as shown in the following table :

Migratory balances/ Level of mobility	**Negative**	**Positive**
Low	Old industrial regions (Nord-Pas-de-Calais)	Venetia
High	Some metropolitan areas (Paris, Berlin)	Periurban zones (Brandenburg)

Table 2
Some examples are written in the cases

4.6 Policy Implications and Recommendations

With regard to *policy implications* and *policy recommendations*, some tendencies in the migratory movement are visible at this stage of the analysis. Different levels in income and education are strong push and pull factors for migratory movement. This is a well known fact, both theoretical and empirical analyses of migration. With regard to young people the urban

lifestyle and education possibilities in the metropolitan areas are also pull-factors of great importance. The metropolitan regions are also in-migration areas with regard to foreigners and immigrants. Here there are a lot of signs of ghetto living and segregation that also results in social conflicts and problems.

By reducing the regional and national differences regarding income and education more balanced migratory movements will take place, promoting a more symmetrical economic development in the EU27+2 area. Furthermore, reducing the regional and national differences in income and education will be an effective means to promote a polycentric development and even stimulate symmetrical migration flows even within different age groups and social categories. Regional enlargement with larger local labour markets and functional urban areas will also stimulate a polycentric development where perhaps the infrastructure will be even more important and a precondition fro and a “driving force” in this development

Chapter 5: Fertility, migration and depopulation (WP4).

5.1 Principle Aims

The principle objectives of WP4 "Fertility, migration and depopulation" is to

1. detect the areas within the boundaries of "Europe 29" which are facing the reality or prospect of demographic 'depopulation', and
2. contribute to the description and understanding of the phenomenon and the processes involved.

To be able to fulfil these objectives the Work Package will have to deal with

a) alternative conceptualizations of an empirical phenomenon of "depopulation",
b) establishment of a satisfactory set of relevant demographical data for the description and analysis of "depopulation",
c) establishment of an overview of the main features and geographical patterns of population decline and possible "depopulation" within the territory of "Europe 29", and
d) identification of main demographic dynamics and determinant factors related to "depopulation" (analysis).

The empirical approach will be twofold, namely i) a statistical description and analysis at the territorial scales corresponding to NUTS 2, and in some cases NUTS 3, covering the entire "Europe 29" territory, and ii) some statistical analysis at finer territorial scales – including more detailed descriptions of demographic components of change and a longer time period – in very few (2-3) carefully selected example regions ("cases").

Important descriptive and analytical tools (and "products") involved in the approach is a set of indicators and typologies on certain aspects – and corresponding thematic maps – to be developed in the relevant stages of the work programme. Typological approaches refer to processes as well as areas of depopulation.

5.2 Concepts and definitions

5.2.1 The Concept and Phenomenon

The concept of 'depopulation' is far from clear. Most often the word is used almost synonymously to population decline, but sometimes it is reserved for population decline of a certain enduring nature, or even more narrowly confined to processes that carry ominous signs of socio-economic impacts. These kinds of concern may relate to socio-economic implications of distortions of the age-pyramid, or of demographical "thinning-out" of already sparsely populated (and often remotely located) areas, or even – as was the case in parts of the Nordic countries from the 1960s on – complete depopulation in the sense that entire local communities literally die out and are emptied of population.

In one or more of these senses of the concept, 'depopulation' has been discussed from time to time during most of the former century – in national and European terms as well as with reference to sub-national uneven territorial development.

Depopulation may be regarded as a special course of development in the process of population change, often indicated by certain probable demographic implications or impacts *with a problem potential* (ageing of the population and the labour force, increasing dependency ratios, labour shortage, decreasing natural growth potential etc.), and associated with long-term demographic process (notably the "modern" fertility decline and sometimes – and even combined with – enduring territorial patterns of selective migration). To be able to indicate the presence of processes with a depopulation potential, we need a relevant territorial scale and a reasonable temporal perspective.

In this project we take an open and pragmatic view of the concept and phenomenon of depopulation and will come back to a further conceptual elaboration based on the empirical analysis that the state of European regional data allows as to perform within the frame of available time resources. However, based on the aspects mentioned here and the more immediate background of the current interest in depopulation as a spatial phenomenon at the European level (cf. above), we may keep in mind that depopulation may be associated with certain:

- Levels or degrees of demographic change
- Durations of demographic change
- Dynamics (or relative components) of demographic change
- Population-structure aspects of demographic change
- Implications/potential implications of demographic change
- Territorial contexts of demographic change/implications of demographic change

A reasonable point of departure seems to be to regard depopulation as population decrease i) of a certain enduring – and potentially territorially comprehensive – nature, ii) which is related to long-term fertility decline, and where iii) the structural demographic implications of which are inadequately counteracted, and sometimes even reinforced, by lasting patterns of net migration. In its turn the inherent demographic dynamics imply iv) particular age-pyramid effects, which entail v) a problem potential depending on qualities of the regional context. However, in order to determine whether observable (negative) demographic trends imply depopulation or potential depopulation in this sense of the term, a comprehensive empirical analysis far beyond the frames of this project is necessary.

5.2.2 Territorial Scale

The picture of the geography of "depopulating" Europe is of course highly sensitive to territorial scale. The NUTS 2 level is far from appropriate for the task of identifying and explaining depopulation processes. A Norwegian example is illustrated in figure 3. Norway is among the countries that came out with the highest fertility levels "at the end of" the recent phase of fertility decline, but every year since the late 1980s around half of the Norwegian municipalities ("NUTS 5"-level) experienced population decline. In more than one third of the municipalities the population declined in more than ten of the fifteen years covered; in two thirds the population declined in more than five years of the period.

At the NUTS 3 compatible level in Norway (counties) only two regions would display a declining population during the 1980s as a total, and only one region during the 1990s. At a NUTS 2 compatible level the statistics show no sign of population decline in Norway.

Analysis of demographic depopulation at the European level will have to focus on the territorial scales that are functional in an operational sense, which are not always the scientifically adequate scales. This may be compensated to some degree by looking closer into a few carefully selected geographical areas, chosen with reference to the outcome of prior typological and analytical effort (cf. above).

Figure 5.1 Norway: Municipalities (435 NUTS 5 regions) with declining population numbers from one year to the next 1980-1996. Their percentage of all municipalities (-----) and their share of the national population (- - - -).

Historical occurrences of population decline with a possible depopulation potential have probably been typical small area phenomena in Europe (cf. for instance the example of Norway above), although some of the implications as well as some causes may be related to larger regions and even entire nations. The Eurostat scenarios seem to indicate that ever larger contiguous territories will be affected, but a hypothesis of increasing disparities in demographic development *within* the larger regions may still be plausible.

The arguments pro and con different choices of territorial scale for focussing on demographic depopulation in a European perspective is not easy to evaluate. However, practical questions on data availability, stability of territorial grids over time, comparability across national borders etc. may anyway be the most determinate factors.

5.2.3 Indicators – Preliminary approach

5.2.3.1 Indicators for direct measurement of depopulation

We take as an obvious point of departure that regional population change in a particular period is the sum of the regions' natural population change (excess of births) and net migration in that period. The long term general trend in Europe is that the natural change component turns from being a positive to being a negative contributor to regional population change as a consequence of fertility decline and population ageing (cf. above), altering the "rules" of regional-demographic distributive games – especially the role of migration. The Eurostat baseline scenario mentioned above, projects that this trend will continue and leave

the EU with a negative average contribution from the natural change component as early as 2010. Below we have displayed some preliminary results (very preliminary typological approach and two maps with a combination of NUTS 2 and NUTS 3 for the purpose of comparability) based on data on main components of regional population change, established in WP3 (see the section on data under the presentation of WP3).

A special illustration is given in a selection of figures exemplifying regional demographic change dynamics using French and Spanish NUTS 3 regions, the two countries representing the "high" and "low" end of the range of national fertility levels following the period of the most pronounced fertility decline. These figures are based on the OECD Territorial Data Base.

In principle the different types of regional population change may be described like this:

Population *decline* (Tneg) due to:
- negative natural change *and* negative net migration (NnegMneg)
- negative natural change alone (NnegMpos)
- negative net migration alone (NposMneg)

Population *growth* (Tpos) due to:
- positive net migration alone (NnegMpos)
- positive natural change alone (NposMneg)
- positive natural change *and* positive net migration (NposMpos)

The potential for depopulation processes may be expected to be found among the regions where processes of long-term weakening of the natural growth potential are at work, indicated in a direct but insufficient way by the "negative natural change" indicator. However, certain regions may be able to permanently compensate – and possibly in the long run even remedy – the loss of natural growth potential by attracting migrants, at the cost of other regions which are becoming increasingly sensitive to negative migration balances.

Below our suggestions of a selection of direct indicators of depopulation at a territorial level are briefly summarized. Coordination with other Work Packages is necessary (particularly WP 1 and 2, but also WP 3 and 5). The proposed indicators are mainly based on the statement on data availability in the *Eurostat Regional Statistics Reference Guide (2003)*, and a limited effort of possible supplements. Indicators may be established as soon as data become available for the project. According to licence agreement between ESPON and Eurostat – signed by all Lead Partners and even Main Partners – the ESPON projects are granted the right to use the complete GISCO and REGIO data bases, and was to receive the data immediately upon signing. CD-versions of the data bases should have been sent to ITPS/Activity 1.1.4 by April 14.2003, for use by all Main Partners. By July 25. 2003 ITPS and its partners had still not received the data bases. Cf. the section on data below.

Table 5.1 Proposed indicators (realistic temporal scope and territorial scale, cf. below. Ideal temporal scope in parenthesis):

Indicator	Temporal scope	Territorial scale
1. Crude rate of total population change	(1980-2000) 1990-2000 (latest); intervals to be decided	NUTS 3 and NUTS 2
2. Crude rate of natural population change (excess of births)	(1980-2000) 1990-2000 (latest); intervals to be decided	NUTS 3 and NUTS 2
3. Crude birth rate (ideally TFR at regional level)	(1980-2000) 1990-2000 (latest); primo, medio, ultimo period	NUTS 3 and NUTS 2
4. Crude rate of change in strategic age groups (0-14, 20-64, 64+, women 20-34)	(1980-2000) 1990-2000 (latest); whole period	NUTS 2
5. Periods of occurrence of negative rates (1, 2)	(1980-1990) 1990-2000 (latest)	NUTS 3 and NUTS 2

5.2.3.2 Indicators for indirect measurement of depopulation

The long-term tendencies towards stable and declining populations – and their inherent demographic dynamics – affect population structures in characteristic ways, *and these structural changes are frequently the main focus of concern rather than the drop in total population numbers* (cf. above on the concept of depopulation). An indirect way to indicate *relative degree of "depopulation" or "depopulation problems"* is to employ some common indicators on demographic structure, like the "dependency ratio".

The most obvious consequence of the general shift from high to low mortality and the fall of fertility rates, are changes in the age structure of populations, and particularly the rather recent phenomenon of *ageing.* The main cause of ageing is the change in fertility. While improved mortality generally operates at all ages, fertility changes initially affect the size of one age group only, the very young. Depopulation and ageing are interconnected by definition.

By the time the decline in fertility rates started to level off in most countries (usually around mid-1980s) the most aged populations were found in North and West Europe. In some countries, like Sweden and France, rapid ageing actually started as early as the mid-nineteenth century. The remaining countries did not display such patterns until the present century, however. Demographers often speak of «young», «mature» and «aged» populations by whether the share of persons aged 65 or over is less than 4 per cent, 4-7 per cent, or over 7 percent, respectively. By this measure all "Europe 29" countries and all but two NUTS 2 regions in these countries are rather "aged". In most of the regions the share of elderly people is more than the double of this "aged" threshold.

Ageing is not a uniform trend within ageing national populations. This is due to territorial differences in fertility levels and timing of fertility trends, modified in different ways by age-selective rural-urban migration patterns. The phenomena and territorial patterns of ageing and related changes in age structures associated with population decline, concern i.a. the regions' reproduction potential and the mechanisms of territorial population re-distribution, and the labour supply and composition of the labour force.

Below our suggestions of indirect indicators of "stage of depopulation" at a territorial level are briefly summarized. Coordination with other Work Packages is necessary (particularly WP 1 and 2, but also WP 3 and 5). *The indicators are all measured against the "Europe 29" average in order to express the relative state-of-affairs of the different regions, rather than their absolute state of depopulation* (indexes: "Europe 29" = 100). *They are also grouped into four categories by degree of "negative" deviation from the "Europe 29" average* (half standard deviations are used).

The indicators have a relevant interpretation even when measured at only one point in time, but may also be used to indicate the process. The individual indicator as well as the fruitfulness of the exact definition of each indicator may vary among countries and between different purposes, and are of course subject to discussion. *The indicator values at NUTS 2 level (mostly year 2000) in all "Europe 29" countries are displayed in a series of maps in the results section (cf. below).*

The indirect indicators even include information on recent population change at NUTS 2 level and on the share of population and area of the NUTS 2 regions which are affected by recent population decline at the lower regional level (NUTS 3)[50]. Additionally, two contextual indicators are suggested; population density and the national Total Fertility Rate, to be supplemented by indicators developed in other ESPON Activities (cf. section on data below).

The proposed indicators are mainly based on the statement on data availability in the *Eurostat Regional Statistics Reference Guide (2003)*, and a limited effort of possible supplements. Indicators may be established as soon as data become available for the project. According to licence agreement between ESPON and Eurostat – signed by all Lead Partners and even Main Partners – the ESPON projects are granted the right to use the complete GISCO and REGIO data bases, and was to receive the data immediately upon signing. CD-versions of the data bases should have been sent to ITPS/Activity 1.1.4 by April 14.2003, for use by all Main Partners. By July 25. 2003 ITPS and its partners had still not received the data bases.

Indicator 4 tells us if the ten years cohort potentially entering the labour force from the bottom of the age pyramid during the next ten years, is smaller or larger than the ten years cohort potentially leaving the labour force from the top of the age pyramid during the same period – assuming no deaths and migrations in the period. With the same assumptions indicator 7 tells us if the cohort constituting the 20-29 years olds in 2020 (born 1991-2000) is smaller or larger than the cohort constituting the 20-29 years olds in 2000 (born 1971-1980). In most countries this age-span contains the most reproductive ages. Per 1980 this age group was constituted by one of the wider post-war baby-boom cohorts (born 1951-1960).

[50] These indicators are shown here mostly because they are used as "contextual" indicators at national and NUTS 2 level, cf. the results section below. They are actually rather direct measures.

Table 5.2 Proposed indicators (realistic temporal scope and territorial scale, cf. below. ? = to be considered):

Indicator	Temporal scope	Territorial scale
Structural indicators:		
1. Share of children: 0-14/Tot.pop	1990?, 2000	NUTS 2
2. Ageing Population: 65+/Tot.Pop	1990?, 2000	NUTS 2
3. Ageing "Labour Force": 55-64/20-64	1990?, 2000	NUTS 2
4. "Labour Force" Replacement Ratio: 10-19/55-64	1990?, 2000	NUTS 2
5. Post-Active Dependency Ratio: 65+/20-64	1990?, 2000	NUTS 2
6. Aged People vs. Youth: 65+/15-24	1990?, 2000	NUTS 2
Average score on indirect "ageing"/ "depopulating" indicators	1990?, 2000	NUTS 2
Structural growth potential:		
7. Changes in Natural Growth Potential: 20-29 years in 2020 (born 1991-2000)/20-29 years in 2000 (born 1971-1980)	1990?, 2000	NUTS 2
Contextual indicators:		
8. Population density (ihabitants/square kilometers)	1999/2000	NUTS 3, NUTS 2
9. National Total Fertility Rates. 3 Groups	1999/2000 (latest)	NUTS 3, NUTS 2 (demographic context)
Recent population change, pop. and area affected:		
10. Percent recent population change	Cf. direct indicators, 1995-1999	NUTS 2
11. Share of NUTS 2 average population living in NUTS 3 regions with population decline	Cf. direct indicators, 1995-1999, 1999	NUTS 2/NUTS 3
12. Share of NUTS 2 area comprising NUTS 3 regions with population decline	Cf. direct indicators, 1995-1999	NUTS 2/NUTS 3

5.3 Data – sources and limitations

The indicators necessary to develop different modules/aspect of a typology of territorial depopulation and carry out the description and analysis as described, may to a large extent be based on two main sources of data:

1. Data which are available in the Eurostat REGIO data base with certain needs of supplements, especially with regard to the Candidate countries (*core data requirements are very much the same among most of the WPs of project 1.1.4*)
2. Data/indicators prepared and made available by other ESPON activities/the ESPON management (i.a. via the ESPON data base), especially activity 3.1 and 1.1.1./1.1.2

The latter (2) comprises indicators on settlement structure and spatial organisation, especially polycentricity, typologies of functional urban areas (FUAs), typologies of NUTS 3 regions (according to the relations between FUAs and NUTS 3), and rural-urban typology – to be taken into consideration at a later stage of the project. Moreover, the ESPON data base comprises i.a. data on economic performance (GDP), active population, employment, sectoral mix of employment, unemployment, and a small selection of *demographic* data from Eurostat databases. Data for the initial descriptive/analytical and typological tasks, that to a certain degree are unique to this project, belongs to category 1 above.

According to the *Eurostat Regional Statistics Reference Guide (2003)* the demographic data contained in the REGIO database covers among others, the following data of particular relevance to WP 4[51] (and other Work Packages of Activity 1.1.4, cf. above):

NUTS Level 2:

1. Population (by January 1.) by sex and five years age groups yearly from 1980 (EU-countries)
2. Population (by January 1.) by sex and single years of age yearly from 1995 (EU-countries) and 1990 (Candidate countries)
3. Average population by sex and single years of age yearly from 1990 (EU-countries)
4. Age-specific fertility rates yearly from 1990 (EU-countries only?)
5. Population scenarios (projections) in three alternatives for the period 1995-2025 (first single years, then five years) by sex and 19 age groups (EU-countries)
6. i) Excess of births/natural population change, ii) net migration, iii) crude rate of natural population change, iv) crude rate of net migration, v) crude rate of total population change, vi) pre-active dependency ratio, vii) post-active dependency ratio. Indicators i)-vii) yearly from 1990 (EU-countries, Candidate countries?)[52]
7. Crude rate of population change over 5 years periods from 1990 (EU-countries, Candidate countries?)

NUTS Level 3:

1. Average population by sex yearly from 1970 (EU-countries) and 1990 (Candidate countries)
2. i) Number of live births, ii) number of deaths, iii) crude birth rate, iv) crude death rate. Indicators i) – iv) yearly from 1977 (EU-countries) and 1990 (candidate countries)

Initial descriptive and analytical work may lead to the identification of supplementary data requirements to be evaluated and coordinated with the situation and needs across all the 1.1.4. Working Packages.

The description of New Cronos contents conceals several shortcomings with regard to period and general regional coverage. Supplementary activities are necessary to fill wholes in the data material. Data for example studies ("cases", cf. above) are/will be collected from the national statistical sources.

[51] According to licence agreement between ESPON and Eurostat – signed by all Lead Partners and even Main Partners – the ESPON projects are granted the right to use the complete GISCO and REGIO data bases, and was to receive the data immediately upon signing. CD-versions of the data bases should have been sent to ITPS/Activity 1.1.4 by April 14.2003, for use by all Main Partners. By July 25. 2003 ITPS and its partners had still not received the data bases.

[52] These indicators (and indicator 4 above) will be available in New Cronos in 2003. We have received no information from Eurostat upon our request about the exact publication dates.

In some cases supplementary analysis will be based on data from the OECD Territorial Database, covering OECD member countries among "Europe 29", cf. the results section below.

5.4 Some preliminary results

5.4.1 The geography of recent population decline in "Europe 29"

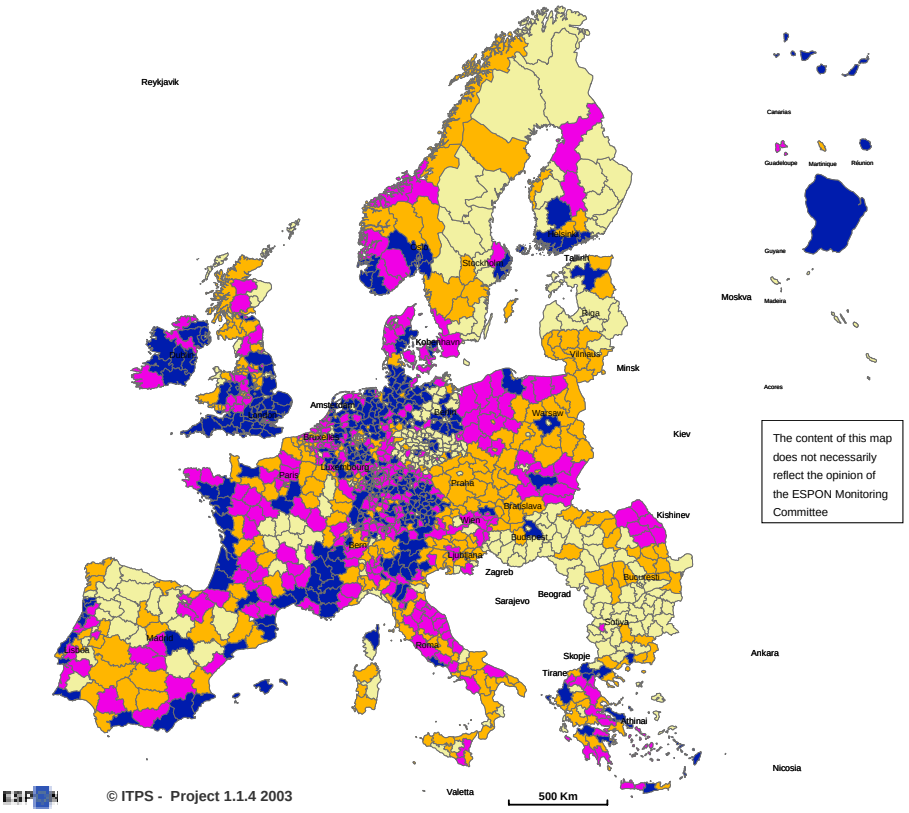
Among 1326 regions at NUTS 3 level in the 29 ESPON-countries ("Europe 29")[53] as many as 531 regions experienced a total fall in population numbers from the middle to the end of the 1990s. The median growth rate was 0,5 percent and one fourth of the regions had a total population decline of more than one percent. The growth rates varied from -13 to +31 percent among the 1326 regions (regional coefficient of variation[54] = 520).

It is important to notice that the NUTS 3 division represents very different levels of territorial detail in the different countries and a tremendous range of sizes (population and area) and other characteristics between as well as within the particular countries. In the more than 440 German NUTS 3 regions the population numbers range from around 36.000 to well above 2.000.000 inhabitants in 1999 (standard deviation 182.349 around an average of 186.229). In half of the regions the population size is higher than 135.000. Only ten percent of the regions have less than 75.000 inhabitants. The areas range from around 36 square kilometres to more than 3058 square kilometres (mean = 810, standard deviation = 596).

The first map displays the crude rates of total population change (percentage) at the NUTS 3 level 1995-1999, categorized (quartiles).

[53] Cyprus and Malta are not included due to insufficient data
[54] RCV = Standard deviation as a percentage of the mean growth rate

Map 5.1
Population Change 1995-1999



Percent population change 1995-1999 (quartiles)

- Lowest (< -1 percent)
- Next to lowest
- Next to highest
- Highest

Geographical Base: Eurostat GISCO
Regional Level: NUTS 3

In the Nordic countries there is a pattern where the less central regions have the most negative development and the most central ones the strongest growth. In Germany the most marked regional differentiation is between the western part, with generally positive development, and the former GDR, where the development is mostly negative, except for in the suburban belt around the major cities. In the western part of Germany, in the Be-Ne-Lux-countries, Ireland, south England, south and western France and coastal Portugal most of the regions are within the two top quartiles. In Italy the very regions with the most negative tendencies regarding indirect depopulation (cf. below) are to a great extent the ones with the most positive population development i the latter half of the 1990s. The regional population change in east Europe is probably hampered by the lack of a properly functioning housing market, and perhaps also due to a greater share of migrations not being registered than in the rest of "Europe 29". Even so, much of Poland shows a very positive population change, not least the regions around Warsaw and Gdansk and south of Krakow.

The most negative change is found in the least densely populated regions in France, Spain and Portugal, the northern and southern parts of east Europe, and in peripheral regions of Sweden and Finland.

When we rank the regions within "Europe 29" according to their population growth rates from the middle to the end of the 1990s, we find that the German NUTS 3 regions (especially the former eastern German regions) are remarkably well represented at the extremes. Many of the fastest growing and fastest declining regions in "Europe 29" are German. This may have to do with the greater level of territorial detail represented by the German NUTS 3 level compared to the other countries. Within all the three neighbouring "declining" NUTS 2 regions of Chemnitz, Dresden and Leipzig we find NUTS 3 regions that rank among the ten percent fastest *growing* as well as among the ten percent fastest *declining* regions among the total number of 1326 "Europe 29"-regions[55].

Tables 5.3 and 5.4 give a rough overview of the regional population development situation in "Europe 29" in the latter half of the 1990s. Table 5.3 indicates to what extent regional population growth rates varies among and within countries, and the share of the countries' regions, populations and areas which was affected by population decline from the middle to the end of the decade. The largest share of declining regions (50-100 percent) and affected populations (40-100 percent) are found in the ten countries Latvia, Bulgaria, Hungary, Sweden, Romania, Czech Republic, Estonia, Finland, Lithuania and the Slovak Republik (in this order).

In the Nordic countries far smaller shares of the populations than of the regions were affected. In many other countries the situation seemed to be reverse. In several countries the major part of the national area and populations were affected by population decline – measured at the territorial scale of the NUTS 3 regions.

[55] Cyprus and Malta not represented

Table 5.3 Regions with population change below zero 1995-1999. Median change rate (percentage) and regional variation in change rates. NUTS 3 regions. "Europe29" minus Cyprus and Malta.

Country Code	Number of NUTS 3 regions	Regions with population decline 1995-1999			Median population growth-rate	Regional coefficient of variation
		Percent of all regions	Percent of national population	Percent of national area		
AT	35	28,6	23,3	30,7	0,6	229,5
BE	43	18,6	27,0	14,4	0,8	118,4
BG	28	92,9	81,7	93,8	-3,0	159,6
CH	26	26,9	8,8	9,6	1,2	210,6
CZ	14	64,3	67,8	66,0	-0,3	242,1
DE	441	38,5	40,4	24,8	0,9	546,5
DK	15	6,7	0,8	1,4	1,0	87,2
EE	5	60,0	63,2	43,1	-0,5	1406,6
ES	52	42,3	26,2	48,7	0,2	338,3
FI	20	60,0	40,5	70,2	-0,9	906,1
FR	100	23,0	13,9	20,8	1,1	157,4
GR	51	45,1	51,9	40,6	0,4	326,2
HU	20	90,0	85,6	88,4	-2,0	219,6
IE	8	0,0	0,0	0,0	2,9	73,8
IT	103	43,7	34,1	44,5	0,2	345,7
LT	10	60,0	74,9	71,8	-0,3	220,3
LU	1	0,0	0,0	0,0	(5,5)	-
LV	5	100,0	100,0	100,0	(-3,5)	126,8
NL	40	10,0	5,4	6,0	1,8	184,2
NO	19	36,8	24,0	63,8	1,5	168,2
PL	44	31,8	36,0	21,7	0,5	405,5
PT	30	43,3	37,8	52,0	0,7	579,0
RO	42	71,4	71,8	71,7	-1,0	257,7
SE	21	76,2	43,9	86,9	-1,1	286,2
SI	12	41,7	34,5	40,3	0,0	332,0
SK	8	50,0	48,3	45,6	0,2	193,8
UK	133	36,1	26,3	30,4	0,8	255,8

Table 5.4 NUTS 3 regions and their average population numbers in 1999 by population change category 1995-1999 (according to cutting points for four equal groups of regions among all regions within "Europe 29" (minus Cyprus and Malta)). Percent of all regions and of the average total population in the regions in 1999, respectively, in each country (cf. also map above).

Country code	Growth category according to percentage change in average population 1995-1999:								Total	Number of regions
	Lowest fourth (<-1 percent)		Next to lowest fourth (-1 - 0,5 percent)		Next to highest fourth (0,5-2 percent)		Highest fourth (>2 percent)			
	Regions	Population 1999	Regions	Population 1999	Regions	Population 1999	Regions	Population 1999		
AT	6	4	37	32	46	55	11	9	100	35
BE	5	5	28	29	49	53	19	13	100	43
BG	89	73	7	12	4	15	0	0	100	28
CH	15	5	27	25	35	60	23	11	100	26
CZ	7	12	93	88	0	0	0	0	100	14
DE	32	31	13	15	21	20	35	34	100	441
DK	7	1	7	5	53	54	33	41	100	15
EE	40	50	40	39	0	0	20	11	100	5
ES	27	13	33	41	17	25	23	20	100	52
FI	50	33	15	10	10	12	25	44	100	20
FR	13	6	23	26	36	37	28	30	100	100
GR	20	6	33	51	25	17	22	26	100	51
HU	75	73	20	17	0	0	5	10	100	20
IE	0	0	0	0	25	26	75	74	100	8
IT	12	6	43	39	32	41	14	14	100	103
LT	10	5	90	95	0	0	0	0	100	10
LU	0	0	0	0	0	0	100	100	100	1
LV	100	100	0	0	0	0	0	0	100	5
NL	8	4	10	8	38	42	45	46	100	40
NO	11	7	26	17	21	17	42	59	100	19
PL	7	12	43	41	43	39	7	9	100	44
PT	30	15	17	24	23	17	30	44	100	30
RO	50	51	36	32	14	17	0	0	100	42
SE	62	36	19	24	14	19	5	20	100	21
SI	25	12	58	71	17	17	0	0	100	12
SK	0	0	63	58	38	42	0	0	100	8
UK	23	14	24	24	19	17	35	46	100	133
"Europe 29" minus Cyprus and Malta	25	18	25	29	25	27	25	25	100	1326

In table 5.4 the 1326 NUTS 3 regions are ranked by their population growth rates in the second half of the 1990s and the cutting points for dividing them into four equal groups according to their level of growth, are established. The table shows the distribution of the

regions and populations of each country in 1999 by "Europe 29" growth category. The ranks of Latvia, Bulgaria, Hungary and Sweden are confirmed. They all have very large shares of regions and populations in the category comprising the fourth of the regions with the lowest growth rates. The table even indicates that seven countries have one third or more of their regions in the category comprising the fourth of the regions with the highest growth rates, viz. Luxembourg, Ireland, Netherlands, Norway, Germany, United Kingdom and Denmark. Some of these countries also have substantial declining areas within their borders.

Among the ten percent *most declining* NUTS 3 regions in the last half of the 1990s the regions of 18 counties are represented. Of the 133 "most declining regions" as many as 64 regions are *German*, 18 regions are *Bulgarian*, 8 regions are part of *United Kingdom*, 6 regions are *Romanian* and 5 regions are *Portuguese*. The rest of the 18 countries are represented with 1-4 regions (Austria, Switzerland, Estonia, Spain, Finland, Greece, Hungary, Italy, Latvia, Netherlands, Norway, Poland, Sweden).

5.4.2 Recent population decline and "depopulation" – direct indicators

A series of maps may be produced – based on (a selection of) the single indicators of demographic change – in order to illustrate the geographical pattern of different aspects of relative demographic change and "depopulation potential" among "Europe 29" regions at NUTS 3 level (direct indicators, cf. above). "Partial depopulation" (or change in strategic age groups) may for reasons of data availability be illustrated at the NUTS 2 level only (not included in this report).

A composite typology of the (potential) depopulation process should ideally integrate indicators on the degree or level of population decline (direct indicator 1 above), the components of change (direct indicator 2 above), the timing (direct indicator 5 above) and the context (for instance indirect indicator 9 above, other – non-demographic – indicators) of change, to produce a map of degrees and types of depopulation processes in "Europe 29" at the NUTS 3 level.

At this stage of the project WP 4 we are able to display – in a highly preliminary way – two simple sketches of typologies of the "geography of depopulation" based on direct indicators and observations for a rather short period;

i) one based on the main components of change (natural population change/excess of births and migratory balance/ net migration) and
ii) one based on a combination of indicators on depopulation at three different levels of territorial scale (nation, NUTS 2, NUTS 3).

5.4.2.1 Typology based on the main components of population change[56]

The two maps presented her display the same phenomena in slightly different ways. The typological approach are explained in the legend. The maps are based on data on migratory balances per 1000 inhabitants, natural population change per 1000 inhabitants and total population change per 1000 inhabitants. Data covers demographic change for the period 1996-1999 (annual averages). The territorial scale is a combination of NUTS 3 and NUTS 4 levels, based on an evaluation of national territorial grids in a comparability perspective.

[56] The two maps presented under 5.2.1 are produced by ULB, Departement de Geographie, Bruxelles (responsible for WP3)

The first map displays all combinations of total change and the contributions (negative or positive) by the two main components of change (migratory balance and natural population change). Total population *growth* is displayed in red tones, separated in three shades according to the components of growth (natural, migration or both). Total population *decline* is represented by blue tones, and similarly differentiated into three types according to the "demographic dynamics".

The second map accentuates the *declining* regions and their combinations of components of change, while showing all *increasing* regions in a light yellow tone. This may be regarded as a first sketch or idea of a typology of depopulation areas, to be elaborated in a later stage of the project.

It is obvious from the maps that a large share of the "depopulating" regions may be characterised as relatively rural – in many cases sparsely populated and remote – regions, but even old industrial areas and relatively central towns seem to be affected by population decline. The relative contribution by the two main components of change seems to differentiate between the types of "depopulation" areas according to location, regional context and characteristics. This will have to be looked into in a later stage of the project, supported by territorial typology inputs from other ESPON-activities.

In six diagrams below (figure 5.2-5.7) we have used demographic change rates for the *NUTS 3 regions of France and Spain* to illustrate i) the distribution of regions according to rates of change in the total population and in the two main components of change (natural change and net migration), ii) the relationships between the regions' position in the pattern of distribution in two consecutive periods (1980-1990, 1990-2000), and iii) the regions' position according to the relative contributions to total population change by the two main components of change (both periods). Figure 5.7 shows the relative contribution of the two main components of change to population development in each of the NUTS 3 regions of *Spain* 1990-2000. The figure illustrates how net migration "operates" across the regional pattern of natural population change, exemplified by the Spanish NUTS 3 regions, displayed as a reminder for the interpretation of the relative influence and status of the two components of change in a "depopulation" perspective.

France and Spain are selected to represent cases at the high and low end of the range of national fertility levels following the main period of fertility decline (cf. figure 2)[57].

Only a few points indicated by the figures are to be mentioned here:

a) Figures 5.5 and 5.6 show that the two components of change were only slightly negatively correlated in the 1980s, a bit stronger in Spain than in France, however. The pattern changes from one decade to the next. In the 1990s the Spanish regions display a negative correlation, while no correlation exists for France. However, the overall pattern of regional-demographic change became far more dispersed from one decade to the next, and many more regions entered the phase of negative natural growth.
b) Figures 5.2-5.4 indicates that regional-demographic trends seem to persist from the first to the second decade. This is more pronounced among French than among Spanish regions. The regional *pattern* of natural population change was almost the same during the

[57] The source is the OECD Territorial Data Base (TDB), covering the OECD "Territorial Level 3" (TL3) for European (and other) member countries. The territorial scales for TL3 are carefully chosen for each country to enhance comparability at sub-national level across the entire OECD territory. It is not always identical to NUTS 3. However, for France and Spain the NUTS 3 level is chosen as OECD TL3 (with a slight adjustment for France)

1990s as during the 1980s, but – especially in Spain – many more regions entered the negative natural change phase in the course of these decades. The picture is more ambiguous with regard to net migration even if there is a visible tendency of repeating patterns, especially in France.

The French and Spanish NUTS 3 regions may be classified according to the actual results of the different types of regional-demographic dynamics during the two decades described above[58], cf. the scheme below.

A map of the results of the 1980s and 1990s regional-demographic processes according to this classification would show for instance that 11 new regions in Spain had entered the TnegNnegMneg category and one region had changed from that category to another from the first to the second decade.

In France 10 regions declined due to negative net migration alone during the 1990s (11 in the 1980s), while 8 regions (5 in the 1980s) declined due to negative natural change, and 4 (5) due to a combination of negative components of change. In Spain 13 (3) regions declined as result of a combination of negative factors and only 4 (8) due to net migration alone.

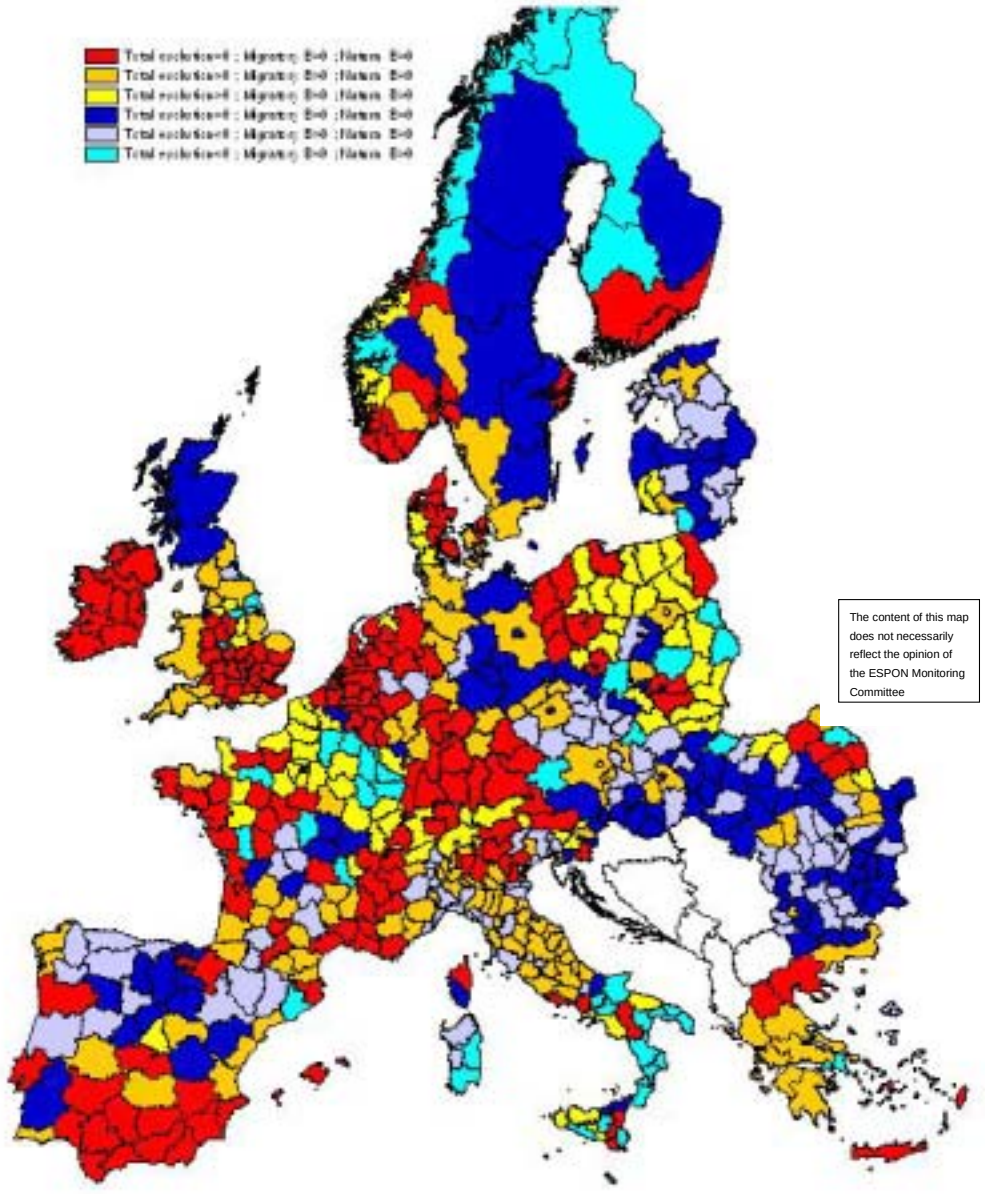
All together the number of regions with negative natural population change increased in both countries from the 1980s to the 1990s. In Spain the number of regions increased from 7 to 28 (from ca. 13 to ca 52 percent of all regions), and in France the increase was from 26 (27 percent of all regions) to 28 (29 percent).

Table 5.5 Typology Matrix

Regional population processes 1980-1990:	Regional population prosesses 1990-2000:						TOTAL
	Tneg Nneg Mneg	**Tneg Nneg Mpos**	**Tneg Npos Mneg**	Tpos Nneg Mpos	Tpos Npos Mneg	Tpos Npos Mpos	
SPAIN:							
TnegNnegMneg	**2**	**1**					**3**
TnegNnegMpos	**2**	**1**					**3**
TnegNposMneg	**3**	**2**	**1**	**2**			**8**
TposNnegMpos	**1**						1
TposNposMneg	**3**		**2**	4	4	11	24
TposNposMpos	**2**		**1**	4		6	13
TOTAL	**13**	**4**	**4**	10	4	17	52
FRANCE:							
TnegNnegMneg	**1**	**4**		**1**			**6**
TnegNnegMpos		**3**		**2**			**5**
TnegNposMneg	**1**		**6**		**3**	**1**	**11**
TposNnegMpos	**1**	**1**		12		1	15
TposNposMneg	**1**		**3**		15	4	23
TposNposMpos			**1**	1	7	27	36
TOTAL	**4**	**8**	**10**	16	25	33	96

[58] Cf. the section on "Indicators for direct measurement of depopulation" above.

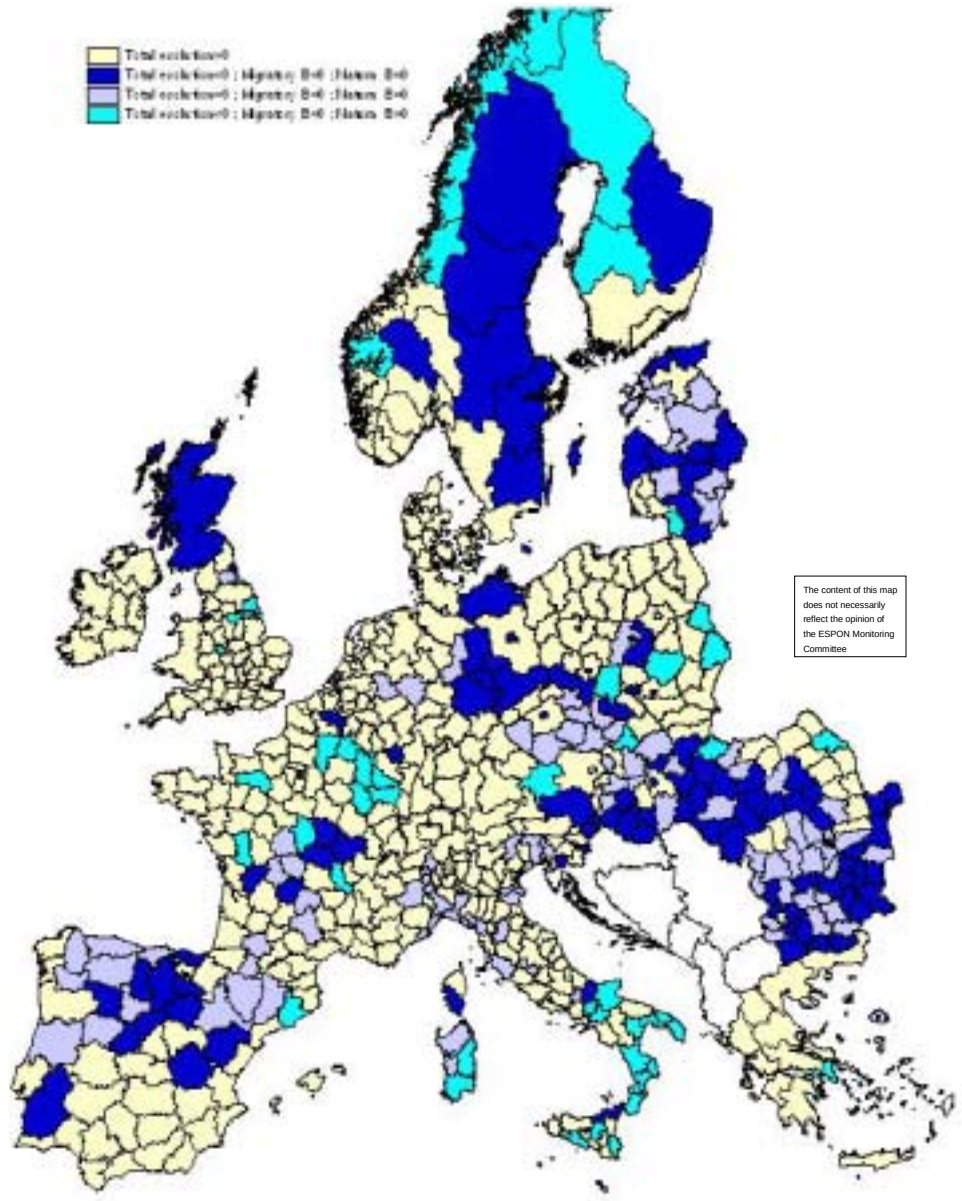
Map 5.2 Components of Population Increase 1996-1999



The content of this map does not necessarily reflect the opinion of the ESPON Monitoring Committee

Origin of data: EU15 and CC's: Eurostat, Norway and Switzerland: National Statistics Offices
Source: ESPON Database

Map 5.3 Typology of Depopulation Area 1996-1999



Origin of data: EU15 and CC's: Eurostat, Norway and Switzerland: National Statistics Offices
Source: ESPON Database

Figure 5.2 Percent total population change 1980-1990 and 1990-2000. NUTS 3 level. France and Spain

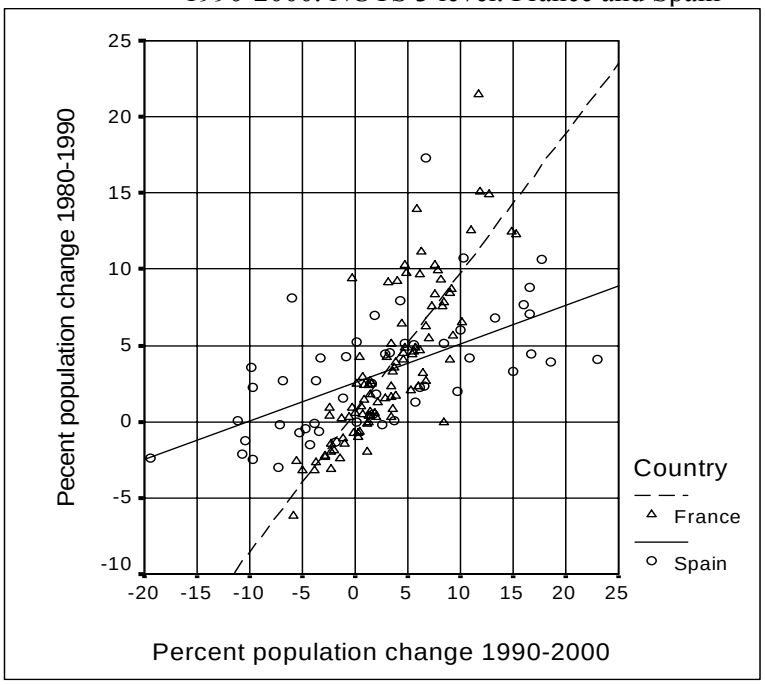


Figure 5.3 Percent natural population change 1980-1990 and 1990-2000. NUTS 3 level. France and Spain

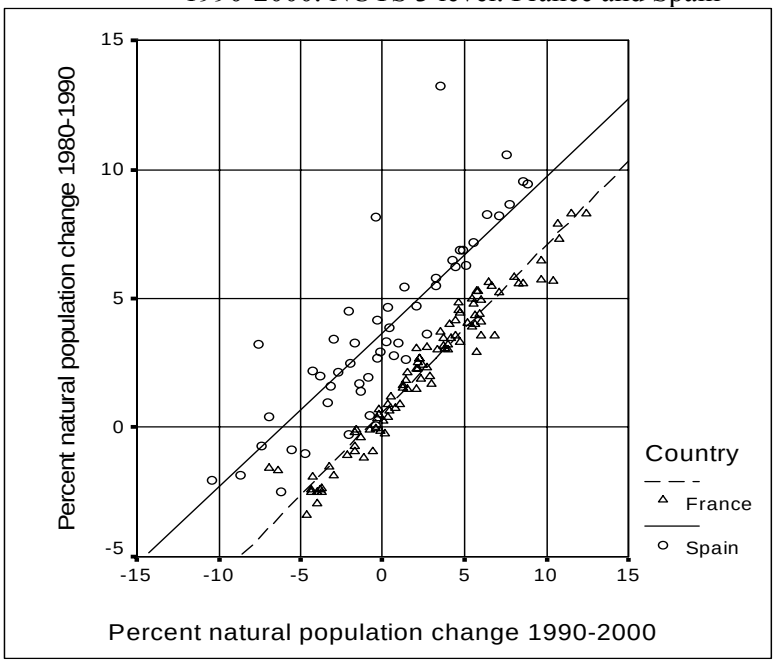


Figure 5.4 Percent net migration 1980-1990 and 1990-2000. NUTS 3 level. France and Spain

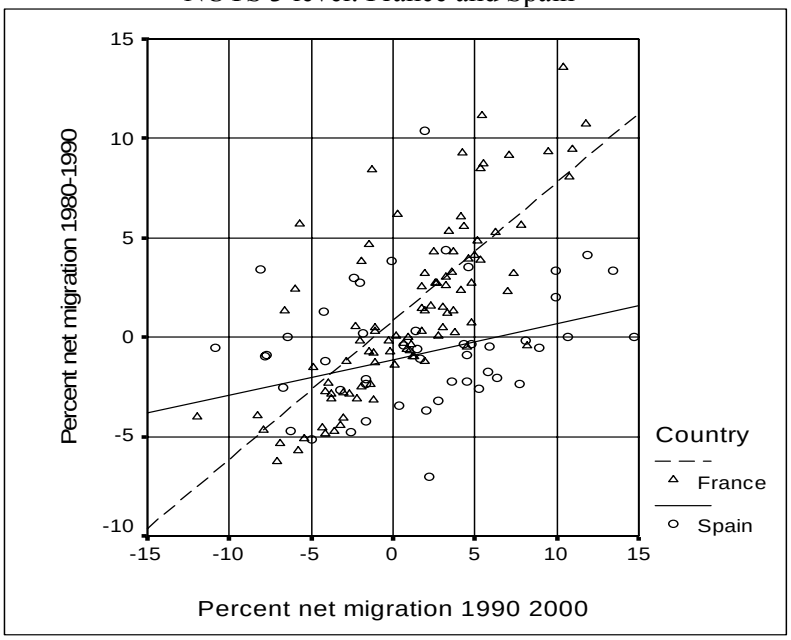


Figure 5.5 Percent natural population change and percent net migration 1980-1990. NUTS 3 level. France and Spain

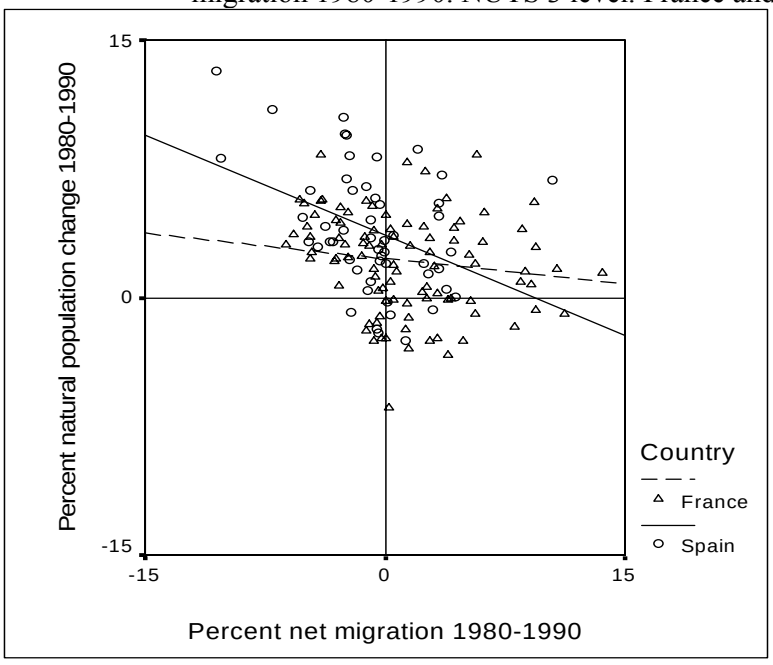


Figure 5.6 Percent natural population change and percent net migration 1990-2000. NUTS 3 level. France and Spain

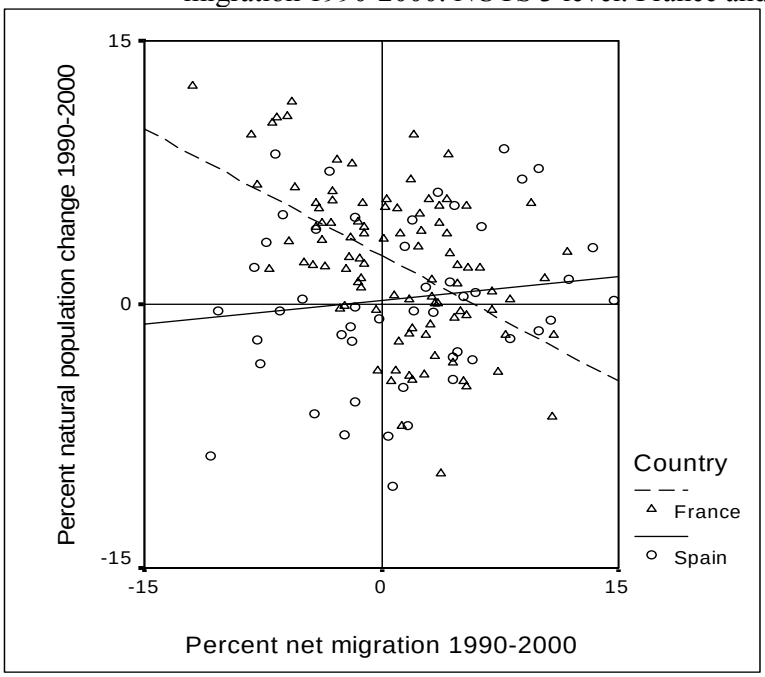
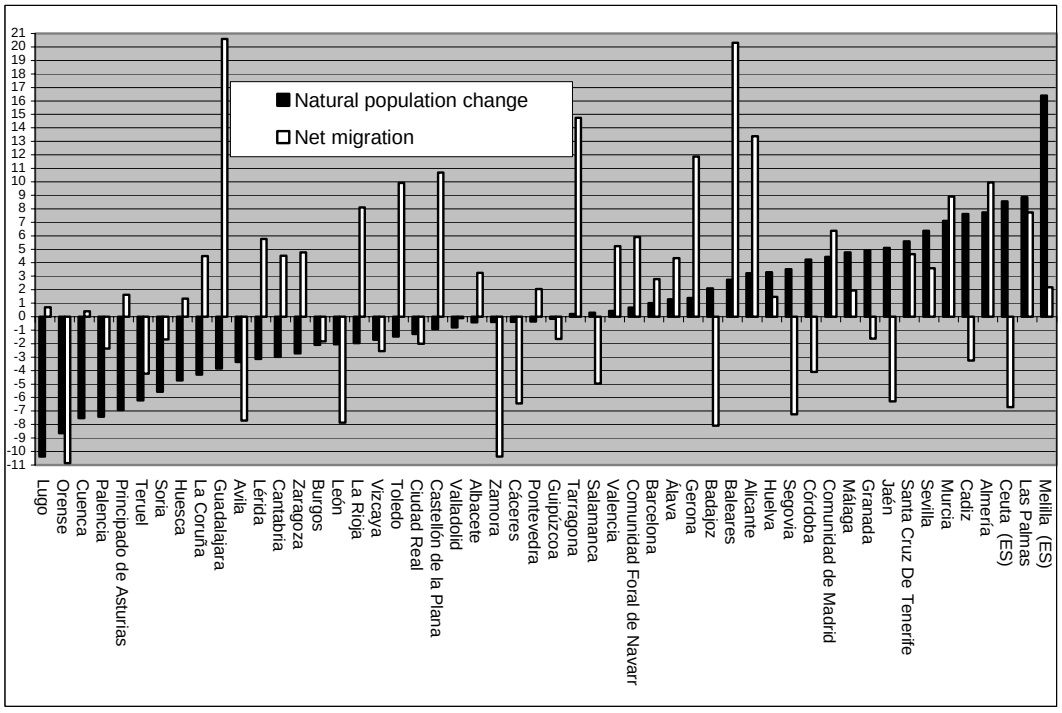


Figure 5.7. Natural population change and net migration 1990-2000. Percent of total population 1990. NUTS 3 regions in Spain.



5.4.2.2 Typology based on indicators at different territorial scales

The logic behind this typological sketch – displayed in two maps below – is that the recent (short-term: 1995-1999, total population change) demographic development of a smaller territorial unit may have different interpretations according to demographic development characteristics of the larger region of which it is a part, and even the demographic situation of the nation as a whole. In our approach the NUTS 3 level represents the smaller territorial units and the NUTS 2 level represents the larger regions. The national Total Fertility Rates (TFR) may indicate dramatically different national demographic scenarios (cf. Chesnais 2000, op.cit.) and regional-demographic dynamics, and therefore represent important frame conditions for determining prospective regional demographic change. This indicator has therefore been given some weight in the typological approach.

The approach is "hierarchical" in the sense that population change in small territorial units is "weighted" by the population change situation of the larger region, and in its turn by the national demographic prospects (assuming no migration), indicated by the Total Fertility Rate. Total Fertility Rates at sub-national territorial levels are very hard to come by, and are also relatively unstable figures. Some effort will be made to estimate TFR or a similar indicator at NUTS 2 level, however (cf. WP 2). The logic is illustrated in the table below:

Table 5.6 Total fertility rate and recent population decline

NATIONAL	**NUTS 2-regions**	**NUTS 3-units**	**NUMBER OF NUTS 3-units**	**Code**
Total Fertility Rate	Recent population decline	Recent population decline	1995-1999 "Europe 29" (excl. CY & MT)	
<1,3 (Extremely low)	Change rate <0 or share of pop. in declining units >25%	Change rate <0	**122**	111
		ELSE	46	112
	ELSE	Change rate <0	**6**	121
		ELSE	65	122
1,3 – 1,5 (Very low)	Change rate <0 or share of pop. in declining units >25%	Change rate <0	**213**	211
		ELSE	155	212
	ELSE	Change rate <0	**45**	221
		ELSE	295	222
>1,5 (<1,9) (Low)	Change rate <0 or share of pop. in declining units >25%	Change rate <0	**78**	311
		ELSE	61	312
	ELSE	Change rate <0	**15**	321
		ELSE	255	322

The typological exercise may take different paths depending on the relative weights assigned to the influence of the different hierarchical levels. Below, two slightly different examples are given, however both giving a certain emphasis to the national "frame" indicator. The typological sketches are schematically presented, followed by one map for each preliminary typology:

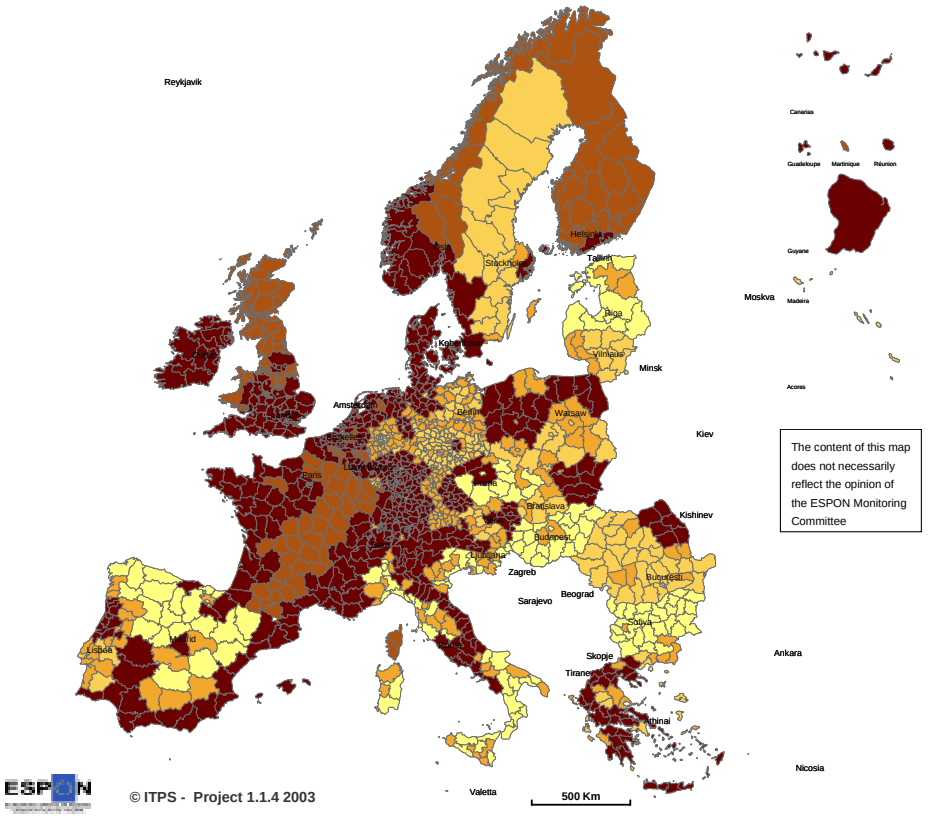
Table 5.7 Preliminary typology, alternative 1 (based on direct indicators of ”depopulation”):

CODE, composite indicator (”typology”) of ”depopulation”	TERRITORIAL LEVEL/Indicator			Code, cf. scheme above
	NATION Total Fertility Rate 1999	NUTS 2 Recent population change/share of population in declining NUTS 3 units >25% of population in NUTS 2 region (1995-1999)	NUTS 3 Recent population change (1995-1999)	
1 (Very strong depopulation)	Extremely low	Decline	Decline	111
2 (Strong depopulation)	Very low	Decline	Decline	211
3 (Depopulation)	Extremely low	Decline	Not decline	112
	Extremely low	Not decline	Decline	121
	Very low	Decline	Not decline	212
	Very low	Not decline	Decline	221
4 (Possible depopulation	Low	Decline	Decline	311
	Low	Decline	Not decline	312
	Low	Not decline	Decline	321
5 (No depopulation)	Extremely low	Not decline	Not decline	122
	Very low	Not decline	Not decline	222
	Low	Not decline	Not decline	322

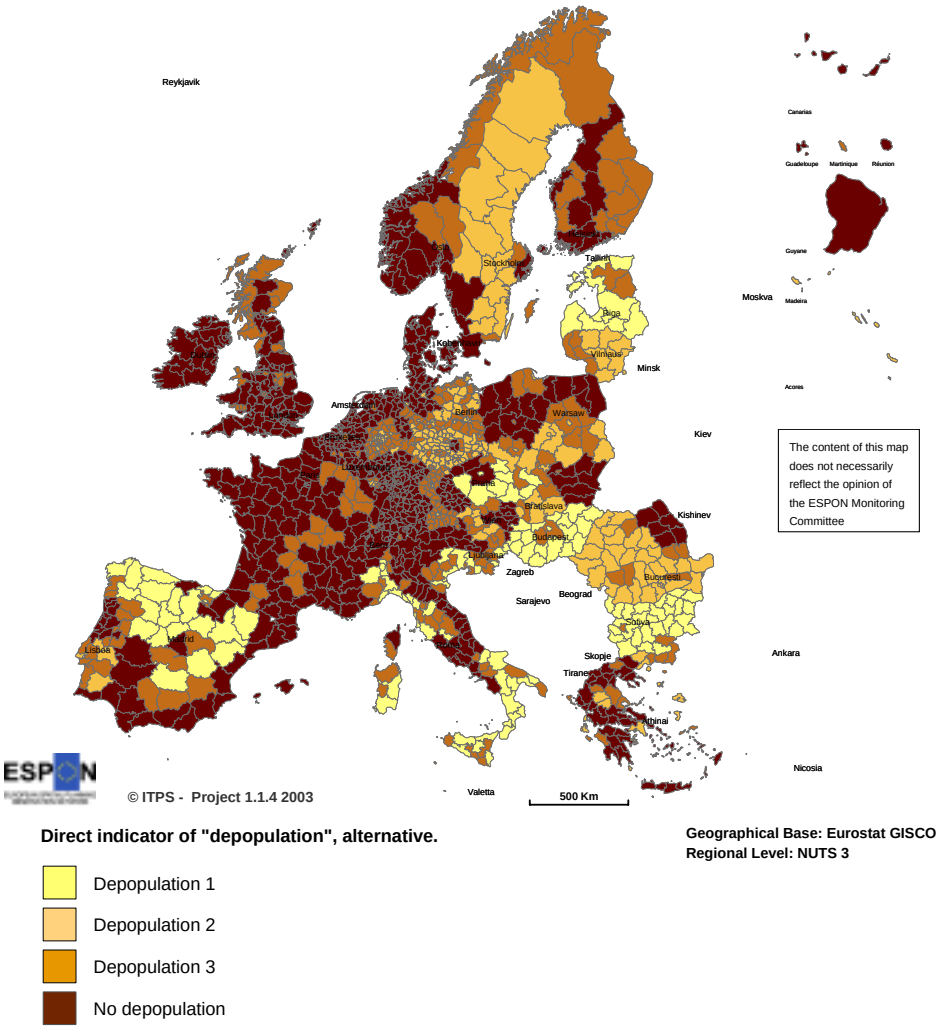
Table 5.8 Preliminary typology, alternative 2 (Based on direct indicators of ”depopulation”):

CODE, composite indicator (”typology”)	TERRITORIAL LEVEL/Indicator			Code, cf. scheme above
	NATION Total Fertility Rate 1999	NUTS 2 Recent population change/share of population in declining NUTS 3 units > 25% of NUTS 2 population (1995-1999)	NUTS 3 Recent population change (1995-1999)	
1 (Depopulation 1)	Extremely low	Decline	Decline	111
2 (Depopulation 2)	Very low	Decline	Decline	211
3 (Depopulation 3)	Extremely low	Decline	Not decline	112
	Extremely low	Not decline	Decline	121
	Very low	Decline	Not decline	212
	Very low	Not decline	Decline	221
	Low	Decline	Decline	311
4 (No depopula-tion)	Extremely low	Not decline	Not decline	122
	Very low	Not decline	Not decline	222
	Low	Decline	Not decline	312
	Low	Not decline	Decline	321
	Low	Not decline	Not decline	322

Map 5.4 Direct Indicator of ’Depopulation’



Map 5.5 Direct Indicator of 'Depopulation' - Alternative



Countries with "Extremely low" Total Fertility Rates in "Europe 29" (except Cyprus and Malta) comprise 239 NUTS 3 units. 708 NUTS 3 units are within countries with "Very low" fertility, and 379 units are located in "Low" fertility countries. The share of NUTS 3 units with *recent population decline* within declining larger regions, range from 51 percent among

units in "Extremely Low" fertility countries, via 30 percent in "Very low" fertility countries, to 21 percent in "Low" fertility countries. Regions with *growing* units within growing regions range from 27 percent, via 48 percent, to 63 percent, respectively. The countries with "Extremely low" fertility rates are Spain, Italy, Bulgaria, Slovenia, Hungary, The Czech Republic, Estonia and Latvia. Within these countries wide "depopulation" areas exist according to our indicators, and in a few of them regional polarization seems to be the case, declining and growing areas existing side by side (for instance Spain and Italy).

In the candidate countries one cannot speak of depopulation in a strict sense, though population decline is a marked process. Actual depopulation might occur in some of the high mountain areas of Romania and Bulgaria, however.

In Hungary the distribution of population (apart from the concentration in the Capital Region) is relatively even, and so is the decrease in the number of inhabitants. Comparison of maps at the NUTS2, NUTS3, NUTS4 and NUTS5 area units reveals that the higher the level of analysis is, the more even is the process of decline. Only a most detailed map (of NUTS5 units) will show variations particularly due to the development of urban regions and the stagnation of rural regions.

In Scandinavia, Swedish territorial units are deviant. At this territorial scale most of the Swedish units will have to be characterized as "depopulation" areas, i.e. they are declining units within declining larger regions in a country with a "Very low" below-replacement fertility level.

According to the first map of "direct indicator of depopulation" no country with low total fertility rate has any region with depopulation. In Ireland and Denmark all regions are in the no depopulation category, while in France, the United Kingdom, the Be-Ne-Lux-countries, in Finland and Norway, parts of the countries are also in the possible depopulation category.

All the countries with very low fertility rate (Sweden, Germany, Switzerland, Austria, Portugal, Slovakia, Greece, Rumania, Poland and Lithuania) have at least some depopulation regions, but no one (per definition) with very strong depopulation. Every region in Lithuania is in the depopulation categories. With the exception of the territories around Leipzig, the whole of the former GDR shows depopulation or strong depopulation, as does the Ruhr area, and territories close to the former GDR border from Lower Saxony to Bavaria.

Very strong depopulation is generally found in territories in the countries with extremely low total fertility rate, Spain, Italy, Slovenia, Bulgaria, Hungary, the Czech republic, Latvia and Estonia. In the Baltic states, Hungary and Bulgaria, all regions are in one of the three depopulation categories. In Latvia, all the regions have very strong depopulation.

The second map (the alternative "direct indicator of depopulation") show to a great extent the same pattern as the main "direct indicator of depopulation", but especially a greater part of France, of the northern parts of the United Kingdom and of Finland falls within the no depopulation category.

Parts of northern Italy, parts of northern Spain and parts of Bulgaria are both found to have the highest level of relative depopulation (cf. the section on indirect/structural indicators below) and very strong depopulation according to the direct indicator. For most of east Europe, there is a discrepancy between low degrees of relative depopulation (cf. below) and

an often strong or very strong depopulation according to the direct indicator, even though we find a number of regions in Poland and in Rumania that combine the lowest degree of relative depopulation and no depopulation according to the direct indicator. Parts of the UK, Germany, Northern Italy and Greece combine the highest degree of relative depopulation (cf. below) with no depopulation according to the direct indicator.

5.4.3 Indirect/structural indicators on degree/state of "depopulation"

Indirect indicators 1-7[59] may serve the purpose of mapping some important *structural aspects* of the type of enduring population stabilisation and decline frequently associated with depopulation. They indicate structural demographic effects of depopulation, as well as the demographic dynamics at work and probable policy relevant implications and the future demographic potential.

The most evident indicators of depopulation in the sense mentioned above are the (shrinking respective expanding) share of children and elderly people in the population (*cf. the first two maps below*). Similar indicators of relative depopulation – and highly policy-relevant, although controversial with regard to interpretation – are the so-called post-active dependency ratio and the ratio of young people to elderly people, and the indicator of an ageing "labour forurce" (cf. *the next three maps*). The maps are showing four categories, from "Europe 29" average or "better" (for instance a lower share of elderly people, a higher share of children, a lower dependency ratio etc., are characterised as "better"), to one standard deviation (STD) or more "worse" than the "Europe 29" average. *The sixth map* is based on the average score on these five (relatively highly correlated) indicators, intended as a rough general relative-state-of-depopulation indicator – and as another preliminary typological basis for a map of "the geography of depopulation" within the "Europe 29". The indicator are categorized in quartiles. *All the indicators and maps in this section are at territorial level NUTS 2.*

Eventually (*the last two maps*) two indirect indicators at NUTS 2 level (indicators 4 and 7)[60] may serve as supplementary pointers to future depopulation geography. The *first* of the last two maps indicates the potential for growth in an important demographic basis for natural population change (the age-group 20-29 years) inherent in the present regional demography (the size of the cohort that will be 20-29 years in 2020 in relation to the size of the cohort that was 20-29 years in 2000). The *second* of the last two maps indicates to what degree the potential loss of "labour power" due to retirement in the course of the next ten years, will be compensated by the entering in the labour market by the cohort leaving the educational system and reaching the economically active ages during the same period. Both indicators are blind to migration and mortality. They are related to "depopulation" as indicators on demographic-structural effects of depopulation dynamics, as well as on potential prospective depopulation process.

The first six maps – based on indirect/structural indicators (the sixth being the average score indicator) – are briefly and preliminary commented upon as follows:

1. The regions with the most negative deviations regarding *the share of children* ("Europe 29" average = 17,2 percent) are mostly located in northern and central Italy, northern Spain, east Germany and in Greece. On The British Isles and in the Nordic and the Baltic countries, all

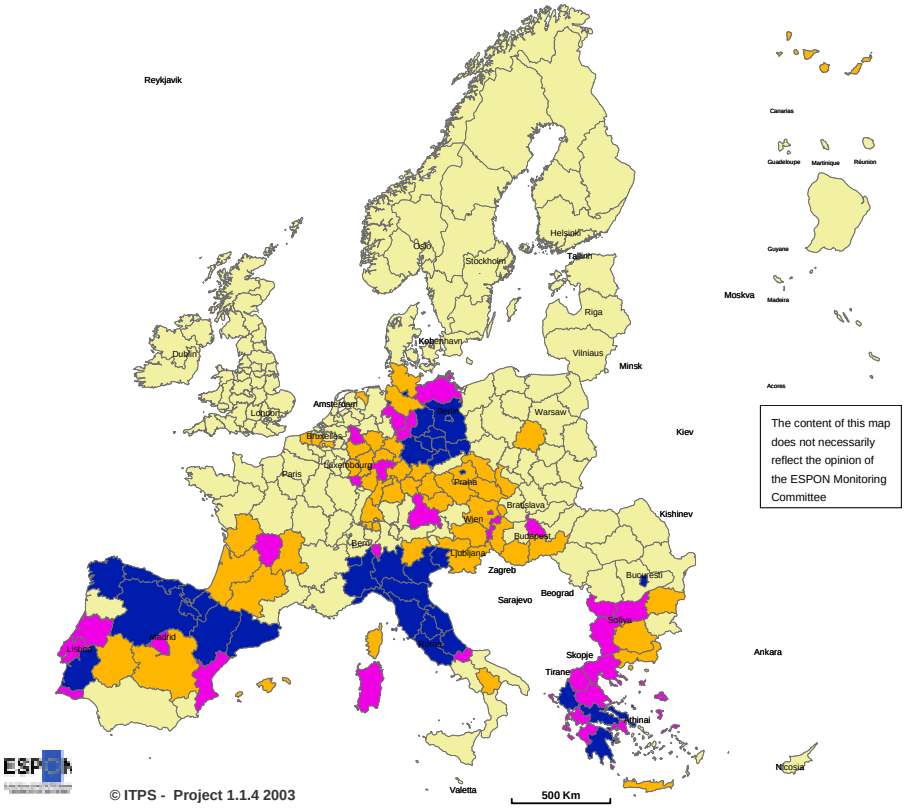
[59] Cf. section on "Indicators for indirect measurement of depopulation" above.
[60] Cf. the section "Indicators for indirect measurement of depopulation".

regions are on the European average or "better", as are most of Poland, Slovakia, Rumania, Belgium and the Netherlands. The east German case is related to a rapid fertility decline after the reunification of Germany and migration to former West Germany. For both the Italian and Greek regions with a particularly difficult position according to this indicator we must probably seek the explanations in previous demographic occurrences, as these regions generally have a strongly positive migratory balance, that greatly influences the population distribution by age groups. To some extent, this is also true for Northern Spain.

2. The regions with highest *share of persons above 65 years of age* are Spanish and Portuguese regions with low population density, much of northern and central Italy, and some parts of Greece, the United Kingdom and Sweden. The Italian regions are generally more densely populated than the other regions, and include many of that country's most important cities. Only tree regions within the former east European countries are not included among regions on the "Europe 29" average or better ("Europe 29" average = 15,6 percent). There is little reason to assume that the same explanatory processes are at work in all these regions. This pattern is basically a result of changes in fertility levels and migration levels.

3. Very much the same picture is presented by the *post-active dependency ratio* ("Europe 29" average = 0,3) as for the population ageing. This should not be taken as an indication that the distribution of children is close to being the same as for the population 20-64 years of age. It rather means that this difference is not big enough to contribute significantly to changing the regional pattern when using a rather crude ratio. This is partly a result of the one group consisting of 20 cohorts, the other of 45.

Map 5.6 The Share of Children 0-14 Years.

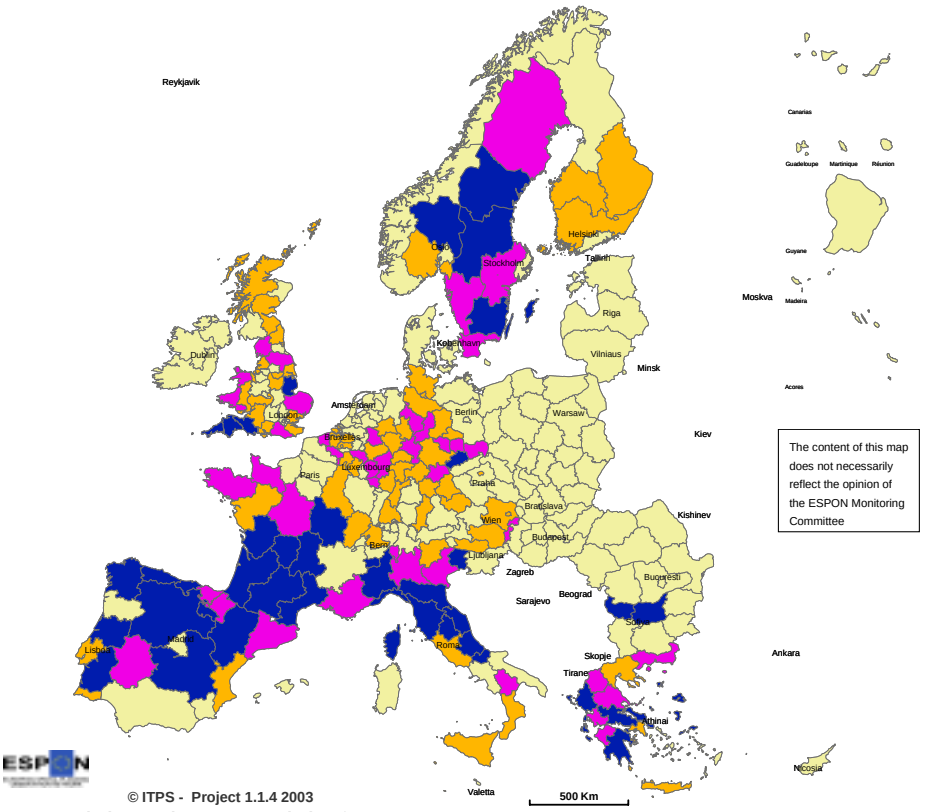


Share of children 2000. Deviation from "Europe 29" average.
Share of persons 0-14 years.

Geographical Base: Eurostat GISCO
Regional Level: NUTS 2

- "Europe 29" average or "better"
- Less than 1/2 STD "negative" deviation
- 1/2 to 1 STD "negative" deviation
- 1 STD deviation or "worse"

Map 5.7 The Share of Persons 65+ years



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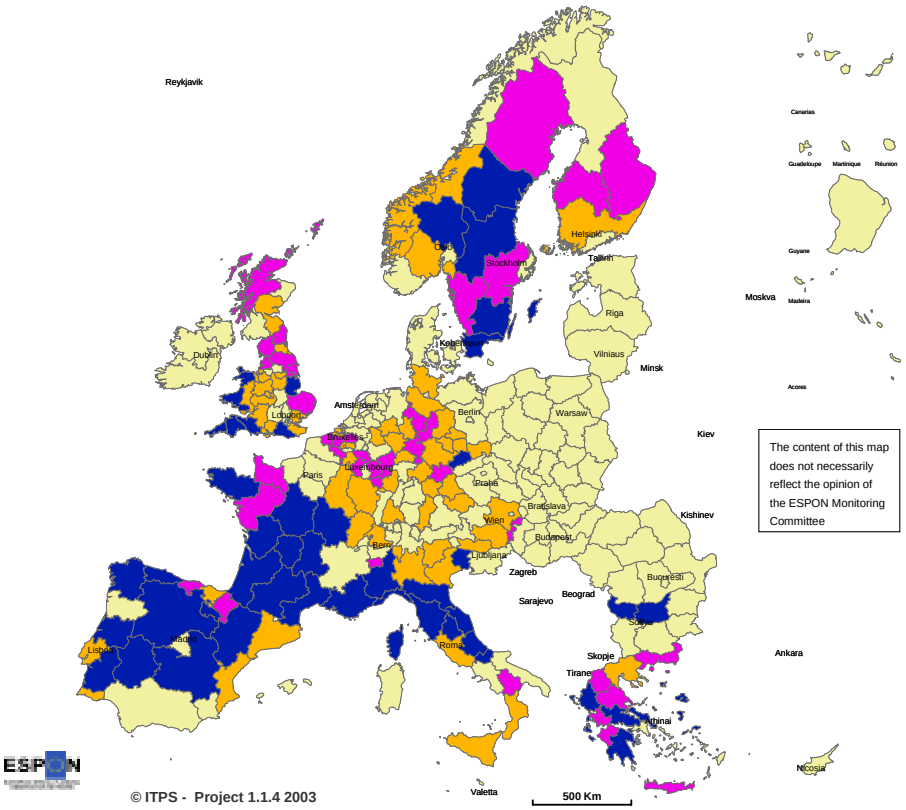
Population ageing 2000. Deviation from "Europe 29" average.
Share of persons > 65 years.

Geographical Base: Eurostat GISCO
Regional Level: NUTS 2

- "Europe 29" average or "better"
- Less than 1/2 STD "negative" deviation
- 1/2 to 1 STD "negative" deviation
- 1 STD deviation or "worse"

Map 5.8 Post-Active Dependency Ratio 2000 (65+/20-64 years).



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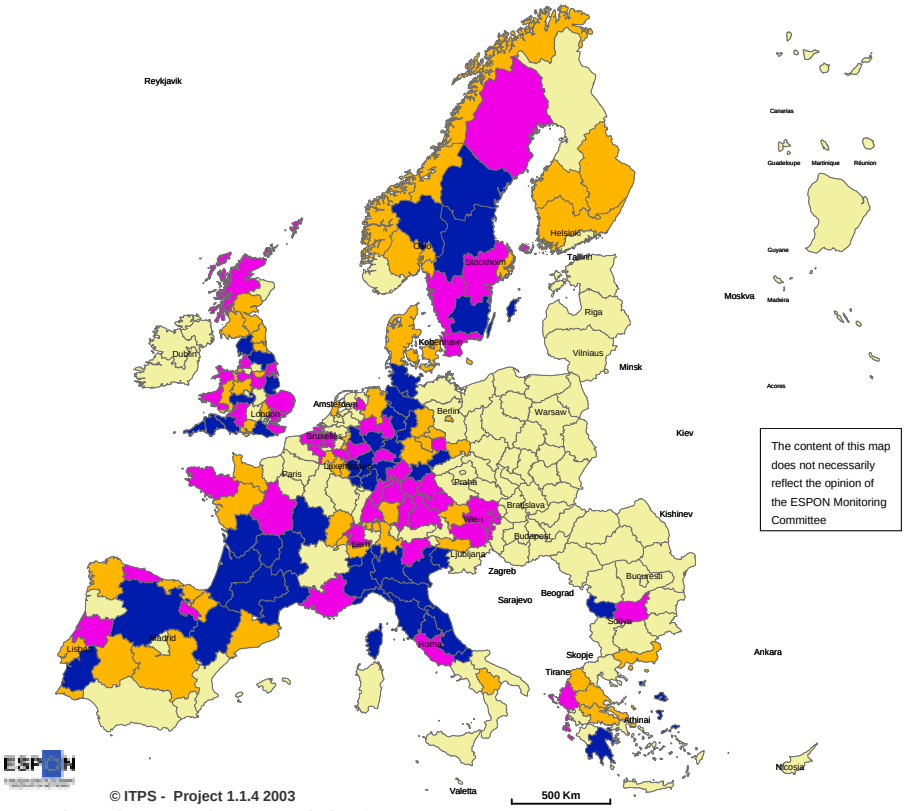
Post-Active Dependency Ratio 2000. Deviation from "Europe 29" average. 65+/20-64 years

Geographical Base: Eurostat GISCO
Regional Level: NUTS 2

- "Europe 29" average or "better"
- Less than 1/2 STD "negative" deviation
- 1/2 to 1 STD "negative" deviation
- 1 STD deviation or "worse"

Map 5.9 Aged People vs. Youth 2000 (65+/15-24 years).



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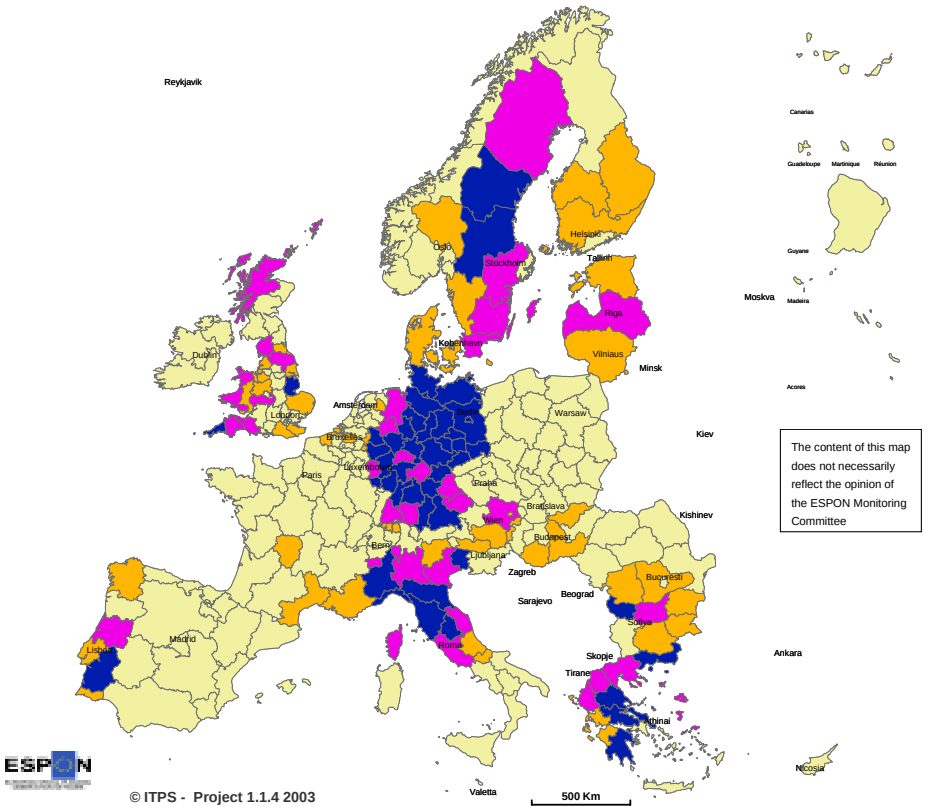
Aged People vs. Youth 2000. Deviation from "Europe 29" average. 65+/15-24 years

- "Europe 29" average or "better"
- Less than 1/2 STD "negative" deviation
- 1/2 to 1 STD "negative" deviation
- 1 STD deviation or "worse"

Geographical Base: Eurostat GISCO
Regional Level: NUTS 2

Map 5.10 Ageing Labour Force 2000 (55-64/20-64).

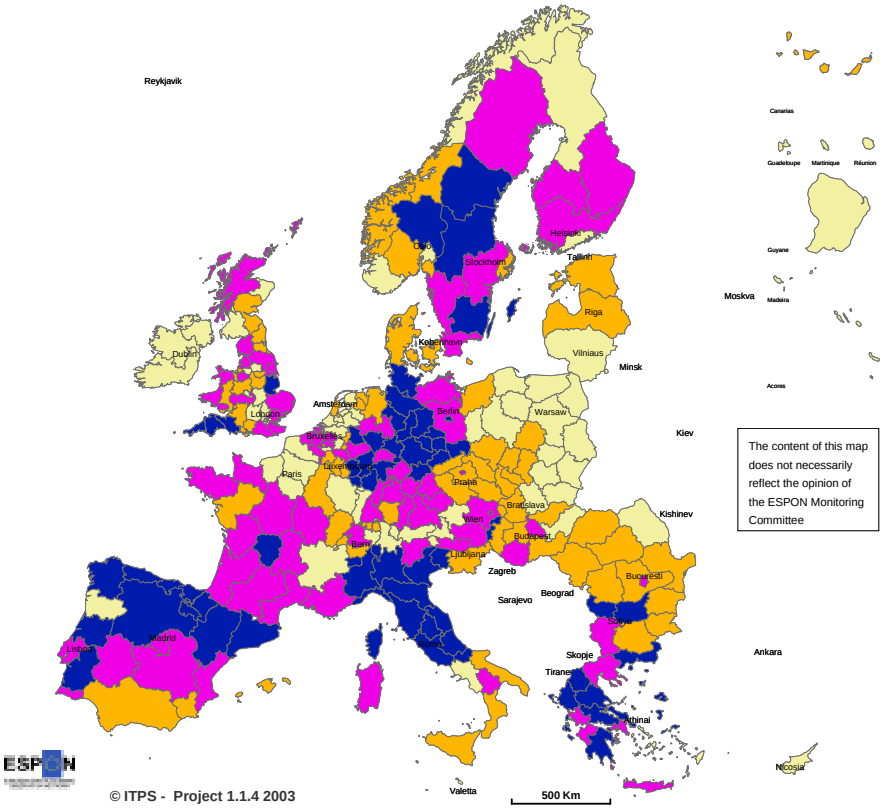


Ageing Labour force 2000. Deviation from "Europe 29" average. 55-64/20-64 years.

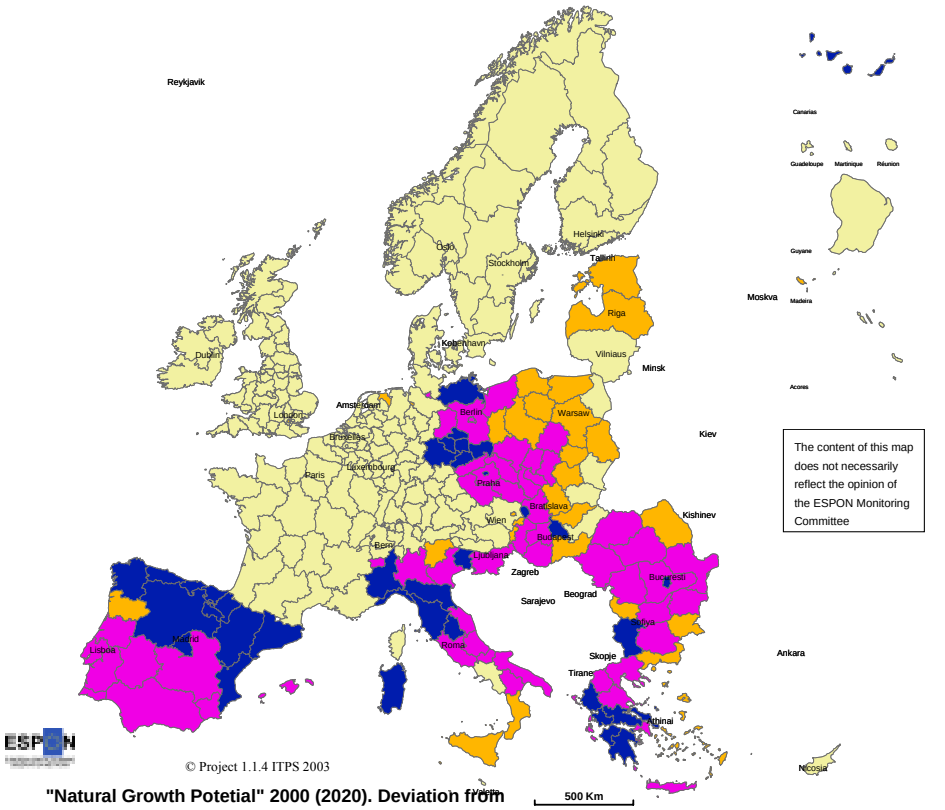
Geographical Base: Eurostat GISCO
Regional Level: NUTS 2

- "Europe 29" average or "better"
- Less than 1/2 STD "negative" deviation
- 1/2 to 1 STD "negative" deviation
- 1 STD deviation or "worse"

Map 5.11 Average Score on Indirect Depopulation Indicators 2000.



Map 5.12 ”Natural Growth Potential” 2000 (2020)

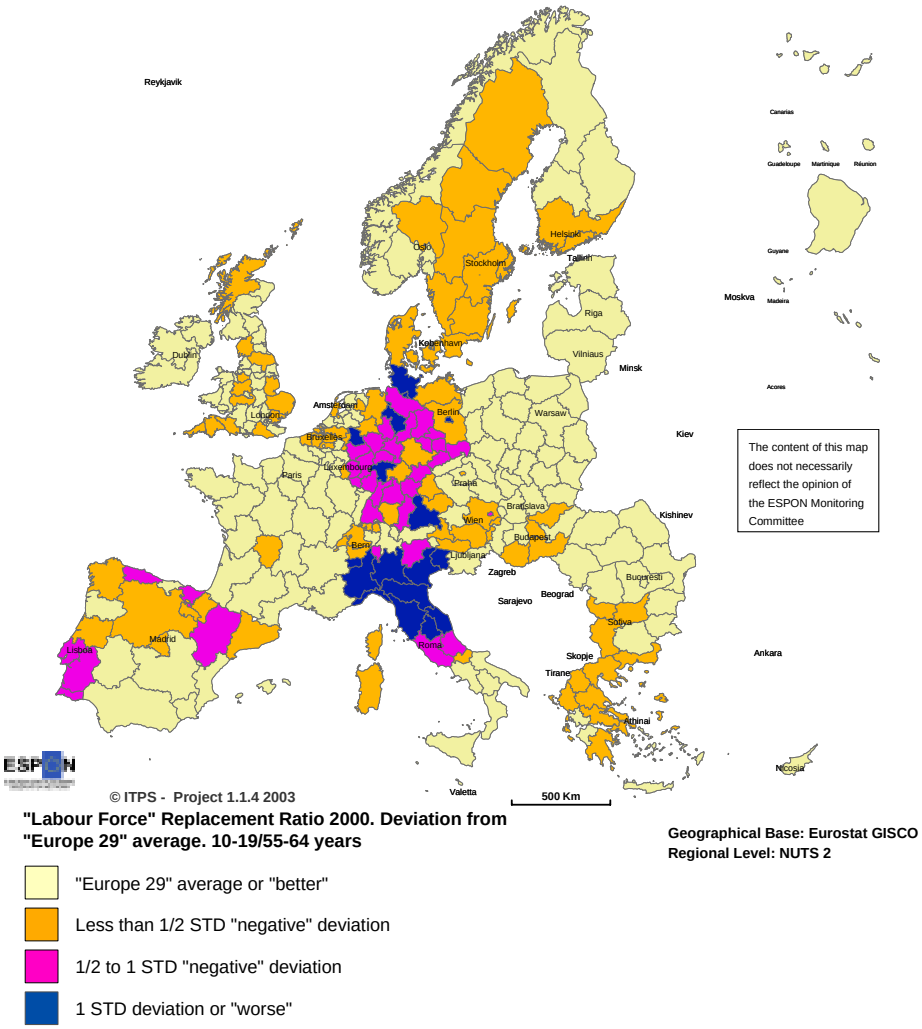


"Natural Growth Potetial" 2000 (2020). Deviation from "Europe 29" average. Cohort 1991-2000/Cohort 1971-1980 (20-29 in 2020/20-29 in 2000).

Geographical Base: Eurostat GISCO
Regional Level: NUTS 2 © ITPS 1.1.4

- "Europe 29" average or "better"
- Less than 1/2 STD "negative" deviation
- 1/2 to 1 STD "negative" deviation
- 1 STD deviation or "worse"

Map 5.13 Labour Force Replacement Ratio 2000 (10-19/55-64 years).



4. When it comes *to the aging of the labour force* ("Europe 29" average = 17,7 percent), the northern Italian regions, most of Greece and most of Sweden are included in the two groups with at least ½ STD (standard deviation) "negative" deviations. All the German regions falls within these two groups as well. This means that the early reduction in fertility in Germany

will be very marked in the age structure of the labour force by this time, opening a potential for migration from the candidate countries, where most regions have a lower share of the cohort near retirement age than the "Europe 29" average. France, with its very early reduction in fertility, has not an ageing labour force by this measure; neither has the BeNeLux countries, Spain, Ireland or Norway.

5. When looking at *average scores*, Ireland is the only country with a national subdivision that is completely within *the lowest degree of relative depopulation*. No regions in Germany, the Czech Republic, Bulgaria and Spain are within this category. When looking at the regional picture, a big discrepancy with the migratory balances of adults in the reproductive age groups is shown (cf. also WP 3). This means that for example the very same northern and central Italian regions that for decades have had a migratory surplus is in the category of *highest degree of relative depopulation*, we find no north-south dimension in the United Kingdom, and the regions of France with the most positive migratory balance are also among those with high degree of relative depopulation.

What these results demonstrate is basically that demographic scores at any given time are highly influenced by former demographic occurrences. Behind these figures are national and regional changes in fertility over almost a century, migration patterns and their changes within each country, international migration and its regional distribution in the countries, and implications of wars.

The last two maps based on indirect/structural indicator are briefly and preliminary commented upon as follows:

1. The first map demonstrates to a great extent the difference between the countries that since the 1970s have bettered their fertility rates, and those which have not. For the former east European countries, it shows the reductions in fertility during the 1990s, which make the situation of east Europe generally somewhat negative with regard to prospective change in the core age group of its "natural growth potential" ("Europe 29" average = 0,8). With the exception of the metropolitan regions of some of the east European countries, however, the regions with the most "negative" deviation from the average are almost exclusively within the present EU, and in countries with very low or extremely low total fertility rate. As expected, much of northern Italy, the northern half of Spain, and parts of Greece falls within this group, as does much of east Germany. For the northern Italian regions and for the Greek ones, these deviations will probably be modified by migration. Almost all European regions within the former west bloc north of the Alps and the Pyrenees are on the average or better.

2. There are comparatively few regions with a strong negative deviation for the "labour force" replacement ratio (10-19/55-64 years, "Europe 29" average = 1,2). More than one STD (standard deviation) "negative" deviation are only found in regions of northern Italy and scattered German regions. All regions of Germany and Sweden have a negative deviation. When most regions with a strong negative deviation on ageing labour force (cf. above) does not have a strong negative deviation for labour force replacement, this means that most of the regions with a large share of people in the 55-64 age group also have a relatively large group of 10-19 years old people.

5.5 Outlook – Further Steps

The tasks with highest priority in the next phases of the project will be (all within the realism of the time, financial and infrastructural resources available):

- To make an effort to fill as far as possible the data-gaps in order to make the typologies (and maps) somewhat closer to the ideal definition (cf. the section on data and data limitations above). Especially this concerns the temporal scope and the data on main components of demographic change.
- Investigate the possibility of moving from NUTS 2 to NUTS 3 level for some of the "indirect/structural" indicators of depopulation, and investigate to what degree this will have to compromise with the aim of regional coverage.
- General refinement/improvement of main preliminary typologies, investigate the possibility for developing better typologies.
- Integrate territorial information/typologies developed in other ESPON-Activities to search for principle explanatory factors to the observed territorial patterns of "depopulation" (cf. above).
- Select (on the basis of available information/preliminary typologies) a small number of example regions ("cases") for closer statistical analysis/analysis at finer regional scales (preferably NUTS 5 level), mainly based on data collected from national sources.
- Continuous refinement of maps/presentations

Chapter 6 Ageing, Labour Shortage and 'Replacement Migration' (WP5)

6.1 Principles and aims

The aim of this WP deals with ageing, labour shortage and "replacement migration" in an integrated perspective, within the objectives of identifying innovative policies on migration flows management and control at different territorial scales, particularly to prevent all forms of clandestine migration and clandestine work, identifying innovative and practices at local level, in order to avoid social exclusion of immigrants, and identifying innovative strategies on depopulating or labour shortage areas, in order to attract migrants and sustain their settlement..

Replacement migration is the central topic of WP5, due to the ageing trends and expected labour shortage. That is why research will be focused on non-EU international migration flows and on economic migrants[61].

6.2 Concepts, theories and explanatory factors

6.2.1 Concepts

The ageing trends of the European population, aggravated by the decline in the fertility rates, result in an ageing workforce, in a declining potential support ratio and ultimately, there is a possibility that these developments also result in labour shortages. In this context, a growing concern about the future of labour supply, has renewed the debate by scientific experts and policy makers around the concept of "*replacement migration*".

In 2000, the United Nations published a report on immigration as a solution to the population ageing and decline[62]. The term *replacement migration* was used and defined as the international migration to be needed to offset declines in the size of population, declines in the population working ages as well as to offset the overall aging of population. The report concluded that Europe would need an immigration of 1,356 million persons for the period 1995-2050 (an average of 25.2 million a year) to maintain the support potential ratio. "Such high levels of migration have not been observed in the past for any of the [studied] countries and regions. Moreover, it seems extremely unlikely that such flows could happen in these countries in the foreseeable time. Therefore, it appears inevitable that the populations of the low-fertility countries will age rapidly in the 21st century"[63].

Several authors argue that there are no feasible migration solutions to the age-structure change and its effects on labour market shortages and on social security sustainability[64]. Apart from the composition of the immigrant inflows, its size also remains controversial[65]. Replacement

[61] Economic migrant: a person leaving his/her habitual place of residence to settle outside his/her country of origin in order to improve his/her quality of life. This term is also use to refer to persons attempting to enter a country without legal permission and/or by using asylum procedures without bona fide cause. It also applies to persons settling outside their country of origin for the duration of an agricultural or tourist season, appropriately called seasonal workers (IOM 2003).
[62] United Nations (2000).
[63] United Nations (2000, p. 94).
[64] Coleman (2001).
[65] Coleman (2000).

migration also assumes that migrants are willing to immigrate to all countries, which is an assumption that could be questioned.[66] Furthermore, the different sectors in different countries must actually be able to afford employing the labour, which is not always the case.[67]

While increased immigration would certainly have an immediate impact on the working-age population, in the long-term, migration is not a solution to population ageing, because immigrants themselves age, and need be replaced. Furthermore, although a commissioned OECD study[68] refers to higher fertility rates of immigrant women, compared to native women, these fertility levels tend to converge in the long term.

6.2.2 Theoretical Considerations on Migration

Related to the discussion of replacement migration, and its social and economic consequences, is the use of traditional and new theories on migration movements relevant. The neoclassical macro-economics and micro-economics approaches, as the new economics of migrations or the dual labour market theory will be fundamental to this discussion. These theories have been discussed in WP3 above, and will not be discussed here.

6.2.3 The Economic Benefits of Migration

6.2.3.1 Theory

There is no general consensus regarding the economic benefits of migration. Different theories, based on different assumptions, reach different conclusions on the impact of international migration on economic growth, unemployment, labour force participation, wages, taxes, and transfers.

According to *neoclassical macroeconomics* immigration will promote economic growth.[69] Immigrants will constitute substitutive labour. Given that the number of jobs is constant, the wages will be lowered and the native workforce will have difficulties competing with cheap immigrant labour.[70] If the number of jobs is constant, adding more workers on the labour market will lead to a competition for jobs. The equilibrium on the market will be changed, resulting in lower wages.[71] Low-income earners are the ones who will be hit most severely.[72] The capital owners in the country of destination will gain from immigration[73] as well as the well educated.[74] If the immigrant is young, well educated, has no dependents and get a job immediately at arrival, the country of destination will gain of immigration: the tax contributions of this immigrant will exceed the transfers from the public.[75] This kind of immigration ought to be encouraged. If the transfers to immigrants exceed their tax

[66] Rauhut (2002b) concludes that Sweden will have difficulties to attract the number of immigrants to fill the estimated future demand for labour. The lack of significant migration flows and difficulties of attracting persons with needed skills and education are two major problems for Sweden.
[67] In the case of Sweden, the biggest need for future labour is in the municipalities (elderly care, child care, schooling and health care). However, the finances of the public sector at the local level are seriously troublesome, which means that the municipalities cannot afford hiring all labour they need in the future (Rauhut 2003).
[68] Coppel et al. (2001).
[69] Simon (1999), Friedberg & Hunt (1995). See also Borjas (1995).
[70] Fassmann & Münz (1995).
[71] Fassmann & Münz (1995). See also Zimmermann (1995) and OECD (2002).
[72] Johnson (1980).
[73] Layard et al. (1994)
[74] Johnson (1980).
[75] Layard et al. (1994).

contributions, filters are needed in the immigration policy to only accept the most profitable immigrants be allowed to immigrate.[76]

According to neoclassical macroeconomics a completely different scenario of the economic benefits of immigration is also possible: immigration can slow down a structural change in the economy. Economically stagnating sectors can survive by employing cheaper immigrants, preserving and maintaining the existing economic structure.[77] An access to immigrant labour may also lead to labour intensive investment, keeping productivity down.[78]

According to the *dual labour market theory* we are accustomed to thinking of industrialization and economic growth as a process that in some basic way involves increasingly sophisticated technologies and progressively more highly educated and well-trained labour force. At the same time unskilled and cheap labour is needed to do hard work under bad working conditions and low salaries, a kind of work the native labour do not want to do. According to this theory, immigrant labour constitutes a complementary work force. If labour at the lower segment of the labour market is missing, economic growth will slow down. Substituting labour with capital is one solution, but since it is not possible to substitute labour with capital in labour intensive sectors, hiring immigrants is another solution. Immigrant labour can keep up the economic growth on a short-term basis; on a long-term basis changes in society are needed. Since the immigrants work in the low-paid sectors their tax contributions will be lower than the tax contributions of the natives. A physically hard and monotonous job will affect the health, resulting in a need for public transfers. Since the immigrants usually end up in hard and monotonous jobs, their need for public transfers will be bigger than for the natives.[79]

According to the *new economics of migration* a continued immigration will lead to a lower economic growth, depending on that the amount of low productive work increases and that the immigrants send home remittances to the family.[80] Immigrants will take jobs in sectors with many immigrants, which usually means sectors in which the natives do not want to work.[81] If the salary in the country of destination is much higher than in the country of origin, *low-quality migrants* are the ones who are most willing to migrate.[82] Since these immigrants usually are low-educated and low skilled workers they will "experience higher unemployment rate and have fewer hours of work per year".[83] The employers have asymmetric information of the productivity of the immigrant workers, and, together with the fact that immigrants in general do low qualified jobs, this is the reason why the immigrants receive lower salaries until the employers have improved knowledge about their workers. As a result of having a low salary, or working in the informal sector, the tax contribution of the immigrants will be lower than the natives'. If the immigrants work in the informal sector they are not entitled to any public transfers. If they work in the formal sector they have low salaries, and they will receive less in public transfers than the natives.[84]

[76] Borjas (1995).
[77] Maillat (1974).
[78] Wadensjö (1981), Elliott (1991).
[79] Piore (1979). See also Schoorl (1995).
[80] Stark & Yitzhaki (1982).
[81] Stark (1991).
[82] Stark & Katz (1989).
[83] Stark (1991, p. 393).
[84] Stark (1991).

6.2.3.2 Empirical Evidence

The gains of immigration are difficult to calculate, and results depend very much on the used method[85] and in the spatial context. In general, immigration confers small net gains, in terms of per capita output, to the host country. However, the distribution of the benefits is not even and depends, to a large extent, on the qualifications structure of the immigrants and the native workforce. So far the net impact at national levels on government expenditures and revenues seems to have been negligible for most countries.[86]

Only a limited number of studies have been made on the income transfers from immigrants to natives for Western countries or on the impact on economic growth by immigration. During the period 1950-1980 the income transfers from immigrants to natives in *Sweden* reached approximately 1 per cent of the GDP annually.[87] They peaked around 1970, when the transfers barely reached 2 per cent of the GDP (Ekberg 2002)[88]. The income transfers were even in the period 1980-1985, i.e. the immigrants paid as much in tax as they received in transfers.[89] During the 1990's the income transfers have changed direction: the immigrants are now net receivers and the natives are net payers. The transfer of incomes to the immigrants was about 0,9 per cent of the Swedish GDP in 1991, and in 1994 the transfers to the immigrants reached 2 per cent of the GDP. The income transfers from natives to immigrants have remained at that level throughout the 1990's.[90]

A simulation study on the long-term gains on economic growth by immigration to Sweden concluded that the plausible economic gains were insignificant.[91]. An estimation on the economic surplus of immigration to Sweden shows that it has been negligible.[92]

Two studies on the income transfers have been made for *Denmark*, and they show that the income transfers from natives to immigrants was close to 1 per cent of the GDP in the 1990's.[93] In one study on *Norway* for 1993 showed that the refugees received income transfers close to 0,9 per cent of the GDP.[94] In another Norwegian study concluded that the annual income transfers from natives to immigrants were approximately 1 per cent of the GDP in the mid 1990's.[95]

In *Canada* a positive net income transfer from the immigrants to the natives has been found[96], which is also the case for *Australia*[97] and *Switzerland*.[98] One study on *Germany* shows net income transfers from immigrants to natives[99], but another shows the opposite result.[100] The changed direction of the income transfers can be explained by the changed employment patterns for the immigrants since the 1960's, as well as the changed age structure among the immigrants.[101]

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[85] See Kelly, A.C. & Schmidt, R.M. (1994).
[86] For an overview, see Rauhut & Blomberg (2003).
[87] Ekberg (1999).
[88] In Ekberg (1999) the income transfers from the immigrants to the natives are estimated to about 1 per cent of the GDP.
[89] Gustafsson (1990). See also Gustafsson et al. (1990).
[90] Ekberg (1999). See also Gustafsson & Österberg (2001).
[91] Ekberg (1977).
[92] Ekberg (1998).
[93] Christensen (1998), Økonomiministeriet (1997).
[94] Larsen & Bruce (1996).
[95] Larsen (1996).
[96] Akbari (1989).
[97] Kakwani (1986).
[98] Straubhaar & Weber (1994).
[99] Miegel (1984).
[100] Ulrich (1994).
[101] Ibidum.

Some studies for the *USA* show a positive correlation between immigration and economic growth. The most well-known study is made by Julian Simon, and he argues that immigration has a significant positive impact on economic growth.[102] Other studies on how immigration affects the American economy show that the economic impact of immigration depends on the human capital of the immigrants, their geographic and social mobility. Estimations show that a 1 per cent increase of the immigration to the USA leads to a 0,1 per cent increase of the economic growth.[103]

The estimations of the size and direction of the income transfers between immigrants and natives in the USA show divergent results. Some studies find net income transfers from immigrants to natives, and in 1998 the income transfer to the natives was about 0,1 per cent of the GDP or USD 30 per native person.[104] A newly made study concluded that the income transfer from immigrants to natives in 1996 was USD 166-226 per native household (Hanson et al. 2002). Other studies find negative income transfers from the immigrants to the natives in the USA (Blau 1984, and Weintraub 1984). A study for 1990 finds that the income transfers from natives to immigrants reached USD 16 billion, which is close to 0,3 per cent of the American GDP (Borjas 1994).

6.2.4 Concluding Remarks

In brief, we came to the conclusion that migration is and should be considered an important ingredient in a diversified approach to respond to demographic trends in Europe. However, a long-term and integrated view is indispensable here, both because population policy deals with long time periods (at list one generation) and because uncertainty and lack of planning for the future lead to fear among European citizens[105].

The local or regional impact of an immigration responding to declines in the population in working ages can differ from the impact on aggregate level. Regions with a very labour intensive sector and population decline need labour to reduce the bottle-necks in the production. Some actors can replace labour for capital, but this is difficult in several labour intensive agriculture tasks, many personal services (e.g. domestic activities, elderly care, etc.) and other unskilled and low-paid jobs which are refused by the native population, who have increasing skills and expectancies.[106]

It must be taken into consideration that despite the high number of skilled Eastern Europeans that came into Western and Southern Europe during the last decade, most of them have been incorporated in low skilled activity branches (e.g. Construction, agriculture, labour intensive manufacturing, industrial and domestic cleaning and the horeca[107] sector). That is why, an analysis of the employability features of immigrants (human capital + social capital) and also of the conditions that may lead to an upgrading process of these people in the regional labour ladders (transition from unskilled tasks to semi and high skilled ones) is required.

[102] Simon (1999).
[103] Friedberg & Hunt (1995).
[104] Borjas (2001).
[105] Niessen &Schibel (2002).
[106] Rauhut (2002a).
[107] Horeca stands for hotels, restaurants and cafés.

However, despite the lack of appropriate statistical data it is our belief that is possible to estimate the need of an immigration responding to declines in the population in working ages at the NUTS 2 level, by building up a model that could integrate the ageing process in elementary scenarios of social and economic evolution.

The framework that will sustain the research aiming to estimate the immigration needs to respond to labour shortages, points to the following central concepts of the project: ageing, regional development, regional labour markets and labour migrations. The incorporation of case-studies in the research aims to illustrate some aspects of the migration phenomenon that are not yet visible or still do not have much expression in the treatment of information at the macro-scale of country or NUTS 2 level.

6.3 Methods, data and sources

6.3.1 Methods

This WP deals with ageing, labour shortage and "replacement migration" in an integrated way. It is quite understandable that the way to minimal fulfilment of the defined objectives is through a methodology based on case studies. The optimal way to do it will be when the reflection of case studies is based on a typology of regions characteristics of the different process of ageing and labour shortage.

But we are not able yet to do it in that optimal way, because on in one hand the means involved in our WP are not enough and, on the other, and more important, the information system needed to do that is not yet available, either at suitable geographical scale and time periods, or even by the type of variables needed.

That's why a second best solution must be adopted: a case studies methodology based on the knowledge that the experts of 1.1.4. group have about the process and regions where the subjects of ageing, depopulation, migrations movements and problems due to the labour shortage, are relevant.

The ageing is a demographic process and its trends are partially analysed in WP2 and WP4. Generally, the demographic evolution is a main factor to the development of regions. The migration processes strongly contributes to the final characteristics of the populations, and always affect the trends of the regions development.

The ageing appears, in the developed societies, as a general phenomenon. At a regional level is related with the development process that obliges the change of productive factors. The ageing problem is strongly related with the development patterns. Is necessary to analyse the past, but especially to have coherent and credible previsions on ageing and the future needs of labour force (supply and demand). Assuming only the demographic factors to predict the more problematic cases of ageing is insufficient. The economic framework is also important, and even when we consider only the evolution of demographic trends, we are assuming economic development scenarios, but without a formal conception and a probabilistic analysis of occurrence.

The traditional approach to the trends analysis assumes, in a non formal way, development scenarios. When we assume that the future evolution will be as the last two decades, or when

we assume a decrease on migration pattern, or in others assumptions, we are assuming socio and economic behaviours.

At this stage we need to build up a model that could, in an explicit form, integrate the ageing process in elementary scenarios of social and economic evolution. With this model we could have a more deep and coherent characterization of ageing problems. Simultaneously we could characterize the labour shortage. Knowing the labour stock in the future (population in active age) we could estimate the labour shortage assuming the productive needs in the future. This volume could only be estimated based on national or/and regional scenarios of productive structure and productivity levels, due to the complex process of revenue redistribution at higher scales.

What we will do is an exercise of balance of potential offer of labour force with the need to the regional productive system (annual long term trends on national level of production and productivity).

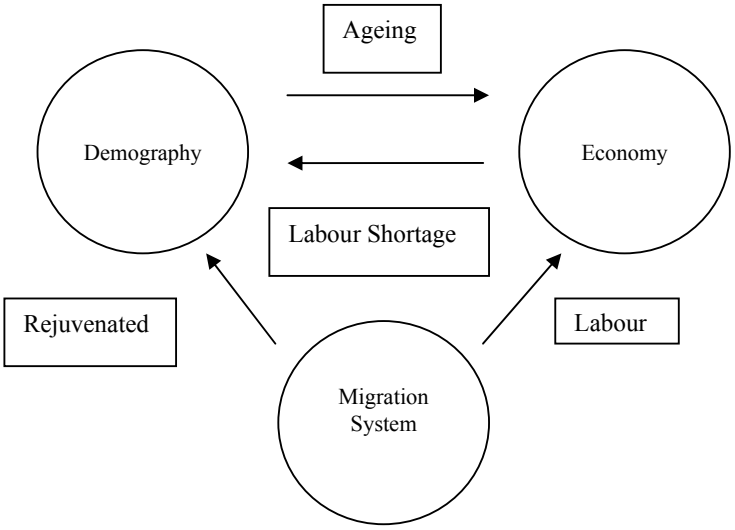
Besides the global needs labour in the future, the relation between the supply (regional active population) and the demand (production labour needs), we must also attend as much as possible to the future labour skills needs by the production system.

This general model, albeit not very accurate, will be necessary to identify and characterize the different situations at a national and regional level, that ageing and labour shortage could assume. We expected that it will be possible to detect the main trends and the critical and extreme situations.

In the future it will be necessary to create a management system of demographic/migration process that could identify: the problems; their evolution; and the critical situations. This system could provide good support to political recommendations in an appropriated time. But at the same time is necessary to make available an information system that could provide crucial information, at a correct analysis unit (scale level) and at a correct frequency (time).

The ageing process, especially at a regional and local scale, affects the bases of regional economies, mainly due to the labour shortage. The migration system can answer to that in two ways. In one hand it rejuvenated the demographic structure and in other, launches actives in labour market.

Figure 6.1 A simple model



The present work will be defined in two complementary stages. One is concerning to the definition of the demographic and economic model, necessarily in a broad form due to the lack of relevant information. The other is concerning to the analysis of case studies, defined up by the results of the model and the contributions of other WP groups. The use of case studies could give us some indications to formulate a more accurate model, adjust the typologies suggested by model results and show the best and worst practices concerning to politics advices.

The model that we will construct is based, as the UN reports, on a simple cohort-survival model that will be supported by demographic trends, without migration flows, and production and productivity scenarios. While the long term trends are considered, the idea is to confront the potential offer of labour with the needs of different scenarios of development in a way to identify the different impacts and situations. On a first stage it will be defined to a national scale, and in a second stage will be tried to NUT's 2 level.

6.3.2 Data and Sources: Migration data present on secondary sources – limitations to comparability

At this moment is necessary to reflect about the quality, limitations and degree of comparability on international migration data. The characteristics of data collection reflect the way that different countries assume foreign migration and, in a broad way, their migration policies. For the case studies and to complement the results of the model it will be necessary to use migration data from several sources and this reflection is crucial.

Several institutions that produce statistics on migration, such as SOPEMI (OCDE), Eurostat and more recently the Migration Information Source of the Migration Policy Institute, are developing a wide and long-lasting discussion on the comparability of the international migration data. Despite the improvement in the international statistics and the efforts to enhance comparability between the different national collection systems, the ongoing

limitations justify a careful and critical use of the data coming from secondary sources, which are expected to feed the proposed model.

In the following lines, we will address some of the limitations associated to international data on international migration, being aware that the specific nature of the phenomena makes data necessarily incomplete. For instance, undocumented immigrants, rather significant in several European countries and regions, as the successive extraordinary regularisations and "amnesties" that took place in the 1990s and early 2000s in countries such as Spain, Italy and Portugal demonstrate, are not registered in the statistics.

Furthermore, the category "immigrants" or "foreigners" does not encompass the same people in all countries. In some countries the category foreigners comprehends everybody with residence permits wishing to stay in the country for at least one year (e.g. Finland) whereas in other cases this period corresponds only to just three months (Belgium, Germany or Denmark) [108]. Moreover, in some destination countries the category foreigners includes several people that were not born abroad due to the prevalence of a legal "*jus sanguinis*" principle (e.g. Portugal).

This issue becomes more complicated if we take into consideration the question of nationality. In fact, countries display different "naturalization rates", with the Nordic countries frequently "more generous" in this practice. [109] The statistical relevance of "naturalizations" is related to the "disappearance" of the ex-foreigners from the data of the destinations countries. This disappearance is essentially a formal and "statistical operation", because the social condition of immigrants is not lost simply because one has obtained a new nationality (that frequently is added to the old one, due the possibility of dual citizenship that is offered by several countries). Moreover, independently of their formal nationality, immigrants keep strong and diversified links with their origin regions and may keep alive the traditional "dream of return".

Due to the afore-mentioned limitations associated to the use of category "foreigners", more relevant in ex-colonial powers that have specific agreements and forms treatment towards the people coming from the ex-colonies (e.g. United Kingdom or the Netherlands) and in countries with traditional pro-immigration policies where foreigners are expected to "naturalise" as soon as they get the right to do so (e.g. USA or Canada), some countries privileged an approach based in "ethnic groups" or in groups "coming from a certain country", even if they have obtained the nationality of the destination place (e.g. United Kingdom, the Netherlands).

However, the minimum common denominator seems to be the number of foreigners (split by nationalities and considering several variables – age, sex, branch of activity, etc.) who wish to stay in the country for more than 3 months (in this case we are considering both temporary and long term immigrants, according to the UN definitions) or for more than one year (only long term immigrants), even if the national sources are different (population registers in several countries, foreigners' registers of the Public Order and Internal Affairs Ministries or the Borders Offices in the cases of some Southern European countries, labour surveys). [110]

[108] EUROSTAT (1997), SOPEMI (2001, 2002).
[109] SOPEMI (2002).
[110] It is important to remember that, frequently, the asylum seekers, one the most important sources of foreign arrivals in the countries of Central and Northern Europe, constitute a specific "class" and are not part of the overall category "foreigners".

In addition to these limitations in the contents of the category "foreigners", another issue must be considered – the status of the European co-citizens, that is, the status of the EU citizens who live in a EU state that is not the country of his/hers nationality. Because the analysis of EU internal mobility is very relevant, these figures must be available but must be considered a specific category (eventually, not exactly foreigners but EU co-citizens) due to the free movement *clausula*. If the solution for the EU citizens is relatively simple, to categorize the people coming from the European Economic Space (EEE) and also from the acceding states is a more complex task.

If these limitations can be identified at the national scale, they become more relevant if we want to analyse migration at a regional level (NUTS 2 or 3). The first problem concerns the limitations in the regional statistical series concerning international migration (stocks and especially flows). For some countries data are rather incomplete, especially if we need time series starting some years ago. Moreover, countries like Portugal still organise immigration stocks by specific regional units (in the concerned case, the "distritos") and not by NUTS. The second problem relates to the internal mobility of the foreign immigrants, after their settlement in the destination country. Frequently, statistics are not detailed enough to capture this kind movements (and people don't have to declare internal movements to the authorities in several countries), especially if the labour market insertion of immigrants happens in activity branches that require a relatively high level of work mobility (e.g. construction and public works, tourism and leisure related activities).

All these queries associated to data production and availability have to be discussed and considered in the process of building and running the statistical model that we are proposing. The impossibility of solving some of the data problems with a high level of effectiveness, adds a technical reason to the justifications for the use of case studies. Besides the advantages associated to the identification of deep causal explanations for certain events or results and a better understanding of the processes of change[111], the use of case studies is less limited by issues of statistical comparability of the data. On the one hand, a better control and understanding of the conditions of "production" of the data may be achieved through this process, enabling a positive critical perspective and an eventual process of reconstruction. On the other hand, the purpose of case studies is not to be representative or generalizable but to illustrate patterns, situations and contingent relations[112], being this process is less limited by specific statistical limitations of the data coming from secondary sources. Finally, the use of the qualitative information provided by the case studies contributes to fill in some of the gaps associated to quantitative information.

6.4. Main preliminary results and policy implications

At this moment we are collecting data and to make the data compatible for modelling the "replacement migration" process. For now is not possible to present any preliminary results.

When it comes to policy implications at this early stage of the work, we acknowledge that an increased immigration would certainly have an immediate impact on the working-age population. However, in the long-term, migration is not a solution to population ageing, because immigrants themselves age, and need be replaced. Furthermore, although the fertility

[111] Sayer (2000).
[112] Ibid.

rate of immigrant women is higher, compared to native women, the fertility level tends to converge in the long term.

Under these circumstances, it can be argued that no complete policy solution is possible. Governments should respond to demographic change and to potential labour shortages with a variety of policies and instruments, depending on the specificities of each particular country or region. Five broad categories of interventions are available:[113]

6. Encouraging higher workforce participation through retraining of the unemployed, discouraging early retirement, increase female activity rate, by making it easier for women to combine work with childcare;
7. Postponing retirement ages, a process facilitated by longer active lives;
8. Improve labour productivity levels, by increasing capital investment and promoting the development innovation both in technology and organization capacity;
9. Immigration policies;
10. Encouraging increase in fertility.

[113] SOPEMI (2002).

Chapter 7 Outlook and Time Schedule

Stage 1 was concentrated on discussing and improving indicators from a methodological point of view. Common definitions, methodological tasks, data needs, review of earlier studies are issues that will have a central role in this part of the study. This is valid both with respect to demographic trends and migratory movements. A central ingredient here is inventory and gathering of data – old as well as new ones – and examines if and how they can be used in the following analyses and Work Packages. Connections to other Actions has been established.

Stage 2 will be focused on analyses based on the preliminary results from the data gathering and an explicit discussion of the strength and weaknesses in the different databases and indicators. Data from Eurostat, and national institutes of statistics have now been gathered and evaluated. Here the first results from the Work Packages will be shown and even some preliminary policy recommendations. A first set of typologies of regions with regard to the demographic variables and migratory movements have been developed. The analyses will be illustrated by maps and map-making. Phase 2 will end up in August 2003 when this interim report is delivered.

Stage 3 will be focused on presentation of more elaborated analyses within the differing Work Packages and scenario writings. Now, more explicit policy recommendations can be done on bases of the statistical analyses based on new or improved data and inputs from the different Work Packages. The policy relevance is thus even more pronounced in this stage of the work. Typologies of regions with regard to the demographic variables and migratory movements have now been developed even more than in phase 2 and the analyses of preconditions for a polycentric development with respect to demographic trends and migration will be investigated. Maps covering the whole investigated European area will illustrate the results. The connection to the other Actions (1.1.1, 1.1.2, 1.1.3 and 3.1) will be more pronounced in this part of the study.

Stage 4 will continue, accentuate and synthesise the inputs and results from the earlier phases and the policy relevance is growing in importance. Now the database is completed, corrections and adjustment of the analyses have been done, more maps and figures have been produced, the typologies are developed and illustrated by maps and analyses of the demographic development and the migratory movements is completed. Explicit policy recommendations and suggestions to stimulate a polycentric development with regard to settlement and mobility will be delivered in the final report. Stage 4 ends up in March of 2004 when the final report is delivered and the project is finished.

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ESPON 2006 Programme Action 1.1.4:

THE SPATIAL EFFECTS OF DEMOGRAPHIC TRENDS AND MIGRATION

2nd interim report, August 2003

APPENDICES: TABLES

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Table A1. Core indicators with regard to population, ageing and depopulation								Indexes (ratio/share E29 total = 100)
NUTS 2	REGION NAME	Ageing Population 65+/Tot. Pop	Ageing "Labour Force" 55-64/20-64	"Labour Force" Replace-ment 10-19/55-64	Post-Active Dependency 65+/20-64	Aged People vs. Youth 65+/15-24	Share of children 0-14/Tot.pop	Changes in Natural Growth Potential: 20-29 years in 2020 (born 1991-2000)/20-29 years in 2000 (born 1971-1980)
NUTS 2	REGION	2000	2000	2000	2000	2000	2000	
AT11	BURGENLAND	116,0	103,2	90,6	116,5	125,1	88,5	93,1
AT12	NIEDEROESTERREICH	106,1	111,4	85,1	106,5	121,0	98,0	113,6
AT13	WIEN	100,9	105,1	69,8	95,3	128,5	87,2	97,5
AT21	KAERNTEN	104,0	101,9	96,5	104,5	111,5	98,6	108,8
AT22	STEIERMARK	105,8	103,1	90,9	105,1	115,0	94,5	100,8
AT31	OBEROESTERREICH	95,6	99,5	101,8	95,9	103,1	104,9	118,5
AT32	SALZBURG	86,9	97,4	99,6	85,0	90,7	104,2	110,3
AT33	TIROL	86,1	96,1	102,7	84,8	89,6	107,3	111,1
AT34	VORARLBERG	79,6	95,6	108,3	78,6	78,4	111,6	114,4
BE1	REG.BRUXELLES-CAP./BRUSSELS HFDST.GEW.	107,7	87,1	102,6	109,4	115,3	103,7	102,4
BE21	ANTWERPEN	108,5	100,9	94,0	110,1	120,9	100,1	117,2
BE22	LIMBURG (B)	88,8	95,3	102,4	86,8	88,4	101,2	108,2
BE23	OOST-VLAANDEREN	109,6	99,5	90,7	110,2	120,6	96,8	108,2
BE24	VLAAMS BRABANT	107,6	99,0	93,0	108,4	122,7	99,6	119,8
BE25	WEST-VLAANDEREN	116,0	106,8	91,1	119,8	126,5	99,1	114,7
BE31	BRABANT WALLON	94,5	93,3	116,0	97,1	98,8	114,4	134,4
BE32	HAINAUT	110,8	89,2	113,7	115,1	120,1	105,8	116,5
BE33	LIEGE	110,7	94,9	105,9	114,8	121,3	105,4	118,2
BE34	LUXEMBOURG (B)	103,7	87,4	131,7	110,8	106,7	118,7	130,7
BE35	NAMUR	104,7	89,2	119,9	109,3	109,4	110,8	123,2
BG01	SEVEROIZTOCHEN (NORTH-WEST)	136,7	117,2	87,8	145,3	144,7	89,1	93,0
BG02	SEVEREN TSENTRALEN (NORTH CENTRAL)	120,3	113,6	88,5	121,9	115,4	86,0	80,0
BG03	SEVEROZAPADEN (NORTH-EAST)	92,8	104,3	104,1	91,7	82,5	98,5	85,4
BG04	YUGOIZTOCHEN (NORTH-EAST)	99,8	98,2	99,1	96,4	88,4	86,7	68,5
BG05	YUZHEN TSENTRALEN (SOUTH CENTRAL)	99,0	104,0	107,3	98,9	87,3	95,6	83,2
BG06	YUGOZAPADEN (SOUTH-EAST)	96,7	103,9	110,7	97,8	84,9	101,2	91,0
CH01	REGION LEMANIQUE	96,0	98,6	88,6	94,4	110,1	103,1	117,1
CH02	ESPACE MITTELLAND	104,1	99,8	94,9	104,7	119,7	101,5	120,7
CH03	SUISSE DU NORD-EST	98,1	101,8	87,9	95,9	113,1	97,4	114,3
CH04	ZUERICH	99,4	100,7	87,6	97,6	114,8	98,9	114,5
CH05	SUISSE ORIENTALE	94,6	95,6	111,5	96,5	104,4	111,8	133,6
CH06	SUISSE CENTRALE	87,3	91,6	112,5	87,4	93,0	112,1	126,9
CH07	TICINO	111,2	111,5	67,1	107,5	138,8	85,9	100,7
CY	KIBRIS	74,8	90,7	141,0	77,2	63,6	125,1	119,6
CZ01	PRAHA	104,9	100,0	86,1	100,0	97,4	80,8	68,1
CZ02	STREDNÍ CECHY	92,4	94,7	104,4	89,7	79,8	94,8	78,1
CZ03	JIHOZÁPAD	88,9	94,0	107,6	86,1	75,9	96,5	78,7

CZ04	SEVEROZÁPAD	77,2	90,4	112,5	73,7	64,0	100,7	79,2
CZ05	SEVEROVYCHOD	88,9	92,0	111,5	86,8	75,1	99,3	80,2
CZ06	JIHOVYCHOD	90,5	94,5	110,8	88,7	76,0	98,2	80,2
CZ07	STREDNI MORAVA	87,2	92,8	113,4	84,9	71,9	98,6	78,3
CZ08	OSTRAVSKY	78,4	94,4	111,2	75,4	66,5	102,7	83,0
DE11	STUTTGART	98,1	118,2	72,3	95,4	117,4	97,6	115,0
DE12	KARLSRUHE	102,8	115,6	70,7	99,5	126,3	92,7	110,9
DE13	FREIBURG	101,8	113,8	79,6	100,9	119,8	99,5	118,9
DE14	TUEBINGEN	95,2	111,3	85,1	94,4	108,7	104,6	122,2
DE21	OBERBAYERN	98,5	120,0	62,7	93,5	125,6	91,3	111,0
DE22	NIEDERBAYERN	102,0	107,8	85,9	101,4	116,5	99,7	116,1
DE23	OBERPFALZ	102,1	109,1	84,4	101,4	119,0	99,8	117,6
DE24	OBERFRANKEN	111,8	117,1	75,9	111,7	133,7	93,9	113,4
DE25	MITTELFRANKEN	105,0	118,1	70,5	102,4	130,4	93,0	113,7
DE26	UNTERFRANKEN	103,4	111,8	84,0	103,1	119,4	99,3	118,5
DE27	SCHWABEN	103,3	117,1	78,1	103,2	122,9	101,5	123,6
DE3	BERLIN	91,0	120,1	65,0	83,0	105,3	80,1	82,2
DE4	BRANDENBURG	95,4	128,7	85,7	91,1	94,4	82,0	78,6
DE5	BREMEN	115,9	126,5	58,3	111,8	146,3	81,4	96,3
DE6	HAMBURG	107,2	118,1	56,4	99,9	135,8	78,7	85,8
DE71	DARMSTADT	100,8	117,6	62,8	95,2	131,0	87,6	108,3
DE72	GIESSEN	104,2	109,8	80,7	102,5	119,1	95,5	107,7
DE73	KASSEL	114,5	120,9	73,4	114,9	140,0	93,4	115,2
DE8	MECKLENBURG VORPOMMERN	93,0	122,1	96,0	89,5	86,3	84,4	75,5
DE91	BRAUNSCHWEIG	113,8	124,1	66,7	112,3	140,8	90,0	109,2
DE92	HANNOVER	112,4	125,9	62,5	110,0	144,6	89,3	113,0
DE93	LUENEBURG	103,3	125,3	69,5	102,2	132,4	99,7	132,9
DE94	WESER-EMS	97,6	113,8	84,4	97,8	111,4	106,3	124,7
DEA1	DUESSELDORF	110,6	126,0	63,6	108,1	145,9	90,2	116,8
DEA2	KOELN	100,8	117,8	68,8	97,2	126,5	93,7	114,9
DEA3	MUENSTER	101,8	111,7	83,3	101,6	118,5	102,1	120,3
DEA4	DETMOLD	107,7	117,3	81,0	109,4	125,7	102,3	122,6
DEA5	ARNSBERG	109,8	121,5	71,4	108,8	134,6	93,9	115,4
DEB1	KOBLENZ	112,6	119,9	76,8	113,8	138,9	97,6	126,4
DEB2	TRIER	113,5	112,6	81,3	114,8	132,1	96,1	114,1
DEB3	RHEINHESSEN-PFALZ	105,8	116,5	73,0	103,6	132,0	93,5	116,8
DEC	SAARLAND	114,3	123,7	67,0	112,2	146,2	87,3	113,5
DED1	CHEMNITZ	122,8	135,2	73,9	121,3	131,0	73,7	73,8
DED2	DRESDEN	111,7	134,5	78,7	109,2	110,8	77,7	70,9
DED3	LEIPZIG	110,3	130,7	74,3	105,6	115,4	74,4	68,6
DEE1	DESSAU	109,9	136,2	76,5	106,4	114,4	76,4	74,0
DEE2	HALLE	110,7	131,9	77,9	107,3	114,7	76,3	72,1
DEE3	MAGDEBURG	105,7	129,5	82,4	102,6	110,0	80,5	79,0
DEF	SCHLESWIG-HOLSTEIN	105,1	130,1	61,8	102,2	136,1	93,5	119,4
DEG	THUERINGEN	104,4	126,4	83,9	100,6	104,2	78,4	72,4
DK	DANMARK	95,2	102,7	83,3	94,1	107,6	107,1	119,9
EE	EESTI	93,0	104,9	116,9	94,2	83,7	104,6	90,3
ES11	GALICIA	126,7	100,1	89,0	125,4	114,2	71,6	58,8
ES12	ASTURIAS	133,2	95,8	82,5	129,7	128,7	63,5	53,8
ES13	CANTABRIA	119,0	87,3	101,1	116,2	107,4	73,9	61,1
ES21	PAIS VASCO	110,2	96,4	78,8	103,2	105,9	70,4	60,3
ES22	NAVARRA	115,6	92,1	89,1	112,6	113,4	79,9	73,0
ES23	RIOJA	123,7	95,4	89,3	122,5	119,5	77,2	69,6
ES24	ARAGON	137,2	100,0	82,1	138,6	141,1	74,2	70,3
ES3	MADRID	98,6	92,8	92,8	94,0	89,9	84,9	72,0

ES41	CASTILLA-LEON	138,9	97,5	88,6	140,8	136,4	71,9	64,1
ES42	CASTILLA-LA MANCHA	123,3	91,4	112,5	129,1	114,3	93,9	84,7
ES43	EXTREMADURA	115,9	91,2	119,2	120,8	103,7	96,6	84,0
ES51	CATALUNA	112,0	95,9	86,9	108,8	106,2	81,1	72,1
ES52	COMUNIDAD VALENCIANA	103,0	91,2	103,2	100,7	90,3	87,6	72,8
ES53	BALEARES	98,2	87,3	106,9	96,4	91,5	95,2	85,0
ES61	ANDALUCIA	90,5	84,7	131,1	90,8	73,4	103,3	82,9
ES62	MURCIA	91,4	84,6	128,2	92,1	75,1	104,7	85,7
ES63	CEUTA Y MELILLA	78,1	79,7	149,6	80,7	65,2	124,2	111,1
ES7	CANARIAS	76,6	79,3	127,7	73,1	63,8	99,3	76,3
FI13	IT--SUOMI	109,1	106,8	102,3	113,2	114,7	102,4	136,9
FI14	VALI-SUOMI	105,1	101,2	112,0	110,4	103,1	109,2	131,5
FI15	POHJOIS-SUOMI	84,6	94,1	129,2	87,8	77,7	120,2	139,0
FI16	UUSIMAA (SUURALUE)	74,1	87,3	99,6	70,3	77,7	108,2	117,0
FI17	ETELA-SUOMI	105,4	103,8	92,6	106,5	112,9	100,4	123,8
FI2	AALAND	104,3	101,5	96,9	106,9	124,8	108,6	139,0
FR1	ILE DE FRANCE	77,4	79,3	127,7	76,3	76,3	115,3	110,9
FR21	CHAMPAGNE-ARDENNE	100,6	87,0	133,4	105,4	98,9	111,9	116,4
FR22	PICARDIE	91,1	82,7	146,9	95,6	90,2	120,1	127,9
FR23	HAUTE-NORMANDIE	93,3	84,9	142,9	98,0	91,0	117,9	124,8
FR24	CENTRE	114,2	93,9	117,1	121,3	122,9	107,1	121,7
FR25	BASSE-NORMANDIE	111,1	91,5	129,0	119,4	112,1	111,1	123,6
FR26	BOURGOGNE	121,5	97,8	111,5	129,8	131,6	102,9	118,7
FR3	NORD-PAS-DE-CALAIS	89,3	78,6	166,7	95,3	79,1	123,7	120,8
FR41	LORRAINE	98,8	89,2	128,2	102,5	97,2	110,5	115,1
FR42	ALSACE	89,4	86,3	123,1	90,3	90,1	112,0	115,5
FR43	FRANCHE-COMTE	101,8	91,9	124,6	106,7	101,8	111,1	120,0
FR51	PAYS DE LA LOIRE	105,5	89,0	131,7	112,2	101,8	111,8	118,9
FR52	BRETAGNE	115,3	94,3	118,9	123,0	116,8	106,4	116,8
FR53	POITOU-CHARENTES	127,8	99,4	106,9	137,0	138,7	98,6	114,5
FR61	AQUITAINE	122,6	97,1	105,5	129,1	133,0	98,2	111,7
FR62	MIDI-PYRENEES	123,3	96,3	102,7	129,4	133,6	97,4	109,9
FR63	LIMOUSIN	147,8	103,6	90,6	158,8	171,8	85,1	101,0
FR71	RHONE-ALPES	96,0	90,2	123,3	99,4	95,9	113,7	120,8
FR72	AUVERGNE	125,6	99,6	100,7	131,6	137,0	94,1	107,2
FR81	LANGUEDOC-ROUSSILLON	123,7	100,4	106,3	132,3	131,1	101,8	115,9
FR82	PROVENCE-ALPES-COTE D'AZUR	118,1	102,1	103,0	125,0	130,3	104,5	122,7
FR83	CORSE	120,0	107,2	92,7	124,9	142,9	98,5	120,0
FR91	GUADELOUPE	65,7	75,5	182,0	68,9	59,5	137,6	134,4
FR92	MARTINIQUE	78,5	82,7	159,9	82,0	76,0	128,2	128,6
FR93	GUYANE	9,0	49,2	373,3	10,4	7,3	199,1	201,4
FR94	REUNION	26,2	66,4	241,8	28,0	20,4	157,4	141,1
GR11	ANATOLIKI MAKEDONIA, THRAKI	114,8	117,9	86,7	117,7	107,9	92,8	93,1
GR12	KENTRIKI MAKEDONIA	103,1	108,4	84,2	100,8	98,5	89,2	81,7
GR13	DYTIKI MAKEDONIA	114,6	110,6	96,1	117,4	105,0	91,8	85,9
GR14	THESSALIA	116,7	118,3	86,4	118,8	106,0	88,2	82,2
GR21	IPEIROS	126,0	110,5	87,8	126,8	115,1	76,7	65,9
GR22	IONIA NISIA	131,4	102,7	97,5	137,3	127,6	86,4	85,1
GR23	DYTIKI ELLADA	111,5	100,8	107,2	113,4	96,2	90,4	76,1
GR24	STEREA ELLADA	122,6	115,6	84,1	122,3	114,7	76,9	66,8
GR25	PELOPONNISOS	137,7	114,8	84,0	142,1	135,2	76,8	72,1
GR3	ATTIKI	102,2	97,8	90,0	99,4	99,3	89,0	84,6
GR41	VOREIO AIGAIO	147,6	113,6	95,1	163,3	147,5	89,8	99,7
GR42	NOTIO AIGAIO	96,4	93,2	111,9	96,8	89,5	101,7	99,1

GR43	KRITI	109,4	96,9	111,7	112,9	97,1	98,5	88,3
HU01	KOEZEP-MAGYARORSZAG	97,7	100,7	87,4	93,9	85,8	90,2	75,6
HU02	KOEZEP-DUNANTUL	84,5	98,7	102,6	82,0	71,9	101,1	84,7
HU03	NYUGAT-DUNANTUL	95,0	98,2	101,8	93,0	81,8	95,1	81,2
HU04	DEL-DUNANTUL	94,2	101,4	97,5	92,8	84,4	99,3	89,0
HU05	ESZAK-MAGYARORSZAG	94,9	106,8	99,4	95,8	85,0	106,1	99,2
HU06	ESZAK-ALFOELD	86,7	95,5	116,7	87,8	74,6	113,1	100,9
HU07	DEL-ALFOELD	99,2	104,2	95,1	98,7	89,8	99,5	89,2
IE01	BORDER, MIDLAND AND WESTERN	82,4	87,0	179,7	90,5	60,6	129,9	118,8
IE02	SOUTHERN AND EASTERN	68,3	80,8	165,3	70,4	52,0	126,3	104,8
IT11	PIEMONTE	131,0	118,9	53,6	125,8	171,0	69,4	77,1
IT12	VALLE D'AOSTA	119,8	110,1	56,6	113,0	158,1	73,6	79,7
IT13	LIGURIA	158,6	129,6	43,3	157,4	244,2	60,4	74,8
IT2	LOMBARDIA	112,1	111,6	59,6	105,1	138,0	75,8	80,0
IT31	TRENTINO-ALTO ADIGE	106,7	102,9	77,9	104,3	124,3	92,4	99,1
IT32	VENETO	114,0	107,5	63,4	107,9	138,0	77,3	80,2
IT33	FRIULI-VENEZIA GIULIA	135,5	121,4	48,4	129,3	186,8	64,9	72,5
IT4	EMILIA-ROMAGNA	141,5	116,7	49,7	137,0	198,3	65,3	74,3
IT51	TOSCANA	140,5	117,8	53,7	137,1	186,3	67,2	74,5
IT52	UMBRIA	142,6	117,3	61,0	142,5	176,8	71,0	77,5
IT53	MARCHE	136,9	113,6	64,8	136,6	164,1	74,9	80,5
IT6	LAZIO	109,3	108,5	70,0	104,5	126,2	82,5	86,1
IT71	ABRUZZO	126,8	105,8	81,6	128,0	137,3	83,5	84,5
IT72	MOLISE	131,8	102,6	90,1	136,1	138,8	85,4	85,5
IT8	CAMPANIA	87,2	90,3	124,3	88,4	77,1	112,1	100,9
IT91	PUGLIA	96,8	95,8	107,5	96,8	86,8	100,4	88,9
IT92	BASILICATA	114,1	97,4	104,3	116,7	109,8	94,8	87,8
IT93	CALABRIA	104,7	95,0	115,6	107,3	95,1	101,2	91,0
ITA	SICILIA	103,5	97,8	109,5	106,4	97,5	104,8	99,2
ITB	SARDEGNA	98,1	97,7	91,8	93,5	92,9	84,6	72,9
LT	LIETUVA	85,7	101,1	121,8	87,5	79,0	115,1	103,6
LU	LUXEMBOURG (GRAND-DUCHE)	91,6	93,0	95,7	90,9	107,1	110,2	128,6
LV	LATVIJA	94,1	111,9	109,7	95,3	87,8	103,7	92,1
MT	MALTA	79,1	95,1	123,2	79,5	69,2	114,9	109,2
NL11	GRONINGEN	93,0	89,2	100,3	90,3	88,3	97,8	92,3
NL12	FRIESLAND	92,0	98,2	106,0	93,0	97,4	110,7	126,0
NL13	DRENTHE	98,4	102,8	94,5	99,3	121,6	108,1	140,9
NL21	OVERIJSSEL	87,6	92,4	110,2	87,9	90,9	113,3	119,0
NL22	GELDERLAND	87,3	92,8	103,7	86,4	95,7	110,3	123,4
NL23	FLEVOLAND	56,8	65,2	177,3	57,1	59,9	138,8	156,0
NL31	UTRECHT	79,8	82,6	110,2	77,3	85,2	110,3	111,3
NL32	NOORD-HOLLAND	86,4	86,5	95,5	82,8	102,3	103,5	112,2
NL33	ZUID-HOLLAND	88,5	87,7	107,0	87,3	96,4	108,4	114,7
NL34	ZEELAND	105,0	103,7	95,2	107,8	125,0	107,6	136,6
NL41	NOORD-BRABANT	82,1	94,4	96,9	79,5	92,4	108,4	121,5
NL42	LIMBURG (NL)	93,4	102,2	86,3	90,6	112,5	100,3	124,3
NO01	OSLO OG AKERSHUS	88,4	81,2	101,9	86,5	106,2	111,0	115,1
NO02	HEDMARK OG OPPLAND	119,0	100,4	97,7	125,7	135,7	105,5	126,9
NO03	SOR-OSTLANDET	104,6	94,6	105,5	108,2	114,9	111,0	125,7
NO04	AGDER OG ROGALAND	86,7	84,6	136,1	91,4	84,7	128,2	135,6
NO05	VESTLANDET	99,7	88,0	126,5	106,0	101,5	121,4	131,9
NO06	TRONDELAG	99,3	90,9	114,3	103,8	106,6	118,5	131,3
NO07	NORD-NORGE	95,1	92,1	113,3	98,8	102,3	119,8	133,0
PL01	DOLNOSLASKIE	79,6	74,9	162,3	78,3	61,1	100,1	82,1

PL02	KUJAWSKO-POMORSKIE	73,3	76,2	173,1	74,0	56,0	113,2	95,4
PL03	LUBELSKIE	87,3	84,3	165,7	92,0	67,0	115,2	98,9
PL04	LUBUSKIE	69,3	69,4	194,8	69,6	50,9	112,9	91,6
PL05	LÓDZKIE	91,9	83,4	139,2	92,0	76,3	99,1	88,1
PL06	MALOPOLSKIE	79,2	83,0	160,6	81,6	61,1	116,4	98,1
PL07	MAZOWIECKIE	89,5	84,0	144,1	90,6	72,7	103,5	90,5
PL08	OPOLSKIE	75,2	85,0	150,9	74,3	59,3	105,2	87,5
PL09	PODKARPACKIE	76,0	79,0	186,9	80,2	57,5	124,4	104,1
PL0A	PODLASKIE	86,6	84,3	169,8	91,7	67,5	117,2	101,0
PL0B	POMORSKIE	68,9	75,6	175,2	69,1	52,0	115,5	94,5
PL0C	SLASKIE	73,6	88,6	136,8	71,4	57,9	100,7	84,1
PL0D	SWIETOKRZYSKIE	88,9	83,0	158,9	92,1	70,1	109,4	95,8
PL0E	WARMINSKO-MAZURSKIE	66,6	71,0	201,8	68,1	48,3	120,2	97,8
PL0F	WIELKOPOLSKIE	72,6	72,7	184,1	73,5	54,7	115,1	94,4
PL0G	ZACHODNIOPOMORSKIE	69,7	71,5	177,1	68,8	52,5	108,9	88,8
PT11	NORTE	90,0	89,2	116,3	89,4	76,5	101,8	89,6
PT12	CENTRO (P)	125,5	109,1	89,4	129,5	119,1	86,9	84,8
PT13	LISBOA E VALE DO TEJO	104,8	106,8	77,6	101,5	101,0	86,5	80,2
PT14	ALENTEJO	150,9	116,6	79,9	161,5	150,5	79,1	80,3
PT15	ALGARVE	105,4	105,2	82,2	105,8	106,6	85,3	86,5
PT2	ACORES	79,2	84,0	174,1	84,6	60,1	127,1	111,3
PT3	MADEIRA	85,6	89,1	150,9	89,0	66,0	112,8	95,8
RO01	NORD-EST	80,8	96,1	143,1	84,6	61,5	123,5	94,0
RO02	SUD-EST	80,8	95,4	130,2	80,5	65,5	109,2	81,6
RO03	SUD	94,5	105,1	111,6	95,6	82,3	106,2	82,9
RO04	SUD-VEST	93,0	106,8	111,0	94,4	80,4	107,4	87,4
RO05	VEST	82,8	93,9	120,5	80,8	70,8	103,2	78,9
RO06	NORD-VEST	79,4	95,4	128,8	79,3	62,9	110,6	83,8
RO07	CENTRU	78,7	91,0	136,5	78,1	61,3	107,8	78,6
RO08	BUCURESTI	87,4	85,8	123,1	82,0	69,0	83,2	54,9
SE01	STOCKHOLM LAEN	92,1	96,5	89,4	90,5	109,6	108,3	115,3
SE02	OESTRA MELLANSVERIGE	111,1	109,7	93,6	116,1	122,6	108,8	122,3
SE04	SYDSVERIGE	115,3	110,8	89,7	120,4	129,0	105,7	119,3
SE06	NORRA MELLANSVERIGE	126,6	117,2	89,7	136,2	151,4	104,4	133,3
SE07	MELLERSTA NORRLAND	128,5	117,9	87,5	137,6	150,5	101,6	125,2
SE08	OEVRE NORRLAND	111,9	110,8	94,9	117,1	119,0	106,9	119,2
SE09	SMAALAND MED OEARNA	121,5	113,1	97,6	131,5	135,5	109,1	132,5
SE0A	VASTSVERIGE	111,1	105,5	96,4	116,3	126,4	109,9	125,8
SI	SLOVENIJA	88,9	96,7	106,1	85,9	79,8	93,8	84,3
SK01	BRATISLAVSKÝ	77,2	80,6	138,8	73,7	61,1	95,2	74,8
SK02	Z-PADN+ SLOVENSKO	76,9	84,9	143,4	76,2	59,7	107,9	85,9
SK03	STREDN+ SLOVENSKO	73,6	80,8	158,3	74,5	57,0	117,2	95,7
SK04	VÝCHODN+ SLOVENSKO	66,6	77,4	180,6	69,1	50,1	130,5	107,8
UKC1	TEES VALLEY AND DURHAM	99,8	101,8	110,1	103,8	108,4	112,2	130,5
UKC2	NORTHUMBERLAND AND TYNE AND WEAR	106,2	99,4	107,5	110,0	108,9	106,5	118,6
UKD1	CUMBRIA	115,0	112,3	88,9	119,6	153,1	103,3	132,1
UKD2	CHESHIRE	99,2	105,1	98,7	101,4	117,3	110,4	133,9
UKD3	GREATER MANCHESTER	93,0	95,4	115,2	96,0	95,9	116,8	124,7
UKD4	LANCASHIRE	105,4	103,6	106,4	110,7	118,3	112,2	130,9
UKD5	MERSEYSIDE	103,5	101,0	111,7	108,7	107,8	112,7	123,9
UKE1	EAST RIDING AND NORTH LINCOLNSHIRE	106,3	104,0	106,1	111,7	117,2	112,0	133,0
UKE2	NORTH YORKSHIRE	114,5	109,7	94,2	119,6	138,5	103,4	134,7
UKE3	SOUTH YORKSHIRE	101,3	98,5	104,6	104,2	109,9	110,0	124,0
UKE4	WEST YORKSHIRE	94,5	92,7	117,3	97,6	93,2	115,6	124,1

UKF1	DERBYSHIRE AND NOTTINGHAMSHIRE	102,4	99,9	102,1	105,0	115,4	108,4	124,1
UKF2	LEICESTERSHIRE, RUTLAND AND NORTHAMPTONSHIRE	93,2	94,2	114,9	95,5	93,9	113,9	125,8
UKF3	LINCOLNSHIRE	121,9	115,9	88,9	129,2	159,3	102,8	133,3
UKG1	HEREFORDSHIRE, WORCESTERSHIRE AND WARWICKSHIRE	106,0	108,6	91,4	108,6	136,3	106,6	134,6
UKG2	SHROPSHIRE AND STAFFORDSHIRE	99,9	105,4	98,8	102,0	114,1	108,5	127,5
UKG3	WEST MIDLANDS	98,2	98,1	115,7	103,8	97,7	119,5	130,5
UKH1	EAST ANGLIA	110,1	101,8	99,1	114,5	130,4	107,3	122,2
UKH2	BEDFORDSHIRE AND HERTFORDSHIRE	90,8	92,6	109,0	92,0	106,6	115,7	132,2
UKH3	ESSEX	104,7	100,0	98,4	107,6	125,2	108,6	124,8
UKI1	INNER LONDON	70,2	67,5	123,1	66,3	63,6	111,8	95,0
UKI2	OUTER LONDON	87,0	84,0	112,2	86,3	88,3	112,6	112,7
UKJ1	BERKSHIRE, BUCKINGHAMSHIRE AND OXFORDSHIRE	82,7	88,6	116,1	82,3	87,9	114,3	122,3
UKJ2	SURREY, EAST AND WEST SUSSEX	118,2	101,2	96,9	123,9	145,4	104,2	130,0
UKJ3	HAMPSHIRE AND ISLE OF WIGHT	102,9	97,7	106,3	105,9	112,2	108,2	121,6
UKJ4	KENT	105,0	102,3	102,2	109,4	127,8	112,2	133,5
UKK1	GLOUCESTERSHIRE, WILTSHIRE AND NORTH SOMERSET	103,3	97,2	103,8	106,1	115,5	108,6	122,8
UKK2	DORSET AND SOMERSET	133,1	110,2	94,6	144,5	170,8	101,2	128,6
UKK3	CORNWALL AND ISLES OF SCILLY	128,1	118,6	88,6	137,4	168,4	101,4	134,3
UKK4	DEVON	127,5	112,5	94,0	137,1	143,9	101,8	129,9
UKL1	WEST WALES AND THE VALLEYS	115,0	111,0	101,0	123,0	127,0	109,1	131,6
UKL2	EAST WALES	103,3	101,1	109,5	108,1	110,0	112,6	128,6
UKM1	NORTH EASTERN SCOTLAND	92,1	91,9	110,3	91,9	95,8	106,8	120,4
UKM2	EASTERN SCOTLAND	100,3	97,8	100,6	101,1	105,2	104,3	112,1
UKM3	SOUTH WESTERN SCOTLAND	97,2	98,7	105,7	98,8	100,5	107,9	117,0
UKM4	HIGHLANDS AND ISLANDS	106,8	112,9	93,8	110,9	125,6	108,3	139,8
UKN	NORTHERN IRELAND	83,6	93,3	139,9	89,1	78,0	130,7	131,9
E-29	**E-29**	100,0	100,0	100,0	100,0	100,0	100,0	100,0
E-29	**E-29**	**15,6**	**17,7**	**1,2**	**0,3**	**1,2**	**17,2**	**0,8**

Table A2. Core indicators with regard to population, ageing and depopulation.

		4 groups (4 = most "ageing"/"depopulating" = one STD or more from E29 average).						
NUTS 2	REGION NAME	Ageing Population 65+/Tot.Pop	Ageing "Labour Force" 55-64/20-64	"Labour Force" Replacement 10-19/55-64	Post-Active Dependency 65+/20-64	Aged People vs. Youth 65+/15-24	Share of children 0-14/Tot.pop	Changes in Natural Growth Potential: 20-29 years in 2020 (born 1991-2000)/20-29 years in 2000 (born 1971-1980)
NUTS 2	REGION	2000	2000	2000	2000	2000	2000	
AT11	BURGENLAND	3	2	2	3	3	3	2
AT12	NIEDEROESTERREICH	2	3	2	2	3	2	1
AT13	WIEN	2	2	3	1	3	3	2
AT21	KAERNTEN	2	2	2	2	2	2	1
AT22	STEIERMARK	2	2	2	2	3	2	1
AT31	OBEROESTERREICH	1	1	1	1	2	1	1
AT32	SALZBURG	1	1	2	1	1	1	1
AT33	TIROL	1	1	1	1	1	1	1
AT34	VORARLBERG	1	1	1	1	1	1	1
BE1	REG.BRUXELLES-CAP./BRUSSELS HFDST.GEW.	2	1	1	2	3	1	1
BE21	ANTWERPEN	2	2	2	3	3	1	1
BE22	LIMBURG (B)	1	1	1	1	1	1	1
BE23	OOST-VLAANDEREN	2	1	2	3	3	2	1
BE24	VLAAMS BRABANT	2	1	2	2	3	2	1
BE25	WEST-VLAANDEREN	3	2	2	3	3	2	1
BE31	BRABANT WALLON	1	1	1	1	1	1	1
BE32	HAINAUT	3	1	1	3	3	1	1
BE33	LIEGE	3	1	1	3	3	1	1
BE34	LUXEMBOURG (B)	2	1	1	3	2	1	1
BE35	NAMUR	2	1	1	2	2	1	1
BG01	SEVEROIZTOCHEN (NORTH-WEST)	4	4	2	4	4	3	2
BG02	SEVEREN TSENTRALEN (NORTH CENTRAL)	4	3	2	4	3	3	3
BG03	SEVEROZAPADEN (NORTH-EAST)	1	2	1	1	1	2	3
BG04	YUGOIZTOCHEN (NORTH-EAST)	1	1	2	1	1	3	4
BG05	YUZHEN TSENTRALEN (SOUTH CENTRAL)	1	2	1	1	1	2	3
BG06	YUGOZAPADEN (SOUTH-EAST)	1	2	1	1	1	1	2
CH01	REGION LEMANIQUE	1	1	2	1	2	1	1
CH02	ESPACE MITTELLAND	2	1	2	2	3	1	1
CH03	SUISSE DU NORD-EST	1	2	2	1	2	2	1
CH04	ZUERICH	1	2	2	1	2	2	1
CH05	SUISSE ORIENTALE	1	1	1	1	2	1	1
CH06	SUISSE CENTRALE	1	1	1	1	1	1	1
CH07	TICINO	3	3	3	2	4	3	1
CY	KIBRIS	1	1	1	1	1	1	1
CZ01	PRAHA	2	1	2	1	1	4	4
CZ02	STREDNÍ CECHY	1	1	1	1	1	2	3

CZ03	JIHOZÁPAD	1	1	1	1	1	2	3
CZ04	SEVEROZÁPAD	1	1	1	1	1	1	3
CZ05	SEVEROVYCHOD	1	1	1	1	1	2	3
CZ06	JIHOVYCHOD	1	1	1	1	1	2	3
CZ07	STREDNI MORAVA	1	1	1	1	1	2	3
CZ08	OSTRAVSKY	1	1	1	1	1	1	3
DE11	STUTTGART	1	4	3	1	3	2	1
DE12	KARLSRUHE	2	4	3	1	3	2	1
DE13	FREIBURG	2	3	3	2	3	2	1
DE14	TUEBINGEN	1	3	2	1	2	1	1
DE21	OBERBAYERN	1	4	4	1	3	3	1
DE22	NIEDERBAYERN	2	3	2	2	3	2	1
DE23	OBERPFALZ	2	3	2	2	3	2	1
DE24	OBERFRANKEN	3	4	3	3	4	2	1
DE25	MITTELFRANKEN	2	4	3	2	3	2	1
DE26	UNTERFRANKEN	2	3	2	2	3	2	1
DE27	SCHWABEN	2	4	3	2	3	1	1
DE3	BERLIN	1	4	4	1	2	4	3
DE4	BRANDENBURG	1	4	2	1	1	4	3
DE5	BREMEN	3	4	4	3	4	4	2
DE6	HAMBURG	2	4	4	1	4	4	3
DE71	DARMSTADT	2	4	4	1	4	3	1
DE72	GIESSEN	2	3	3	2	3	2	1
DE73	KASSEL	3	4	3	3	4	2	1
DE8	MECKLENBURG VORPOMMERN	1	4	2	1	1	3	4
DE91	BRAUNSCHWEIG	3	4	3	3	4	3	1
DE92	HANNOVER	3	4	4	3	4	3	1
DE93	LUENEBURG	2	4	3	2	4	2	1
DE94	WESER-EMS	1	3	2	1	2	1	1
DEA1	DUESSELDORF	3	4	4	2	4	3	1
DEA2	KOELN	2	4	3	1	3	2	1
DEA3	MUENSTER	2	3	2	2	3	1	1
DEA4	DETMOLD	2	4	3	2	3	1	1
DEA5	ARNSBERG	2	4	3	2	4	2	1
DEB1	KOBLENZ	3	4	3	3	4	2	1
DEB2	TRIER	3	3	3	3	4	2	1
DEB3	RHEINHESSEN-PFALZ	2	4	3	2	4	2	1
DEC	SAARLAND	3	4	3	3	4	3	1
DED1	CHEMNITZ	4	4	3	4	4	4	4
DED2	DRESDEN	3	4	3	2	2	4	4
DED3	LEIPZIG	3	4	3	2	3	4	4
DEE1	DESSAU	2	4	3	2	2	4	4
DEE2	HALLE	3	4	3	2	2	4	4
DEE3	MAGDEBURG	2	4	3	2	2	4	3
DEF	SCHLESWIG-HOLSTEIN	2	4	4	2	4	2	1
DEG	THUERINGEN	2	4	2	2	2	4	4
DK	DANMARK	1	2	2	1	2	1	1
EE	EESTI	1	2	1	1	1	1	2
ES11	GALICIA	4	2	2	4	2	4	4
ES12	ASTURIAS	4	1	3	4	3	4	4
ES13	CANTABRIA	4	1	1	3	2	4	4
ES21	PAIS VASCO	3	1	3	2	2	4	4
ES22	NAVARRA	3	1	2	3	2	4	4
ES23	RIOJA	4	1	2	4	3	4	4
ES24	ARAGON	4	1	3	4	4	4	4

ES3	MADRID	1	1	2	1	1	3	4
ES41	CASTILLA-LEON	4	1	2	4	4	4	4
ES42	CASTILLA-LA MANCHA	4	1	1	4	2	2	3
ES43	EXTREMADURA	3	1	1	4	2	2	3
ES51	CATALUNA	3	1	2	2	2	4	4
ES52	COMUNIDAD VALENCIANA	2	1	1	2	1	3	4
ES53	BALEARES	1	1	1	1	1	2	3
ES61	ANDALUCIA	1	1	1	1	1	1	3
ES62	MURCIA	1	1	1	1	1	1	3
ES63	CEUTA Y MELILLA	1	1	1	1	1	1	1
ES7	CANARIAS	1	1	1	1	1	2	4
FI13	IT--SUOMI	2	2	1	3	2	1	1
FI14	VALI-SUOMI	2	2	1	3	2	1	1
FI15	POHJOIS-SUOMI	1	1	1	1	1	1	1
FI16	UUSIMAA (SUURALUE)	1	1	2	1	1	1	1
FI17	ETELA-SUOMI	2	2	2	2	2	1	1
FI2	AALAND	2	2	2	2	3	1	1
FR1	ILE DE FRANCE	1	1	1	1	1	1	1
FR21	CHAMPAGNE-ARDENNE	2	1	1	2	1	1	1
FR22	PICARDIE	1	1	1	1	1	1	1
FR23	HAUTE-NORMANDIE	1	1	1	1	1	1	1
FR24	CENTRE	3	1	1	4	3	1	1
FR25	BASSE-NORMANDIE	3	1	1	3	2	1	1
FR26	BOURGOGNE	4	1	1	4	4	1	1
FR3	NORD-PAS-DE-CALAIS	1	1	1	1	1	1	1
FR41	LORRAINE	1	1	1	2	1	1	1
FR42	ALSACE	1	1	1	1	1	1	1
FR43	FRANCHE-COMTE	2	1	1	2	2	1	1
FR51	PAYS DE LA LOIRE	2	1	1	3	2	1	1
FR52	BRETAGNE	3	1	1	4	3	1	1
FR53	POITOU-CHARENTES	4	1	1	4	4	2	1
FR61	AQUITAINE	4	1	1	4	4	2	1
FR62	MIDI-PYRENEES	4	1	1	4	4	2	1
FR63	LIMOUSIN	4	2	2	4	4	3	1
FR71	RHONE-ALPES	1	1	1	1	1	1	1
FR72	AUVERGNE	4	1	1	4	4	2	1
FR81	LANGUEDOC-ROUSSILLON	4	2	1	4	4	1	1
FR82	PROVENCE-ALPES-COTE D'AZUR	3	2	1	4	3	1	1
FR83	CORSE	4	3	2	4	4	2	1
FR91	GUADELOUPE	1	1	1	1	1	1	1
FR92	MARTINIQUE	1	1	1	1	1	1	1
FR93	GUYANE	1	1	1	1	1	1	1
FR94	REUNION	1	1	1	1	1	1	1
GR11	ANATOLIKI MAKEDONIA, THRAKI	3	4	2	3	2	2	2
GR12	KENTRIKI MAKEDONIA	2	3	2	2	1	3	3
GR13	DYTIKI MAKEDONIA	3	3	2	3	2	3	3
GR14	THESSALIA	3	4	2	3	2	3	3
GR21	IPEIROS	4	3	2	4	3	4	4
GR22	IONIA NISIA	4	2	2	4	3	3	3
GR23	DYTIKI ELLADA	3	2	1	3	1	3	4
GR24	STEREA ELLADA	4	4	2	4	2	4	4
GR25	PELOPONNISOS	4	4	2	4	4	4	4
GR3	ATTIKI	2	1	2	1	1	3	3
GR41	VOREIO AIGAIO	4	3	2	4	4	3	2

GR42	NOTIO AIGAIO	1	1	1	1	1	1	2
GR43	KRITI	2	1	1	3	1	2	3
HU01	KOEZEP-MAGYARORSZAG	1	2	2	1	1	3	4
HU02	KOEZEP-DUNANTUL	1	1	1	1	1	1	3
HU03	NYUGAT-DUNANTUL	1	1	1	1	1	2	3
HU04	DEL-DUNANTUL	1	2	2	1	1	2	3
HU05	ESZAK-MAGYARORSZAG	1	2	2	1	1	1	2
HU06	ESZAK-ALFOELD	1	1	1	1	1	1	1
HU07	DEL-ALFOELD	1	2	2	1	1	2	2
IE01	BORDER, MIDLAND AND WESTERN	1	1	1	1	1	1	1
IE02	SOUTHERN AND EASTERN	1	1	1	1	1	1	1
IT11	PIEMONTE	4	4	4	4	4	4	4
IT12	VALLE D'AOSTA	4	3	4	3	4	4	3
IT13	LIGURIA	4	4	4	4	4	4	4
IT2	LOMBARDIA	3	3	4	2	4	4	3
IT31	TRENTINO-ALTO ADIGE	2	2	3	2	3	2	2
IT32	VENETO	3	3	4	2	4	4	3
IT33	FRIULI-VENEZIA GIULIA	4	4	4	4	4	4	4
IT4	EMILIA-ROMAGNA	4	4	4	4	4	4	4
IT51	TOSCANA	4	4	4	4	4	4	4
IT52	UMBRIA	4	4	4	4	4	4	4
IT53	MARCHE	4	3	4	4	4	4	3
IT6	LAZIO	2	3	3	2	3	4	3
IT71	ABRUZZO	4	2	3	4	4	4	3
IT72	MOLISE	4	2	2	4	4	3	3
IT8	CAMPANIA	1	1	1	1	1	1	1
IT91	PUGLIA	1	1	1	1	1	1	3
IT92	BASILICATA	3	1	1	3	2	2	3
IT93	CALABRIA	2	1	1	2	1	1	2
ITA	SICILIA	2	1	1	2	1	1	2
ITB	SARDEGNA	1	1	2	1	1	3	4
LT	LIETUVA	1	2	1	1	1	1	1
LU	LUXEMBOURG (GRAND-DUCHE)	1	1	2	1	2	1	1
LV	LATVIJA	1	3	1	1	1	1	2
MT	MALTA	1	1	1	1	1	1	1
NL11	GRONINGEN	1	1	1	1	1	2	2
NL12	FRIESLAND	1	1	1	1	1	1	1
NL13	DRENTHE	1	2	2	1	3	1	1
NL21	OVERIJSSEL	1	1	1	1	1	1	1
NL22	GELDERLAND	1	1	1	1	1	1	1
NL23	FLEVOLAND	1	1	1	1	1	1	1
NL31	UTRECHT	1	1	1	1	1	1	1
NL32	NOORD-HOLLAND	1	1	2	1	2	1	1
NL33	ZUID-HOLLAND	1	1	1	1	1	1	1
NL34	ZEELAND	2	2	2	2	3	1	1
NL41	NOORD-BRABANT	1	1	2	1	1	1	1
NL42	LIMBURG (NL)	1	2	2	1	2	1	1
NO01	OSLO OG AKERSHUS	1	1	1	1	2	1	1
NO02	HEDMARK OG OPPLAND	4	2	2	4	4	1	1
NO03	SOR-OSTLANDET	2	1	1	2	2	1	1
NO04	AGDER OG ROGALAND	1	1	1	1	1	1	1
NO05	VESTLANDET	1	1	1	2	2	1	1
NO06	TRONDELAG	1	1	1	2	2	1	1
NO07	NORD-NORGE	1	1	1	1	2	1	1

PL01	DOLNOSLASKIE	1	1	1	1	1	1	3
PL02	KUJAWSKO-POMORSKIE	1	1	1	1	1	1	2
PL03	LUBELSKIE	1	1	1	1	1	1	2
PL04	LUBUSKIE	1	1	1	1	1	1	2
PL05	LÓDZKIE	1	1	1	1	1	2	3
PL06	MALOPOLSKIE	1	1	1	1	1	1	2
PL07	MAZOWIECKIE	1	1	1	1	1	1	2
PL08	OPOLSKIE	1	1	1	1	1	1	3
PL09	PODKARPACKIE	1	1	1	1	1	1	1
PL0A	PODLASKIE	1	1	1	1	1	1	1
PL0B	POMORSKIE	1	1	1	1	1	1	2
PL0C	SLASKIE	1	1	1	1	1	1	3
PL0D	SWIETOKRZYSKIE	1	1	1	1	1	1	2
PL0E	WARMINSKO-MAZURSKIE	1	1	1	1	1	1	2
PL0F	WIELKOPOLSKIE	1	1	1	1	1	1	2
PL0G	ZACHODNIOPOMORSKIE	1	1	1	1	1	1	3
PT11	NORTE	1	1	1	1	1	1	2
PT12	CENTRO (P)	4	3	2	4	3	3	3
PT13	LISBOA E VALE DO TEJO	2	2	3	2	2	3	3
PT14	ALENTEJO	4	4	3	4	4	4	3
PT15	ALGARVE	2	2	3	2	2	3	3
PT2	ACORES	1	1	1	1	1	1	1
PT3	MADEIRA	1	1	1	1	1	1	2
RO01	NORD-EST	1	1	1	1	1	1	2
RO02	SUD-EST	1	1	1	1	1	1	3
RO03	SUD	1	2	1	1	1	1	3
RO04	SUD-VEST	1	2	1	1	1	1	3
RO05	VEST	1	1	1	1	1	1	3
RO06	NORD-VEST	1	1	1	1	1	1	3
RO07	CENTRU	1	1	1	1	1	1	3
RO08	BUCURESTI	1	1	1	1	1	4	4
SE01	STOCKHOLM LAEN	1	1	2	1	2	1	1
SE02	OESTRA MELLANSVERIGE	3	3	2	3	3	1	1
SE04	SYDSVERIGE	3	3	2	4	3	1	1
SE06	NORRA MELLANSVERIGE	4	4	2	4	4	1	1
SE07	MELLERSTA NORRLAND	4	4	2	4	4	1	1
SE08	OEVRE NORRLAND	3	3	2	3	3	1	1
SE09	SMAALAND MED OEARNA	4	3	2	4	4	1	1
SE0A	V-STSVERIGE	3	2	2	3	3	1	1
SI	SLOVENIJA	1	1	1	1	1	2	3
SK01	BRATISLAVSKÝ	1	1	1	1	1	2	4
SK02	Z-PADN+ SLOVENSKO	1	1	1	1	1	1	3
SK03	STREDN+ SLOVENSKO	1	1	1	1	1	1	2
SK04	VÝCHODN+ SLOVENSKO	1	1	1	1	1	1	1
UKC1	TEES VALLEY AND DURHAM	1	2	1	2	2	1	1
UKC2	NORTHUMBERLAND AND TYNE AND WEAR	2	1	1	3	2	1	1
UKD1	CUMBRIA	3	3	2	3	4	1	1
UKD2	CHESHIRE	1	2	2	2	3	1	1
UKD3	GREATER MANCHESTER	1	1	1	1	1	1	1
UKD4	LANCASHIRE	2	2	1	3	3	1	1
UKD5	MERSEYSIDE	2	2	1	2	2	1	1
UKE1	EAST RIDING AND NORTH LINCOLNSHIRE	2	2	1	3	3	1	1
UKE2	NORTH YORKSHIRE	3	3	2	3	4	1	1
UKE3	SOUTH YORKSHIRE	2	1	1	2	2	1	1

UKE4	WEST YORKSHIRE	1	1	1	1	1	1	1
UKF1	DERBYSHIRE AND NOTTINGHAMSHIRE	2	1	1	2	3	1	1
UKF2	LEICESTERSHIRE, RUTLAND AND NORTHAMPTONSHIRE	1	1	1	1	1	1	1
UKF3	LINCOLNSHIRE	4	4	2	4	4	1	1
UKG1	HEREFORDSHIRE, WORCESTERSHIRE AND WARWICKSHIRE	2	3	2	2	4	1	1
UKG2	SHROPSHIRE AND STAFFORDSHIRE	1	2	2	2	2	1	1
UKG3	WEST MIDLANDS	1	1	1	2	1	1	1
UKH1	EAST ANGLIA	3	2	2	3	3	1	1
UKH2	BEDFORDSHIRE AND HERTFORDSHIRE	1	1	1	1	2	1	1
UKH3	ESSEX	2	1	2	2	3	1	1
UKI1	INNER LONDON	1	1	1	1	1	1	2
UKI2	OUTER LONDON	1	1	1	1	1	1	1
UKJ1	BERKSHIRE, BUCKINGHAMSHIRE AND OXFORDSHIRE	1	1	1	1	1	1	1
UKJ2	SURREY, EAST AND WEST SUSSEX	3	2	2	4	4	1	1
UKJ3	HAMPSHIRE AND ISLE OF WIGHT	2	1	1	2	2	1	1
UKJ4	KENT	2	2	1	2	3	1	1
UKK1	GLOUCESTERSHIRE, WILTSHIRE AND NORTH SOMERSET	2	1	1	2	3	1	1
UKK2	DORSET AND SOMERSET	4	3	2	4	4	1	1
UKK3	CORNWALL AND ISLES OF SCILLY	4	4	2	4	4	1	1
UKK4	DEVON	4	3	2	4	4	1	1
UKL1	WEST WALES AND THE VALLEYS	3	3	1	4	3	1	1
UKL2	EAST WALES	2	2	1	2	2	1	1
UKM1	NORTH EASTERN SCOTLAND	1	1	1	1	1	1	1
UKM2	EASTERN SCOTLAND	2	1	1	2	2	1	1
UKM3	SOUTH WESTERN SCOTLAND	1	1	1	1	2	1	1
UKM4	HIGHLANDS AND ISLANDS	2	3	2	3	3	1	1
UKN	NORTHERN IRELAND	1	1	1	1	1	1	1

Table A3. Core indicators with regard to population, ageing and depopulation.

NUTS 2	REGION NAME	Average score on indirect "ageing"/ "depopu-lating" indicators	Average score on indirect "ageing"/ "depopu-lating" indicators, Grouped (quartiles)	National Total Fertility Rates 1999/2000. 3 Groups (intervals)	National Total Fertility Rates 1999-2000 CODE
NUTS_2	REGION				
AT11	BURGENLAND	2,6	4	NTFR = 1,3 - 1,5	2
AT12	NIEDEROESTERREICH	2,1	3	NTFR = 1,3 - 1,5	2
AT13	WIEN	2,3	3	NTFR = 1,3 - 1,5	2
AT21	KAERNTEN	1,9	3	NTFR = 1,3 - 1,5	2
AT22	STEIERMARK	2,0	3	NTFR = 1,3 - 1,5	2
AT31	OBEROESTERREICH	1,1	1	NTFR = 1,3 - 1,5	2
AT32	SALZBURG	1,1	1	NTFR = 1,3 - 1,5	2
AT33	TIROL	1,0	1	NTFR = 1,3 - 1,5	2
AT34	VORARLBERG	1,0	1	NTFR = 1,3 - 1,5	2
BE1	REG.BRUXELLES-CAP./BRUSSELS HFDST.GEW.	1,6	2	NTFR > 1,5	3
BE21	ANTWERPEN	2,0	3	NTFR > 1,5	3
BE22	LIMBURG (B)	1,0	1	NTFR > 1,5	3
BE23	OOST-VLAANDEREN	2,0	3	NTFR > 1,5	3
BE24	VLAAMS BRABANT	1,9	3	NTFR > 1,5	3
BE25	WEST-VLAANDEREN	2,3	3	NTFR > 1,5	3
BE31	BRABANT WALLON	1,0	1	NTFR > 1,5	3
BE32	HAINAUT	1,9	3	NTFR > 1,5	3
BE33	LIEGE	1,9	3	NTFR > 1,5	3
BE34	LUXEMBOURG (B)	1,6	2	NTFR > 1,5	3
BE35	NAMUR	1,4	2	NTFR > 1,5	3
BG01	SEVEROIZTOCHEN (NORTH-WEST)	3,3	4	NTFR < 1,3	1
BG02	SEVEREN TSENTRALEN (NORTH CENTRAL)	3,1	4	NTFR < 1,3	1
BG03	SEVEROZAPADEN (NORTH-EAST)	1,6	2	NTFR < 1,3	1
BG04	YUGOIZTOCHEN (NORTH-EAST)	1,9	3	NTFR < 1,3	1
BG05	YUZHEN TSENTRALEN (SOUTH CENTRAL)	1,6	2	NTFR < 1,3	1
BG06	YUGOZAPADEN (SOUTH-EAST)	1,3	2	NTFR < 1,3	1
CH01	REGION LEMANIQUE	1,3	2	NTFR = 1,3 - 1,5	2
CH02	ESPACE MITTELLAND	1,7	3	NTFR = 1,3 - 1,5	2
CH03	SUISSE DU NORD-EST	1,6	2	NTFR = 1,3 - 1,5	2
CH04	ZUERICH	1,6	2	NTFR = 1,3 - 1,5	2
CH05	SUISSE ORIENTALE	1,1	1	NTFR = 1,3 - 1,5	2
CH06	SUISSE CENTRALE	1,0	1	NTFR = 1,3 - 1,5	2
CH07	TICINO	2,7	4	NTFR = 1,3 - 1,5	2
CY	KIBRIS	1,0	1	NTFR > 1,5	3
CZ01	PRAHA	2,1	3	NTFR < 1,3	1
CZ02	STREDNÍ CECHY	1,4	2	NTFR < 1,3	1
CZ03	JIHOZÁPAD	1,4	2	NTFR < 1,3	1
CZ04	SEVEROZÁPAD	1,3	2	NTFR < 1,3	1
CZ05	SEVEROVYCHOD	1,4	2	NTFR < 1,3	1

CZ06	JIHOVYCHOD	1,4	2	NTFR < 1,3	1
CZ07	STREDNI MORAVA	1,4	2	NTFR < 1,3	1
CZ08	OSTRAVSKY	1,3	2	NTFR < 1,3	1
DE11	STUTTGART	2,1	3	NTFR = 1,3 - 1,5	2
DE12	KARLSRUHE	2,3	3	NTFR = 1,3 - 1,5	2
DE13	FREIBURG	2,3	3	NTFR = 1,3 - 1,5	2
DE14	TUEBINGEN	1,6	2	NTFR = 1,3 - 1,5	2
DE21	OBERBAYERN	2,4	3	NTFR = 1,3 - 1,5	2
DE22	NIEDERBAYERN	2,1	3	NTFR = 1,3 - 1,5	2
DE23	OBERPFALZ	2,1	3	NTFR = 1,3 - 1,5	2
DE24	OBERFRANKEN	2,9	4	NTFR = 1,3 - 1,5	2
DE25	MITTELFRANKEN	2,4	3	NTFR = 1,3 - 1,5	2
DE26	UNTERFRANKEN	2,1	3	NTFR = 1,3 - 1,5	2
DE27	SCHWABEN	2,3	3	NTFR = 1,3 - 1,5	2
DE3	BERLIN	2,7	4	NTFR = 1,3 - 1,5	2
DE4	BRANDENBURG	2,3	3	NTFR = 1,3 - 1,5	2
DE5	BREMEN	3,4	4	NTFR = 1,3 - 1,5	2
DE6	HAMBURG	3,1	4	NTFR = 1,3 - 1,5	2
DE71	DARMSTADT	2,7	4	NTFR = 1,3 - 1,5	2
DE72	GIESSEN	2,3	3	NTFR = 1,3 - 1,5	2
DE73	KASSEL	2,9	4	NTFR = 1,3 - 1,5	2
DE8	MECKLENBURG VORPOMMERN	2,3	3	NTFR = 1,3 - 1,5	2
DE91	BRAUNSCHWEIG	3,0	4	NTFR = 1,3 - 1,5	2
DE92	HANNOVER	3,1	4	NTFR = 1,3 - 1,5	2
DE93	LUENEBURG	2,6	4	NTFR = 1,3 - 1,5	2
DE94	WESER-EMS	1,6	2	NTFR = 1,3 - 1,5	2
DEA1	DUESSELDORF	3,0	4	NTFR = 1,3 - 1,5	2
DEA2	KOELN	2,3	3	NTFR = 1,3 - 1,5	2
DEA3	MUENSTER	2,0	3	NTFR = 1,3 - 1,5	2
DEA4	DETMOLD	2,3	3	NTFR = 1,3 - 1,5	2
DEA5	ARNSBERG	2,6	4	NTFR = 1,3 - 1,5	2
DEB1	KOBLENZ	2,9	4	NTFR = 1,3 - 1,5	2
DEB2	TRIER	2,7	4	NTFR = 1,3 - 1,5	2
DEB3	RHEINHESSEN-PFALZ	2,6	4	NTFR = 1,3 - 1,5	2
DEC	SAARLAND	3,0	4	NTFR = 1,3 - 1,5	2
DED1	CHEMNITZ	3,9	4	NTFR = 1,3 - 1,5	2
DED2	DRESDEN	3,1	4	NTFR = 1,3 - 1,5	2
DED3	LEIPZIG	3,3	4	NTFR = 1,3 - 1,5	2
DEE1	DESSAU	3,0	4	NTFR = 1,3 - 1,5	2
DEE2	HALLE	3,1	4	NTFR = 1,3 - 1,5	2
DEE3	MAGDEBURG	2,9	4	NTFR = 1,3 - 1,5	2
DEF	SCHLESWIG-HOLSTEIN	2,7	4	NTFR = 1,3 - 1,5	2
DEG	THUERINGEN	2,9	4	NTFR = 1,3 - 1,5	2
DK	DANMARK	1,4	2	NTFR > 1,5	3
EE	EESTI	1,3	2	NTFR < 1,3	1
ES11	GALICIA	3,1	4	NTFR < 1,3	1
ES12	ASTURIAS	3,3	4	NTFR < 1,3	1
ES13	CANTABRIA	2,7	4	NTFR < 1,3	1
ES21	PAIS VASCO	2,7	4	NTFR < 1,3	1
ES22	NAVARRA	2,7	4	NTFR < 1,3	1
ES23	RIOJA	3,1	4	NTFR < 1,3	1

ES24	ARAGON	3,4	4	NTFR < 1,3	1
ES3	MADRID	1,9	3	NTFR < 1,3	1
ES41	CASTILLA-LEON	3,3	4	NTFR < 1,3	1
ES42	CASTILLA-LA MANCHA	2,4	3	NTFR < 1,3	1
ES43	EXTREMADURA	2,3	3	NTFR < 1,3	1
ES51	CATALUNA	2,6	4	NTFR < 1,3	1
ES52	COMUNIDAD VALENCIANA	2,0	3	NTFR < 1,3	1
ES53	BALEARES	1,4	2	NTFR < 1,3	1
ES61	ANDALUCIA	1,3	2	NTFR < 1,3	1
ES62	MURCIA	1,3	2	NTFR < 1,3	1
ES63	CEUTA Y MELILLA	1,0	1	NTFR < 1,3	1
ES7	CANARIAS	1,6	2	NTFR < 1,3	1
FI13	IT--SUOMI	1,7	3	NTFR > 1,5	3
FI14	VALI-SUOMI	1,7	3	NTFR > 1,5	3
FI15	POHJOIS-SUOMI	1,0	1	NTFR > 1,5	3
FI16	UUSIMAA (SUURALUE)	1,1	1	NTFR > 1,5	3
FI17	ETELA-SUOMI	1,7	3	NTFR > 1,5	3
FI2	AALAND	1,9	3	NTFR > 1,5	3
FR1	ILE DE FRANCE	1,0	1	NTFR > 1,5	3
FR21	CHAMPAGNE-ARDENNE	1,3	2	NTFR > 1,5	3
FR22	PICARDIE	1,0	1	NTFR > 1,5	3
FR23	HAUTE-NORMANDIE	1,0	1	NTFR > 1,5	3
FR24	CENTRE	2,0	3	NTFR > 1,5	3
FR25	BASSE-NORMANDIE	1,7	3	NTFR > 1,5	3
FR26	BOURGOGNE	2,3	3	NTFR > 1,5	3
FR3	NORD-PAS-DE-CALAIS	1,0	1	NTFR > 1,5	3
FR41	LORRAINE	1,1	1	NTFR > 1,5	3
FR42	ALSACE	1,0	1	NTFR > 1,5	3
FR43	FRANCHE-COMTE	1,4	2	NTFR > 1,5	3
FR51	PAYS DE LA LOIRE	1,6	2	NTFR > 1,5	3
FR52	BRETAGNE	2,0	3	NTFR > 1,5	3
FR53	POITOU-CHARENTES	2,4	3	NTFR > 1,5	3
FR61	AQUITAINE	2,4	3	NTFR > 1,5	3
FR62	MIDI-PYRENEES	2,4	3	NTFR > 1,5	3
FR63	LIMOUSIN	2,9	4	NTFR > 1,5	3
FR71	RHONE-ALPES	1,0	1	NTFR > 1,5	3
FR72	AUVERGNE	2,4	3	NTFR > 1,5	3
FR81	LANGUEDOC-ROUSSILLON	2,4	3	NTFR > 1,5	3
FR82	PROVENCE-ALPES-COTE D'AZUR	2,1	3	NTFR > 1,5	3
FR83	CORSE	2,9	4	NTFR > 1,5	3
FR91	GUADELOUPE	1,0	1	NTFR > 1,5	3
FR92	MARTINIQUE	1,0	1	NTFR > 1,5	3
FR93	GUYANE	1,0	1	NTFR > 1,5	3
FR94	REUNION	1,0	1	NTFR > 1,5	3
GR11	ANATOLIKI MAKEDONIA, THRAKI	2,6	4	NTFR = 1,3 - 1,5	2
GR12	KENTRIKI MAKEDONIA	2,3	3	NTFR = 1,3 - 1,5	2
GR13	DYTIKI MAKEDONIA	2,7	4	NTFR = 1,3 - 1,5	2
GR14	THESSALIA	2,9	4	NTFR = 1,3 - 1,5	2
GR21	IPEIROS	3,4	4	NTFR = 1,3 - 1,5	2
GR22	IONIA NISIA	3,0	4	NTFR = 1,3 - 1,5	2
GR23	DYTIKI ELLADA	2,4	3	NTFR = 1,3 - 1,5	2

GR24	STEREA ELLADA	3,4	4	NTFR = 1,3 - 1,5	2
GR25	PELOPONNISOS	3,7	4	NTFR = 1,3 - 1,5	2
GR3	ATTIKI	1,9	3	NTFR = 1,3 - 1,5	2
GR41	VOREIO AIGAIO	3,1	4	NTFR = 1,3 - 1,5	2
GR42	NOTIO AIGAIO	1,1	1	NTFR = 1,3 - 1,5	2
GR43	KRITI	1,9	3	NTFR = 1,3 - 1,5	2
HU01	KOEZEP-MAGYARORSZAG	2,0	3	NTFR < 1,3	1
HU02	KOEZEP-DUNANTUL	1,3	2	NTFR < 1,3	1
HU03	NYUGAT-DUNANTUL	1,4	2	NTFR < 1,3	1
HU04	DEL-DUNANTUL	1,7	3	NTFR < 1,3	1
HU05	ESZAK-MAGYARORSZAG	1,4	2	NTFR < 1,3	1
HU06	ESZAK-ALFOELD	1,0	1	NTFR < 1,3	1
HU07	DEL-ALFOELD	1,6	2	NTFR < 1,3	1
IE01	BORDER, MIDLAND AND WESTERN	1,0	1	NTFR > 1,5	3
IE02	SOUTHERN AND EASTERN	1,0	1	NTFR > 1,5	3
IT11	PIEMONTE	4,0	4	NTFR < 1,3	1
IT12	VALLE D'AOSTA	3,6	4	NTFR < 1,3	1
IT13	LIGURIA	4,0	4	NTFR < 1,3	1
IT2	LOMBARDIA	3,3	4	NTFR < 1,3	1
IT31	TRENTINO-ALTO ADIGE	2,3	3	NTFR < 1,3	1
IT32	VENETO	3,3	4	NTFR < 1,3	1
IT33	FRIULI-VENEZIA GIULIA	4,0	4	NTFR < 1,3	1
IT4	EMILIA-ROMAGNA	4,0	4	NTFR < 1,3	1
IT51	TOSCANA	4,0	4	NTFR < 1,3	1
IT52	UMBRIA	4,0	4	NTFR < 1,3	1
IT53	MARCHE	3,7	4	NTFR < 1,3	1
IT6	LAZIO	2,9	4	NTFR < 1,3	1
IT71	ABRUZZO	3,4	4	NTFR < 1,3	1
IT72	MOLISE	3,1	4	NTFR < 1,3	1
IT8	CAMPANIA	1,0	1	NTFR < 1,3	1
IT91	PUGLIA	1,3	2	NTFR < 1,3	1
IT92	BASILICATA	2,1	3	NTFR < 1,3	1
IT93	CALABRIA	1,4	2	NTFR < 1,3	1
ITA	SICILIA	1,4	2	NTFR < 1,3	1
ITB	SARDEGNA	1,9	3	NTFR < 1,3	1
LT	LIETUVA	1,1	1	NTFR = 1,3 - 1,5	2
LU	LUXEMBOURG (GRAND-DUCHE)	1,3	2	NTFR > 1,5	3
LV	LATVIJA	1,4	2	NTFR < 1,3	1
MT	MALTA	1,0	1	NTFR > 1,5	3
NL11	GRONINGEN	1,3	2	NTFR > 1,5	3
NL12	FRIESLAND	1,0	1	NTFR > 1,5	3
NL13	DRENTHE	1,6	2	NTFR > 1,5	3
NL21	OVERIJSSEL	1,0	1	NTFR > 1,5	3
NL22	GELDERLAND	1,0	1	NTFR > 1,5	3
NL23	FLEVOLAND	1,0	1	NTFR > 1,5	3
NL31	UTRECHT	1,0	1	NTFR > 1,5	3
NL32	NOORD-HOLLAND	1,3	2	NTFR > 1,5	3
NL33	ZUID-HOLLAND	1,0	1	NTFR > 1,5	3
NL34	ZEELAND	1,9	3	NTFR > 1,5	3
NL41	NOORD-BRABANT	1,1	1	NTFR > 1,5	3
NL42	LIMBURG (NL)	1,4	2	NTFR > 1,5	3

NO01	OSLO OG AKERSHUS	1,1	1	NTFR > 1,5	3
NO02	HEDMARK OG OPPLAND	2,6	4	NTFR > 1,5	3
NO03	SOR-OSTLANDET	1,4	2	NTFR > 1,5	3
NO04	AGDER OG ROGALAND	1,0	1	NTFR > 1,5	3
NO05	VESTLANDET	1,3	2	NTFR > 1,5	3
NO06	TRONDELAG	1,3	2	NTFR > 1,5	3
NO07	NORD-NORGE	1,1	1	NTFR > 1,5	3
PL01	DOLNOSLASKIE	1,3	2	NTFR = 1,3 - 1,5	2
PL02	KUJAWSKO-POMORSKIE	1,1	1	NTFR = 1,3 - 1,5	2
PL03	LUBELSKIE	1,1	1	NTFR = 1,3 - 1,5	2
PL04	LUBUSKIE	1,1	1	NTFR = 1,3 - 1,5	2
PL05	LÓDZKIE	1,4	2	NTFR = 1,3 - 1,5	2
PL06	MALOPOLSKIE	1,1	1	NTFR = 1,3 - 1,5	2
PL07	MAZOWIECKIE	1,1	1	NTFR = 1,3 - 1,5	2
PL08	OPOLSKIE	1,3	2	NTFR = 1,3 - 1,5	2
PL09	PODKARPACKIE	1,0	1	NTFR = 1,3 - 1,5	2
PL0A	PODLASKIE	1,0	1	NTFR = 1,3 - 1,5	2
PL0B	POMORSKIE	1,1	1	NTFR = 1,3 - 1,5	2
PL0C	SLASKIE	1,3	2	NTFR = 1,3 - 1,5	2
PL0D	SWIETOKRZYSKIE	1,1	1	NTFR = 1,3 - 1,5	2
PL0E	WARMINSKO-MAZURSKIE	1,1	1	NTFR = 1,3 - 1,5	2
PL0F	WIELKOPOLSKIE	1,1	1	NTFR = 1,3 - 1,5	2
PL0G	ZACHODNIOPOMORSKIE	1,3	2	NTFR = 1,3 - 1,5	2
PT11	NORTE	1,1	1	NTFR = 1,3 - 1,5	2
PT12	CENTRO (P)	3,1	4	NTFR = 1,3 - 1,5	2
PT13	LISBOA E VALE DO TEJO	2,4	3	NTFR = 1,3 - 1,5	2
PT14	ALENTEJO	3,7	4	NTFR = 1,3 - 1,5	2
PT15	ALGARVE	2,4	3	NTFR = 1,3 - 1,5	2
PT2	ACORES	1,0	1	NTFR = 1,3 - 1,5	2
PT3	MADEIRA	1,1	1	NTFR = 1,3 - 1,5	2
RO01	NORD-EST	1,1	1	NTFR = 1,3 - 1,5	2
RO02	SUD-EST	1,3	2	NTFR = 1,3 - 1,5	2
RO03	SUD	1,4	2	NTFR = 1,3 - 1,5	2
RO04	SUD-VEST	1,4	2	NTFR = 1,3 - 1,5	2
RO05	VEST	1,3	2	NTFR = 1,3 - 1,5	2
RO06	NORD-VEST	1,3	2	NTFR = 1,3 - 1,5	2
RO07	CENTRU	1,3	2	NTFR = 1,3 - 1,5	2
RO08	BUCURESTI	1,9	3	NTFR = 1,3 - 1,5	2
SE01	STOCKHOLM LAEN	1,3	2	NTFR = 1,3 - 1,5	2
SE02	OESTRA MELLANSVERIGE	2,3	3	NTFR = 1,3 - 1,5	2
SE04	SYDSVERIGE	2,4	3	NTFR = 1,3 - 1,5	2
SE06	NORRA MELLANSVERIGE	2,9	4	NTFR = 1,3 - 1,5	2
SE07	MELLERSTA NORRLAND	2,9	4	NTFR = 1,3 - 1,5	2
SE08	OEVRE NORRLAND	2,3	3	NTFR = 1,3 - 1,5	2
SE09	SMAALAND MED OEARNA	2,7	4	NTFR = 1,3 - 1,5	2
SE0A	VASTSVERIGE	2,1	3	NTFR = 1,3 - 1,5	2
SI	SLOVENIJA	1,4	2	NTFR < 1,3	1
SK01	BRATISLAVSKÝ	1,6	2	NTFR = 1,3 - 1,5	2
SK02	Z-PADN+ SLOVENSKO	1,3	2	NTFR = 1,3 - 1,5	2
SK03	STREDN+ SLOVENSKO	1,1	1	NTFR = 1,3 - 1,5	2
SK04	VÝCHODN+ SLOVENSKO	1,0	1	NTFR = 1,3 - 1,5	2

UKC1	TEES VALLEY AND DURHAM	1,4	2	NTFR > 1,5	3
UKC2	NORTHUMBERLAND AND TYNE AND WEAR	1,6	2	NTFR > 1,5	3
UKD1	CUMBRIA	2,4	3	NTFR > 1,5	3
UKD2	CHESHIRE	1,7	3	NTFR > 1,5	3
UKD3	GREATER MANCHESTER	1,0	1	NTFR > 1,5	3
UKD4	LANCASHIRE	1,9	3	NTFR > 1,5	3
UKD5	MERSEYSIDE	1,6	2	NTFR > 1,5	3
UKE1	EAST RIDING AND NORTH LINCOLNSHIRE	1,9	3	NTFR > 1,5	3
UKE2	NORTH YORKSHIRE	2,4	3	NTFR > 1,5	3
UKE3	SOUTH YORKSHIRE	1,4	2	NTFR > 1,5	3
UKE4	WEST YORKSHIRE	1,0	1	NTFR > 1,5	3
UKF1	DERBYSHIRE AND NOTTINGHAMSHIRE	1,6	2	NTFR > 1,5	3
UKF2	LEICESTERSHIRE, RUTLAND AND NORTHAMPTONSHIRE	1,0	1	NTFR > 1,5	3
UKF3	LINCOLNSHIRE	2,9	4	NTFR > 1,5	3
UKG1	HEREFORDSHIRE, WORCESTERSHIRE AND WARWICKSHIRE	2,1	3	NTFR > 1,5	3
UKG2	SHROPSHIRE AND STAFFORDSHIRE	1,6	2	NTFR > 1,5	3
UKG3	WEST MIDLANDS	1,1	1	NTFR > 1,5	3
UKH1	EAST ANGLIA	2,1	3	NTFR > 1,5	3
UKH2	BEDFORDSHIRE AND HERTFORDSHIRE	1,1	1	NTFR > 1,5	3
UKH3	ESSEX	1,7	3	NTFR > 1,5	3
UKI1	INNER LONDON	1,1	1	NTFR > 1,5	3
UKI2	OUTER LONDON	1,0	1	NTFR > 1,5	3
UKJ1	BERKSHIRE, BUCKINGHAMSHIRE AND OXFORDSHIRE	1,0	1	NTFR > 1,5	3
UKJ2	SURREY, EAST AND WEST SUSSEX	2,4	3	NTFR > 1,5	3
UKJ3	HAMPSHIRE AND ISLE OF WIGHT	1,4	2	NTFR > 1,5	3
UKJ4	KENT	1,7	3	NTFR > 1,5	3
UKK1	GLOUCESTERSHIRE, WILTSHIRE AND NORTH SOMERSET	1,6	2	NTFR > 1,5	3
UKK2	DORSET AND SOMERSET	2,7	4	NTFR > 1,5	3
UKK3	CORNWALL AND ISLES OF SCILLY	2,9	4	NTFR > 1,5	3
UKK4	DEVON	2,7	4	NTFR > 1,5	3
UKL1	WEST WALES AND THE VALLEYS	2,3	3	NTFR > 1,5	3
UKL2	EAST WALES	1,6	2	NTFR > 1,5	3
UKM1	NORTH EASTERN SCOTLAND	1,0	1	NTFR > 1,5	3
UKM2	EASTERN SCOTLAND	1,4	2	NTFR > 1,5	3
UKM3	SOUTH WESTERN SCOTLAND	1,1	1	NTFR > 1,5	3
UKM4	HIGHLANDS AND ISLANDS	2,1	3	NTFR > 1,5	3
UKN	NORTHERN IRELAND	1,0	1	NTFR > 1,5	3

Table A4. Core indicators with regard to population, ageing and depopulation.

NUTS 2	REGION NAME	Percent population change 1995-1999	Share of NUTS 2 average population 1999 living in NUTS 3 regions with population decline 1995-1999	Share of NUTS 2 area comprising NUTS 3 regions with population decline 1995-1999	Population density 1999 (ihabitants/ square kilometers)
NUTS_2	REGION	1995-1999			1999
AT11	BURGENLAND	1,1	0,0	0,0	70,1
AT12	NIEDEROESTERREICH	1,4	14,4	24,1	80,3
AT13	WIEN	0,6	0,0	0,0	3862,7
AT21	KAERNTEN	0,5	0,0	0,0	59,2
AT22	STEIERMARK	-0,2	24,1	38,5	73,4
AT31	OBEROESTERREICH	-0,6	69,3	56,8	114,9
AT32	SALZBURG	1,6	0,0	0,0	72,0
AT33	TIROL	1,2	0,0	0,0	52,7
AT34	VORARLBERG	1,5	0,0	0,0	133,8
BE1	REG.BRUXELLES-CAP./BRUSSELS HFDST.GEW.	0,5	0,0	0,0	5931,7
BE21	ANTWERPEN	0,6	56,8	34,9	572,0
BE22	LIMBURG (B)	1,7	0,0	0,0	324,9
BE23	OOST-VLAANDEREN	0,5	0,0	0,0	455,4
BE24	VLAAMS BRABANT	1,4	0,0	0,0	480,1
BE25	WEST-VLAANDEREN	0,4	0,0	0,0	359,5
BE31	BRABANT WALLON	2,7	0,0	0,0	318,1
BE32	HAINAUT	-0,3	57,9	32,8	338,4
BE33	LIEGE	0,3	57,7	20,6	263,6
BE34	LUXEMBOURG (B)	1,7	0,0	0,0	55,2
BE35	NAMUR	1,4	0,0	0,0	120,3
BG01	SEVEROIZTOCHEN (NORTH-WEST)	-4,5	100,0	100,0	55,6
BG02	SEVEREN TSENTRALEN (NORTH CENTRAL)	-3,7	100,0	100,0	68,7
BG03	SEVEROZAPADEN (NORTH-EAST)	-2,5	100,0	100,0	67,4
BG04	YUGOIZTOCHEN (NORTH-EAST)	-0,9	43,7	93,4	105,7
BG05	YUZHEN TSENTRALEN (SOUTH CENTRAL)	-2,2	85,9	79,9	75,3
BG06	YUGOZAPADEN (SOUTH-EAST)	-2,4	100,0	100,0	56,5
CH01	REGION LEMANIQUE	1,3	0,0	0,0	148,0
CH02	ESPACE MITTELLAND	0,7	4,2	8,3	164,4
CH03	SUISSE DU NORD-EST	1,1	19,3	1,9	503,8
CH04	ZUERICH	1,4	0,0	0,0	690,0
CH05	SUISSE ORIENTALE	0,7	3,7	5,9	90,3
CH06	SUISSE CENTRALE	2,4	0,0	0,0	150,3
CH07	TICINO	0,3	0,0	0,0	109,2
CY	KIBRIS				
CZ01	PRAHA	-1,9	100,0	100,0	2399,2
CZ02	STREDNÍ CECHY	0,2	0,0	0,0	100,8
CZ03	JIHOZÁPAD	-0,4	100,0	100,0	66,9
CZ04	SEVEROZÁPAD	0,1	0,0	0,0	130,9
CZ05	SEVEROVYCHOD	-0,3	71,2	74,6	119,8
CZ06	JIHOVYCHOD	-0,3	100,0	100,0	118,7

CZ07	STREDNI MORAVA	-0,2	48,2	56,5	136,2
CZ08	OSTRAVSKY	-0,9	100,0	100,0	231,0
DE11	STUTTGART	1,5	18,0	2,9	370,2
DE12	KARLSRUHE	1,1	15,9	3,5	386,2
DE13	FREIBURG	2,0	0,0	0,0	226,7
DE14	TUEBINGEN	1,9	0,0	0,0	196,6
DE21	OBERBAYERN	1,2	29,7	1,8	229,1
DE22	NIEDERBAYERN	2,6	4,3	0,7	113,0
DE23	OBERPFALZ	2,2	15,7	1,4	110,7
DE24	OBERFRANKEN	0,6	29,3	19,6	154,1
DE25	MITTELFRANKEN	1,1	29,0	2,6	232,2
DE26	UNTERFRANKEN	1,4	13,7	1,5	156,1
DE27	SCHWABEN	1,4	20,6	2,5	174,2
DE3	BERLIN	-2,2	100,0	100,0	3804,9
DE4	BRANDENBURG	2,0	40,5	38,7	88,0
DE5	BREMEN	-2,1	100,0	100,0	1644,4
DE6	HAMBURG	-0,2	100,0	100,0	2255,6
DE71	DARMSTADT	0,9	21,1	5,0	498,5
DE72	GIESSEN	1,0	0,0	0,0	197,5
DE73	KASSEL	0,4	34,9	26,9	153,3
DE8	MECKLENBURG VORPOMMERN	-1,8	55,4	38,1	77,5
DE91	BRAUNSCHWEIG	-0,4	58,7	51,4	206,4
DE92	HANNOVER	0,7	35,3	18,7	237,8
DE93	LUENEBURG	3,9	0,0	0,0	106,6
DE94	WESER-EMS	2,8	15,8	2,7	161,0
DEA1	DUESSELDORF	-0,4	61,7	27,8	995,8
DEA2	KOELN	1,9	32,1	8,8	578,0
DEA3	MUENSTER	1,6	36,2	12,5	377,4
DEA4	DETMOLD	2,2	15,7	4,0	314,1
DEA5	ARNSBERG	-0,3	57,6	30,0	476,6
DEB1	KOBLENZ	2,3	0,0	0,0	187,8
DEB2	TRIER	1,2	0,0	0,0	103,8
DEB3	RHEINHESSEN-PFALZ	1,2	15,5	4,1	292,0
DEC	SAARLAND	-1,0	66,5	43,5	417,9
DED1	CHEMNITZ	-2,8	89,9	93,9	270,5
DED2	DRESDEN	-1,8	65,2	86,2	218,2
DED3	LEIPZIG	7,4	15,2	36,3	272,6
DEE1	DESSAU	-3,6	100,0	100,0	129,9
DEE2	HALLE	-3,5	90,9	85,8	198,9
DEE3	MAGDEBURG	-2,9	75,4	68,4	104,4
DEF	SCHLESWIG-HOLSTEIN	2,1	22,2	2,9	175,9
DEG	THUERINGEN	-2,1	82,0	83,0	152,0
DK	DANMARK	1,8	0,0	0,0	123,4
EE	EESTI	-1,0	63,2	43,1	33,0
ES11	GALICIA	-0,7	66,6	84,8	91,9
ES12	ASTURIAS	-1,9	100,0	100,0	100,0
ES13	CANTABRIA	0,0	0,0	0,0	99,5
ES21	PAIS VASCO	-0,7	86,4	58,0	284,0
ES22	NAVARRA	1,5	0,0	0,0	51,3
ES23	RIOJA	0,8	0,0	0,0	52,2
ES24	ARAGON	-1,0	100,0	100,0	24,6
ES3	MADRID	1,6	0,0	0,0	636,3
ES41	CASTILLA-LEON	-1,6	100,0	100,0	26,3
ES42	CASTILLA-LA MANCHA	1,1	39,5	46,5	21,5
ES43	EXTREMADURA	0,0	0,0	0,0	25,7

ES51	CATALUNA	0,9	0,0	0,0	191,9
ES52	COMUNIDAD VALENCIANA	2,0	0,0	0,0	171,1
ES53	BALEARES	6,1	0,0	0,0	153,6
ES61	ANDALUCIA	1,4	19,6	31,2	82,4
ES62	MURCIA	3,1	0,0	0,0	98,2
ES63	CEUTA Y MELILLA	4,5	0,0	0,0	4451,6
ES7	CANARIAS	6,1	0,0	0,0	227,3
FI13	IT--SUOMI	-2,5	100,0	100,0	9,8
FI14	VALI-SUOMI	-0,6	38,3	43,9	16,5
FI15	POHJOIS-SUOMI	0,2	35,1	72,5	4,3
FI16	UUSIMAA (SUURALUE)	5,4	0,0	0,0	150,6
FI17	ETELA-SUOMI	0,4	42,0	46,0	34,6
FI2	AALAND	4,0	0,0	0,0	17,0
FR1	ILE DE FRANCE	0,8	12,6	2,0	912,8
FR21	CHAMPAGNE-ARDENNE	-0,4	36,1	44,7	52,4
FR22	PICARDIE	0,6	28,8	38,0	95,9
FR23	HAUTE-NORMANDIE	0,6	0,0	0,0	144,8
FR24	CENTRE	0,9	22,3	35,8	62,4
FR25	BASSE-NORMANDIE	1,0	20,5	34,7	81,0
FR26	BOURGOGNE	-0,2	47,8	48,7	51,0
FR3	NORD-PAS-DE-CALAIS	0,3	0,0	0,0	322,3
FR41	LORRAINE	-0,2	55,7	73,6	98,2
FR42	ALSACE	2,7	0,0	0,0	210,1
FR43	FRANCHE-COMTE	0,5	0,0	0,0	69,1
FR51	PAYS DE LA LOIRE	2,4	0,0	0,0	100,7
FR52	BRETAGNE	2,2	0,0	0,0	107,0
FR53	POITOU-CHARENTES	1,4	20,7	23,1	63,7
FR61	AQUITAINE	1,9	0,0	0,0	70,6
FR62	MIDI-PYRENEES	2,3	25,8	42,9	56,4
FR63	LIMOUSIN	-0,7	50,2	67,4	42,0
FR71	RHONE-ALPES	2,2	12,9	10,9	129,5
FR72	AUVERGNE	0,0	37,8	50,2	50,4
FR81	LANGUEDOC-ROUSSILLON	3,8	0,0	0,0	84,1
FR82	PROVENCE-ALPES-COTE D'AZUR	2,3	0,0	0,0	143,9
FR83	CORSE	0,4	45,4	46,2	30,0
FR91	GUADELOUPE	1,0	0,0	0,0	248,7
FR92	MARTINIQUE	-1,0	100,0	100,0	338,7
FR93	GUYANE	3,9	0,0	0,0	1,9
FR94	REUNION	7,7	0,0	0,0	281,7
GR11	ANATOLIKI MAKEDONIA, THRAKI	0,2	42,1	39,4	39,8
GR12	KENTRIKI MAKEDONIA	2,1	4,6	13,4	96,0
GR13	DYTIKI MAKEDONIA	0,3	13,8	24,2	32,2
GR14	THESSALIA	0,1	36,1	42,9	52,9
GR21	IPEIROS	2,7	0,0	0,0	40,9
GR22	IONIA NISIA	2,5	26,5	54,6	88,4
GR23	DYTIKI ELLADA	1,4	24,6	23,1	65,2
GR24	STEREA ELLADA	1,4	0,0	0,0	42,6
GR25	PELOPONNISOS	1,2	0,0	0,0	43,3
GR3	ATTIKI	-0,4	100,0	100,0	906,0
GR41	VOREIO AIGAIO	-1,1	79,3	79,7	48,0
GR42	NOTIO AIGAIO	3,0	0,0	0,0	51,6
GR43	KRITI	1,8	0,0	0,0	67,8
HU01	KOEZEP-MAGYARORSZAG	-1,6	64,0	7,6	412,0
HU02	KOEZEP-DUNANTUL	-0,6	61,6	61,2	98,6

HU03	NYUGAT-DUNANTUL	-1,5	100,0	100,0	88,1
HU04	DEL-DUNANTUL	-2,2	100,0	100,0	69,0
HU05	ESZAK-MAGYARORSZAG	-2,2	100,0	100,0	94,7
HU06	ESZAK-ALFOELD	-1,2	100,0	100,0	86,0
HU07	DEL-ALFOELD	-2,0	100,0	100,0	73,4
IE01	BORDER, MIDLAND AND WESTERN	2,8	0,0	0,0	29,7
IE02	SOUTHERN AND EASTERN	4,4	0,0	0,0	74,5
IT11	PIEMONTE	-0,1	70,4	52,7	168,8
IT12	VALLE D'AOSTA	0,8	0,0	0,0	36,8
IT13	LIGURIA	-1,9	86,7	78,7	300,6
IT2	LOMBARDIA	1,4	0,0	0,0	378,9
IT31	TRENTINO-ALTO ADIGE	2,4	0,0	0,0	68,6
IT32	VENETO	1,6	28,2	43,2	245,0
IT33	FRIULI-VENEZIA GIULIA	-0,5	64,8	65,1	150,9
IT4	EMILIA-ROMAGNA	1,2	15,5	23,6	179,5
IT51	TOSCANA	0,2	58,8	52,9	153,7
IT52	UMBRIA	1,2	26,7	25,1	98,6
IT53	MARCHE	1,1	0,0	0,0	150,4
IT6	LAZIO	1,2	0,0	0,0	305,3
IT71	ABRUZZO	0,7	0,0	0,0	118,4
IT72	MOLISE	-0,9	72,0	65,5	74,1
IT8	CAMPANIA	0,6	12,7	35,8	425,6
IT91	PUGLIA	0,2	41,5	59,2	211,1
IT92	BASILICATA	-0,3	100,0	100,0	60,8
IT93	CALABRIA	-0,9	100,0	100,0	136,5
ITA	SICILIA	0,1	58,4	62,1	198,1
ITB	SARDEGNA	-0,4	62,7	40,2	68,7
LT	LIETUVA	-0,4	74,9	71,8	56,6
LU	LUXEMBOURG (GRAND-DUCHE)	5,6	0,0	0,0	167,4
LV	LATVIJA	-3,3	100,0	100,0	37,7
MT	MALTA				
NL11	GRONINGEN	0,7	9,4	11,4	240,1
NL12	FRIESLAND	2,0	0,0	0,0	185,4
NL13	DRENTHE	2,9	26,7	26,0	176,9
NL21	OVERIJSSEL	2,1	0,0	0,0	321,9
NL22	GELDERLAND	2,3	0,0	0,0	383,4
NL23	FLEVOLAND	16,4	0,0	0,0	219,1
NL31	UTRECHT	3,4	0,0	0,0	808,7
NL32	NOORD-HOLLAND	1,9	9,3	6,9	944,3
NL33	ZUID-HOLLAND	1,8	0,0	0,0	1182,1
NL34	ZEELAND	1,1	0,0	0,0	207,1
NL41	NOORD-BRABANT	2,8	18,7	18,3	475,8
NL42	LIMBURG (NL)	0,7	0,0	0,0	525,6
NO01	OSLO OG AKERSHUS	5,5	0,0	0,0	180,0
NO02	HEDMARK OG OPPLAND	-0,5	100,0	100,0	7,0
NO03	SOR-OSTLANDET	2,9	0,0	0,0	23,4
NO04	AGDER OG ROGALAND	3,3	0,0	0,0	24,3
NO05	VESTLANDET	1,6	0,0	0,0	15,9
NO06	TRONDELAG	1,0	32,7	54,3	9,4
NO07	NORD-NORGE	-1,3	100,0	100,0	4,1
PL01	DOLNOSLASKIE	-0,3	68,2	53,5	149,4
PL02	KUJAWSKO-POMORSKIE	0,4	0,0	0,0	116,9
PL03	LUBELSKIE	-0,3	44,9	60,8	89,1
PL04	LUBUSKIE	0,9	0,0	0,0	73,2

PL05	LÓDZKIE	-1,2	100,0	100,0	145,8
PL06	MALOPOLSKIE	1,1	23,0	2,2	212,6
PL07	MAZOWIECKIE	0,2	31,9	1,4	142,3
PL08	OPOLSKIE	-0,5	100,0	100,0	115,7
PL09	PODKARPACKIE	1,0	0,0	0,0	118,5
PL0A	PODLASKIE	0,2	0,0	0,0	60,6
PL0B	POMORSKIE	1,2	34,5	2,3	119,6
PL0C	SLASKIE	-0,8	43,6	9,9	396,6
PL0D	SWIETOKRZYSKIE	-0,5	100,0	100,0	113,4
PL0E	WARMINSKO-MAZURSKIE	1,0	0,0	0,0	60,5
PL0F	WIELKOPOLSKIE	0,7	17,2	0,9	112,4
PL0G	ZACHODNIOPOMORSKIE	0,8	0,0	0,0	75,6
PT11	NORTE	1,3	19,4	68,1	169,8
PT12	CENTRO (P)	1,9	16,5	51,4	74,1
PT13	LISBOA E VALE DO TEJO	1,1	61,7	30,4	285,3
PT14	ALENTEJO	-0,4	49,6	53,6	19,5
PT15	ALGARVE	7,6	0,0	0,0	73,8
PT2	ACORES	-1,2	100,0	100,0	103,0
PT3	MADEIRA	-3,1	100,0	100,0	318,4
RO01	NORD-EST	1,3	0,0	0,0	104,0
RO02	SUD-EST	-0,3	64,8	73,9	82,4
RO03	SUD	-1,1	91,2	87,1	101,2
RO04	SUD-VEST	-0,8	65,5	61,1	82,7
RO05	VEST	-2,6	100,0	100,0	63,4
RO06	NORD-VEST	-1,3	88,4	84,3	83,3
RO07	CENTRU	-1,4	100,0	100,0	77,4
RO08	BUCURESTI	-3,3	100,0	100,0	1238,3
SE01	STOCKHOLM LAEN	3,9	0,0	0,0	276,3
SE02	OESTRA MELLANSVERIGE	-0,6	80,4	81,8	38,8
SE04	SYDSVERIGE	0,6	11,9	21,1	91,1
SE06	NORRA MELLANSVERIGE	-2,3	100,0	100,0	13,2
SE07	MELLERSTA NORRLAND	-3,0	100,0	100,0	5,4
SE08	OEVRE NORRLAND	-1,9	100,0	100,0	3,3
SE09	SMAALAND MED OEARNA	-1,2	92,8	90,6	24,1
SE0A	VASTSVERIGE	0,6	0,0	0,0	59,9
SI	SLOVENIJA	-0,2	34,5	40,3	97,9
SK01	BRATISLAVSKÝ	-0,3	100,0	100,0	300,5
SK02	Z-PADN+ SLOVENSKO	0,0	70,6	72,3	125,1
SK03	STREDN+ SLOVENSKO	0,3	48,9	58,2	83,4
SK04	VÝCHODN+ SLOVENSKO	1,2	0,0	0,0	98,2
UKC1	TEES VALLEY AND DURHAM	-0,6	67,7	83,4	381,7
UKC2	NORTHUMBERLAND AND TYNE AND WEAR	-1,6	78,2	9,7	254,9
UKD1	CUMBRIA	0,2	48,0	30,4	72,1
UKD2	CHESHIRE	0,5	0,0	0,0	421,7
UKD3	GREATER MANCHESTER	-0,2	53,8	42,6	2003,9
UKD4	LANCASHIRE	-0,1	20,2	5,6	464,2
UKD5	MERSEYSIDE	-2,0	100,0	100,0	2140,2
UKE1	EAST RIDING AND NORTH LINCOLNSHIRE	-1,0	64,2	31,7	241,1
UKE2	NORTH YORKSHIRE	2,5	0,0	0,0	90,0
UKE3	SOUTH YORKSHIRE	-0,3	59,2	76,5	835,8
UKE4	WEST YORKSHIRE	0,3	0,0	0,0	1040,3
UKF1	DERBYSHIRE AND NOTTINGHAMSHIRE	0,8	34,4	41,3	419,1
UKF2	LEICESTERSHIRE, RUTLAND AND NORTHAMPTONSHIRE	2,4	18,7	1,5	316,4

UKF3	LINCOLNSHIRE	3,1	0,0	0,0	106,2
UKG1	HEREFORDSHIRE, WORCESTERSHIRE AND WARWICKSHIRE	1,6	0,0	0,0	206,0
UKG2	SHROPSHIRE AND STAFFORDSHIRE	1,2	16,8	1,5	240,9
UKG3	WEST MIDLANDS	-0,4	80,6	69,4	2915,6
UKH1	EAST ANGLIA	3,7	7,1	2,6	174,8
UKH2	BEDFORDSHIRE AND HERTFORDSHIRE	3,2	0,0	0,0	558,5
UKH3	ESSEX	2,6	0,0	0,0	440,3
UKI1	INNER LONDON	5,4	0,0	0,0	8778,8
UKI2	OUTER LONDON	3,3	0,0	0,0	3537,6
UKJ1	BERKSHIRE, BUCKINGHAMSHIRE AND OXFORDSHIRE	4,0	0,0	0,0	368,7
UKJ2	SURREY, EAST AND WEST SUSSEX	3,6	0,0	0,0	474,9
UKJ3	HAMPSHIRE AND ISLE OF WIGHT	2,4	10,6	1,0	426,7
UKJ4	KENT	2,3	0,0	0,0	424,9
UKK1	GLOUCESTERSHIRE, WILTSHIRE AND NORTH SOMERSET	2,6	0,0	0,0	286,7
UKK2	DORSET AND SOMERSET	2,3	0,0	0,0	194,1
UKK3	CORNWALL AND ISLES OF SCILLY	2,7	0,0	0,0	139,1
UKK4	DEVON	1,6	23,5	1,2	160,4
UKL1	WEST WALES AND THE VALLEYS	-0,6	70,2	41,0	142,3
UKL2	EAST WALES	2,7	0,0	0,0	139,9
UKM1	NORTH EASTERN SCOTLAND	-1,6	100,0	100,0	68,7
UKM2	EASTERN SCOTLAND	0,3	34,3	20,7	105,6
UKM3	SOUTH WESTERN SCOTLAND	-0,8	72,9	82,8	180,0
UKM4	HIGHLANDS AND ISLANDS	-0,5	58,9	76,2	9,3
UKN	NORTHERN IRELAND	2,4	16,8	0,8	119,5

Table A5.	Total fertility rate (TFR) 1990, 1995, 1999					
NUTS	REGION	1990		1995	1999	
BE	**BE BELGIUM**	**1,62**		**1,55**	**1,61**	
BE1	BE1 RÉGION BXL-CAPITALE	1,78		1,77	1,84	e
BE2	BE2 VLAAMS GEWEST	1,55		1,5	1,56	e
BE21	BE21 ANTWERPEN	1,58		1,54	1,6	e
BE22	BE22 LIMBURG	1,49		1,41	1,46	e
BE23	BE23 OOST-VLAANDERERN	1,51		1,48	1,54	e
BE24	BE24 VLAAMS BRABANT	1,5		1,47	1,53	e
BE25	BE25 WEST-VLAANDEREN	1,63		1,56	1,62	e
BE3	BE3 RÉGION WALLONNE	1,7		1,61	1,67	e
BE31	BE31 BRABANT WALLON	1,68		1,61	1,67	e
BE32	BE32 HAINAUT	1,66		1,57	1,63	e
BE33	BE33 LIÈGE	1,69		1,59	1,65	e
BE34	BE34 LUXEMBOURG (BE)	1,82		1,77	1,84	e
BE35	BE35 NAMUR	1,78		1,65	1,71	e
DK	**DK DENMARK**	**1676**		**1807**	**1735**	
DK001	DK001 KØBENHAVN OG FREDERIKSBERG	1,33		1,51	1,50	
DK002	DK002 KØBENHAVNS AMT	1,70		1,92	1,83	
DK003	DK003 FREDERIKSBORG AMT	1,78		1,99	1,90	
DK004	DK004 ROSKILDE AMT	1,68		1,92	1,83	
DK005	DK005 VESTSJÆLLANDS AMT	1,73		1,90	1,84	
DK006	DK006 STORSTRØMS AMT	1,67		1,84	1,80	
DK007	DK007 BORNHOLMS AMT	1,77		1,98	1,80	
DK008	DK008 FYNS AMT	1,72		1,81	1,75	
DK009	DK009 SØNDERJYLLANDS AMT	1,93		1,96	1,92	
DK00A	DK00A RIBE AMT	1,94		2,03	1,98	
DK00B	DK00B VEJLE AMT	1,77		1,90	1,86	
DK00C	DK00C RINGKØBING AMT	1,84		2,01	1,94	
DK00D	DK00DE ÅRHUS AMT	1,63		1,79	1,70	
DK00E	DK00 VIBORG AMT	1,95		2,07	1,98	
DK00F	DK00F NORDJYLLANDS AMT	1,75		1,84	1,75	
DE	**DE FEDERAL REP OF GERMANY (INCL X-GDR FROM 1991)**	**1,45**	*	**1,25**	**1,36**	
DE1	DE1 BADEN-WÜRTTEMBERG	NA	*	NA	NA	
DE11	DE11 STUTTGART	1,49	*	1,44	1,46	
DE12	DE12 KARLSRUHE	1,37	*	1,31	1,35	
DE13	DE13 FREIBURG	1,43	*	1,37	1,39	
DE14	DE14 TÜBINGEN	1,55	*	1,45	1,50	
DE2	DE2 BAYERN	NA	*	NA	NA	
DE21	DE21 OBERBAYERN	1,39	*	1,32	1,39	
DE22	DE22 NIDERBAYERN	1,50	*	1,37	1,45	
DE23	DE23 OBERPFALZ	1,49	*	1,38	1,45	
DE24	DE24 OBERFRANKEN	1,44	*	1,31	1,38	
DE25	DE25 MITTELFRANKEN	1,41	*	1,32	1,39	
DE26	DE26 UNTERFRANKEN	1,49	*	1,36	1,37	
DE27	DE27 SCHWABEN	1,59	*	1,47	1,52	
DE3	DE3 BERLIN	1,10	*	1,06	1,20	
DE4	DE4 BRANDENBURG	0,97	*	0,83	1,12	
DE5	DE5 BREMEN	1,30	*	1,28	1,34	
DE6	DE6 HAMBURG	1,24	*	1,16	1,21	
DE7	DE7 HESSEN	NA	*	NA	NA	
DE71	DE71 DARMSTADT	1,29	*	1,27	1,36	
DE72	DE72 GIEßEN	1,35	*	1,28	1,35	

DE73	DE73 KASSEL	1,42	*	1,39	1,40
DE8	DE8 MECKLENBURG-VORPOMMERN	1,01	*	0,82	1,14
DE9	DE9 NIDERSACHSEN	NA	*	NA	NA
DE91	DE91 BRAUNSCHWEIG	1,37	*	1,29	1,37
DE92	DE92 HANNOVER	1,35	*	1,31	1,38
DE93	DE93 LÜNEBURG	1,48	*	1,43	1,52
DE94	DE94 WESER-EMS	1,57	*	1,47	1,59
DEA	DEA NORDRHEIN-WESTFALEN	NA	*	NA	NA
DEA1	DEA1 DÜSSELDORF	1,42	*	1,33	1,36
DEA2	DEA2 KÖLN	1,41	*	1,34	1,40
DEA3	DEA3 MÜNSTER	1,50	*	1,40	1,46
DEA4	DEA4 DETMOLD	1,53	*	1,49	1,53
DEA5	DEA5 ARNSBERG	1,48	*	1,38	1,43
DEB	DEB RHEINLAND-PFALZ	NA	*	NA	NA
DEB1	DEB1 KOBLENZ	1,52	*	1,39	1,47
DEB2	DEB2 TRIER	1,48	*	1,38	1,36
DEB3	DEB3 RHEINHESSEN-PFALZ	1,41	*	1,32	1,38
DEC	DEC SAARLAND	1,32	*	1,24	1,28
DED	DED SACHSEN	NA	*	NA	NA
DED1	DED1 CHEMNITZ	1,02	*	0,86	1,18
DED2	DED2 DRESDEN	1,01	*	0,84	1,18
DED3	DED3 LEIPZIG	0,98	*	0,77	1,10
DEE	DEE SACHSEN-ANHALT	NA	*	NA	NA
DEE1	DEE1 DESSAU	0,97	*	0,81	1,08
DEE2	DEE2 HALLE	0,99	*	0,81	1,13
DEE3	DEE3 MAGDEBURG	1,02	*	0,84	1,16
DEF	DEF SCHLESWIG-HOLSTEIN	1,44	*	1,34	1,43
DEG	DEG THÜRINGEN	0,97	*	0,84	1,12
GR	**GR GREECE**	**1,39**		**1,38**	**1,31**
GR1	GR1 VOREIA ELLADA	1,41		1,35	1,33
GR11	GR11 ANATOLIKI MAKEDONIA, THRAKI	1,49		1,46	1,44
GR12	GR12 KENTRIKI MAKEDONIA	1,33		1,3	1,3
GR13	GR13 DYTIKI MAKEDONIA	1,49		1,41	1,36
GR14	GR14 THESSALIA	1,54		1,4	1,31
GR2	GR2 KENTRIKI ELLADA	1,41		1,18	1,11
GR21	GR21 IPEIROS	1,36		1,1	0,99
GR22	GR22 IONIA NISIA	1,51		1,49	1,32
GR23	GR23 DYTIKI ELLADA	1,51		1,28	1,19
GR24	GR24 STEREA ELLADA	1,31		1,04	0,99
GR25	GR25 PELOPONNISOS	1,37		1,18	1,14
GR3	GR3 ATTIKI	1,3		1,3	1,36
GR4	GR4 NISIA AIGAIOU, KRITI	NA		NA	1,49
GR41	GR41 VOREIO AIGAIO	NA		NA	1,51
GR42	GR42 NOTIO AIGAIO	NA		NA	1,49
GR43	GR43 KRITI	NA		NA	1,49
EES	**ES SPAIN**	**1,36**		**1,18**	**1,20**
ES1	ES1 NOROESTE	NA		NA	NA
ES11	ES11 GALICIA	1,17		0,94	0,91
ES12	ES12 PRINCIPADO DE ASTURIAS	0,98		0,83	0,82
ES13	ES13 CANTABRIA	1,15		0,92	0,98
ES2	ES2 NORESTE	NA		NA	NA
ES21	ES21 PAIS VASCO	0,99		0,91	1,01
ES22	ES22 COMUNIDAD FORAL DE NAVARRA	1,23		1,12	1,21
ES23	ES23 LA RIOJA	1,21		1,05	1,14

ES24	ES24 ARAGÓN	1,16	1,08	1,11
ES3	ES3 COMUNIDAD DE MADRID	1,27	1,15	1,24
ES4	ES4 CENTRO (E)	NA	NA	NA
ES41	ES41 CASTILLA Y LEÓN	1,17	0,96	0,93
ES42	ES42 CASTILLA-LA MANCHA	1,61	1,36	1,27
ES43	ES43 EXTREMADURA	1,63	1,32	1,21
ES5	ES5 ESTE	NA	NA	NA
ES51	ES51 CATALUÑA	1,25	1,16	1,25
ES52	ES52 COMUNIDAD VALENCIANA	1,38	1,19	1,20
ES53	ES53 BALEARES	1,62	1,35	1,43
ES6	ES6 SUR	NA	NA	NA
ES61	ES61 ANDALUCIA	1,66	1,37	1,31
ES62	ES62 MURCIA	1,73	1,43	1,42
ES63	ES63 CEUTA Y MELILLA	1,93	1,96	1,91
ES7	ES7 CANARIAS	1,48	1,24	1,29
FR	**FR FRANCE (**)**	**1,88**	**1,70**	**1,86**
FR1	FR1 ÎLE DE FRANCE	1,89	1,74	1,94
FR2	FR2 BASSIN PARISIEN	1,92	1,72	1,89
FR21	FR21 CHAMPAGNE-ARDENNE	1,88	1,71	1,87
FR22	FR22 PICARDIE	2,02	1,78	1,98
FR23	FR23 HAUTE-NORMANDIE	1,98	1,78	1,92
FR24	FR24 CENTRE	1,86	1,66	1,85
FR25	FR25 BASSE-NORMANDIE	1,90	1,77	1,91
FR26	FR26 BOURGOGNE	1,84	1,64	1,79
FR3	FR3 NORD - PAS-DE-CALAIS	2,14	1,87	2,00
FR4	FR4 EST	1,87	1,68	1,79
FR41	FR41 LORRAINE	1,88	1,65	1,75
FR42	FR42 ALSACE	1,85	1,67	1,76
FR43	FR43 FRANCHE-COMTÉ	1,91	1,75	1,91
FR5	FR5 OUEST	1,90	1,70	1,92
FR51	FR51 PAYS DE LA LOIRE	1,95	1,76	2.00
FR52	FR52 BRETAGNE	1,93	1,70	1,92
FR53	FR53 POITOU-CHARENTES	1,74	1,58	1,76
FR6	FR6 SUD-OUEST	1,65	1,50	1,69
FR61	FR61 AQUITAINE	1,68	1,50	1,70
FR62	FR62 MIDI-PYRÉNÉES	1,65	1,52	1,70
FR63	FR63 LIMOUSIN	1,50	1,43	1,61
FR7	FR7 CENTRE-EST	1,89	1,66	1,83
FR71	FR71 RHÔNE-ALPES	1,95	1,71	1,87
FR72	FR72 AUVERGNE	1,64	1,44	1,67
FR8	FR8 MÉDITERRANÉE	1,84	1,67	1,76
FR81	FR81 LANGUEDOC-ROUSSILLON	1,81	1,65	1,70
FR82	FR82 PROVENCE-ALPES-CÔTE D'AZUR	1,86	1,69	1,80
FR83	FR83 CORSE	1,76	1,57	1,67
IE	**IE011 IRELAND**	**NA**	**NA**	**1,89**
IE01	IE012 BORDER, MIDLANDS AND WESTERN	NA	NA	2,02
IE02	IE013 SOUTHERN AND EASTERN	NA	NA	1,85
IT	**IT ITALY**	**1,33**	**1,18**	**1,23**
IT1	IT1 NORD OVEST	1,07	0,98	1,02
IT11	IT11 PIEMONTE	1,08	1,00	1,04
IT12	IT12 VALLE D'AOSTA	1,10	1,08	1,13
IT13	IT13 LIGURIA	1,02	0,91	0,95
IT2	IT2 LOMBARDIA	1,13	1,09	1,13

IT3	IT3 NORD EST	1,17	1,08	1,13
IT31	IT31 TRENTINO-ALTO ADIGE	1,40	1,33	1,39
IT32	IT32 VENETO	1,14	1,06	1,10
IT33	IT33 FRIULI-VENEZIA GIULIA	1,08	0,99	1,03
IT4	IT4 EMILIA-ROMAGNA	1,04	0,99	1,03
IT5	IT5 CENTRO (I)	1,14	1,03	1,08
IT51	IT51 TOSCANA	1,09	0,99	1,03
IT52	IT52 UMBRIA	1,21	1,10	1,14
IT53	IT53 MARCHE	1,24	1,10	1,14
IT6	IT6 LAZIO	1,28	1,13	1,18
IT7	IT7 ABRUZZO-MOLISE	1,33	1,14	1,19
IT71	IT71 ABRUZZO	1,32	1,13	1,17
IT72	IT72 MOLISE	1,34	1,22	1,27
IT8	IT8 CAMPANIA	1,81	1,51	1,57
IT9	IT9 SUD	1,57	1,31	1,37
IT91	IT91 PUGLIA	1,60	1,35	1,40
IT92	IT92 BASILICATA	1,40	1,14	1,19
IT93	IT93 CALABRIA	1,56	1,29	1,34
ITA	ITA SICILIA	1,74	1,45	1,51
ITB	ITB SARDEGNA	1,35	1,07	1,12
LU	**LU LUXEMBOURG**	**1,61**	**1,69**	**1,73**
NL	**NL NETHERLANDS**	**1,62**	**1,53**	**1,64**
NL1	NL1 NOORD-NEDERLAND	1,59	1,56	1,69
NL11	NL11 GRONINGEN	1,48	1,42	1,52
NL12	NL12 FRIESLAND	1,68	1,69	1,78
NL13	NL13 DRENTHE	1,64	1,60	1,79
NL2	NL2 OOST-NEDERLAND	1,71	1,62	1,75
NL21	NL21 OVERIJSSEL	1,77	1,64	1,78
NL22	NL22 GELDERLAND	1,65	1,58	1,70
NL23	NL23 FLEVOLAND	2,05	1,84	1,94
NL3	NL3 WEST-NEDERLAND	1,61	1,50	1,61
NL31	NL31 UTRECHT	1,59	1,50	1,65
NL32	NL32 NOORD-HOLLAND	1,54	1,45	1,56
NL33	NL33 ZUID-HOLLAND	1,66	1,52	1,63
NL34	NL34 ZEELAND	1,75	1,68	1,74
NL4	NL4 ZUID-NEDERLAND	1,59	1,50	1,59
NL41	NL41 NOORD-BRABANT	1,62	1,54	1,63
NL42	NL42 LIMBURG (NL)	1,52	1,42	1,51
AT	**AT AUSTRIA**	**1,45**	**1,40**	**1,31**
AT1	AT10 OSTÖSTERREICH	1,41	1,34	1,26
AT11	AT11 BURGENLAND	1,34	1,28	1,15
AT12	AT12 NIEDERÖSTERREICH	1,50	1,47	1,34
AT13	AT13 WIEN	1,36	1,26	1,23
AT2	AT20 SUDÖSTERREICH	1,42	1,35	1,26
AT21	AT21 KÄRNTEN	1,46	1,42	1,29
AT22	AT22 STEIERMARK	1,40	1,31	1,24
AT3	AT30 WESTÖSTERREICH	1,52	1,50	1,40
AT31	AT31 OBERÖSTERREICH	1,51	1,49	1,42
AT32	AT32 SALZBURG	1,45	1,46	1,39
AT33	AT33 TIROL	1,51	1,47	1,34
AT34	AT34 VORARLBERG	1,66	1,65	1,51
PT	**PT PORTUGAL**	**1,57**	**1,40**	**1,48**
PT1	PT1 PORTUGAL (CONTINENT)	NA	1,39	1,48
PT11	PT11 NORTE	NA	1,41	1,45

PT12	PT12 CENTRO (P)	NA		1,33	1,37
PT13	PT13 LISBOA E VALE DO TEJO	NA		1,39	1,57
PT14	PT14 ALENTEJO	NA		1,25	1,35
PT15	PT15 ALGARVE	NA		1,51	1,67
PT2	PT2 AÇORES (PT)	NA		1,84	1,67
PT3	PT3 MADEIRA (PT)	NA		1,37	1,41
FI	**FI FINLAND**	**1,77**		**1,79**	**1,72**
FI1	FI1 MANNER-SUOMI	1,77		1,79	1,72
FI13	FI13 ITÄ-SUOMI	1,76		1,78	1,76
FI14	FI14 VÄLI-SUOMI	1,94		1,92	1,84
FI15	FI15 POHJOIS-SUOMI	2,01		2,08	2,04
FI11	FI16 UUSIMAA (SUURALUE)	1,67		1,68	1,58
FI12	FI17 ETELÄ-SUOMI	1,73		1,76	1,71
FI2	FI2 ÅLAND	2,01		1,88	1,67
SE	**SE SWEDEN**	**2,12**	*	**1,74**	**1,50**
SE01	SE01 STOCKHOLM	1,95	*	1,70	1,49
SE02	SE02 ÖSTRA MELLANSVERIGE	2,15	*	1,77	1,49
SE021	SE021 UPPSALA LÄN	2,11	*	1,69	1,37
SE022	SE022 SÖDERMANLANDS LÄN	2,23	*	1,83	1,60
SE023	SE023 ÖSTERGÖTLANDS LÄN	2,15	*	1,81	1,49
SE024	SE024 ÖREBRO LÄN	2,12	*	1,75	1,55
SE025	SE025 VÄSTMANLANDS LÄN	2,17	*	1,79	1,50
SE04	SE04 SYDSVERIGE	2,05	*	1,71	1,50
SE041	SE041 BLEKINGE LÄN	2,22	*	1,76	1,50
SE044	SE044 SKÅNE LÄN	a	*	a	1,50
SE06	SE06 NORRA MELLANSVERIGE	2,28	*	1,73	1,52
SE061	SE061 VÄRMLANDS LÄN	2,26	*	1,74	1,54
SE062	SE062 DALARNAS LÄN	2,34	*	1,79	1,56
SE063	SE063 GÄVLEBORGS LÄN	2,25	*	1,67	1,45
SE07	SE07 MELLERSTA NORRLAND	2,20	*	1,74	1,52
SE071	SE071 VÄSTERNORRLANDS LÄN	2,18	*	1,76	1,55
SE072	SE072 JÄMTLANDS LÄN	2,24	*	1,70	1,46
SE08	SE08 ÖVRE NORRLAND	2,28	*	1,71	1,49
SE081	SE081 VÄSTERBOTTENS LÄN	2,37	*	1,73	1,43
SE082	SE082 NORRBOTTENS LÄN	2,21	*	1,69	1,55
SE09	SE09 SMÅLAND MED ÖARNA	2,26	*	1,83	1,54
SE091	SE091 JÖNKÖPINGS LÄN	2,35	*	1,87	1,59
SE092	SE092 KRONOBERGS LÄN	2,16	*	1,81	1,54
SE093	SE093 KALMAR LÄN	2,26	*	1,83	1,49
SE094	SE094 GOTLANDS LÄN	2,17	*	1,72	1,53
SE0A	SE0A VÄSTSVERIGE	2,13	*	1,74	1,52
SE0A1	SE0A1 HALLANDS LÄN	2,20	*	1,84	1,60
SE0A2	SE0A2 VÄSTRA GÖTALANDS LÄN	b		b	1,51
UK	**UK UNITED KINGDOM**	**1,83**		**1,70**	**1,68**
UKC	UKC NORTH EAST	NA		1,66	1,62
UKC1	UKC1 TEES VALLEY AND DURHAM	NA		1,71	1,69
UKC2	UKC2 NORTHUMBERLAND, TYNE AND WEAR	NA		1,62	1,57
UKD	UKD NORTH WEST (INCLUDING MERSEYSIDE)	NA		1,71	1,70
UKD1	UKD1 CUMBRIA	NA		1,61	1,64
UKD2	UKD2 CHESHIRE	NA		1,69	1,71
UKD3	UKD3 GREATER MANCHESTER	NA		1,74	1,74
UKD4	UKD4 LANCASHIRE	NA		1,76	1,77
UKD5	UKD5 MERSEYSIDE	NA		1,67	1,59
UKE	UKE YORKSHIRE AND THE HUMBER	NA		1,74	1,72

UKE1	UKE1 EAST RIDING AND NORTH LINCOLNSHIRE	NA	1,74	1,70
UKE2	UKE2 NORTH YORKSHIRE	NA	1,67	1,63
UKE3	UKE3 SOUTH YORKSHIRE	NA	1,70	1,66
UKE4	UKE4 WEST YORKSHIRE	NA	1,79	1,80
UKF	UKF EAST MIDLANDS	NA	1,68	1,65
UKF1	UKF1 DERBYSHIRE AND NOTTINGHAMSHIRE	NA	1,66	1,63
UKF2	UKF2 LEICESTERSHIRE, RUTLAND AND NORTHANTS	NA	1,70	1,70
UKF3	UKF3 LINCOLNSHIRE	NA	1,69	1,67
UKG	UKG WEST MIDLANDS	NA	1,78	1,78
UKG1	UKG1 HEREFORDSHIRE, WORCESTERSHIRE AND WARKS	NA	1,71	1,70
UKG2	UKG2 SHROPSHIRE AND STAFFORDSHIRE	NA	1,68	1,67
UKG3	UKG3 WEST MIDLANDS	NA	1,86	1,87
UKH	UKH EASTERN	NA	1,71	1,66
UKH1	UKH1 EAST ANGLIA	NA	1,67	1,59
UKH2	UKH2 BEDFORDSHIRE, HERTFORDSHIRE	NA	1,77	1,73
UKH3	UKH3 ESSEX	NA	1,70	1,67
UKI	UKI LONDON	NA	NA	1,73
UKI1	UKI1 INNER LONDON	NA	NA	1,73
UKI2	UKI2 OUTER LONDON	NA	NA	1,74
UKJ	UKJ SOUTH EAST	NA	1,70	1,65
UKJ1	UKJ1 BERKSHIRE, BUCKS AND OXFORDSHIRE	NA	1,67	1,67
UKJ2	UKJ2 SURREY, EAST AND WEST SUSSEX	NA	1,67	1,58
UKJ3	UKJ3 HAMPSHIRE AND ISLE OF WIGHT	NA	1,69	1,64
UKJ4	UKJ4 KENT	NA	1,77	1,77
UKK	UKK SOUTH WEST	NA	1,67	1,64
UKK1	UKK1 GLOUCESTERSHIRE, WILTSHIRE AND NORTH SOMERSET	NA	1,69	1,66
UKK2	UKK2 DORSET AND SOMERSET	NA	1,64	1,58
UKK3	UKK3 CORNWALL AND ISLES OF SCILLY	NA	NA	1,76
UKK4	UKK4 DEVON	NA	NA	1,63
UKL	UKL WALES	NA	1,77	1,73
UKL1	UKL1 WEST WALES AND THE VALLEYS	NA	NA	1,76
UKL2	UKL2 EAST WALES	NA	NA	1,68
UKM	UKM SCOTLAND	NA	1,55	1,53
UKM1	UKM1 NORTH EASTERN SCOTLAND	NA	NA	NA
UKM2	UKM2 EASTERN SCOTLAND	NA	NA	NA
UKM3	UKM3 SOUTH WESTERN SCOTLAND	NA	NA	NA
UKM4	UKM4 HIGHLANDS AND ISLANDS	NA	NA	NA
UKN	UKN NORTHERN IRELAND	NA	1,91	1,88
BG	**BULGARIA**	**1,81**	**1,24**	**1,23**
CY	**CYPRUS**	**2,42**	**2,13**	**1,83**
CZ	**CZECH REPUBLIC**	**1,89**	**1,28**	**1,13**
EE	**ESTONIA**	**2,05**	**1,32**	**1,24**
HU	**HUNGARY**	**1,87**	**1,58**	**1,29**
LT	**LITHUANIA**	**2**	**1,49**	**1,35**
LV	**LATVIA**	**2,02**	**1,25**	**1,18**
MT	**MALTA**	**2,05**	**1,83**	**1,72**
PL	**POLAND**	**2,06**	**1,62**	**1,34**
PL01	Dolnoslaskie	1,89	1,48	1,2
PL02	Kujawsko-Pomorskie	2,12	1,67	1,36
PL03	Lubelskie	2,34	1,79	1,45
PL04	Lubuskie	2,08	1,68	1,29
PL05	Lódzkie	1,88	1,53	1,26
PL06	Malopolskie	2,19	1,74	1,49
PL07	Mazowieckie	2,01	1,61	1,35

PL08	Opolskie	1,85	1,38	1,15	
PL09	Podkarpackie	2,41	1,77	1,48	
PL0A	Podlaskie	2,29	1,76	1,39	
PL0B	Pomorskie	2,15	1,69	1,42	
PL0C	Slaskie	1,75	1,41	1,19	
PL0D	Swietokrzyskie	2,16	1,691	1,33	
PL0E	Warminsko-Mazurskie	2,22	1,72	1,40	
PL0F	Wielkopolskie	2,19	1,69	1,39	
PL0G	Zachodniopomorskie	2,06	1,64	1,3	
RO	**ROMANIA**	**1,83**	**1,34**	**1,3**	
SI	**SLOVENIA**	**1,46**	**1,29**	**1,21**	
SK	**SLOVAK REPUBLIC**	**2,09**	**1,52**	**1,33**	
NO	**NORWAY(***)**	**1,93**	**1,87**	**1,84**	
N0	AKERSHUS	1,78	1,82	1,80	
N0	AUST-AGDER	1,87	1,89	1,90	
N0	BUSKERUD	1,72	1,74	1,74	
N0	FINNMARK	1,93	2,06	2,05	
N0	HEDMARK	1,65	1,75	1,71	
N0	HORDALAND	1,98	2,02	1,97	
N0	MORE OG ROMSDAL	1,95	1,97	2,00	
N0	NORDLAND	1,9	1,97	1,93	
N0	NORD-TRONDELAG	1,94	2	2,03	
N0	OPPLAND	1,65	1,72	1,72	
N0	OSLO	1,63	1,71	1,69	
N0	OSTFOLD	1,66	1,72	1,72	
N0	ROGALAND	2,07	2,13	2,08	
N0	SOGN OG FJORDANE	2,04	2,11	2,11	
N0	SOR-TRONDELAG	1,82	1,9	1,87	
N0	TELEMARK	1,78	1,77	1,73	
N0	TROMS	1,87	2	1,90	
N0	VEST-AGDER	1,98	2,02	1,96	
N0	VESTFOLD	1,76	1,78	1,75	
CH	**SWITZERLAND**	**1,59**	**1,48**	**1,48**	
CH01	NORDOSTSCHWEIZ	1,56	1,48	1,48	e
CH02	NORDWESTSCHWEIZ-BERN	1,54	1,42	1,42	e
CH03	SUDSCHWEIZ	1,81	1,57	1,57	e
CH04	WESTSCHWEIZ	1,64	1,56	1,56	e
CH05	SUDSCHWEIZ	1,56	1,39	1,39	e

e=estimated according to the national change 1995-1999
(*) Data for 1991
(**) Without overseas departments
(***) Annual average for 1986-1990, 1991-1995 and 1996-2000

Table A6. Population change 1996-1999 with regard to total and natural development and net-migration

Cyprus and Malta have been excluded

NUTS	REGION	Tot pop dev/ pop	Nat pop dev/ pop	Net mig/ pop
BE1	BE1 RÉGION BXL-CAPITALE	1,68	2,38	-0,70
BE21	BE21 ANTWERPEN	1,75	1,28	0,47
BE22	BE22 LIMBURG	4,69	3,37	1,32
BE23	BEE23 OOST-VLAANDERERN	1,75	0,52	1,23
BE24	BE24 VLAAMS BRABANT	3,68	1,26	2,42
BE25	BE25 WEST-VLAANDEREN	1,19	0,39	0,80
BE31	BE31 BRABANT WALLON	7,34	2,33	5,00
BE32	BE32 HAINAUT	-1,05	-0,49	-0,56
BE33	BE33 LIÈGE	1,15	0,23	0,92
BE34	BE34 LUXEMBOURG (BE)	4,80	2,19	2,60
BE35	BE35 NAMUR	3,73	1,45	2,28
DK001	DK001 KØBENHAVN OG FREDERIKSBERG	10,20	0,52	9,68
DK002	DK002 KØBENHAVNS AMT	2,90	1,37	1,53
DK003	DK003 FREDERIKSBORG AMT	9,12	2,88	6,23
DK004	DK004 ROSKILDE AMT	7,04	4,25	2,79
DK005	DK005 VESTSJÆLLANDS AMT	4,97	-0,34	5,32
DK006	DK006 STORSTRØMS AMT	2,07	-3,49	5,56
DK007	DK007 BORNHOLMS AMT	-4,45	-3,71	-0,74
DK008	DK008 FYNS AMT	1,66	0,35	1,31
DK009	DK009 SØNDERJYLLANDS AMT	0,85	1,58	-0,72
DK00A	DK00A RIBE AMT	2,01	2,53	-0,52
DK00B	DK00B VJL AMT	6,55	2,23	4,32
DK00C	DK00C RINGKØBING AMT	1,72	2,58	-0,86
DK00D	DK00D ÅRHUS AMT	6,00	3,65	2,35
DK00E	DK00E VIBORG AMT	2,15	0,43	1,72
DK00F	DK00F NORDJYLLANDS AMT	2,37	0,81	1,56
DE11	DE11 STUTTGART	3,31	1,91	1,39
DE12	DE12 KARLSRUHE	2,46	0,41	2,04
DE13	DE13 FREIBURG	4,60	1,51	3,09
DE14	DE14 TÜBINGEN	4,34	2,74	1,60
DE21	DE21 OBERBAYERN	2,30	1,32	0,98
DE22	DE22 NIDERBAYERN	6,06	0,61	5,45
DE23	DE23 OBERPFALZ	4,78	0,72	4,06
DE24	DE24 OBERFRANKEN	1,23	-1,50	2,72
DE25	DE25 MITTELFRANKEN	2,42	-0,24	2,66
DE26	DE26 UNTERFRANKEN	3,36	0,63	2,73
DE27	DE27 SCHWABEN	3,24	0,85	2,40
DE3	DE3 BERLIN	-6,28	-1,92	-4,37
DE4	DE4 BRANDENBURG	5,79	-4,17	9,97
DE5	DE5 BREMEN	-5,42	-2,12	-3,30
DE6	DE6 HAMBURG	-1,11	-1,74	0,62
DE71	DE71 DARMSTADT	2,08	0,38	1,70
DE72	DE72 GIEßEN	2,03	0,13	1,90
DE73	DE73 KASSEL	0,84	-1,07	1,91
DE8	DE8 MECKLENBURG-VORPOMMERN	-4,64	-3,46	-1,19
DE91	DE91 BRAUNSCHWEIG	-1,63	-1,69	0,06
DE92	DE92 HANNOVER	1,76	-1,26	3,02
DE93	DE93 LÜNEBURG	9,32	-0,02	9,34
DE94	DE94 WESER-EMS	6,65	2,15	4,50
DEA1	DEA1 DÜSSELDORF	-1,13	-1,46	0,33

DEA2	DEA2 KÖLN	4,79	0,50	4,29
DEA3	DEA3 MÜNSTER	3,63	1,27	2,36
DEA4	DEA4 DETMOLD	5,07	0,94	4,14
DEA5	DEA5 ARNSBERG	-0,71	-0,97	0,26
DEB1	DEB1 KOBLENZ	5,10	-0,89	5,99
DEB2	DEB2 TRIER	3,31	-0,72	4,03
DEB3	DEB3 RHEINHESSEN-PFALZ	3,19	-0,38	3,57
DEC	DEC SAARLAND	-2,80	-2,59	-0,22
DED	DED SACHSEN	-5,52	-5,51	-0,01
DEE1	DEE1 DESSAU	-8,51	-1,17	-7,34
DEE2	DEE2 HALLE	-7,78	-3,89	-3,89
DEE3	DEE3 MAGDEBURG	-7,78	-4,73	-3,05
DEF	DEF SCHLESWIG-HOLSTEIN	4,92	-0,73	5,65
DEG	DEG THÜRINGEN	-5,46	-4,80	-0,66
GR11	GR11 ANATOLIKI MAKEDONIA, THRAKI	0,53	-0,77	1,31
GR12	GR12 KENTRIKI MAKEDONIA	4,73	1,34	3,38
GR13	GR13 DYTIKI MAKEDONIA	1,49	0,00	1,49
GR14	GR14 THESSALIA	0,45	-0,99	1,44
GR21	GR21 IPEIROS	5,98	-2,07	8,04
GR22	GR22 IONIA NISIA	7,03	-1,99	9,02
GR23	GR23 DYTIKI ELLADA	2,99	-0,77	3,76
GR24	GR24 STEREA ELLADA	2,36	-1,96	4,33
GR25	GR25 PELOPONNISOS	0,94	-3,08	4,03
GR3	GR3 ATTIKI	-0,70	0,89	-1,59
GR41	GR41 VOREIO AIGAIO	-3,35	-4,35	1,00
GR42	GR42 NOTIO AIGAIO	5,50	3,46	2,04
GR43	GR43 KRITI	3,50	1,43	2,08
ES111	ES111 LA CORUÑA	0,08	-3,45	3,52
ES112	ES112 LUGO	-6,58	-7,57	0,99
ES113	ES113 ORENSE	-4,99	-7,47	2,47
ES114	ES114 PONTEVEDRA	0,61	-0,88	1,49
ES12	ES12 PRINCIPADO DE ASTURIAS	-5,10	-5,16	0,06
ES13	ES13 CANTABRIA	-0,19	-2,60	2,41
ES211	ES211 ÁLAVA	2,34	0,60	1,74
ES212	ES212 GUIPÚZCOA	-3,65	-0,15	-3,50
ES213	ES213 VIZCAYA	-5,30	-1,43	-3,88
ES22	ES22 COMUNIDAD FORAL DE NAVARRA	2,24	0,32	1,93
ES23	ES23 LA RIOJA	-1,86	-1,41	-0,45
ES241	ES241 HUESCA	-2,35	-3,89	1,54
ES242	ES242 TERUEL	-6,27	-4,82	-1,45
ES243	ES243 ZARAGOZA	-1,24	-2,28	1,04
ES3	ES3 COMUNIDAD DE MADRID	1,21	2,12	-0,90
ES411	ES411 AVILA	-4,74	-4,34	-0,39
ES412	ES412 BURGOS	-2,30	-2,01	-0,29
ES413	ES413 LEÓN	-3,34	-3,44	0,10
ES414	ES414 PALENCIA	-3,87	-3,50	-0,37
ES415	ES415 SALAMANCA	-2,07	-3,30	1,22
ES416	ES416 SEGOVIA	-1,49	-1,37	-0,11
ES417	ES417 SORIA	-4,35	-3,99	-0,36
ES418	ES418 VALLADOLID	-0,34	-1,15	0,81
ES419	ES419 ZAMORA	-5,84	-4,70	-1,13
ES421	ES421 ALBACETE	3,93	1,80	2,13
ES422	ES422 CIUDAD REAL	0,49	-0,14	0,63
ES423	ES423 CUENCA	-4,07	-1,83	-2,24

ES424	ES424 GUADALAJARA	14,06	-1,69	15,75
ES425	ES425 TOLEDO	7,17	0,00	7,17
ES431	ES431 BADAJOZ	2,87	0,50	2,36
ES432	ES432 CÁCERES	1,77	-0,96	2,73
ES511	ES511 BARCELONA	-2,30	0,19	-2,48
ES512	ES512 GERONA	4,44	0,06	4,38
ES513	ES513 LÉRIDA	-0,33	-2,55	2,22
ES514	ES514 TARRAGONA	8,91	-0,52	9,43
ES521	ES521 ALICANTE	4,42	1,03	3,39
ES522	ES522 CASTELLÓN DE LA PLANA	2,32	-0,96	3,27
ES523	ES523 VALENCIA	1,01	-0,50	1,50
ES53	ES53 BALEARES	5,09	0,45	4,64
ES611	ES611 ALMERÍA	6,47	3,85	2,62
ES612	ES612 CADIZ	4,19	3,57	0,62
ES613	ES613 CÓRDOBA	2,94	1,69	1,25
ES614	ES614 GRANADA	4,00	1,88	2,12
ES615	ES615 HUELVA	1,75	1,19	0,56
ES616	ES616 JAÉN	2,54	2,26	0,28
ES617	ES617 MÁLAGA	5,01	1,83	3,18
ES618	ES618 SEVILLA	5,03	2,58	2,46
ES62	ES62 MURCIA	6,03	3,54	2,49
FR101	FR101 PARIS	-0,22	6,02	-6,24
FR102	FR102 SEINE-ET-MARNE	6,25	7,55	-1,29
FR103	FR103 YVELINES	1,46	8,27	-6,82
FR104	FR104 ESSONNE	1,22	8,50	-7,28
FR105	FR105 HAUTS-DE-SEINE	4,27	8,81	-4,54
FR106	FR106 SEINE-SAINT-DENIS	-0,96	9,92	-10,88
FR107	FR107 VAL-DE-MARNE	1,50	8,12	-6,62
FR108	FR108 VAL-D'OISE	2,29	8,51	-6,22
FR211	FR211 ARDENNES	-2,66	3,08	-5,74
FR212	FR212 AUBE	0,20	1,82	-1,62
FR213	FR213 MARNE	0,38	4,18	-3,80
FR214	FR214 HAUTE-MARNE	-5,00	1,36	-6,35
FR221	FR221 AISNE	-0,98	2,61	-3,58
FR222	FR222 OISE	3,15	6,19	-3,04
FR223	FR223 SOMME	1,70	2,83	-1,13
FR231	FR231 EURE	4,66	4,52	0,14
FR232	FR232 SEINE-MARITIME	0,06	4,28	-4,22
FR241	FR241 CHER	-3,93	1,37	-5,31
FR242	FR242 EURE-ET-LOIR	1,21	3,59	-2,39
FR243	FR243 INDRE	-2,15	-3,44	1,29
FR244	FR244 INDRE-ET-LOIRE	4,80	2,30	2,50
FR245	FR245 LOIR-ET-CHER	3,18	0,32	2,86
FR246	FR246 LOIRET	6,06	3,91	2,16
FR251	FR251 CALVADOS	4,99	4,87	0,12
FR252	FR252 MANCHE	0,90	1,94	-1,04
FR253	FR253 ORNE	-1,22	1,59	-2,81
FR261	FR261 CÔTE-D'OR	2,24	3,23	-0,99
FR262	FR262 NIÈVRE	-4,29	-3,96	-0,33
FR263	FR263 SAÔNE-ET-LOIRE	-3,52	-0,43	-3,10
FR264	FR264 YONNE	2,81	-0,50	3,31
FR301	FR301 NORD	0,58	5,35	-4,77
FR302	FR302 PAS-DE-CALAIS	0,83	3,66	-2,83
FR411	FR411 MEURTHE-ET-MOSELLE	-1,29	3,35	-4,65

FR412	FR412 MEUSE	-4,26	1,55	-5,81
FR413	FR413 MOSELLE	1,16	3,36	-2,20
FR414	FR414 VOSGES	-2,00	1,39	-3,40
FR421	FR421 BAS-RHIN	7,25	4,64	2,62
FR422	FR422 HAUT-RHIN	5,11	4,22	0,89
FR431	FR431 DOUBS	1,91	5,02	-3,11
FR432	FR432 JURA	0,47	1,46	-1,00
FR433	FR433 HAUTE-SAÔNE	0,47	1,45	-0,98
FR434	FR434 TERRITOIRE DE BELFORT	1,09	4,37	-3,28
FR511	FR511 LOIRE-ATLANTIQUE	8,50	4,41	4,09
FR512	FR512 MAINE-ET-LOIRE	3,94	4,48	-0,55
FR513	FR513 MAYENNE	3,17	3,53	-0,35
FR514	FR514 SARTHE	3,51	3,04	0,47
FR515	FR515 VENDÉE	6,44	1,19	5,25
FR521	FR521 CÔTE-DU-NORD	3,52	-1,30	4,81
FR522	FR522 FINISTÈRE	3,63	0,16	3,48
FR523	FR523 ILLE-ET-VILAINE	9,99	4,81	5,19
FR524	FR524 MORBIHAN	5,79	1,05	4,75
FR531	FR531 CHARENTE	-1,03	-0,59	-0,44
FR532	FR532 CHARENTE-MARITIME	6,61	0,79	5,82
FR533	FR533 DEUX-SÈVRES	-0,56	0,39	-0,94
FR534	FR534 VIENNE	4,75	1,34	3,40
FR611	FR611 DORDOGNE	1,16	-3,87	5,03
FR612	FR612 GIRONDE	5,52	2,23	3,30
FR613	FR613 LANDES	5,76	-1,34	7,10
FR614	FR614 LOT-ET-GARONNE	1,18	-1,20	2,38
FR615	FR615 PYRÉNÉES-ATLANTIQUES	4,41	-0,73	5,14
FR621	FR621 ARIÈGE	1,95	-3,90	5,86
FR622	FR622 AVEYRON	-0,88	-5,79	4,91
FR623	FR623 HAUTE-GARONNE	12,63	4,40	8,23
FR624	FR624 GERS	-0,24	-3,29	3,04
FR625	FR625 LOT	3,87	-3,35	7,21
FR626	FR626 HAUTES-PYRÉNÉES	-1,79	-2,24	0,45
FR627	FR627 TARN	1,00	-1,56	2,56
FR628	FR628 TARN-ET-GARONNE	2,35	0,16	2,19
FR631	FR631 CORRÈZE	-3,89	-1,86	-2,03
FR632	FR632 CREUSE	-4,38	-7,96	3,58
FR633	FR633 HAUTE-VIENNE	-0,49	-2,54	2,05
FR711	FR711 AIN	9,77	4,34	5,43
FR712	FR712 ARDÈCHE	3,84	-0,12	3,95
FR713	FR713 DRÔME	6,32	3,15	3,17
FR714	FR714 ISÈRE	7,86	5,55	2,31
FR715	FR715 LOIRE	-4,20	1,73	-5,93
FR716	FR716 RHÔNE	3,61	6,65	-3,04
FR717	FR717 SAVOIE	7,19	3,53	3,66
FR718	FR718 HAUTE-SAVOIE	9,47	6,26	3,21
FR721	FR721 ALLIER	-4,10	-3,17	-0,94
FR722	FR722 CANTAL	-1,64	-13,13	11,49
FR723	FR723 HAUTE-LOIRE	3,17	-0,80	3,97
FR724	FR724 PUY-DE-DÔME	1,73	0,11	1,62
FR811	FR811 AUDE	12,16	-15,53	27,70
FR812	FR812 GARD	7,22	1,57	5,64
FR813	FR813 HÉRAULT	12,94	2,24	10,70
FR814	FR814 LOZÈRE	2,04	-2,72	4,77

FR815	FR815 PYRÉNÉES-ORIENTALES	9,88	-1,29	11,17
FR821	FR821 ALPES-DE-HAUTE-PROVENCE	6,36	-0,48	6,84
FR822	FR822 HAUTES-ALPES	8,87	1,39	7,49
FR823	FR823 ALPES-MARITIMES	2,88	-0,63	3,51
FR824	FR824 BOUCHES-DU-RHÔNE	3,32	2,56	0,76
FR825	FR825 VAR	10,19	0,75	9,44
FR826	FR826 VAUCLUSE	6,89	3,10	3,79
FR831	FR831 CORSE-DU-SUD	-3,02	-0,28	-2,74
FR832	FR832 HAUTE-CORSE	4,68	0,24	4,44
IE001	IE011 BORDER	1,68	1,23	0,45
IE004	IE012 MIDLANDS	6,44	1,77	4,67
IE008	IE013 WEST	13,11	1,03	12,09
IE002	IE021 DUBLIN	12,51	2,64	9,87
IE003	IE022 MID-EAST	25,85	3,14	22,71
IE005	IE023 MIDWEST	7,83	1,79	6,04
IE006	IE024 SOUTH-EAST (IE)	6,42	1,87	4,55
IE007	IE025 SOUTH-WEST (IE)	4,63	1,65	2,99
IT111	IT111 TORINO	-0,92	-1,86	0,94
IT112	IT112 VERCELLI	-2,75	-6,24	3,49
IT113	IT113 BIELLA	-1,93	-5,78	3,86
IT114	IT114 VERBANO-CUSIO-OSSOLA	-0,72	-3,72	3,00
IT115	IT115 NOVARA	2,83	-3,32	6,16
IT116	IT116 CUNEO	2,44	-3,61	6,05
IT117	IT117 ASTI	0,40	-6,35	6,74
IT118	IT118 ALESSANDRIA	-1,54	-8,53	6,99
IT12	IT12 VALLE D'AOSTA	3,35	-1,95	5,30
IT131	IT131 IMPERIA	-0,85	-5,53	4,69
IT132	IT132 SAVONA	-3,20	-7,22	4,02
IT133	IT133 GENOVA	-6,71	-6,86	0,14
IT134	IT134 LA SPEZIA	-4,02	-6,40	2,38
IT201	IT201 VARESE	2,57	-0,74	3,31
IT202	IT202 COMO	3,65	-0,19	3,84
IT203	IT203 LECCO	5,40	0,22	5,19
IT204	IT204 SONDRIO	0,56	-0,56	1,13
IT205	IT205 MILANO	2,36	-0,46	2,82
IT206	IT206 BERGAMO	7,04	1,30	5,74
IT207	IT207 BRESCIA	7,15	0,37	6,78
IT208	IT208 PAVIA	1,38	-6,26	7,64
IT209	IT209 LODI	7,19	-1,73	8,92
IT20A	IT20A CREMONA	2,21	-3,72	5,93
IT20B	IT20B MANTOVA	2,84	-3,87	6,71
IT311	IT311 BOLZANO-BOZEN	6,00	3,88	2,12
IT312	IT312 TRENTO	5,94	0,57	5,37
IT321	IT321 VERONA	5,75	-0,25	6,00
IT322	IT322 VICENZA	6,97	1,34	5,63
IT323	IT323 BELLUNO	-1,02	-3,93	2,91
IT324	IT324 TREVISO	7,83	0,70	7,13
IT325	IT325 VENEZIA	-1,06	-1,63	0,57
IT326	IT326 PADOVA	4,07	0,12	3,95
IT327	IT327 ROVIGO	-1,91	-4,22	2,31
IT331	IT331 PORDENONE	2,95	-2,53	5,48
IT332	IT332 UDINE	-0,83	-4,17	3,34
IT333	IT333 GORIZIA	0,00	-5,32	5,32
IT334	IT334 TRIESTE	-7,28	-9,00	1,72

IT401	IT401 PIACENZA	-1,00	-6,14	5,14
IT402	IT402 PARMA	2,41	-5,50	7,91
IT403	IT403 REGGIO NELL'EMILIA	10,12	-2,37	12,48
IT404	IT404 MODENA	5,74	-2,38	8,13
IT405	IT405 BOLOGNA	2,53	-4,65	7,18
IT406	IT406 FERRARA	-4,87	-7,09	2,22
IT407	IT407 RAVENNA	0,19	-4,95	5,14
IT408	IT408 FORLÌ-CESENA	2,23	-2,85	5,07
IT409	IT409 RIMINI	5,49	-0,75	6,24
IT5	IT5 CENTRO (I)	1,43	-3,70	5,14
IT511	IT511 MASSA-CARRARA	-1,91	-5,15	3,24
IT512	IT512 LUCCA	-0,49	-4,61	4,13
IT513	IT513 PISTOIA	2,56	-3,74	6,30
IT514	IT514 FIRENZE	-0,39	-3,92	3,54
IT515	IT515 PRATO	7,16	-0,89	8,05
IT516	IT516 LIVORNO	-2,03	-4,56	2,53
IT517	IT517 PISA	0,74	-4,24	4,98
IT518	IT518 AREZZO	3,40	-4,19	7,59
IT519	IT519 SIENA	1,13	-6,09	7,21
IT51A	IT51A GROSSETO	-1,70	-5,70	4,01
IT521	IT521 PERUGIA	4,31	-3,07	7,38
IT522	IT522 TERNI	-1,12	-4,92	3,80
IT531	IT531 PESARO E URBINO	3,62	-2,35	5,97
IT532	IT532 ANCONA	1,85	-2,72	4,57
IT533	IT533 MACERATA	3,28	-3,34	6,62
IT534	IT534 ASCOLI PICENO	2,58	-1,72	4,31
IT601	IT601 VITERBO	3,04	-3,09	6,13
IT602	IT602 RIETI	0,66	-3,10	3,76
IT603	IT603 ROMA	2,97	-0,10	3,07
IT604	IT604 LATINA	6,51	2,11	4,39
IT605	IT605 FROSINONE	2,61	-0,88	3,49
IT711	IT711 L'AQUILA	0,16	-2,74	2,90
IT712	IT712 TERAMO	4,10	-0,35	4,45
IT713	IT713 PESCARA	1,59	-0,46	2,05
IT714	IT714 CHIETI	1,46	-1,54	3,00
IT721	IT721 ISERNIA	-1,63	-2,53	0,90
IT722	IT722 CAMPOBASSO	-2,87	-1,96	-0,91
IT801	IT801 CASERTA	5,14	5,06	0,08
IT802	IT802 BENEVENTO	-1,86	0,00	-1,86
IT803	IT803 NAPOLI	1,08	5,72	-4,63
IT804	IT804 AVELLINO	-0,60	0,45	-1,06
IT805	IT805 SALERNO	1,82	2,29	-0,47
IT911	IT911 FOGGIA	-1,67	3,34	-5,01
IT912	IT912 BARI	2,49	3,38	-0,89
IT913	IT913 TARANTO	-1,83	2,88	-4,71
IT914	IT914 BRINDISI	-0,08	2,25	-2,33
IT915	IT915 LECCE	-0,08	1,59	-1,67
IT921	IT921 POTENZA	0,21	0,00	0,21
IT922	IT922 MATERA	-2,25	1,45	-3,69
IT931	IT931 COSENZA	-1,84	1,20	-3,03
IT932	IT932 CROTONE	-5,71	4,31	-10,02
IT933	IT933 CATANZARO	-0,82	1,73	-2,56
IT934	IT934 VIBO VALENTIA	-2,98	2,05	-5,03
IT935	IT935 REGGIO DI CALABRIA	-1,73	1,32	-3,05

ITA01	ITA01 TRAPANI	0,50	1,23	-0,73
ITA02	ITA02 PALERMO	0,21	2,90	-2,68
ITA03	ITA03 MESSINA	-1,78	-1,03	-0,76
ITA04	ITA04 AGRIGENTO	-2,67	2,04	-4,71
ITA05	ITA05 CALTANISSETTA	0,47	2,70	-2,23
ITA06	ITA06 ENNA	-5,79	0,54	-6,33
ITA07	ITA07 CATANIA	3,61	3,23	0,38
ITA08	ITA08 RAGUSA	4,00	1,89	2,11
ITA09	ITA09 SIRACUSA	-1,48	1,31	-2,79
ITB01	ITB01 SASSARI	-0,14	-0,72	0,58
ITB02	ITB02 NUORO	-2,82	0,00	-2,82
ITB03	ITB03 ORISTANO	-0,53	-1,89	1,37
ITB04	ITB04 CAGLIARI	-1,17	0,52	-1,69
LU	LU LUXEMBOURG	13,34	3,88	9,46
NL11	NL11 GRONINGEN	1,22	1,25	-0,03
NL12	NL12 FRIESLAND	4,95	2,87	2,08
NL13	NL13 DRENTHE	6,91	2,45	4,47
NL21	NL21 OVERIJSSEL	5,15	3,96	1,19
NL22	NL22 GELDERLAND	5,51	3,79	1,72
NL23	NL23 FLEVOLAND	38,80	10,09	28,71
NL31	NL31 UTRECHT	8,46	5,20	3,26
NL32	NL32 NOORD-HOLLAND	4,56	3,64	0,91
NL33	NL33 ZUID-HOLLAND	4,45	3,38	1,06
NL34	NL34 ZEELAND	3,16	2,08	1,08
NL41	NL41 NOORD-BRABANT	6,83	4,25	2,58
NL42	NL42 LIMBURG (NL)	1,76	1,61	0,15
AT11	AT11 BURGENLAND	3,44	-2,66	6,10
AT12	AT12 NIEDERÖSTERREICH	3,32	-0,68	4,00
AT13	AT13 WIEN	1,42	-1,87	3,29
AT21	AT21 KÄRNTEN	1,33	0,89	0,44
AT22	AT22 STEIERMARK	-0,86	-0,19	-0,66
AT31	AT31 OBERÖSTERREICH	-1,69	2,25	-3,94
AT32	AT32 SALZBURG	4,14	3,52	0,62
AT33	AT33 TIROL	2,90	4,13	-1,23
AT34	AT34 VORARLBERG	3,24	5,51	-2,27
PT11	PT11 NORTE	4,35	3,29	1,06
PT12	PT12 CENTRO (P)	-0,29	-1,99	1,70
PT13	PT13 LISBOA E VALE DO TEJO	1,57	0,21	1,36
PT14	PT14 ALENTEJO	-8,80	-6,06	-2,74
PT15	PT15 ALGARVE	3,08	-2,21	5,29
PT2	PT2 AÇORES (PT)	4,66	3,15	1,51
PT3	PT3 MADEIRA (PT)	3,99	1,68	2,32
FI13	FI13 ITÄ-SUOMI	-6,32	-0,62	-5,70
FI14	FI14 VÄLI-SUOMI	-1,09	1,56	-2,65
FI15	FI15 POHJOIS-SUOMI	-0,15	4,41	-4,56
FI11	FI16 UUSIMAA (SUURALUE)	12,96	4,64	8,32
FI12	FI17 ETELÄ-SUOMI	1,26	0,22	1,04
FI2	FI2 ÅLAND	5,27	2,64	2,64
SE01	STOCKHOLM	10,90	2,91	7,99
SE02	OSTRA MELLANSVERIGE	-1,51	-0,39	-1,12
SE04	SYDSVERIGE	2,15	-0,85	3,01
SE06	NORRA MELLANSVERIGE	-6,99	-3,10	-3,89
SE07	MELLERSTA NORRLAND	-8,42	-3,85	-4,57
SE08	OVRE NORRLAND	-4,85	-0,61	-4,24

SE03	SMALAND MED OARNA	-3,49	-1,44	-2,05
SE05	VASTSVERIGE	1,67	-0,03	1,69
UKB	UKN NORTHERN IRELAND	6,13	5,36	0,77
UK111	CLEVELAND	-1,41	1,71	-3,12
UK112	DURHAM	-0,36	-0,60	0,24
UK12	CUMBRIA	1,29	-1,23	2,52
UK131	NORTHUMBERLAND	2,75	-1,87	4,63
UK132	TYNE AND WEAR	-5,05	-0,66	-4,39
UK21	HUMBERSIDE	-2,11	0,24	-2,35
UK22	NORTH YORKSHIRE	5,58	-0,49	6,07
UK23	SOUTH YORKSHIRE	-0,27	0,39	-0,66
UK24	WEST YORKSHIRE	1,07	2,34	-1,28
UK311	DERBYSHIRE	4,19	0,61	3,58
UK312	NOTTINGHAMSHIRE	0,10	1,07	-0,97
UK321	LEICESTERSHIRE	2,31	2,43	-0,12
UK322	NORTHAMPTONSHIRE	9,09	2,54	6,56
UK33	LINCOLNSHIRE	6,46	-1,20	7,66
UK401	CAMBRIDGESHIRE	11,12	2,90	8,22
UK402	NORFOLK	7,96	-1,14	9,10
UK403	SUFFOLK	6,83	0,57	6,26
UK511	BEDFORDSHIRE	7,33	5,14	2,20
UK512	HERTFORDSHIRE	8,07	3,73	4,34
UK521	BERKSHIRE	5,56	5,29	0,27
UK522	BUCKINGHAMSHIRE	8,29	4,64	3,65
UK523	OXFORDSHIRE	11,27	3,44	7,83
UK531	EAST SUSSEX	8,03	-3,18	11,21
UK532	SURREY	7,43	1,94	5,48
UK533	WEST SUSSEX	9,76	-1,48	11,23
UK54	ESSEX	6,23	1,53	4,70
UK55	GREATER LONDON	9,15	5,85	3,29
UK561	HAMPSHIRE	5,37	1,85	3,52
UK562	ISLE OF WIGHT	6,09	-4,72	10,81
UK57	KENT	9,92	1,24	8,68
UK611	AVON	6,77	1,89	4,88
UK612	GLOUCESTERSHIRE	3,04	0,80	2,24
UK613	WILTSHIRE	8,87	2,97	5,90
UK621	CORNWALL	6,53	-1,95	8,48
UK622	DEVON	3,96	-1,97	5,93
UK631	DORSET	5,60	-2,94	8,54
UK632	SOMERSET	6,40	-1,03	7,44
UK711	HEREFORD AND WORCESTER	5,56	0,63	4,92
UK712	WARWICKSHIRE	5,06	0,83	4,24
UK721	SHROPSHIRE	8,40	1,45	6,95
UK722	STAFFORDSHIRE	1,54	1,02	0,52
UK73	WEST MIDLANDS	-1,58	2,99	-4,57
UK81	CHESHIRE	1,48	1,13	0,35
UK82	GREATER MANCHESTER	0,04	1,50	-1,46
UK83	LANCASHIRE	0,19	-0,03	0,21
UK84	MERSEYSIDE	-4,08	-0,33	-3,75
UK9	UKL WALES	1,52	-0,05	1,57
UKA	UKM SCOTLAND	-1,38	-0,22	-1,16
UKB	NORTHERN IRELAND	5,68	5,44	0,25
BG011	VIDIN	-13,79	-14,02	0,23
BG012	MONTANA	-14,24	-11,89	-2,35

BG013	VRATSA	-8,87	-9,51	0,63
BG021	PLEVEN	-10,64	-9,52	-1,11
BG022	LOVECH	-10,13	-10,68	0,55
BG023	VELIKO TARNOVO	-10,75	-9,35	-1,40
BG024	GABROVO	-8,55	-9,40	0,85
BG025	RUSE	-7,14	-7,86	0,71
BG031	VARNA	-5,94	-4,01	-1,93
BG032	DOBRICH	-5,09	-5,53	0,44
BG033	SHUMEN	-6,12	-5,66	-0,46
BG034	TURGOVISHTE	-6,80	-5,90	-0,91
BG035	RAZGRAD	-6,94	-5,75	-1,19
BG036	SILISTRA	-9,62	-6,84	-2,78
BG041	SOFIA STOLITSA (CAPITAL)	2,52	-4,79	7,31
BG042	SOFIA	-14,55	-8,00	-6,55
BG043	BLAGOEVGRAD	-2,85	-1,33	-1,52
BG044	PERNIK	-9,55	-9,98	0,42
BG045	KYUSTENDIL	-9,52	-9,52	0,00
BG051	PLOVDIV	-2,53	-5,42	2,89
BG052	STARA ZAGORA	-5,13	-6,67	1,54
BG053	HASKOVO	-2,31	-7,27	4,96
BG054	PAZARDZHIK	-7,25	-4,14	-3,11
BG055	SMOLYAN	-15,05	-2,58	-12,47
BG056	KARDZHALI	-11,74	-2,03	-9,70
BG061	BURGAS	-6,14	-3,76	-2,38
BG062	SLIVEN	-5,03	-3,16	-1,87
BG063	YAMBOL	-8,72	-8,14	-0,58
CZ01	PRAHA	-4,57	-4,29	-0,28
CZ02	STREDNÍ CECHY	0,45	-3,23	3,68
CZ031	JIHOCECKÝ	-0,27	-1,49	1,22
CZ032	PLZENSKÝ	-1,81	-2,95	1,14
CZ041	KARLOVARSKÝ	0,00	-0,55	0,55
CZ042	ÚSTECKÝ	0,61	-1,49	2,10
CZ051	LIBERECKÝ	0,00	-1,17	1,17
CZ052	KRÁLOVEHRADECKÝ	-0,90	-1,75	0,84
CZ053	PARDUBICKÝ	-0,98	-1,24	0,26
CZ061	VYSOCINA	-0,64	-0,96	0,32
CZ062	JIHOMORAVSKÝ	-0,88	-2,17	1,29
CZ071	OLOMOUCKÝ	-0,52	-1,76	1,24
CZ072	ZLÍNSKÝ	-1,11	-1,94	0,83
CZ08	MORAVSKOSLEZKO	-1,94	-0,96	-0,98
EE001	PÕHJA-EESTI	-9,57	-4,26	-5,31
EE004	LÄÄNE-EESTI	-1,80	-2,70	0,90
EE002	KESK-EESTI	9,01	-9,23	18,24
EE003	KIRDE-EESTI	-7,13	-3,57	-3,57
EE005	LÕUNA-EESTI	-2,77	-4,06	1,29
HU011	BUDAPEST	-12,45	-6,56	-5,89
HU012	PEST	11,33	-2,47	13,80
HU021	FEJÉR	0,00	-2,27	2,27
HU022	KOMÁROM-ESZTERGOM	-1,61	-3,43	1,82
HU023	VESZPRÉM	-3,09	-3,01	-0,09
HU031	GYOR-MOSON-SOPRON	-1,18	-3,22	2,04
HU032	VAS	-4,32	-5,06	0,74
HU033	ZALA	-6,71	-5,59	-1,12
HU041	BARANYA	-5,34	-3,94	-1,40

HU042	SOMOGY	-5,47	-4,98	-0,50
HU043	TOLNA	-5,40	-4,72	-0,67
HU051	BORSOD-ABAÚJ-ZEMPLÉN	-5,17	-2,11	-3,06
HU052	HEVES	-4,59	-4,89	0,31
HU053	NÓGRÁD	-6,82	-5,30	-1,52
HU061	HAJDÚ-BIHAR	-3,35	-1,28	-2,07
HU062	JÁSZ-NAGYKUN-SZOLNOK	-5,18	-4,31	-0,88
HU063	SZABOLCS-SZATMÁR-BEREG	-0,58	0,64	-1,22
HU071	BÁCS-KISKUN	-3,72	-4,77	1,05
HU072	BÉKÉS	-6,67	-5,58	-1,08
HU073	CSONGRÁD	-5,52	-5,28	-0,24
LT001	ALYTAUS (APSKRITIS)	-1,65	-0,99	-0,66
LT002	KAUNO (APSKRITIS)	-1,10	-0,49	-0,62
LT003	KLAIPEDOS (APSKRITIS)	0,00	0,48	-0,48
LT004	MARIJAMPOLES (APSKRITIS)	-0,84	0,00	-0,84
LT005	PANEVEZIO (APSKRITIS)	-2,58	-1,55	-1,03
LT006	SIAULIU (APSKRITIS)	-0,41	-0,58	0,17
LT007	TAURAGES (APSKRITIS)	0,00	-1,03	1,03
LT008	TELSIU (APSKRITIS)	0,00	1,09	-1,09
LT009	UTENOS (APSKRITIS)	-4,13	-5,28	1,16
LT00A	VILNIAUS (APSKRITIS)	-1,49	-1,56	0,07
LV001	RIGA	-9,52	-14,78	5,25
LV002	VIDZEME	-4,55	-17,30	12,75
LV003	KURZEME	-9,42	-5,46	-3,97
LV004	ZEMGALE	-7,02	-4,59	-2,43
LV005	LATGALE	-10,10	-4,21	-5,89
PL011	JELENIOGÓRSKO-WALBRZYSKI	-1,90	-0,50	-1,40
PL012	LEGNICKI	1,62	2,72	-1,10
PL013	WROCLAWSKI	3,10	2,02	1,09
PL014	MIASTA WROCLAW	-2,34	-1,87	-0,47
PL021	BYDGOSKI	1,13	1,26	-0,13
PL022	TORUNSKO-WLOCLAWSKI	0,94	1,85	-0,91
PL031	BIALSKOPODLASKI	-1,03	1,03	-2,06
PL032	CHELMSKO-ZAMOJSKI	-1,94	0,15	-2,09
PL033	LUBELSKI	0,00	0,54	-0,54
PL041	GORZOWSKI	3,05	2,26	0,78
PL042	ZIELONOGÓRSKI	2,36	2,04	0,31
PL051	LÓDZKI	-1,38	-1,63	0,24
PL052	PIOTRKOWSKO-SKIERNIEWICKI	-1,11	-0,33	-0,78
PL053	MIASTA LÓDZ	-6,75	-6,71	-0,04
PL061	KRAKOWSKO-TARNOWSKI	2,77	1,78	0,99
PL062	NOWOSADECKI	6,18	5,60	0,59
PL063	MIASTA KRAKÓW	-2,25	-1,40	-0,86
PL071	CIECHANOWSKO-PLOCKI	0,52	1,65	-1,14
PL072	OSTROLECKO-SIEDLECKI	0,43	2,20	-1,77
PL073	WARSZAWSKI (SRE 2001)	5,69	-0,40	6,08
PL074	RADOMSKI	0,44	1,59	-1,14
PL075	MIASTA WARSZAWA	-3,49	-4,08	0,59
PL08	OPOLSKIE	-1,07	0,76	-1,83
PL091	RZESZOWSKO-TARNOBRZESKI	3,31	3,37	-0,06
PL092	KROSNIENSKO-PRZEMYSKI	1,74	3,10	-1,36
PL0A1	BIALOSTOCKO-SUWALSKI	0,74	0,33	0,41
PL0A2	LOMZYNSKI	0,00	3,35	-3,35
PL0B1	SLUPSKI	2,74	4,25	-1,51

PL0B2	GDANSKI	6,42	5,28	1,14
PL0B3	GDANSK-GDYNIA-SOPOT	-1,10	-0,75	-0,35
PL0C1	PÓLNOCNOSLASKI (SRE 2001)	4,01	-1,70	5,72
PL0C2	POLUDNIOWOSLASKI (SRE 2001)	1,38	1,85	-0,47
PL0C3	CENTRALNY SLASKI (SRE 2001)	-7,30	-1,34	-5,96
PL0D	SWIETOKRZYSKIE	-1,25	0,20	-1,45
PL0E1	ELBLASKI	2,77	4,06	-1,29
PL0E2	OLSZTYNSKI	2,40	3,10	-0,69
PL0E3	ELCKI	1,71	4,55	-2,84
PL0F1	PILSKI	2,03	3,33	-1,30
PL0F2	POZNANSKI	4,66	2,28	2,37
PL0F3	KALISKI	0,83	1,33	-0,50
PL0F4	KONINSKI	1,14	2,73	-1,59
PL0F5	MIASTA POZNAN	-1,72	-2,30	0,57
PL0G1	SZCZECINSKI	1,49	1,41	0,09
PL0G2	KOSZALINSKI	3,27	3,00	0,27
RO011	BACAU	4,69	1,79	2,90
RO012	BOTOSANI	5,43	-0,51	5,94
RO013	IASI	-0,20	2,71	-2,91
RO014	NEAMT	4,29	0,63	3,66
RO015	SUCEAVA	3,51	2,67	0,84
RO016	VASLUI	6,87	2,10	4,77
RO021	BRAILA	0,00	-3,34	3,34
RO022	BUZAU	-0,98	-3,61	2,62
RO023	CONSTANTA	-1,12	-0,31	-0,80
RO024	GALATI	0,26	0,57	-0,31
RO025	TULCEA	-3,76	-2,38	-1,38
RO026	VRANCEA	1,28	-0,85	2,13
RO031	ARGES	-0,99	-1,43	0,44
RO032	CALARASI	-2,50	-3,40	0,90
RO033	DÂMBOVITA	-0,90	-2,11	1,20
RO034	GIURGIU	-6,13	-6,80	0,67
RO035	IALOMITA	1,09	-1,97	3,06
RO036	PRAHOVA	-2,89	-2,70	-0,19
RO037	TELEORMAN	-4,65	-7,80	3,15
RO041	DOLJ	-4,01	-4,27	0,27
RO042	GORJ	0,00	-0,59	0,59
RO043	MEHEDINTI	-3,08	-3,90	0,82
RO044	OLT	-1,30	-3,44	2,14
RO045	VÂLCEA	0,77	-2,62	3,39
RO051	ARAD	-2,80	-5,66	2,87
RO052	CARAS-SEVERIN	-8,31	-4,16	-4,16
RO053	HUNEDOARA	-9,52	-2,33	-7,18
RO054	TIMIS	-8,66	-3,03	-5,63
RO061	BIHOR	-3,73	-3,67	-0,05
RO062	BISTRITA-NASAUD	1,53	2,14	-0,61
RO063	CLUJ	-8,29	-3,45	-4,83
RO064	MARAMURES	0,31	1,00	-0,69
RO065	SATU MARE	-2,13	-2,55	0,43
RO066	SALAJ	-2,57	-3,47	0,90
RO071	ALBA	-2,90	-2,40	-0,50
RO072	BRASOV	-7,60	-0,84	-6,76
RO073	COVASNA	-2,16	-0,43	-1,73
RO074	HARGHITA	-2,43	-0,97	-1,46

RO075	MURES	-0,83	-1,99	1,16
RO076	SIBIU	-3,75	-0,52	-3,22
RO081	BUCURESTI (CAPITAL)	-10,03	-4,29	-5,74
RO082	ILFOV	-3,61	-4,09	0,48
SI001	POMURSKA	-3,97	-2,91	-1,06
SI002	PODRAVSKA	-1,56	-1,35	-0,21
SI003	KOROSKA	0,00	0,90	-0,90
SI004	SAVINJSKA	0,00	-0,13	0,13
SI005	ZASAVSKA	0,00	-2,13	2,13
SI006	SPODNJEPOSAVSKA	-4,76	-1,90	-2,86
SI009	GORENJSKA	0,85	1,70	-0,85
SI00A	NOTRANJSKO-KRASKA	-6,67	-1,33	-5,33
SI00B	GORISKA	-1,39	-1,67	0,28
SI00C	OBALNO-KRASKA	0,00	-1,62	1,62
SI00D	JUGOVZHODNA SLOVENIJA	1,22	0,97	0,24
SI00E	OSREDNJESLOVENSKA	0,00	1,10	-1,10
SK01	BRATISLAVSKÝ	-0,81	-1,13	0,32
SK021	TRNAVSKÝ KRAJ	0,91	-0,12	1,03
SK022	TRENCIANSKÝ KRAJ	-0,27	0,05	-0,33
SK023	NITRIANSKÝ KRAJ	-0,23	-1,44	1,21
SK031	ZILINSKÝ KRAJ	1,94	3,14	-1,21
SK032	BANSKOBYSTRICKÝ KRAJ	-0,25	-0,60	0,35
SK041	PRESOVSKÝ KRAJ	4,30	5,68	-1,38
SK042	KOSICKÝ KRAJ	2,63	3,16	-0,53
N010	AKERSHUS	15,41	6,08	9,33
N011	AUST-AGDER	4,23	2,49	1,74
N012	BUSKERUD	8,16	1,62	6,54
N013	FINNMARK	-10,59	6,93	-17,52
N014	HEDMARK	0,13	-2,04	2,18
N015	HORDALAND	5,18	5,30	-0,12
N016	MORE OG ROMSDAL	2,08	2,75	-0,67
N017	NORDLAND	-3,61	2,58	-6,18
N018	NORD-TRONDELAG	-1,38	2,75	-4,13
N019	OPPLAND	-1,18	-0,73	-0,45
N020	OSLO	9,57	4,49	5,08
N021	OSTFOLD	7,97	0,59	7,38
N022	ROGALAND	11,13	7,96	3,17
N023	SOGN OG FJORDANE	-0,28	2,94	-3,22
N024	SOR-TRONDELAG	4,72	4,16	0,57
N025	TELEMARK	2,67	-0,12	2,79
N026	TROMS	-2,12	4,54	-6,66
N027	VEST-AGDER	7,86	4,26	3,60
N028	VESTFOLD	10,13	1,55	8,58
CH01	NORDOSTSCHWEIZ	2,87	2,36	0,51
CH02	NORDWESTSCHWEIZ-BERN	1,03	1,44	-0,42
CH03	SUDSCHWEIZ	0,85	2,49	-1,64
CH04	WESTSCHWEIZ	4,26	3,51	0,75
CH05	ZENTRALSCHWEIZ	5,53	4,72	0,81

Table A7. Population change, six typologies with regard to total and natural population development and net-migration 1996-1999

Six typologies:

1	BT>0	BM>0	BN>0
2	BT>0	BM>0	BN<0
3	BT>0	BM<0	BN>0
4	BT<0	BM<0	BN<0
5	BT<0	BM>0	BN<0
6	BT<0	BM<0	BN>0

BT=Total population development
BM=Net migration
BN=Natural population development

BE	BE BELGIUM	1
BE1	BE1 RÉGION BXL-CAPITALE	3
BE21	BE21 ANTWERPEN	1
BE22	BE22 LIMBURG	1
BE23	BEE23 OOST-VLAANDERERN	1
BE24	BE24 VLAAMS BRABANT	1
BE25	BE25 WEST-VLAANDEREN	1
BE31	BE31 BRABANT WALLON	1
BE32	BE32 HAINAUT	4
BE33	BE33 LIÈGE	1
BE34	BE34 LUXEMBOURG (BE)	1
BE35	BE35 NAMUR	1
DK	DK DENMARK	1
DK001	DK001 KØBENHAVN OG FREDERIKSBERG	1
DK002	DK002 KØBENHAVNS AMT	1
DK003	DK003 FREDERIKSBORG AMT	1
DK004	DK004 ROSKILDE AMT	1
DK005	DK005 VESTSJÆLLANDS AMT	2
DK006	DK006 STORSTRØMS AMT	2
DK007	DK007 BORNHOLMS AMT	4
DK008	DK008 FYNS AMT	1
DK009	DK009 SØNDERJYLLANDS AMT	3
DK00A	DK00A RIBE AMT	3
DK00B	DK00B VJL AMT	1
DK00C	DK00C RINGKØBING AMT	3
DK00D	DK00D ÅRHUS AMT	1
DK00E	DK00E VIBORG AMT	1
DK00F	DK00F NORDJYLLANDS AMT	1
DE	DE FEDERAL REPUBLIC OF GERMANY (INCL EX-GDR FROM 1991)	2
DE1	DE1 BADEN-WÜRTTEMBERG	1
DE11	DE11 STUTTGART	1
DE12	DE12 KARLSRUHE	1
DE13	DE13 FREIBURG	1
DE14	DE14 TÜBINGEN	1
DE2	DE2 BAYERN	1
DE21	DE21 OBERBAYERN	1

DE22	DE22 NIDERBAYERN	1
DE23	DE23 OBERPFALZ	1
DE24	DE24 OBERFRANKEN	2
DE25	DE25 MITTELFRANKEN	2
DE26	DE26 UNTERFRANKEN	1
DE27	DE27 SCHWABEN	1
DE3	DE3 BERLIN	4
DE4	DE4 BRANDENBURG	2
DE5	DE5 BREMEN	4
DE6	DE6 HAMBURG	5
DE7	DE7 HESSEN	1
DE71	DE71 DARMSTADT	1
DE72	DE72 GIEßEN	1
DE73	DE73 KASSEL	2
DE8	DE8 MECKLENBURG-VORPOMMERN	4
DE9	DE9 NIDERSACHSEN	2
DE91	DE91 BRAUNSCHWEIG	5
DE92	DE92 HANNOVER	2
DE93	DE93 LÜNEBURG	2
DE94	DE94 WESER-EMS	1
DEA	DEA NORDRHEIN-WESTFALEN	2
DEA1	DEA1 DÜSSELDORF	5
DEA2	DEA2 KÖLN	1
DEA3	DEA3 MÜNSTER	1
DEA4	DEA4 DETMOLD	1
DEA5	DEA5 ARNSBERG	5
DEB	DEB RHEINLAND-PFALZ	2
DEB1	DEB1 KOBLENZ	2
DEB2	DEB2 TRIER	2
DEB3	DEB3 RHEINHESSEN-PFALZ	2
DEC	DEC SAARLAND	4
DED	DED SACHSEN	4
DEE	DEE SACHSEN-ANHALT	4
DEE1	DEE1 DESSAU	4
DEE2	DEE2 HALLE	4
DEE3	DEE3 MAGDEBURG	4
DEF	DEF SCHLESWIG-HOLSTEIN	2
DEG	DEG THÜRINGEN	4
GR	GR GREECE	1
GR1	GR1 VOREIA ELLADA	1
GR11	GR11 ANATOLIKI MAKEDONIA, THRAKI	2
GR12	GR12 KENTRIKI MAKEDONIA	1
GR13	GR13 DYTIKI MAKEDONIA	1
GR14	GR14 THESSALIA	2
GR2	GR2 KENTRIKI ELLADA	2
GR21	GR21 IPEIROS	2
GR22	GR22 IONIA NISIA	2
GR23	GR23 DYTIKI ELLADA	2
GR24	GR24 STEREA ELLADA	2
GR25	GR25 PELOPONNISOS	2
GR3	GR3 ATTIKI	6
GR4	GR4 NISIA AIGAIOU, KRITI	1
GR41	GR41 VOREIO AIGAIO	5
GR42	GR42 NOTIO AIGAIO	1

GR43	GR43 KRITI	1
EES	ES SPAIN	1
ES1	ES1 NOROESTE	5
ES11	ES11 GALICIA	5
ES111	ES111 LA CORUÑA	2
ES112	ES112 LUGO	5
ES113	ES113 ORENSE	5
ES114	ES114 PONTEVEDRA	2
ES12	ES12 PRINCIPADO DE ASTURIAS	5
ES13	ES13 CANTABRIA	5
ES2	ES2 NORESTE	4
ES21	ES21 PAIS VASCO	4
ES211	ES211 ÁLAVA	1
ES212	ES212 GUIPÚZCOA	4
ES213	ES213 VIZCAYA	4
ES22	ES22 COMUNIDAD FORAL DE NAVARRA	1
ES23	ES23 LA RIOJA	4
ES24	ES24 ARAGÓN	5
ES241	ES241 HUESCA	5
ES242	ES242 TERUEL	4
ES243	ES243 ZARAGOZA	5
ES3	ES3 COMUNIDAD DE MADRID	3
ES4	ES4 CENTRO (E)	2
ES41	ES41 CASTILLA Y LEÓN	5
ES411	ES411 AVILA	4
ES412	ES412 BURGOS	4
ES413	ES413 LEÓN	5
ES414	ES414 PALENCIA	4
ES415	ES415 SALAMANCA	5
ES416	ES416 SEGOVIA	4
ES417	ES417 SORIA	4
ES418	ES418 VALLADOLID	5
ES419	ES419 ZAMORA	4
ES42	ES42 CASTILLA-LA MANCHA	1
ES421	ES421 ALBACETE	1
ES422	ES422 CIUDAD REAL	2
ES423	ES423 CUENCA	4
ES424	ES424 GUADALAJARA	2
ES425	ES425 TOLEDO	1
ES43	ES43 EXTREMADURA	2
ES431	ES431 BADAJOZ	1
ES432	ES432 CÁCERES	2
ES5	ES5 ESTE	2
ES51	ES51 CATALUÑA	4
ES511	ES511 BARCELONA	6
ES512	ES512 GERONA	1
ES513	ES513 LÉRIDA	5
ES514	ES514 TARRAGONA	2
ES52	ES52 COMUNIDAD VALENCIANA	2
ES521	ES521 ALICANTE	1
ES522	ES522 CASTELLÓN DE LA PLANA	2
ES523	ES523 VALENCIA	2
ES53	ES53 BALEARES	1
ES6	ES6 SUR	1

ES61	ES61 ANDALUCIA	1
ES611	ES611 ALMERÍA	1
ES612	ES612 CADIZ	1
ES613	ES613 CÓRDOBA	1
ES614	ES614 GRANADA	1
ES615	ES615 HUELVA	1
ES616	ES616 JAÉN	1
ES617	ES617 MÁLAGA	1
ES618	ES618 SEVILLA	1
ES62	ES62 MURCIA	1
FR	FR FRANCE	3
FR1	FR1 ÎLE DE FRANCE	3
FR101	FR101 PARIS	6
FR102	FR102 SEINE-ET-MARNE	3
FR103	FR103 YVELINES	3
FR104	FR104 ESSONNE	3
FR105	FR105 HAUTS-DE-SEINE	3
FR106	FR106 SEINE-SAINT-DENIS	6
FR107	FR107 VAL-DE-MARNE	3
FR108	FR108 VAL-D'OISE	3
FR2	FR2 BASSIN PARISIEN	3
FR21	FR21 CHAMPAGNE-ARDENNE	6
FR211	FR211 ARDENNES	6
FR212	FR212 AUBE	3
FR213	FR213 MARNE	3
FR214	FR214 HAUTE-MARNE	6
FR22	FR22 PICARDIE	3
FR221	FR221 AISNE	6
FR222	FR222 OISE	3
FR223	FR223 SOMME	3
FR23	FR23 HAUTE-NORMANDIE	3
FR231	FR231 EURE	1
FR232	FR232 SEINE-MARITIME	3
FR24	FR24 CENTRE	1
FR241	FR241 CHER	6
FR242	FR242 EURE-ET-LOIR	3
FR243	FR243 INDRE	5
FR244	FR244 INDRE-ET-LOIRE	1
FR245	FR245 LOIR-ET-CHER	1
FR246	FR246 LOIRET	1
FR25	FR25 BASSE-NORMANDIE	3
FR251	FR251 CALVADOS	1
FR252	FR252 MANCHE	3
FR253	FR253 ORNE	6
FR26	FR26 BOURGOGNE	6
FR261	FR261 CÔTE-D'OR	3
FR262	FR262 NIÈVRE	4
FR263	FR263 SAÔNE-ET-LOIRE	4
FR264	FR264 YONNE	2
FR3	FR3 NORD - PAS-DE-CALAIS	3
FR301	FR301 NORD	3
FR302	FR302 PAS-DE-CALAIS	3
FR4	FR4 EST	3
FR41	FR41 LORRAINE	6

FR411	FR411 MEURTHE-ET-MOSELLE	6
FR412	FR412 MEUSE	6
FR413	FR413 MOSELLE	3
FR414	FR414 VOSGES	6
FR42	FR42 ALSACE	1
FR421	FR421 BAS-RHIN	1
FR422	FR422 HAUT-RHIN	1
FR43	FR43 FRANCHE-COMTÉ	3
FR431	FR431 DOUBS	3
FR432	FR432 JURA	3
FR433	FR433 HAUTE-SAÔNE	3
FR434	FR434 TERRITOIRE DE BELFORT	3
FR5	FR5 OUEST	1
FR51	FR51 PAYS DE LA LOIRE	1
FR511	FR511 LOIRE-ATLANTIQUE	1
FR512	FR512 MAINE-ET-LOIRE	3
FR513	FR513 MAYENNE	3
FR514	FR514 SARTHE	1
FR515	FR515 VENDÉE	1
FR52	FR52 BRETAGNE	1
FR521	FR521 CÔTE-DU-NORD	2
FR522	FR522 FINISTÈRE	1
FR523	FR523 ILLE-ET-VILAINE	1
FR524	FR524 MORBIHAN	1
FR53	FR53 POITOU-CHARENTES	1
FR531	FR531 CHARENTE	4
FR532	FR532 CHARENTE-MARITIME	1
FR533	FR533 DEUX-SÈVRES	6
FR534	FR534 VIENNE	1
FR6	FR6 SUD-OUEST	2
FR61	FR61 AQUITAINE	1
FR611	FR611 DORDOGNE	2
FR612	FR612 GIRONDE	1
FR613	FR613 LANDES	2
FR614	FR614 LOT-ET-GARONNE	2
FR615	FR615 PYRÉNÉES-ATLANTIQUES	2
FR62	FR62 MIDI-PYRÉNÉES	1
FR621	FR621 ARIÈGE	2
FR622	FR622 AVEYRON	5
FR623	FR623 HAUTE-GARONNE	1
FR624	FR624 GERS	5
FR625	FR625 LOT	2
FR626	FR626 HAUTES-PYRÉNÉES	5
FR627	FR627 TARN	2
FR628	FR628 TARN-ET-GARONNE	1
FR63	FR63 LIMOUSIN	5
FR631	FR631 CORRÈZE	4
FR632	FR632 CREUSE	5
FR633	FR633 HAUTE-VIENNE	5
FR7	FR7 CENTRE-EST	1
FR71	FR71 RHÔNE-ALPES	1
FR711	FR711 AIN	1
FR712	FR712 ARDÈCHE	2
FR713	FR713 DRÔME	1

FR714	FR714 ISÈRE	1
FR715	FR715 LOIRE	6
FR716	FR716 RHÔNE	3
FR717	FR717 SAVOIE	1
FR718	FR718 HAUTE-SAVOIE	1
FR72	FR72 AUVERGNE	2
FR721	FR721 ALLIER	4
FR722	FR722 CANTAL	5
FR723	FR723 HAUTE-LOIRE	2
FR724	FR724 PUY-DE-DÔME	1
FR8	FR8 MÉDITERRANÉE	1
FR81	FR81 LANGUEDOC-ROUSSILLON	2
FR811	FR811 AUDE	2
FR812	FR812 GARD	1
FR813	FR813 HÉRAULT	1
FR814	FR814 LOZÈRE	2
FR815	FR815 PYRÉNÉES-ORIENTALES	2
FR82	FR82 PROVENCE-ALPES-CÔTE D'AZUR	1
FR821	FR821 ALPES-DE-HAUTE-PROVENCE	2
FR822	FR822 HAUTES-ALPES	1
FR823	FR823 ALPES-MARITIMES	2
FR824	FR824 BOUCHES-DU-RHÔNE	1
FR825	FR825 VAR	1
FR826	FR826 VAUCLUSE	1
FR83	FR83 CORSE	1
FR831	FR831 CORSE-DU-SUD	4
FR832	FR832 HAUTE-CORSE	1
IE001	IE011 BORDER	1
IE004	IE012 MIDLANDS	1
IE008	IE013 WEST	1
IE002	IE021 DUBLIN	1
IE003	IE022 MID-EAST	1
IE005	IE023 MIDWEST	1
IE006	IE024 SOUTH-EAST (IE)	1
IE007	IE025 SOUTH-WEST (IE)	1
IT	IT ITALY	2
IT1	IT1 NORD OVEST	5
IT11	IT11 PIEMONTE	5
IT111	IT111 TORINO	5
IT112	IT112 VERCELLI	5
IT113	IT113 BIELLA	5
IT114	IT114 VERBANO-CUSIO-OSSOLA	5
IT115	IT115 NOVARA	2
IT116	IT116 CUNEO	2
IT117	IT117 ASTI	2
IT118	IT118 ALESSANDRIA	5
IT12	IT12 VALLE D'AOSTA	2
IT13	IT13 LIGURIA	5
IT131	IT131 IMPERIA	5
IT132	IT132 SAVONA	5
IT133	IT133 GENOVA	5
IT134	IT134 LA SPEZIA	5
IT2	IT2 LOMBARDIA	2
IT201	IT201 VARESE	2

IT202	IT202 COMO	2
IT203	IT203 LECCO	1
IT204	IT204 SONDRIO	2
IT205	IT205 MILANO	2
IT206	IT206 BERGAMO	1
IT207	IT207 BRESCIA	1
IT208	IT208 PAVIA	2
IT209	IT209 LODI	2
IT20A	IT20A CREMONA	2
IT20B	IT20B MANTOVA	2
IT3	IT3 NORD EST	2
IT31	IT31 TRENTINO-ALTO ADIGE	1
IT311	IT311 BOLZANO-BOZEN	1
IT312	IT312 TRENTO	1
IT32	IT32 VENETO	2
IT321	IT321 VERONA	2
IT322	IT322 VICENZA	1
IT323	IT323 BELLUNO	5
IT324	IT324 TREVISO	1
IT325	IT325 VENEZIA	5
IT326	IT326 PADOVA	1
IT327	IT327 ROVIGO	5
IT33	IT33 FRIULI-VENEZIA GIULIA	5
IT331	IT331 PORDENONE	2
IT332	IT332 UDINE	5
IT333	IT333 GORIZIA	2
IT334	IT334 TRIESTE	5
IT4	IT4 EMILIA-ROMAGNA	2
IT401	IT401 PIACENZA	5
IT402	IT402 PARMA	2
IT403	IT403 REGGIO NELL'EMILIA	2
IT404	IT404 MODENA	2
IT405	IT405 BOLOGNA	2
IT406	IT406 FERRARA	5
IT407	IT407 RAVENNA	2
IT408	IT408 FORLÌ-CESENA	2
IT409	IT409 RIMINI	2
IT5	IT5 CENTRO (I)	2
IT51	IT51 TOSCANA	2
IT511	IT511 MASSA-CARRARA	5
IT512	IT512 LUCCA	5
IT513	IT513 PISTOIA	2
IT514	IT514 FIRENZE	5
IT515	IT515 PRATO	2
IT516	IT516 LIVORNO	5
IT517	IT517 PISA	2
IT518	IT518 AREZZO	2
IT519	IT519 SIENA	2
IT51A	IT51A GROSSETO	5
IT52	IT52 UMBRIA	2
IT521	IT521 PERUGIA	2
IT522	IT522 TERNI	5
IT53	IT53 MARCHE	2
IT531	IT531 PESARO E URBINO	2

IT532	IT532 ANCONA	2
IT533	IT533 MACERATA	2
IT534	IT534 ASCOLI PICENO	2
IT6	IT6 LAZIO	2
IT601	IT601 VITERBO	2
IT602	IT602 RIETI	2
IT603	IT603 ROMA	2
IT604	IT604 LATINA	1
IT605	IT605 FROSINONE	2
IT7	IT7 ABRUZZO-MOLISE	2
IT71	IT71 ABRUZZO	2
IT711	IT711 L'AQUILA	2
IT712	IT712 TERAMO	2
IT713	IT713 PESCARA	2
IT714	IT714 CHIETI	2
IT72	IT72 MOLISE	4
IT721	IT721 ISERNIA	5
IT722	IT722 CAMPOBASSO	4
IT8	IT8 CAMPANIA	3
IT801	IT801 CASERTA	1
IT802	IT802 BENEVENTO	6
IT803	IT803 NAPOLI	3
IT804	IT804 AVELLINO	6
IT805	IT805 SALERNO	3
IT9	IT9 SUD	6
IT91	IT91 PUGLIA	3
IT911	IT911 FOGGIA	6
IT912	IT912 BARI	3
IT913	IT913 TARANTO	6
IT914	IT914 BRINDISI	6
IT915	IT915 LECCE	6
IT92	IT92 BASILICATA	6
IT921	IT921 POTENZA	1
IT922	IT922 MATERA	6
IT93	IT93 CALABRIA	6
IT931	IT931 COSENZA	6
IT932	IT932 CROTONE	6
IT933	IT933 CATANZARO	6
IT934	IT934 VIBO VALENTIA	6
IT935	IT935 REGGIO DI CALABRIA	6
ITA	ITA SICILIA	3
ITA01	ITA01 TRAPANI	3
ITA02	ITA02 PALERMO	3
ITA03	ITA03 MESSINA	4
ITA04	ITA04 AGRIGENTO	6
ITA05	ITA05 CALTANISSETTA	3
ITA06	ITA06 ENNA	6
ITA07	ITA07 CATANIA	1
ITA08	ITA08 RAGUSA	1
ITA09	ITA09 SIRACUSA	6
ITB	ITB SARDEGNA	4
ITB01	ITB01 SASSARI	5
ITB02	ITB02 NUORO	6
ITB03	ITB03 ORISTANO	5

ITB04	ITB04 CAGLIARI	6
LU	LU LUXEMBOURG	1
NL	NL NETHERLANDS	1
NL1	NL1 NOORD-NEDERLAND	1
NL11	NL11 GRONINGEN	3
NL12	NL12 FRIESLAND	1
NL13	NL13 DRENTHE	1
NL2	NL2 OOST-NEDERLAND	1
NL21	NL21 OVERIJSSEL	1
NL22	NL22 GELDERLAND	1
NL23	NL23 FLEVOLAND	1
NL3	NL3 WEST-NEDERLAND	1
NL31	NL31 UTRECHT	1
NL32	NL32 NOORD-HOLLAND	1
NL33	NL33 ZUID-HOLLAND	1
NL34	NL34 ZEELAND	1
NL4	NL4 ZUID-NEDERLAND	1
NL41	NL41 NOORD-BRABANT	1
NL42	NL42 LIMBURG (NL)	1
AT	AT AUSTRIA	1
AT11	AT11 BURGENLAND	2
AT12	AT12 NIEDERÖSTERREICH	2
AT13	AT13 WIEN	2
AT21	AT21 KÄRNTEN	1
AT22	AT22 STEIERMARK	4
AT31	AT31 OBERÖSTERREICH	6
AT32	AT32 SALZBURG	1
AT33	AT33 TIROL	3
AT34	AT34 VORARLBERG	3
PT	PT PORTUGAL	1
PT1	PT1 PORTUGAL (CONTINENT)	1
PT11	PT11 NORTE	1
PT12	PT12 CENTRO (P)	5
PT13	PT13 LISBOA E VALE DO TEJO	1
PT14	PT14 ALENTEJO	4
PT15	PT15 ALGARVE	2
PT2	PT2 AÇORES (PT)	1
PT3	PT3 MADEIRA (PT)	1
FI	FI FINLAND	1
FI13	FI13 ITÄ-SUOMI	4
FI14	FI14 VÄLI-SUOMI	6
FI15	FI15 POHJOIS-SUOMI	6
FI11	FI16 UUSIMAA (SUURALUE)	1
FI12	FI17 ETELÄ-SUOMI	1
FI2	FI2 ÅLAND	1
SE01	STOCKHOLM	1
SE02	OSTRA MELLANSVERIGE	4
SE04	SYDSVERIGE	2
SE06	NORRA MELLANSVERIGE	4
SE07	MELLERSTA NORRLAND	4
SE08	OVRE NORRLAND	4
SE03	SMALAND MED OARNA	4
SE05	VASTSVERIGE	2
UKB	UKN NORTHERN IRELAND	1

UK111	CLEVELAND	6
UK112	DURHAM	5
UK12	CUMBRIA	2
UK131	NORTHUMBERLAND	2
UK132	TYNE AND WEAR	4
UK21	HUMBERSIDE	6
UK22	NORTH YORKSHIRE	2
UK23	SOUTH YORKSHIRE	6
UK24	WEST YORKSHIRE	3
UK311	DERBYSHIRE	1
UK312	NOTTINGHAMSHIRE	3
UK321	LEICESTERSHIRE	3
UK322	NORTHAMPTONSHIRE	1
UK33	LINCOLNSHIRE	2
UK401	CAMBRIDGESHIRE	1
UK402	NORFOLK	2
UK403	SUFFOLK	1
UK511	BEDFORDSHIRE	1
UK512	HERTFORDSHIRE	1
UK521	BERKSHIRE	1
UK522	BUCKINGHAMSHIRE	1
UK523	OXFORDSHIRE	1
UK531	EAST SUSSEX	2
UK532	SURREY	1
UK533	WEST SUSSEX	2
UK54	ESSEX	1
UK55	GREATER LONDON	1
UK561	HAMPSHIRE	1
UK562	ISLE OF WIGHT	2
UK57	KENT	1
UK611	AVON	1
UK612	GLOUCESTERSHIRE	1
UK613	WILTSHIRE	1
UK621	CORNWALL	2
UK622	DEVON	2
UK631	DORSET	2
UK632	SOMERSET	2
UK711	HEREFORD AND WORCESTER	1
UK712	WARWICKSHIRE	1
UK721	SHROPSHIRE	1
UK722	STAFFORDSHIRE	1
UK73	WEST MIDLANDS	6
UK81	CHESHIRE	1
UK82	GREATER MANCHESTER	3
UK83	LANCASHIRE	2
UK84	MERSEYSIDE	4
UK9	UKL WALES	2
UKA	UKM SCOTLAND	4
UKB	NORTHERN IRELAND	1
BG	BULGARIA	5
BG01	SEVEROZAPADEN	4
BG011	VIDIN	5
BG012	MONTANA	4
BG013	VRATSA	5

BG02	SEVEREN TSENTRALEN	4
BG021	PLEVEN	4
BG022	LOVECH	5
BG023	VELIKO TARNOVO	4
BG024	GABROVO	5
BG025	RUSE	5
BG03	SEVEROIZTOCHEN	4
BG031	VARNA	4
BG032	DOBRICH	5
BG033	SHUMEN	4
BG034	TURGOVISHTE	4
BG035	RAZGRAD	4
BG036	SILISTRA	4
BG04	YUGOZAPADEN	5
BG041	SOFIA STOLITSA (CAPITAL)	2
BG042	SOFIA	4
BG043	BLAGOEVGRAD	4
BG044	PERNIK	5
BG045	KYUSTENDIL	5
BG05	YUZHEN TSENTRALEN	4
BG051	PLOVDIV	5
BG052	STARA ZAGORA	5
BG053	HASKOVO	5
BG054	PAZARDZHIK	4
BG055	SMOLYAN	4
BG056	KARDZHALI	4
BG06	YUGOIZTOCHEN	4
BG061	BURGAS	4
BG062	SLIVEN	4
BG063	YAMBOL	4
CZ	CZECH REPUBLIC	5
CZ01	PRAHA	4
CZ02	STREDNÍ CECHY	2
CZ03	JIHOZÁPAD	5
CZ031	JIHOCECKÝ	5
CZ032	PLZENSKÝ	5
CZ04	SEVEROZÁPAD	2
CZ041	KARLOVARSKÝ	2
CZ042	ÚSTECKÝ	2
CZ05	SEVEROVÝCHOD	5
CZ051	LIBERECKÝ	2
CZ052	KRÁLOVEHRADECKÝ	5
CZ053	PARDUBICKÝ	5
CZ06	JIHOVÝCHOD	5
CZ061	VYSOCINA	5
CZ062	JIHOMORAVSKÝ	5
CZ07	STREDNÍ MORAVA	5
CZ071	OLOMOUCKÝ	5
CZ072	ZLÍNSKÝ	5
CZ08	MORAVSKOSLEZKO	4
EE	ESTONIA	4
EE001	PÕHJA-EESTI	4
EE004	LÄÄNE-EESTI	5
EE002	KESK-EESTI	2

EE003	KIRDE-EESTI	4
EE005	LÕUNA-EESTI	5
HU	HUNGARY	4
HU01	KÖZÉP-MAGYARORSZÁG	5
HU011	BUDAPEST	4
HU012	PEST	2
HU02	KÖZÉP-DUNÁNTÚL	5
HU021	FEJÉR	2
HU022	KOMÁROM-ESZTERGOM	5
HU023	VESZPRÉM	4
HU03	NYUGAT-DUNÁNTÚL	5
HU031	GYOR-MOSON-SOPRON	5
HU032	VAS	5
HU033	ZALA	4
HU04	DÉL-DUNÁNTÚL	4
HU041	BARANYA	4
HU042	SOMOGY	4
HU043	TOLNA	4
HU05	ÉSZAK-MAGYARORSZÁG	4
HU051	BORSOD-ABAÚJ-ZEMPLÉN	4
HU052	HEVES	5
HU053	NÓGRÁD	4
HU06	ÉSZAK-ALFÖLD	4
HU061	HAJDÚ-BIHAR	4
HU062	JÁSZ-NAGYKUN-SZOLNOK	4
HU063	SZABOLCS-SZATMÁR-BEREG	6
HU07	DÉL-ALFÖLD	5
HU071	BÁCS-KISKUN	5
HU072	BÉKÉS	4
HU073	CSONGRÁD	4
LT	LITHUANIA	4
LT001	ALYTAUS (APSKRITIS)	4
LT002	KAUNO (APSKRITIS)	4
LT003	KLAIPEDOS (APSKRITIS)	3
LT004	MARIJAMPOLES (APSKRITIS)	6
LT005	PANEVEZIO (APSKRITIS)	4
LT006	SIAULIU (APSKRITIS)	5
LT007	TAURAGES (APSKRITIS)	2
LT008	TELSIU (APSKRITIS)	3
LT009	UTENOS (APSKRITIS)	5
LT00A	VILNIAUS (APSKRITIS)	5
LV	LATVIA	6
LV001	RIGA	5
LV002	VIDZEME	5
LV003	KURZEME	4
LV004	ZEMGALE	4
LV005	LATGALE	4
PL	POLAND	3
PL01	DOLNOSLASKIE	6
PL011	JELENIOGÓRSKO-WALBRZYSKI	4
PL012	LEGNICKI	3
PL013	WROCLAWSKI	1
PL014	MIASTA WROCLAW	4
PL02	KUJAWSKO-POMORSKIE	3

PL021	BYDGOSKI	3
PL022	TORUNSKO-WLOCLAWSKI	3
PL03	LUBELSKIE	6
PL031	BIALSKOPODLASKI	6
PL032	CHELMSKO-ZAMOJSKI	6
PL033	LUBELSKI	3
PL04	LUBUSKIE	1
PL041	GORZOWSKI	1
PL042	ZIELONOGÓRSKI	1
PL05	LÓDZKIE	4
PL051	LÓDZKI	5
PL052	PIOTRKOWSKO-SKIERNIEWICKI	4
PL053	MIASTA LÓDZ	4
PL06	MALOPOLSKIE	1
PL061	KRAKOWSKO-TARNOWSKI	1
PL062	NOWOSADECKI	1
PL063	MIASTA KRAKÓW	4
PL07	MAZOWIECKIE	2
PL071	CIECHANOWSKO-PLOCKI	3
PL072	OSTROLECKO-SIEDLECKI	3
PL073	WARSZAWSKI (SRE 2001)	2
PL074	RADOMSKI	3
PL075	MIASTA WARSZAWA	5
PL08	OPOLSKIE	6
PL09	PODKARPACKIE	3
PL091	RZESZOWSKO-TARNOBRZESKI	3
PL092	KROSNIENSKO-PRZEMYSKI	3
PL0A	PODLASKIE	3
PL0A1	BIALOSTOCKO-SUWALSKI	1
PL0A2	LOMZYNSKI	3
PL0B	POMORSKIE	1
PL0B1	SLUPSKI	3
PL0B2	GDANSKI	1
PL0B3	GDANSK-GDYNIA-SOPOT	4
PL0C	SLASKIE	4
PL0C1	PÓLNOCNOSLASKI (SRE 2001)	2
PL0C2	POLUDNIOWOSLASKI (SRE 2001)	3
PL0C3	CENTRALNY SLASKI (SRE 2001)	4
PL0D	SWIETOKRZYSKIE	6
PL0E	WARMINSKO-MAZURSKIE	3
PL0E1	ELBLASKI	3
PL0E2	OLSZTYNSKI	3
PL0E3	ELCKI	3
PL0F	WIELKOPOLSKIE	1
PL0F1	PILSKI	3
PL0F2	POZNANSKI	1
PL0F3	KALISKI	3
PL0F4	KONINSKI	3
PL0F5	MIASTA POZNAN	5
PL0G	ZACHODNIOPOMORSKIE	1
PL0G1	SZCZECINSKI	1
PL0G2	KOSZALINSKI	1
RO	ROMANIA	4
RO01	NORD-EST	1

RO011	BACAU	1
RO012	BOTOSANI	2
RO013	IASI	6
RO014	NEAMT	1
RO015	SUCEAVA	1
RO016	VASLUI	1
RO02	SUD-EST	5
RO021	BRAILA	2
RO022	BUZAU	5
RO023	CONSTANTA	4
RO024	GALATI	3
RO025	TULCEA	4
RO026	VRANCEA	2
RO03	SUD	5
RO031	ARGES	5
RO032	CALARASI	5
RO033	DÂMBOVITA	5
RO034	GIURGIU	5
RO035	IALOMITA	2
RO036	PRAHOVA	4
RO037	TELEORMAN	5
RO04	SUD-VEST	5
RO041	DOLJ	5
RO042	GORJ	2
RO043	MEHEDINTI	5
RO044	OLT	5
RO045	VÂLCEA	2
RO05	VEST	4
RO051	ARAD	5
RO052	CARAS-SEVERIN	4
RO053	HUNEDOARA	4
RO054	TIMIS	4
RO06	NORD-VEST	4
RO061	BIHOR	4
RO062	BISTRITA-NASAUD	3
RO063	CLUJ	4
RO064	MARAMURES	3
RO065	SATU MARE	5
RO066	SALAJ	5
RO07	CENTRU	4
RO071	ALBA	4
RO072	BRASOV	4
RO073	COVASNA	4
RO074	HARGHITA	4
RO075	MURES	5
RO076	SIBIU	4
RO08	BUCURESTI	4
RO081	BUCURESTI (CAPITAL)	4
RO082	ILFOV	5
SI	SLOVENIA	4
SI001	POMURSKA	4
SI002	PODRAVSKA	4
SI003	KOROSKA	3
SI004	SAVINJSKA	2

SI005	ZASAVSKA	2
SI006	SPODNJEPOSAVSKA	4
SI009	GORENJSKA	3
SI00A	NOTRANJSKO-KRASKA	4
SI00B	GORISKA	5
SI00C	OBALNO-KRASKA	2
SI00D	JUGOVZHODNA SLOVENIJA	1
SI00E	OSREDNJESLOVENSKA	3
SK	SLOVAK REPUBLIC	3
SK01	BRATISLAVSKÝ	5
SK02	ZÁPADNÉ SLOVENSKO	2
SK021	TRNAVSKÝ KRAJ	2
SK022	TRENCIANSKÝ KRAJ	6
SK023	NITRIANSKÝ KRAJ	5
SK03	STREDNÉ SLOVENSKO	3
SK031	ZILINSKÝ KRAJ	3
SK032	BANSKOBYSTRICKÝ KRAJ	5
SK04	VÝCHODNÉ SLOVENSKO	3
SK041	PRESOVSKÝ KRAJ	3
SK042	KOSICKÝ KRAJ	3
N010	AKERSHUS	1
N011	AUST-AGDER	1
N012	BUSKERUD	1
N013	FINNMARK	6
N014	HEDMARK	2
N015	HORDALAND	3
N016	MORE OG ROMSDAL	3
N017	NORDLAND	6
N018	NORD-TRONDELAG	6
N019	OPPLAND	4
N020	OSLO	1
N021	OSTFOLD	1
N022	ROGALAND	1
N023	SOGN OG FJORDANE	6
N024	SOR-TRONDELAG	1
N025	TELEMARK	2
N026	TROMS	6
N027	VEST-AGDER	1
N028	VESTFOLD	1
CH	SCHWEIZ	1
CH01	NORDOSTSCHWEIZ	1
CH02	NORDWESTSCHWEIZ-BERN	3
CH03	SUDSCHWEIZ	3
CH04	WESTSCHWEIZ	1
CH05	ZENTRALSCHWEIZ	1

Table A8. Share (%) of population in the ages 65+ in EU29.

NUTS	REGION	1990	1995	1999
BE	**BE BELGIUM**	NA	0,15	0,17
BE1	BE1 RÉGION BXL-CAPITALE	NA	0,17	0,17
BE2	BE2 VLAAMS GEWEST	NA	0,15	0,16
BE21	BE21 ANTWERPEN	NA	0,15	0,17
BE22	BE22 LIMBURG	NA	0,12	0,13
BE23	BE23 OOST-VLAANDERERN	NA	0,16	0,17
BE24	BE24 VLAAMS BRABANT	NA	0,15	0,17
BE25	BE25 WEST-VLAANDEREN	NA	0,16	0,18
BE3	BE3 RÉGION WALLONNE	NA	0,16	0,17
BE31	BE31 BRABANT WALLON	NA	0,14	0,15
BE32	BE32 HAINAUT	NA	0,16	0,17
BE33	BE33 LIÈGE	NA	0,16	0,17
BE34	BE34 LUXEMBOURG (BE)	NA	0,15	0,16
BE35	BE35 NAMUR	NA	0,15	0,16
DK	**DK DENMARK**	0,16	0,15	0,15
DK001	DK001 KØBENHAVN OG FREDERIKSBERG	0,22	0,18	0,12
DK002	DK002 KØBENHAVNS AMT	0,15	0,15	0,16
DK003	DK003 FREDERIKSBORG AMT	0,12	0,13	0,13
DK004	DK004 ROSKILDE AMT	0,10	0,11	0,11
DK005	DK005 VESTSJÆLLANDS AMT	0,16	0,16	0,15
DK006	DK006 STORSTRØMS AMT	0,18	0,18	0,18
DK007	DK007 BORNHOLMS AMT	0,18	0,18	0,18
DK008	DK008 FYNS AMT	0,16	0,16	0,16
DK009	DK009 SØNDERJYLLANDS AMT	0,15	0,15	0,15
DK00A	DK00A RIBE AMT	0,14	0,14	0,14
DK00B	DK00B VEJLE AMT	0,15	0,15	0,15
DK00C	DK00C RINGKØBING AMT	0,12	0,14	0,14
DK00D	DK00DE ÅRHUS AMT	0,14	0,14	0,13
DK00E	DK00 VIBORG AMT	0,17	0,16	0,16
DK00F	DK00F NORDJYLLANDS AMT	0,16	0,16	0,16
DE	**DE GERMANY (INCLUDING EX-GDR FROM 1991)**	NA	0,15	0,16
DE1	DE1 BADEN-WÜRTTEMBERG	NA	0,15	0,15
DE11	DE11 STUTTGART	NA	0,14	0,15
DE12	DE12 KARLSRUHE	NA	0,15	0,16
DE13	DE13 FREIBURG	NA	0,15	0,16
DE14	DE14 TÜBINGEN	NA	0,14	0,15
DE2	DE2 BAYERN	NA	0,15	0,16
DE21	DE21 OBERBAYERN	NA	0,15	0,15
DE22	DE22 NIEDERBAYERN	NA	0,15	0,16
DE23	DE23 OBERPFALZ	NA	0,15	0,16
DE24	DE24 OBERFRANKEN	NA	0,17	0,17
DE25	DE25 MITTELFRANKEN	NA	0,16	0,16
DE26	DE26 UNTERFRANKEN	NA	0,15	0,16
DE27	DE27 SCHWABEN	NA	0,16	0,16
DE3	DE3 BERLIN	NA	0,14	0,14
DE4	DE4 BRANDENBURG	NA	0,13	0,14
DE5	DE5 BREMEN	NA	0,18	0,18
DE6	DE6 HAMBURG	NA	0,17	0,17
DE7	DE7 HESSEN	NA	0,16	0,16
DE71	DE71 DARMSTADT	NA	0,15	0,15
DE72	DE72 GIEßEN	NA	0,15	0,16

DE73	DE73 KASSEL	NA	0,17	0,18
DE8	DE8 MECKLENBURG-VORPOMMERN	NA	0,12	0,14
DE9	DE9 NIEDERSACHSEN	NA	0,16	0,16
DE91	DE91 BRAUNSCHWEIG	NA	0,17	0,17
DE92	DE92 HANNOVER	NA	0,17	0,17
DE93	DE93 LÜNEBURG	NA	0,16	0,16
DE94	DE94 WESER-EMS	NA	0,14	0,15
DEA	DEA NORDRHEIN-WESTFALEN	NA	0,16	0,16
DEA1	DEA1 DÜSSELDORF	NA	0,16	0,17
DEA2	DEA2 KÖLN	NA	0,15	0,15
DEA3	DEA3 MÜNSTER	NA	0,15	0,16
DEA4	DEA4 DETMOLD	NA	0,16	0,17
DEA5	DEA5 ARNSBERG	NA	0,16	0,17
DEB	DEB RHEINLAND-PFALZ	NA	0,16	0,17
DEB1	DEB1 KOBLENZ	NA	0,17	0,17
DEB2	DEB2 TRIER	NA	0,17	0,17
DEB3	DEB3 RHEINHESSEN-PFALZ	NA	0,16	0,16
DEC	DEC SAARLAND	NA	0,16	0,18
DED	DED SACHSEN	NA	0,17	0,17
DED1	DED1 CHEMNITZ	NA	NA	0,19
DED2	DED2 DRESDEN	NA	NA	0,17
DED3	DED3 LEIPZIG	NA	NA	0,17
DEE	DEE SACHSEN-ANHALT	NA	0,15	0,16
DEE1	DEE1 DESSAU	NA	0,15	0,17
DEE2	DEE2 HALLE	NA	0,15	0,17
DEE3	DEE3 MAGDEBURG	NA	0,15	0,16
DEF	DEF SCHLESWIG-HOLSTEIN	NA	0,16	0,16
DEG	DEG THÜRINGEN	NA	0,15	0,16
GR	**GR GREECE**	NA	0,15	0,17
GR1	GR1 VOREIA ELLADA	NA	0,15	0,17
GR11	GR11 ANATOLIKI MAKEDONIA, THRAKI	NA	0,15	0,17
GR12	GR12 KENTRIKI MAKEDONIA	NA	0,14	0,16
GR13	GR13 DYTIKI MAKEDONIA	NA	0,15	0,17
GR14	GR14 THESSALIA	NA	0,16	0,18
GR2	GR2 KENTRIKI ELLADA	NA	0,17	0,19
GR21	GR21 IPEIROS	NA	0,17	0,19
GR22	GR22 IONIA NISIA	NA	0,19	0,20
GR23	GR23 DYTIKI ELLADA	NA	0,16	0,17
GR24	GR24 STEREA ELLADA	NA	0,16	0,19
GR25	GR25 PELOPONNISOS	NA	0,19	0,21
GR3	GR3 ATTIKI	NA	0,14	0,16
GR4	GR4 NISIA AIGAIOU, KRITI	NA	0,17	0,17
GR41	GR41 VOREIO AIGAIO	NA	0,22	0,23
GR42	GR42 NOTIO AIGAIO	NA	0,14	0,15
GR43	GR43 KRITI	NA	0,16	0,17
EES	**ES SPAIN**	NA	0,15	0,17
ES1	ES1 NOROESTE	NA	0,18	0,19
ES11	ES11 GALICIA	NA	0,18	0,19
ES12	ES12 PRINCIPADO DE ASTURIAS	NA	0,19	0,20
ES13	ES13 CANTABRIA	NA	0,17	0,18
ES2	ES2 NORESTE	NA	0,17	0,18
ES21	ES21 PAIS VASCO	NA	0,15	0,17
ES22	ES22 COMUNIDAD FORAL DE NAVARRA	NA	0,17	0,18
ES23	ES23 LA RIOJA	NA	0,18	0,19

ES24	ES24 ARAGÓN	NA	0,20	0,21
ES3	ES3 COMUNIDAD DE MADRID	NA	0,13	0,15
ES4	ES4 CENTRO (E)	NA	0,18	0,20
ES41	ES41 CASTILLA Y LEÓN	NA	0,20	0,21
ES42	ES42 CASTILLA-LA MANCHA	NA	0,18	0,19
ES43	ES43 EXTREMADURA	NA	0,16	0,18
ES5	ES5 ESTE	NA	0,15	0,17
ES51	ES51 CATALUÑA	NA	0,16	0,17
ES52	ES52 COMUNIDAD VALENCIANA	NA	0,15	0,16
ES53	ES53 BALEARES	NA	0,15	0,15
ES6	ES6 SUR	NA	0,13	0,14
ES61	ES61 ANDALUCIA	NA	0,13	0,14
ES62	ES62 MURCIA	NA	0,13	0,14
ES63	ES63 CEUTA Y MELILLA	NA	0,11	0,12
ES7	ES7 CANARIAS	NA	0,10	0,12
FR	**FR FRANCE (**)**	NA	0,150	NA
FR1	FR1 ÎLE DE FRANCE	NA	0,11	0,15
FR2	FR2 BASSIN PARISIEN	NA	0,15	NA
FR21	FR21 CHAMPAGNE-ARDENNE	NA	0,14	0,16
FR22	FR22 PICARDIE	NA	0,13	0,15
FR23	FR23 HAUTE-NORMANDIE	NA	0,13	0,15
FR24	FR24 CENTRE	NA	0,17	0,18
FR25	FR25 BASSE-NORMANDIE	NA	0,16	0,18
FR26	FR26 BOURGOGNE	NA	0,18	0,19
FR3	FR3 NORD - PAS-DE-CALAIS	NA	0,13	0,15
FR4	FR4 EST	NA	0,14	NA
FR41	FR41 LORRAINE	NA	0,14	0,24
FR42	FR42 ALSACE	NA	0,13	0,14
FR43	FR43 FRANCHE-COMTÉ	NA	0,15	0,16
FR5	FR5 OUEST	NA	0,17	NA
FR51	FR51 PAYS DE LA LOIRE	NA	0,15	0,17
FR52	FR52 BRETAGNE	NA	0,17	0,19
FR53	FR53 POITOU-CHARENTES	NA	0,19	0,21
FR6	FR6 SUD-OUEST	NA	0,19	NA
FR61	FR61 AQUITAINE	NA	0,18	0,20
FR62	FR62 MIDI-PYRÉNÉES	NA	0,18	0,20
FR63	FR63 LIMOUSIN	NA	0,22	0,24
FR7	FR7 CENTRE-EST	NA	0,15	NA
FR71	FR71 RHÔNE-ALPES	NA	0,14	0,16
FR72	FR72 AUVERGNE	NA	0,18	0,20
FR8	FR8 MÉDITERRANÉE	NA	0,18	NA
FR81	FR81 LANGUEDOC-ROUSSILLON	NA	0,18	0,20
FR82	FR82 PROVENCE-ALPES-CÔTE D'AZUR	NA	0,18	0,19
FR83	FR83 CORSE	NA	0,17	0,19
IE	**IE011 IRELAND**	NA	NA	NA
IE01	IE012 BORDER, MIDLANDS AND WESTERN	NA	NA	NA
IE02	IE013 SOUTHERN AND EASTERN	NA	NA	NA
IT	**IT ITALY**	NA	0,16	0,18
IT1	IT1 NORD OVEST	NA	0,20	0,21
IT11	IT11 PIEMONTE	NA	0,19	0,20
IT12	IT12 VALLE D'AOSTA	NA	0,17	0,18
IT13	IT13 LIGURIA	NA	0,23	0,24
IT2	IT2 LOMBARDIA	NA	0,16	0,17
IT3	IT3 NORD EST	NA	0,17	0,18

IT31	IT31 TRENTINO-ALTO ADIGE	NA	0,16	0,16
IT32	IT32 VENETO	NA	0,16	0,18
IT33	IT33 FRIULI-VENEZIA GIULIA	NA	0,20	0,21
IT4	IT4 EMILIA-ROMAGNA	NA	0,21	0,22
IT5	IT5 CENTRO (I)	NA	0,20	0,22
IT51	IT51 TOSCANA	NA	0,21	0,22
IT52	IT52 UMBRIA	NA	0,21	0,22
IT53	IT53 MARCHE	NA	0,20	0,21
IT6	IT6 LAZIO	NA	0,15	0,17
IT7	IT7 ABRUZZO-MOLISE	NA	0,18	0,20
IT71	IT71 ABRUZZO	NA	0,18	0,20
IT72	IT72 MOLISE	NA	0,19	0,20
IT8	IT8 CAMPANIA	NA	0,12	0,13
IT9	IT9 SUD	NA	0,14	0,15
IT91	IT91 PUGLIA	NA	0,13	0,15
IT92	IT92 BASILICATA	NA	0,16	0,17
IT93	IT93 CALABRIA	NA	0,14	0,16
ITA	ITA SICILIA	NA	0,14	0,16
ITB	ITB SARDEGNA	NA	0,13	0,15
LU	**LU LUXEMBOURG**	NA	0,14	0,14
NL	**NL NETHERLANDS**	NA	0,13	0,14
NL1	NL1 NOORD-NEDERLAND	NA	0,14	0,15
NL11	NL11 GRONINGEN	NA	0,14	0,15
NL12	NL12 FRIESLAND	NA	0,14	0,14
NL13	NL13 DRENTHE	NA	0,15	0,15
NL2	NL2 OOST-NEDERLAND	NA	0,13	0,13
NL21	NL21 OVERIJSSEL	NA	0,13	0,14
NL22	NL22 GELDERLAND	NA	0,13	0,14
NL23	NL23 FLEVOLAND	NA	0,09	0,09
NL3	NL3 WEST-NEDERLAND	NA	0,14	0,14
NL31	NL31 UTRECHT	NA	0,12	0,12
NL32	NL32 NOORD-HOLLAND	NA	0,13	0,13
NL33	NL33 ZUID-HOLLAND	NA	0,14	0,14
NL34	NL34 ZEELAND	NA	0,16	0,16
NL4	NL4 ZUID-NEDERLAND	NA	0,12	0,13
NL41	NL41 NOORD-BRABANT	NA	0,12	0,13
NL42	NL42 LIMBURG (NL)	NA	0,13	0,14
AT	**AT AUSTRIA**	NA	0,15	0,15
AT1	AT10 OSTÖSTERREICH	NA	0,16	0,16
AT11	AT11 BURGENLAND	NA	0,17	0,18
AT12	AT12 NIEDERÖSTERREICH	NA	0,16	0,16
AT13	AT13 WIEN	NA	0,17	0,16
AT2	AT20 SUDÖSTERREICH	NA	0,16	0,16
AT21	AT21 KÄRNTEN	NA	0,15	0,16
AT22	AT22 STEIERMARK	NA	0,16	0,16
AT3	AT30 WESTÖSTERREICH	NA	0,13	0,14
AT31	AT31 OBERÖSTERREICH	NA	0,14	0,15
AT32	AT32 SALZBURG	NA	0,13	0,13
AT33	AT33 TIROL	NA	0,13	0,13
AT34	AT34 VORARLBERG	NA	0,11	0,12
PT	**PT PORTUGAL**	NA	0,15	0,16
PT1	PT1 PORTUGAL (CONTINENT)	NA	0,15	0,16
PT11	PT11 NORTE	NA	0,12	0,13
PT12	PT12 CENTRO (P)	NA	0,18	0,19

PT13	PT13 LISBOA E VALE DO TEJO	NA	0,15	0,16
PT14	PT14 ALENTEJO	NA	0,21	0,23
PT15	PT15 ALGARVE	NA	0,18	0,19
PT2	PT2 AÇORES (PT)	NA	0,11	0,12
PT3	PT3 MADEIRA (PT)	NA	0,11	0,13
FI	**FI FINLAND**	0,13	0,14	0,15
FI1	FI1 MANNER-SUOMI	0,13	0,14	0,15
FI13	FI13 ITÄ-SUOMI	0,14	0,15	0,17
FI14	FI14 VÄLI-SUOMI	0,14	0,15	0,16
FI15	FI15 POHJOIS-SUOMI	0,11	0,12	0,13
FI11	FI16 UUSIMAA (SUURALUE)	0,11	0,11	0,12
FI12	FI17 ETELÄ-SUOMI	0,15	0,16	0,16
FI2	FI2 ÅLAND	0,17	0,16	0,16
SE	**SE SWEDEN**	0,18	0,17	0,17
SE01	SE01 STOCKHOLM	0,16	0,15	0,15
SE02	SE02 ÖSTRA MELLANSVERIGE	0,18	0,17	0,17
SE04	SE04 SYDSVERIGE	0,19	0,18	0,18
SE06	SE06 NORRA MELLANSVERIGE	0,20	0,19	0,20
SE07	SE07 MELLERSTA NORRLAND	0,21	0,20	0,20
SE08	SE08 ÖVRE NORRLAND	0,17	0,16	0,17
SE09	SE09 SMÅLAND MED ÖARNA	0,19	0,19	0,19
SE0A	SE0A VÄSTSVERIGE	0,18	0,18	0,17
UK	**UK UNITED KINGDOM**	NA	0,16	0,16
UKC	UKC NORTH EAST	NA	0,16	0,16
UKC1	UKC1 TEES VALLEY AND DURHAM	NA	0,15	0,16
UKC2	UKC2 NORTHUMBERLAND, TYNE AND WEAR	NA	0,16	0,17
UKD	UKD NORTH WEST (INCLUDING MERSEYSIDE)	NA	0,16	0,16
UKD1	UKD1 CUMBRIA	NA	0,18	0,18
UKD2	UKD2 CHESHIRE	NA	0,15	0,15
UKD3	UKD3 GREATER MANCHESTER	NA	0,15	0,15
UKD4	UKD4 LANCASHIRE	NA	0,17	0,16
UKD5	UKD5 MERSEYSIDE	NA	0,16	0,16
UKE	UKE YORKSHIRE AND THE HUMBER	NA	0,16	0,16
UKE1	UKE1 EAST RIDING AND NORTH LINCOLNSHIRE	NA	0,16	0,17
UKE2	UKE2 NORTH YORKSHIRE	NA	0,18	0,18
UKE3	UKE3 SOUTH YORKSHIRE	NA	0,16	0,16
UKE4	UKE4 WEST YORKSHIRE	NA	0,15	0,15
UKF	UKF EAST MIDLANDS	NA	0,16	0,16
UKF1	UKF1 DERBYSHIRE AND NOTTINGHAMSHIRE	NA	0,16	0,16
UKF2	UKF2 LEICESTERSHIRE, RUTLAND AND NORTHANTS	NA	0,15	0,15
UKF3	UKF3 LINCOLNSHIRE	NA	0,19	0,19
UKG	UKG WEST MIDLANDS	NA	0,15	0,16
UKG1	UKG1 HEREFORDSHIRE, WORCESTERSHIRE AND WARKS	NA	0,16	0,17
UKG2	UKG2 SHROPSHIRE AND STAFFORDSHIRE	NA	0,15	0,16
UKG3	UKG3 WEST MIDLANDS	NA	0,15	0,15
UKH	UKH EASTERN	NA	0,16	0,16
UKH1	UKH1 EAST ANGLIA	NA	0,17	0,17
UKH2	UKH2 BEDFORDSHIRE, HERTFORDSHIRE	NA	0,14	0,14
UKH3	UKH3 ESSEX	NA	0,16	0,16
UKI	UKI LONDON	NA	NA	0,13
UKI1	UKI1 INNER LONDON	NA	NA	0,11
UKI2	UKI2 OUTER LONDON	NA	NA	0,14
UKJ	UKJ SOUTH EAST	NA	0,16	0,16
UKJ1	UKJ1 BERKSHIRE, BUCKS AND OXFORDSHIRE	NA	0,13	0,13

UKJ2	UKJ2 SURREY, EAST AND WEST SUSSEX	NA	0,19	0,18
UKJ3	UKJ3 HAMPSHIRE AND ISLE OF WIGHT	NA	0,16	0,16
UKJ4	UKJ4 KENT	NA	0,17	0,16
UKK	UKK SOUTH WEST	NA	0,19	0,18
UKK1	UKK1 GLOUCESTERSHIRE, WILTSHIRE AND NORTH SOMERSET	NA	0,16	0,16
UKK2	UKK2 DORSET AND SOMERSET	NA	0,21	0,21
UKK3	UKK3 CORNWALL AND ISLES OF SCILLY	NA	NA	0,20
UKK4	UKK4 DEVON	NA	NA	0,20
UKL	UKL WALES	NA	0,17	0,17
UKL1	UKL1 WEST WALES AND THE VALLEYS	NA	NA	0,1794
UKL2	UKL2 EAST WALES	NA	NA	0,1611
UKM	UKM SCOTLAND	NA	0,15	0,15
UKM1	UKM1 NORTH EASTERN SCOTLAND	NA	0,14	0,14
UKM2	UKM2 EASTERN SCOTLAND	NA	0,16	0,16
UKM3	UKM3 SOUTH WESTERN SCOTLAND	NA	0,15	0,15
UKM4	UKM4 HIGHLANDS AND ISLANDS	NA	0,16	0,16
UKN	UKN NORTHERN IRELAND	NA	0,13	0,13
BG	**BULGARIA**	NA	0,15	0,16
BG01	SEVEROZAPADEN	NA	0,20	0,21
BG011	VIDIN	NA	0,23	0,23
BG012	MONTANA	NA	0,21	0,22
BG013	VRATSA	NA	0,19	0,19
BG02	SEVEREN TSENTRALEN	NA	0,18	0,18
BG021	PLEVEN	NA	0,18	0,19
BG022	LOVECH	NA	0,20	0,20
BG023	VELIKO TARNOVO	NA	0,17	0,18
BG024	GABROVO	NA	0,18	0,19
BG025	RUSE	NA	0,15	0,17
BG03	SEVEROIZTOCHEN	NA	0,13	0,14
BG031	VARNA	NA	0,13	0,14
BG032	DOBRICH	NA	0,13	0,14
BG033	SHUMEN	NA	0,14	0,14
BG034	TURGOVISHTE	NA	0,15	0,16
BG035	RAZGRAD	NA	0,13	0,14
BG036	SILISTRA	NA	0,13	0,14
BG04	YUGOZAPADEN	NA	0,14	0,15
BG041	SOFIA STOLITSA (CAPITAL)	NA	0,14	0,15
BG042	SOFIA	NA	0,17	0,19
BG043	BLAGOEVGRAD	NA	0,11	0,12
BG044	PERNIK	NA	0,17	0,18
BG045	KYUSTENDIL	NA	0,18	0,19
BG05	YUZHEN TSENTRALEN	NA	0,14	0,15
BG051	PLOVDIV	NA	0,14	0,16
BG052	STARA ZAGORA	NA	0,15	0,16
BG053	HASKOVO	NA	0,16	0,18
BG054	PAZARDZHIK	NA	0,13	0,14
BG055	SMOLYAN	NA	0,10	0,12
BG056	KARDZHALI	NA	0,09	0,11
BG06	YUGOIZTOCHEN	NA	0,13	0,15
BG061	BURGAS	NA	0,13	0,14
BG062	SLIVEN	NA	0,13	0,14
BG063	YAMBOL	NA	0,16	0,18
CY	**CYPRUS (*)**	NA	NA	0,12
CZ	**CZECH REPUBLIC**	0,12	0,13	0,14

CZ01	PRAHA	0,15	0,16	0,16
CZ02	STREDNÍ CECHY	0,13	0,14	0,14
CZ03	JIHOZÁPAD	NA	0,13	0,14
CZ031	JIHOCECKÝ	NA	0,13	0,13
CZ032	PLZENSKÝ	NA	0,13	0,14
CZ04	SEVEROZÁPAD	NA	0,11	0,12
CZ041	KARLOVARSKÝ	NA	0,11	0,12
CZ042	ÚSTECKÝ	NA	0,12	0,12
CZ05	SEVEROVÝCHOD	NA	0,13	0,14
CZ051	LIBERECKÝ	NA	0,12	0,13
CZ052	KRÁLOVEHRADECKÝ	NA	0,14	0,14
CZ053	PARDUBICKÝ	NA	0,13	0,14
CZ06	JIHOVÝCHOD	NA	0,13	0,14
CZ061	VYSOCINA	NA	0,13	0,14
CZ062	JIHOMORAVSKÝ	NA	0,14	0,14
CZ07	STREDNÍ MORAVA	NA	0,13	0,13
CZ071	OLOMOUCKÝ	NA	0,13	0,13
CZ072	ZLÍNSKÝ	NA	0,13	0,13
CZ08	MORAVSKOSLEZKO	NA	0,11	0,12
EE	**ESTONIA**	0,12	0,13	0,15
EE001	PÕHJA-EESTI	0,10	0,12	0,13
EE004	LÄÄNE-EESTI	0,13	0,14	0,16
EE002	KESK-EESTI	0,13	0,14	0,15
EE003	KIRDE-EESTI	0,10	0,13	0,15
EE005	LÕUNA-EESTI	0,14	0,15	0,16
HU	**HUNGARY**	0,13	0,14	0,15
HU01	KÖZÉP-MAGYARORSZÁG	0,15	0,15	0,15
HU011	BUDAPEST	NA	NA	0,17
HU012	PEST	NA	NA	0,13
HU02	KÖZÉP-DUNÁNTÚL	0,11	0,12	0,13
HU021	FEJÉR	NA	NA	0,13
HU022	KOMÁROM-ESZTERGOM	NA	NA	0,13
HU023	VESZPRÉM	NA	NA	0,13
HU03	NYUGAT-DUNÁNTÚL	0,13	0,14	0,15
HU031	GYOR-MOSON-SOPRON	NA	NA	0,14
HU032	VAS	NA	NA	0,15
HU033	ZALA	NA	NA	0,15
HU04	DÉL-DUNÁNTÚL	0,13	0,14	0,15
HU041	BARANYA	NA	NA	0,14
HU042	SOMOGY	NA	NA	0,15
HU043	TOLNA	NA	NA	0,15
HU05	ÉSZAK-MAGYARORSZÁG	0,13	0,14	0,15
HU051	BORSOD-ABAÚJ-ZEMPLÉN	NA	NA	0,14
HU052	HEVES	NA	NA	0,16
HU053	NÓGRÁD	NA	NA	0,15
HU06	ÉSZAK-ALFÖLD	0,12	0,13	0,13
HU061	HAJDÚ-BIHAR	NA	NA	0,13
HU062	JÁSZ-NAGYKUN-SZOLNOK	NA	NA	0,15
HU063	SZABOLCS-SZATMÁR-BEREG	NA	NA	0,13
HU07	DÉL-ALFÖLD	0,14	0,15	0,15
HU071	BÁCS-KISKUN	NA	NA	0,15
HU072	BÉKÉS	NA	NA	0,16
HU073	CSONGRÁD	NA	NA	0,15
LT	**LITHUANIA**	NA	0,12	0,13

LT001	ALYTAUS (APSKRITIS)	NA	0,13	0,15
LT002	KAUNO (APSKRITIS)	NA	0,12	0,13
LT003	KLAIPEDOS (APSKRITIS)	NA	0,10	0,12
LT004	MARIJAMPOLES (APSKRITIS)	NA	0,13	0,15
LT005	PANEVEZIO (APSKRITIS)	NA	0,14	0,14
LT006	SIAULIU (APSKRITIS)	NA	0,12	0,13
LT007	TAURAGES (APSKRITIS)	NA	0,13	0,14
LT008	TELSIU (APSKRITIS)	NA	0,12	0,13
LT009	UTENOS (APSKRITIS)	NA	0,15	0,16
LT00A	VILNIAUS (APSKRITIS)	NA	0,10	0,12
LV	**LATVIA**	0,13	0,13	0,14
LV001	RIGA	NA	0,13	0,15
LV002	VIDZEME	NA	0,14	0,15
LV003	KURZEME	NA	0,13	0,14
LV004	ZEMGALE	NA	0,12	0,13
LV005	LATGALE	NA	0,15	0,16
MT	**MALTA**	NA	0,11	NA
PL	**POLAND**	0,09	0,11	0,12
PL01	DOLNOSLASKIE	0,10	0,11	0,11
PL02	KUJAWSKO-POMORSKIE	0,12	0,13	0,13
PL03	LUBELSKIE	0,09	0,10	0,11
PL04	LUBUSKIE	0,13	0,14	0,14
PL05	LÓDZKIE	0,10	0,11	0,12
PL06	MALOPOLSKIE	0,12	0,13	0,14
PL07	MAZOWIECKIE	0,09	0,10	0,11
PL08	OPOLSKIE	0,10	0,11	0,12
PL09	PODKARPACKIE	0,11	0,12	0,13
PL0A	PODLASKIE	0,09	0,10	0,10
PL0B	POMORSKIE	0,09	0,10	0,11
PL0C	SLASKIE	0,12	0,13	0,14
PL0D	SWIETOKRZYSKIE	0,08	0,09	0,10
PL0E	WARMINSKO-MAZURSKIE	0,10	0,11	0,11
PL0F	WIELKOPOLSKIE	0,08	0,10	0,11
PL0G	ZACHODNIOPOMORSKIE	0,08	0,10	0,11
RO	**RO ROMANIA**	0,10	0,12	0,13
RO01	RO01 NORD-EST	0,09	0,11	0,12
RO011	RO011 BACAU	NA	NA	0,11
RO012	RO012 BOTOSANI	NA	NA	0,15
RO013	RO013 IASI	NA	NA	0,11
RO014	RO014 NEAMT	NA	NA	0,12
RO015	RO015 SUCEAVA	NA	NA	0,13
RO016	RO016 VASLUI	NA	NA	0,13
RO02	RO02 SUD-EST	0,09	0,11	0,12
RO021	RO021 BRAILA	NA	NA	0,14
RO022	RO022 BUZAU	NA	NA	0,16
RO023	RO023 CONSTANTA	NA	NA	0,09
RO024	RO024 GALATI	NA	NA	0,11
RO025	RO025 TULCEA	NA	NA	0,11
RO026	RO026 VRANCEA	NA	NA	0,15
RO03	RO03 SUD	0,11	0,13	0,14
RO031	RO031 ARGES	NA	NA	0,12
RO032	RO032 CALARASI	NA	NA	0,15
RO033	RO033 DÂMBOVITA	NA	NA	0,13
RO034	RO034 GIURGIU	NA	NA	0,18

RO035	RO035 IALOMITA	NA	NA	0,14
RO036	RO036 PRAHOVA	NA	NA	0,13
RO037	RO037 TELEORMAN	NA	NA	0,19
RO04	RO04 SUD-VEST	0,11	0,13	0,14
RO041	RO041 DOLJ	NA	NA	0,15
RO042	RO042 GORJ	NA	NA	0,12
RO043	RO043 MEHEDINTI	NA	NA	0,15
RO044	RO044 OLT	NA	NA	0,14
RO045	RO045 VÂLCEA	NA	NA	0,14
RO05	RO05 VEST	0,11	0,12	0,13
RO051	RO051 ARAD	NA	NA	0,15
RO052	RO052 CARAS-SEVERIN	NA	NA	0,13
RO053	RO053 HUNEDOARA	NA	NA	0,11
RO054	RO054 TIMIS	NA	NA	0,13
RO06	RO06 NORD-VEST	0,10	0,11	0,12
RO061	RO061 BIHOR	NA	NA	0,13
RO062	RO062 BISTRITA-NASAUD	NA	NA	0,12
RO063	RO063 CLUJ	NA	NA	0,13
RO064	RO064 MARAMURES	NA	NA	0,10
RO065	RO065 SATU MARE	NA	NA	0,11
RO066	RO066 SALAJ	NA	NA	0,14
RO07	RO07 CENTRU	0,10	0,11	0,12
RO071	RO071 ALBA	NA	NA	0,13
RO072	RO072 BRASOV	NA	NA	0,10
RO073	RO073 COVASNA	NA	NA	0,12
RO074	RO074 HARGHITA	NA	NA	0,12
RO075	RO075 MURES	NA	NA	0,14
RO076	RO076 SIBIU	NA	NA	0,11
RO08	RO08 BUCURESTI	0,11	0,12	0,13
RO081	RO081 BUCURESTI (CAPITAL)	NA	NA	0,13
RO082	RO082 ILFOV	NA	NA	0,14
SI	**SLOVENIA**	0,11	0,12	0,14
SI001	POMURSKA	0,13	0,14	0,15
SI002	PODRAVSKA	0,10	0,12	0,14
SI003	KOROSKA	0,09	0,10	0,12
SI004	SAVINJSKA	0,10	0,11	0,13
SI005	ZASAVSKA	0,11	0,13	0,15
SI006	SPODNJEPOSAVSKA	0,12	0,13	0,15
SI009	GORENJSKA	0,10	0,11	0,13
SI00A	NOTRANJSKO-KRASKA	0,13	0,14	0,15
SI00B	GORISKA	0,13	0,14	0,16
SI00C	OBALNO-KRASKA	0,11	0,13	0,15
SI00D	JUGOVZHODNA SLOVENIJA	0,10	0,11	0,13
SI00E	OSREDNJESLOVENSKA	0,10	0,12	0,13
SK	**SLOVAK REPUBLIC**	0,10	0,11	0,11
SK01	BRATISLAVSKÝ	NA	NA	0,12
SK02	ZÁPADNÉ SLOVENSKO	NA	NA	0,12
SK021	TRNAVSKÝ KRAJ	NA	NA	0,11
SK022	TRENCIANSKÝ KRAJ	NA	NA	0,12
SK023	NITRIANSKÝ KRAJ	NA	NA	0,13
SK03	STREDNÉ SLOVENSKO	NA	NA	0,11
SK031	ZILINSKÝ KRAJ	NA	NA	0,11
SK032	BANSKOBYSTRICKÝ KRAJ	NA	NA	0,12
SK04	VÝCHODNÉ SLOVENSKO	NA	NA	0,10

SK041	PRESOVSKÝ KRAJ	NA	NA	0,10
SK042	KOSICKÝ KRAJ	NA	NA	0,11
NO	**NORWAY**	NA	NA	NA
N001	NO01 ØSTFOLD	0,16	0,17	0,17
N002	NO02 AKERSHUS	0,12	0,13	0,13
N003	NO03 OSLO	0,20	0,17	0,15
N004	NO04 HEDMARK	0,19	0,20	0,19
N005	NO05 OPPLAND	0,19	0,19	0,18
N006	NO06 BUSKERUD	0,17	0,17	0,16
N007	NO07 VESTFOLD	0,17	0,17	0,16
N008	NO08 TELEMARK	0,19	0,18	0,18
N009	NO09 AUST-AGDER	0,17	0,16	0,15
N010	NO10 VEST-AGDER	0,15	0,15	0,15
N011	NO11 ROGALAND	0,14	0,13	0,13
N012	NO12 HORDALAND	0,16	0,15	0,15
N014	NO14 SOGN OG FJORDANE	0,18	0,17	0,17
N015	NO15 MØRE OG ROMSDAL	0,17	0,17	0,17
N016	NO16 SØR-TRØNDELAG	0,16	0,16	0,15
N017	NO17 NORD-TRØNDELAG	0,17	0,17	0,17
N018	NO18 NORDLAND	0,17	0,16	0,16
N019	NO19 TROMS	0,14	0,14	0,10
N020	NO20 FINNMARK	0,12	0,12	0,13
CH	**SCHWEIZ / SUISSE (***)**	NA	0,15	0,15
CH	ZÜRICH	NA	0,15	0,15
CH	BERN	NA	0,17	0,17
CH	LUZERN	NA	0,14	0,19
CH	URI	NA	0,15	0,15
CH	SCHWYZ	NA	0,12	0,13
CH	OBWALDEN	NA	0,14	0,14
CH	NIDWALDEN	NA	0,12	0,13
CH	GLARUS	NA	0,16	0,16
CH	ZUG	NA	0,12	0,12
CH	FRIBOURG	NA	0,13	0,13
CH	SOLOTHURN	NA	0,16	0,16
CH	BASEL-STADT	NA	0,21	0,21
CH	BASEL-LANDSCHAFT	NA	0,15	0,16
CH	SCHAFFHAUSEN	NA	0,17	0,18
CH	APPENZELL A.RH.	NA	0,16	0,16
CH	APPENZELL I.RH.	NA	0,15	0,16
CH	ST.GALLEN	NA	0,14	0,14
CH	GRAUBÜNDEN	NA	0,15	0,15
CH	AARGAU	NA	0,13	0,13
CH	THURGAU	NA	0,14	0,14
CH	TICINO	NA	0,17	0,18
CH	VAUD	NA	0,16	0,16
CH	VALAIS	NA	0,13	0,15
CH	NEUCHÂTEL	NA	0,17	0,17
CH	GENÈVE	NA	0,14	0,15
CH	JURA	NA	0,16	0,16

(*) Data for 2001
(**) Without overseas departments
(***) Data for 2000

Table 9. Regions with a high share (18% or more) of the population in the ages 65+ year 1999. Six typologies with regard to total and natural population development and net-migration 1996-1999

Six typologies:

1	BT>0	BM>0	BN>0
2	BT>0	BM>0	BN<0
3	BT>0	BM<0	BN>0
4	BT<0	BM<0	BN<0
5	BT<0	BM>0	BN<0
6	BT<0	BM<0	BN>0

BT=Total population development
BM=Net migration
BN=Natural population development

NUTS	REGION					Typology
IT13	IT13 LIGURIA	0,24	-4,99	-6,70	1,71	5
FR21	FR41 LORRAINE	0,24	-0,60	2,88	-3,48	6
FR42	FR63 LIMOUSIN	0,24	-2,32	-3,27	0,95	5
GR4	GR41 VOREIO AIGAIO	0,23	-3,35	-4,35	1,00	5
PT14	PT14 ALENTEJO	0,23	-8,80	-6,06	-2,74	4
IT52	IT52 UMBRIA	0,22	2,85	-3,57	6,42	2
IT4	IT4 EMILIA-ROMAGNA	0,22	2,93	-4,08	7,00	2
IT51	IT51 TOSCANA	0,22	0,56	-4,24	4,79	2
ES3	ES41 CASTILLA Y LEÓN	0,21	-2,71	-2,86	0,15	5
BG01	SEVEROZAPADEN	0,21	-11,81	-11,31	-0,49	4
ES23	ES24 ARAGÓN	0,21	-2,04	-2,86	0,82	5
GR25	GR25 PELOPONNISOS	0,21	0,94	-3,08	4,03	2
IT33	IT33 FRIULI-VENEZIA GIULIA	0,21	-1,25	-5,01	3,75	5
UKK2	HAMPSHIRE	0,21	5,37	1,85	3,52	1
FR26	FR53 POITOU-CHARENTES	0,21	3,07	0,51	2,56	1
ES12	ES12 PRINCIPADO DE ASTURIAS	0,20	-5,10	-5,16	0,06	5
GR22	GR22 IONIA NISIA	0,20	7,03	-1,99	9,02	2
IT71	IT72 MOLISE	0,20	-2,52	-2,22	-0,30	4
FR52	FR81 LANGUEDOC-ROUSSILLON	0,20	10,43	-1,09	11,52	2
IT11	IT11 PIEMONTE	0,20	-0,29	-3,49	3,21	5
FR51	FR72 AUVERGNE	0,20	0,01	-2,42	2,42	2
FR41	FR62 MIDI-PYRÉNÉES	0,20	5,51	0,11	5,40	1
SE07	MELLERSTA NORRLAND	0,20	-8,42	-3,85	-4,57	4
FR3	FR61 AQUITAINE	0,20	4,31	0,06	4,25	1
SE06	NORRA MELLANSVERIGE	0,20	-6,99	-3,10	-3,89	4
IT6	IT71 ABRUZZO	0,20	1,79	-0,81	2,60	2
FR61	FR83 CORSE	0,19	1,29	0,13	1,16	1
FR26	FR26 BOURGOGNE	0,19	-0,55	0,21	-0,76	6
ES11	ES11 GALICIA	0,19	-1,30	-3,64	2,34	5
PT12	PT12 CENTRO (P)	0,19	-0,29	-1,99	1,70	5
N004	FINNMARK	0,19	-10,59	6,93	-17,52	6
FR53	FR82 PROVENCE-ALPES-CÔTE D'AZUR	0,19	5,22	1,44	3,78	1
ES22	ES23 LA RIOJA	0,19	-1,86	-1,41	-0,45	4
GR21	GR21 IPEIROS	0,19	5,98	-2,07	8,04	2
ES4	ES42 CASTILLA-LA MANCHA	0,19	3,94	0,00	3,94	1
UKF3	LINCOLNSHIRE	0,19	6,46	-1,20	7,66	2
SE09	SMALAND MED ÍAMA	0,19	-3,49	-1,44	-2,05	4

PT15	PT15 ALGARVE	0,19	3,08	-2,21	5,29	2
GR24	GR24 STEREA ELLADA	0,19	2,36	-1,96	4,33	2
FR25	FR52 BRETAGNE	0,19	5,96	1,45	4,51	1
N005	HEDMARK	0,18	0,13	-2,04	2,18	2
ES63	FR24 CENTRE	0,18	2,47	2,05	0,42	1
BG02	SEVEREN TSENTRALEN	0,18	-9,55	-9,24	-0,32	4
UKJ2	SURREY	0,18	7,43	1,94	5,48	1
	WEST SUSSEX	0,18	9,76	-1,48	11,23	2
IT12	IT12 VALLE D'AOSTA	0,18	3,35	-1,95	5,30	2
DK007	DK007 BORNHOLMS AMT	0,18	-4,45	-3,71	-0,74	4
ES13	ES13 CANTABRIA	0,18	-0,19	-2,60	2,41	5
SE04	SYDSVERIGE	0,18	2,15	-0,85	3,01	2

Table A10. Dependency rates 1995 and 1999**.**Total population/population 20-64 years.

		1995	1999
BE	**BE BELGIUM**	1,66	1,68
BE1	BE1 RÉGION BXL-CAPITALE	1,68	1,68
BE2	BE2 VLAAMS GEWEST	1,64	1,66
BE21	BE21 ANTWERPEN	1,65	1,67
BE22	BE22 LIMBURG	1,60	1,61
BE23	BE23 OOST-VLAANDERERN	1,64	1,65
BE24	BE24 VLAAMS BRABANT	1,63	1,66
BE25	BE25 WEST-VLAANDEREN	1,68	1,70
BE3	BE3 RÉGION WALLONNE	1,70	1,71
BE31	BE31 BRABANT WALLON	1,67	1,69
BE32	BE32 HAINAUT	1,70	1,71
BE33	BE33 LIÈGE	1,68	1,70
BE34	BE34 LUXEMBOURG (BE)	1,75	1,76
BE35	BE35 NAMUR	1,71	1,72
DK	**DK DENMARK**	1,64	1,63
DK001	DK001 KØBENHAVN OG FREDERIKSBERG	1,52	1,47
DK002	DK002 KØBENHAVNS AMT	1,63	1,65
DK003	DK003 FREDERIKSBORG AMT	1,60	1,62
DK004	DK004 ROSKILDE AMT	1,55	1,57
DK005	DK005 VESTSJÆLLANDS AMT	1,67	1,66
DK006	DK006 STORSTRØMS AMT	1,70	1,68
DK007	DK007 BORNHOLMS AMT	1,75	1,73
DK008	DK008 FYNS AMT	1,66	1,65
DK009	DK009 SØNDERJYLLANDS AMT	1,70	1,69
DK00A	DK00A RIBE AMT	1,69	1,68
DK00B	DK00B VEJLE AMT	1,67	1,65
DK00C	DK00C RINGKØBING AMT	1,70	1,68
DK00D	DK00DE ÅRHUS AMT	1,61	1,59
DK00E	DK00 VIBORG AMT	1,74	1,72
DK00F	DK00F NORDJYLLANDS AMT	1,68	1,66
DE	**DE GERMANY (INCLUDING EX-GDR FROM 1991)**	1,58	1,60
DE1	DE1 BADEN-WÜRTTEMBERG	1,58	1,60
DE11	DE11 STUTTGART	1,57	1,59
DE12	DE12 KARLSRUHE	1,56	1,58
DE13	DE13 FREIBURG	1,60	1,62
DE14	DE14 TÜBINGEN	1,60	1,63
DE2	DE2 BAYERN	1,58	1,60
DE21	DE21 OBERBAYERN	1,53	1,56
DE22	DE22 NIEDERBAYERN	1,62	1,63
DE23	DE23 OBERPFALZ	1,61	1,63
DE24	DE24 OBERFRANKEN	1,62	1,64
DE25	DE25 MITTELFRANKEN	1,58	1,60
DE26	DE26 UNTERFRANKEN	1,62	1,64
DE27	DE27 SCHWABEN	1,62	1,64
DE3	DE3 BERLIN	1,51	1,50
DE4	DE4 BRANDENBURG	1,59	1,57
DE5	DE5 BREMEN	1,56	1,58
DE6	DE6 HAMBURG	1,54	1,53
DE7	DE7 HESSEN	1,56	1,58

DE71	DE71 DARMSTADT	1,53	1,55
DE72	DE72 GIEßEN	1,59	1,61
DE73	DE73 KASSEL	1,63	1,64
DE8	DE8 MECKLENBURG-VORPOMMERN	1,61	1,59
DE9	DE9 NIEDERSACHSEN	1,60	1,62
DE91	DE91 BRAUNSCHWEIG	1,59	1,61
DE92	DE92 HANNOVER	1,58	1,60
DE93	DE93 LÜNEBURG	1,60	1,62
DE94	DE94 WESER-EMS	1,62	1,64
DEA	DEA NORDRHEIN-WESTFALEN	1,58	1,61
DEA1	DEA1 DÜSSELDORF	1,57	1,60
DEA2	DEA2 KÖLN	1,55	1,58
DEA3	DEA3 MÜNSTER	1,61	1,63
DEA4	DEA4 DETMOLD	1,64	1,66
DEA5	DEA5 ARNSBERG	1,60	1,62
DEB	DEB RHEINLAND-PFALZ	1,61	1,63
DEB1	DEB1 KOBLENZ	1,63	1,66
DEB2	DEB2 TRIER	1,64	1,66
DEB3	DEB3 RHEINHESSEN-PFALZ	1,58	1,60
DEC	DEC SAARLAND	1,58	1,61
DED	DED SACHSEN	1,63	1,61
DED1	DED1 CHEMNITZ	NA	1,62
DED2	DED2 DRESDEN	NA	1,61
DED3	DED3 LEIPZIG	NA	1,58
DEE	DEE SACHSEN-ANHALT	1,61	1,59
DEE1	DEE1 DESSAU	1,61	1,59
DEE2	DEE2 HALLE	1,61	1,59
DEE3	DEE3 MAGDEBURG	1,61	1,59
DEF	DEF SCHLESWIG-HOLSTEIN	1,57	1,59
DEG	DEG THÜRINGEN	1,61	1,59
GR	**GR GREECE**	1,66	1,64
GR1	GR1 VOREIA ELLADA	1,65	1,64
GR11	GR11 ANATOLIKI MAKEDONIA, THRAKI	1,67	1,68
GR12	GR12 KENTRIKI MAKEDONIA	1,61	1,61
GR13	GR13 DYTIKI MAKEDONIA	1,69	1,69
GR14	GR14 THESSALIA	1,70	1,68
GR2	GR2 KENTRIKI ELLADA	1,71	1,68
GR21	GR21 IPEIROS	1,69	1,66
GR22	GR22 IONIA NISIA	1,75	1,73
GR23	GR23 DYTIKI ELLADA	1,73	1,68
GR24	GR24 STEREA ELLADA	1,67	1,64
GR25	GR25 PELOPONNISOS	1,72	1,70
GR3	GR3 ATTIKI	1,62	1,60
GR4	GR4 NISIA AIGAIOU, KRITI	1,75	1,72
GR41	GR41 VOREIO AIGAIO	1,84	1,83
GR42	GR42 NOTIO AIGAIO	1,69	1,66
GR43	GR43 KRITI	1,75	1,71
EES	**ES SPAIN**	1,67	1,63
ES1	ES1 NOROESTE	1,68	1,63
ES11	ES11 GALICIA	1,69	1,64
ES12	ES12 PRINCIPADO DE ASTURIAS	1,65	1,61
ES13	ES13 CANTABRIA	1,67	1,62
ES2	ES2 NORESTE	1,62	1,59
ES21	ES21 PAIS VASCO	1,57	1,54

ES22	ES22 COMUNIDAD FORAL DE NAVARRA	1,64	1,61
ES23	ES23 LA RIOJA	1,68	1,64
ES24	ES24 ARAGÓN	1,69	1,66
ES3	ES3 COMUNIDAD DE MADRID	1,61	1,57
ES4	ES4 CENTRO (E)	1,73	1,70
ES41	ES41 CASTILLA Y LEÓN	1,70	1,67
ES42	ES42 CASTILLA-LA MANCHA	1,77	1,73
ES43	ES43 EXTREMADURA	1,76	1,72
ES5	ES5 ESTE	1,65	1,61
ES51	ES51 CATALUÑA	1,64	1,60
ES52	ES52 COMUNIDAD VALENCIANA	1,68	1,62
ES53	ES53 BALEARES	1,67	1,63
ES6	ES6 SUR	1,72	1,66
ES61	ES61 ANDALUCIA	1,72	1,66
ES62	ES62 MURCIA	1,72	1,67
ES63	ES63 CEUTA Y MELILLA	1,75	1,71
ES7	ES7 CANARIAS	1,63	1,58
FR	**FR FRANCE (**)**	1,70	NA
FR1	FR1 ÎLE DE FRANCE	1,61	1,61
FR2	FR2 BASSIN PARISIEN	1,73	NA
FR21	FR21 CHAMPAGNE-ARDENNE	1,71	1,71
FR22	FR22 PICARDIE	1,72	1,72
FR23	FR23 HAUTE-NORMANDIE	1,72	1,72
FR24	FR24 CENTRE	1,74	1,74
FR25	FR25 BASSE-NORMANDIE	1,75	1,76
FR26	FR26 BOURGOGNE	1,74	1,75
FR3	FR3 NORD - PAS-DE-CALAIS	1,76	1,05
FR4	FR4 EST	1,68	NA
FR41	FR41 LORRAINE	1,69	1,77
FR42	FR42 ALSACE	1,65	1,64
FR43	FR43 FRANCHE-COMTÉ	1,71	1,71
FR5	FR5 OUEST	1,75	NA
FR51	FR51 PAYS DE LA LOIRE	1,75	1,74
FR52	FR52 BRETAGNE	1,74	1,75
FR53	FR53 POITOU-CHARENTES	1,75	1,76
FR6	FR6 SUD-OUEST	1,71	NA
FR61	FR61 AQUITAINE	1,71	1,73
FR62	FR62 MIDI-PYRÉNÉES	1,70	1,72
FR63	FR63 LIMOUSIN	1,75	1,77
FR7	FR7 CENTRE-EST	1,69	NA
FR71	FR71 RHÔNE-ALPES	1,68	1,69
FR72	FR72 AUVERGNE	1,71	1,72
FR8	FR8 MÉDITERRANÉE	1,73	NA
FR81	FR81 LANGUEDOC-ROUSSILLON	1,74	1,75
FR82	FR82 PROVENCE-ALPES-CÔTE D'AZUR	1,72	1,74
FR83	FR83 CORSE	1,69	1,71
IE	**IE011 IRELAND**	NA	NA
IE01	IE012 BORDER, MIDLANDS AND WESTERN	NA	NA
IE02	IE013 SOUTHERN AND EASTERN	NA	NA
IT	**IT ITALY**	1,61	1,60
IT1	IT1 NORD OVEST	1,58	1,59
IT11	IT11 PIEMONTE	1,57	1,57
IT12	IT12 VALLE D'AOSTA	1,54	1,54
IT13	IT13 LIGURIA	1,61	1,62

IT2	IT2 LOMBARDIA	1,53	1,54
IT3	IT3 NORD EST	1,57	1,56
IT31	IT31 TRENTINO-ALTO ADIGE	1,60	1,60
IT32	IT32 VENETO	1,56	1,55
IT33	IT33 FRIULI-VENEZIA GIULIA	1,58	1,57
IT4	IT4 EMILIA-ROMAGNA	1,58	1,59
IT5	IT5 CENTRO (I)	1,62	1,62
IT51	IT51 TOSCANA	1,61	1,60
IT52	IT52 UMBRIA	1,64	1,64
IT53	IT53 MARCHE	1,64	1,64
IT6	IT6 LAZIO	1,57	1,57
IT7	IT7 ABRUZZO-MOLISE	1,68	1,67
IT71	IT71 ABRUZZO	1,67	1,66
IT72	IT72 MOLISE	1,70	1,70
IT8	IT8 CAMPANIA	1,69	1,67
IT9	IT9 SUD	1,69	1,67
IT91	IT91 PUGLIA	1,68	1,65
IT92	IT92 BASILICATA	1,70	1,68
IT93	IT93 CALABRIA	1,72	1,69
ITA	ITA SICILIA	1,70	1,69
ITB	ITB SARDEGNA	1,61	1,57
LU	**LU LUXEMBOURG**	1,60	1,63
NL	**NL NETHERLANDS**	1,60	1,61
NL1	NL1 NOORD-NEDERLAND	1,63	1,64
NL11	NL11 GRONINGEN	1,59	1,60
NL12	NL12 FRIESLAND	1,67	1,66
NL13	NL13 DRENTHE	1,64	1,65
NL2	NL2 OOST-NEDERLAND	1,63	1,64
NL21	NL21 OVERIJSSEL	1,64	1,65
NL22	NL22 GELDERLAND	1,62	1,62
NL23	NL23 FLEVOLAND	1,67	1,65
NL3	NL3 WEST-NEDERLAND	1,60	1,60
NL31	NL31 UTRECHT	1,59	1,59
NL32	NL32 NOORD-HOLLAND	1,57	1,57
NL33	NL33 ZUID-HOLLAND	1,61	1,62
NL34	NL34 ZEELAND	1,68	1,69
NL4	NL4 ZUID-NEDERLAND	1,57	1,59
NL41	NL41 NOORD-BRABANT	1,57	1,59
NL42	NL42 LIMBURG (NL)	1,57	1,59
AT	**AT AUSTRIA**	1,62	1,62
AT1	AT10 OSTÖSTERREICH	1,61	1,61
AT11	AT11 BURGENLAND	1,66	1,66
AT12	AT12 NIEDERÖSTERREICH	1,65	1,65
AT13	AT13 WIEN	1,57	1,56
AT2	AT20 SUDÖSTERREICH	1,64	1,64
AT21	AT21 KÄRNTEN	1,65	1,66
AT22	AT22 STEIERMARK	1,64	1,64
AT3	AT30 WESTÖSTERREICH	1,63	1,63
AT31	AT31 OBERÖSTERREICH	1,63	1,65
AT32	AT32 SALZBURG	1,61	1,61
AT33	AT33 TIROL	1,62	1,62
AT34	AT34 VORARLBERG	1,62	1,62
PT	**PT PORTUGAL**	1,69	1,65
PT1	PT1 PORTUGAL (CONTINENT)	1,68	1,64

PT11	PT11 NORTE	1,69	1,64
PT12	PT12 CENTRO (P)	1,75	1,71
PT13	PT13 LISBOA E VALE DO TEJO	1,63	1,60
PT14	PT14 ALENTEJO	1,78	1,76
PT15	PT15 ALGARVE	1,71	1,67
PT2	PT2 AÇORES (PT)	1,85	1,78
PT3	PT3 MADEIRA (PT)	1,78	1,72
FI	**FI FINLAND**	1,66	1,65
FI1	FI1 MANNER-SUOMI	1,66	1,65
FI13	FI13 ITÄ-SUOMI	1,69	1,71
FI14	FI14 VÄLI-SUOMI	1,74	1,73
FI15	FI15 POHJOIS-SUOMI	1,71	1,71
FI11	FI16 UUSIMAA (SUURALUE)	1,57	1,56
FI12	FI17 ETELÄ-SUOMI	1,66	1,66
FI2	FI2 ÅLAND	1,69	1,67
SE	**SE SWEDEN**	1,73	1,71
SE01	SE01 STOCKHOLM	1,64	1,62
SE02	SE02 ÖSTRA MELLANSVERIGE	1,74	1,72
SE04	SE04 SYDSVERIGE	1,74	1,72
SE06	SE06 NORRA MELLANSVERIGE	1,78	1,77
SE07	SE07 MELLERSTA NORRLAND	1,78	1,76
SE08	SE08 ÖVRE NORRLAND	1,72	1,72
SE09	SE09 SMÅLAND MED ÖARNA	1,79	1,79
SE0A	SE0A VÄSTSVERIGE	1,74	1,73
UK	**UK UNITED KINGDOM**	1,70	1,69
UKC	UKC NORTH EAST	1,71	1,71
UKC1	UKC1 TEES VALLEY AND DURHAM	1,71	1,71
UKC2	UKC2 NORTHUMBERLAND, TYNE AND WEAR	1,70	1,71
UKD	UKD NORTH WEST (INCLUDING MERSEYSIDE)	1,71	1,71
UKD1	UKD1 CUMBRIA	1,71	1,71
UKD2	UKD2 CHESHIRE	1,68	1,68
UKD3	UKD3 GREATER MANCHESTER	1,71	1,70
UKD4	UKD4 LANCASHIRE	1,73	1,73
UKD5	UKD5 MERSEYSIDE	1,73	1,73
UKE	UKE YORKSHIRE AND THE HUMBER	1,70	1,71
UKE1	UKE1 EAST RIDING AND NORTH LINCOLNSHIRE	1,72	1,73
UKE2	UKE2 NORTH YORKSHIRE	1,71	1,72
UKE3	UKE3 SOUTH YORKSHIRE	1,69	1,69
UKE4	UKE4 WEST YORKSHIRE	1,70	1,70
UKF	UKF EAST MIDLANDS	1,69	1,70
UKF1	UKF1 DERBYSHIRE AND NOTTINGHAMSHIRE	1,68	1,69
UKF2	UKF2 LEICESTERSHIRE, RUTLAND AND NORTHANTS	1,69	1,69
UKF3	UKF3 LINCOLNSHIRE	1,73	1,75
UKG	UKG WEST MIDLANDS	1,70	1,71
UKG1	UKG1 HEREFORDSHIRE, WORCESTERSHIRE AND WARKS	1,69	1,69
UKG2	UKG2 SHROPSHIRE AND STAFFORDSHIRE	1,67	1,68
UKG3	UKG3 WEST MIDLANDS	1,73	1,74
UKH	UKH EASTERN	1,69	1,69

UKH1	UKH1 EAST ANGLIA	1,71	1,71
UKH2	UKH2 BEDFORDSHIRE, HERTFORDSHIRE	1,66	1,67
UKH3	UKH3 ESSEX	1,69	1,69
UKI	UKI LONDON	NA	1,60
UKI1	UKI1 INNER LONDON	NA	1,56
UKI2	UKI2 OUTER LONDON	NA	1,63
UKJ	UKJ SOUTH EAST	1,70	1,69
UKJ1	UKJ1 BERKSHIRE, BUCKS AND OXFORDSHIRE	1,64	1,64
UKJ2	UKJ2 SURREY, EAST AND WEST SUSSEX	1,74	1,73
UKJ3	UKJ3 HAMPSHIRE AND ISLE OF WIGHT	1,69	1,69
UKJ4	UKJ4 KENT	1,71	1,72
UKK	UKK SOUTH WEST	1,74	1,74
UKK1	UKK1 GLOUCESTERSHIRE, WILTSHIRE AND NORTH SOMERSET	1,69	1,69
UKK2	UKK2 DORSET AND SOMERSET	1,79	1,79
UKK3	UKK3 CORNWALL AND ISLES OF SCILLY	NA	1,77
UKK4	UKK4 DEVON	NA	1,77
UKL	UKL WALES	1,75	1,75
UKL1	UKL1 WEST WALES AND THE VALLEYS	NA	1,76
UKL2	UKL2 EAST WALES	NA	1,72
UKM	UKM SCOTLAND	1,67	1,67
UKM1	UKM1 NORTH EASTERN SCOTLAND	1,64	1,64
UKM2	UKM2 EASTERN SCOTLAND	1,66	1,66
UKM3	UKM3 SOUTH WESTERN SCOTLAND	1,68	1,68
UKM4	UKM4 HIGHLANDS AND ISLANDS	1,71	1,71
UKN	UKN NORTHERN IRELAND	1,79	1,76
BG	**BULGARIA**	1,68	1,64
BG01	SEVEROZAPADEN	1,78	1,75
BG011	VIDIN	1,80	1,77
BG012	MONTANA	1,79	1,77
BG013	VRATSA	1,75	1,73
BG02	SEVEREN TSENTRALEN	1,70	1,67
BG021	PLEVEN	1,73	1,71
BG022	LOVECH	1,75	1,72
BG023	VELIKO TARNOVO	1,70	1,66
BG024	GABROVO	1,66	1,63
BG025	RUSE	1,66	1,63
BG03	SEVEROIZTOCHEN	1,67	1,63
BG031	VARNA	1,63	1,60
BG032	DOBRICH	1,67	1,63
BG033	SHUMEN	1,70	1,66
BG034	TURGOVISHTE	1,73	1,69
BG035	RAZGRAD	1,70	1,65
BG036	SILISTRA	1,66	1,62
BG04	YUGOZAPADEN	1,64	1,60
BG041	SOFIA STOLITSA (CAPITAL)	1,60	1,55
BG042	SOFIA	1,70	1,71
BG043	BLAGOEVGRAD	1,68	1,64
BG044	PERNIK	1,66	1,64
BG045	KYUSTENDIL	1,70	1,67
BG05	YUZHEN TSENTRALEN	1,68	1,65
BG051	PLOVDIV	1,65	1,62
BG052	STARA ZAGORA	1,69	1,65

BG053	HASKOVO	1,73	1,70
BG054	PAZARDZHIK	1,69	1,67
BG055	SMOLYAN	1,66	1,60
BG056	KARDZHALI	1,72	1,64
BG06	YUGOIZTOCHEN	1,69	1,66
BG061	BURGAS	1,68	1,64
BG062	SLIVEN	1,72	1,69
BG063	YAMBOL	1,71	1,69
CY	**CYPRUS**	NA	NA
CZ	**CZECH REPUBLIC**	1,68	1,61
CZ01	PRAHA	1,66	1,59
CZ02	STREDNÍ CECHY	1,69	1,61
CZ03	JIHOZÁPAD	1,68	1,61
CZ031	JIHOCECKÝ	1,69	1,62
CZ032	PLZENSKÝ	1,67	1,60
CZ04	SEVEROZÁPAD	1,66	1,59
CZ041	KARLOVARSKÝ	1,64	1,58
CZ042	ÚSTECKÝ	1,67	1,59
CZ05	SEVEROVÝCHOD	1,70	1,62
CZ051	LIBERECKÝ	1,68	1,60
CZ052	KRÁLOVEHRADECKÝ	1,70	1,63
CZ053	PARDUBICKÝ	1,70	1,63
CZ06	JIHOVÝCHOD	1,71	1,63
CZ061	VYSOCINA	1,72	1,65
CZ062	JIHOMORAVSKÝ	1,70	1,62
CZ07	STREDNÍ MORAVA	1,70	1,62
CZ071	OLOMOUCKÝ	1,70	1,62
CZ072	ZLÍNSKÝ	1,69	1,62
CZ08	MORAVSKOSLEZKO	1,66	1,60
EE	**ESTONIA**	1,70	1,69
EE001	PÕHJA-EESTI	1,65	1,61
EE004	LÄÄNE-EESTI	1,74	1,75
EE002	KESK-EESTI	1,76	1,77
EE003	KIRDE-EESTI	1,63	1,66
EE005	LÕUNA-EESTI	1,77	1,78
HU	**HUNGARY**	1,68	1,63
HU01	KÖZÉP-MAGYARORSZÁG	1,67	1,60
HU011	BUDAPEST	NA	1,59
HU012	PEST	NA	1,60
HU02	KÖZÉP-DUNÁNTÚL	1,66	1,61
HU021	FEJÉR	NA	1,60
HU022	KOMÁROM-ESZTERGOM	NA	1,59
HU023	VESZPRÉM	NA	1,62
HU03	NYUGAT-DUNÁNTÚL	1,68	1,63
HU031	GYOR-MOSON-SOPRON	NA	1,62
HU032	VAS	NA	1,63
HU033	ZALA	NA	1,63
HU04	DÉL-DUNÁNTÚL	1,67	1,63
HU041	BARANYA	NA	1,62
HU042	SOMOGY	NA	1,63
HU043	TOLNA	NA	1,64
HU05	ÉSZAK-MAGYARORSZÁG	1,69	1,67
HU051	BORSOD-ABAÚJ-ZEMPLÉN	NA	1,68
HU052	HEVES	NA	1,66

HU053	NÓGRÁD	NA	1,63
HU06	ÉSZAK-ALFÖLD	1,71	1,67
HU061	HAJDÚ-BIHAR	NA	1,66
HU062	JÁSZ-NAGYKUN-SZOLNOK	NA	1,66
HU063	SZABOLCS-SZATMÁR-BEREG	NA	1,69
HU07	DÉL-ALFÖLD	1,70	1,65
HU071	BÁCS-KISKUN	NA	1,65
HU072	BÉKÉS	NA	1,65
HU073	CSONGRÁD	NA	1,64
LT	**LITHUANIA**	1,69	1,68
LT001	ALYTAUS (APSKRITIS)	1,75	1,74
LT002	KAUNO (APSKRITIS)	1,66	1,66
LT003	KLAIPEDOS (APSKRITIS)	1,68	1,68
LT004	MARIJAMPOLES (APSKRITIS)	1,78	1,79
LT005	PANEVEZIO (APSKRITIS)	1,73	1,72
LT006	SIAULIU (APSKRITIS)	1,73	1,72
LT007	TAURAGES (APSKRITIS)	1,80	1,79
LT008	TELSIU (APSKRITIS)	1,79	1,77
LT009	UTENOS (APSKRITIS)	1,76	1,74
LT00A	VILNIAUS (APSKRITIS)	1,61	1,60
LV	**LATVIA**	1,68	1,67
LV001	RIGA	1,62	1,61
LV002	VIDZEME	1,77	1,75
LV003	KURZEME	1,73	1,71
LV004	ZEMGALE	1,73	1,71
LV005	LATGALE	1,71	1,70
MT	**MALTA**	NA	NA
PL	**POLAND**	1,73	1,68
PL01	DOLNOSLASKIE	1,69	1,63
PL02	KUJAWSKO-POMORSKIE	1,73	1,68
PL03	LUBELSKIE	1,81	1,75
PL04	LUBUSKIE	1,73	1,67
PL05	LÓDZKIE	1,71	1,66
PL06	MALOPOLSKIE	1,75	1,71
PL07	MAZOWIECKIE	1,72	1,68
PL08	OPOLSKIE	1,68	1,64
PL09	PODKARPACKIE	1,81	1,75
PL0A	PODLASKIE	1,80	1,76
PL0B	POMORSKIE	1,72	1,66
PL0C	SLASKIE	1,65	1,61
PL0D	SWIETOKRZYSKIE	1,78	1,72
PL0E	WARMINSKO-MAZURSKIE	1,76	1,70
PL0F	WIELKOPOLSKIE	1,75	1,68
PL0G	ZACHODNIOPOMORSKIE	1,69	1,64
RO	**RO ROMANIA**	1,70	1,66
RO01	RO01 NORD-EST	1,79	1,73
RO011	RO011 BACAU	NA	1,69
RO012	RO012 BOTOSANI	NA	1,80
RO013	RO013 IASI	NA	1,71
RO014	RO014 NEAMT	NA	1,69
RO015	RO015 SUCEAVA	NA	1,76
RO016	RO016 VASLUI	NA	1,80
RO02	RO02 SUD-EST	1,69	1,65
RO021	RO021 BRAILA	NA	1,64

RO022	RO022 BUZAU	NA	1,70
RO023	RO023 CONSTANTA	NA	1,59
RO024	RO024 GALATI	NA	1,64
RO025	RO025 TULCEA	NA	1,65
RO026	RO026 VRANCEA	NA	1,72
RO03	RO03 SUD	1,71	1,67
RO031	RO031 ARGES	NA	1,62
RO032	RO032 CALARASI	NA	1,72
RO033	RO033 DÂMBOVITA	NA	1,69
RO034	RO034 GIURGIU	NA	1,76
RO035	RO035 IALOMITA	NA	1,70
RO036	RO036 PRAHOVA	NA	1,62
RO037	RO037 TELEORMAN	NA	1,72
RO04	RO04 SUD-VEST	1,71	1,68
RO041	RO041 DOLJ	NA	1,67
RO042	RO042 GORJ	NA	1,69
RO043	RO043 MEHEDINTI	NA	1,69
RO044	RO044 OLT	NA	1,68
RO045	RO045 VÂLCEA	NA	1,67
RO05	RO05 VEST	1,66	1,62
RO051	RO051 ARAD	NA	1,65
RO052	RO052 CARAS-SEVERIN	NA	1,63
RO053	RO053 HUNEDOARA	NA	1,59
RO054	RO054 TIMIS	NA	1,61
RO06	RO06 NORD-VEST	1,71	1,66
RO061	RO061 BIHOR	NA	1,66
RO062	RO062 BISTRITA-NASAUD	NA	1,73
RO063	RO063 CLUJ	NA	1,60
RO064	RO064 MARAMURES	NA	1,66
RO065	RO065 SATU MARE	NA	1,65
RO066	RO066 SALAJ	NA	1,71
RO07	RO07 CENTRU	1,71	1,65
RO071	RO071 ALBA	NA	1,66
RO072	RO072 BRASOV	NA	1,60
RO073	RO073 COVASNA	NA	1,67
RO074	RO074 HARGHITA	NA	1,67
RO075	RO075 MURES	NA	1,66
RO076	RO076 SIBIU	NA	1,65
RO08	RO08 BUCURESTI	1,63	1,56
RO081	RO081 BUCURESTI (CAPITAL)	NA	1,55
RO082	RO082 ILFOV	NA	1,64
SI	**SLOVENIA**	1,62	1,60
SI001	POMURSKA	1,64	1,61
SI002	PODRAVSKA	1,58	1,57
SI003	KOROSKA	1,62	1,58
SI004	SAVINJSKA	1,62	1,60
SI005	ZASAVSKA	1,62	1,61
SI006	SPODNJEPOSAVSKA	1,65	1,64
SI009	GORENJSKA	1,63	1,62
SI00A	NOTRANJSKO-KRASKA	1,67	1,64
SI00B	GORISKA	1,66	1,62
SI00C	OBALNO-KRASKA	1,59	1,56
SI00D	JUGOVZHODNA SLOVENIJA	1,66	1,65
SI00E	OSREDNJESLOVENSKA	1,61	1,59

SK	**SLOVAK REPUBLIC**	1,74	1,67
SK01	BRATISLAVSKÝ	NA	1,59
SK02	ZÁPADNÉ SLOVENSKO	NA	1,65
SK021	TRNAVSKÝ KRAJ	NA	1,64
SK022	TRENCIANSKÝ KRAJ	NA	1,66
SK023	NITRIANSKÝ KRAJ	NA	1,65
SK03	STREDNÉ SLOVENSKO	NA	1,68
SK031	ZILINSKÝ KRAJ	NA	1,70
SK032	BANSKOBYSTRICKÝ KRAJ	NA	1,66
SK04	VÝCHODNÉ SLOVENSKO	NA	1,72
SK041	PRESOVSKÝ KRAJ	NA	1,76
SK042	KOSICKÝ KRAJ	NA	1,69
NO	**NORWAY**	1,71	1,70
N001	01 ØSTFOLD	1,71	1,70
N002	02 AKERSHUS	1,65	1,66
N003	03 OSLO	1,61	1,57
N004	04 HEDMARK	1,76	1,75
N005	05 OPPLAND	1,74	1,73
N006	06 BUSKERUD	1,71	1,69
N007	07 VESTFOLD	1,72	1,72
N008	08 TELEMARK	1,76	1,74
N009	09 AUST-AGDER	1,77	1,73
N010	10 VEST-AGDER	1,77	1,76
N011	11 ROGALAND	1,73	1,73
N012	12 HORDALAND	1,74	1,73
N014	14 SOGN OG FJORDANE	1,82	1,81
N015	15 MØRE OG ROMSDAL	1,79	1,77
N016	16 SØR-TRØNDELAG	1,68	1,70
N017	17 NORD-TRØNDELAG	1,78	1,78
N018	18 NORDLAND	1,75	1,75
N019	19 TROMS	1,67	1,68
N020	20 FINNMARK	1,64	1,66
CH	**SWITZERLAND (*)**	1,61	1,63
CH	ZÜRICH	1,56	1,57
CH	BERN	1,64	1,65
CH	LUZERN	1,64	1,66
CH	URI	1,69	1,68
CH	SCHWYZ	1,63	1,64
CH	OBWALDEN	1,71	1,71
CH	NIDWALDEN	1,60	1,61
CH	GLARUS	1,71	1,71
CH	ZUG	1,56	1,58
CH	FRIBOURG	1,64	1,65
CH	SOLOTHURN	1,63	1,65
CH	BASEL-STADT	1,60	1,62
CH	BASEL-LANDSCHAFT	1,57	1,61
CH	SCHAFFHAUSEN	1,66	1,67
CH	APPENZELL A.RH.	1,73	1,73
CH	APPENZELL I.RH.	1,78	1,82
CH	ST.GALLEN	1,67	1,67
CH	GRAUBÜNDEN	1,64	1,65
CH	AARGAU	1,59	1,61
CH	THURGAU	1,68	1,68
CH	TICINO	1,57	1,60

CH	VAUD	1,62	1,64
CH	VALAIS	1,62	1,64
CH	NEUCHÂTEL	1,64	1,67
CH	GENÈVE	1,55	1,58
CH	JURA	1,68	1,70

(*) Data for 2000
(**) Without overseas departments