

Eurostat regional yearbook 2009



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Preface

Dear Readers,

Five years ago, 2004, was a momentous year, with 10 new Member States joining the European Union on 1 May. This *Eurostat regional yearbook 2009* is eloquent testimony to the economic and social progress made by these regions since then and highlights those areas where redoubled efforts will be needed to reach our goal of greater cohesion.

The 11 chapters of this yearbook investigate interesting aspects of regional differences and similarities in the 27 Member States and in the candidate and EFTA countries. The aim is to encourage readers to track down the regional data available on the Eurostat website and make their own analyses of economic and social developments.

In addition to the fascinating standard chapters on regional population developments, the regional labour market, regional GDP, etc., this year's edition features a new contribution on the regional development of information society data. As in recent years, the description of regional developments is rounded off by a contribution on the latest findings of the Urban Audit, a data collection containing a multitude of statistical data on European towns and cities.

We are constantly updating the range of regional indicators available and hope to include them as topics in future editions, provided the availability and quality of these data are sufficient.

I wish you an enjoyable reading experience!



Walter Radermacher
Director-General, Eurostat



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Introduction





Statistics on regions and cities

Statistical information is essential for understanding our complex and rapidly changing world. Eurostat, the Statistical Office of the European Communities, is responsible for collecting and disseminating data at European level, not only from the 27 Member States of the European Union, but also from the three candidate countries (Croatia, the former Yugoslav Republic of Macedonia and Turkey) and the four EFTA countries (Iceland, Liechtenstein, Norway and Switzerland).

The aim of this publication, the *Eurostat regional yearbook 2009*, is to give you a flavour of some of the statistics on regions and cities that we collect from these countries. Statistics on regions enable us to identify more detailed statistical patterns and trends than national data, but since we have 271 NUTS 2 regions in the EU-27, 30 statistical regions on level 2 in the candidate countries and 16 statistical regions on level 2 in the EFTA countries, the volume of data is so great that one clearly needs some sorting principles to make it understandable and meaningful.

Statistical maps are probably the easiest way for the human mind to sort and 'absorb' large amounts of statistical data at one time. Hence this year's *Eurostat regional yearbook*, as in previous editions, contains a lot of statistical maps where the data is sorted by different statistical classes represented by colour shades on the maps. Some chapters also make use of graphs and tables to present the statistical data, selected and sorted in some way (different top lists, graphs with regional extreme values within the countries or only giving representative examples) to make it easier to understand.

We are proud to present a great variety of subjects tackled in the 11 chapters in this year's edition of the *Eurostat regional yearbook*. The first chapter on **Population** gives us detailed knowledge of different demographic patterns, such as population density, population change and fertility rates in the countries examined. This chapter can be considered the key to all other chapters, since all other statistics depend on the composition of the population. The second chapter focuses on **European cities** and explains in detail the definitions of the various spatial levels used in the Urban Audit data collection, with some interesting examples on how people travel to work in nine European capitals.

The chapter on the **Labour market** mainly describes the differences in weekly working hours

throughout Europe and offers a couple of explanations for why they vary so much from region to region. The three economic chapters on **Gross domestic product**, **Household accounts** and **Structural business statistics** all give us detailed insight into the general economic situation in regions, private households and different sectors of the business economy.

We are particularly proud to present a new and very interesting chapter on the **Information society**, which describes the use of information and communication technologies (ICT) among private persons and households in European regions. This chapter tells us, for example, how many households use the Internet regularly and how many have broadband access. The next two chapters are on **Science, technology and innovation** and **Education**, three areas of statistics that are often seen as key to monitoring achievement of the goals set in the Lisbon strategy to make Europe the most competitive and dynamic knowledge-based economy in the world.

In the next chapter we learn more about regional statistics on **Tourism**, and which tourist destinations are the most popular. The last chapter focuses on **Agriculture**, this time mainly crop statistics, revealing which kind of crop is grown where in Europe.

The NUTS classification

The nomenclature of territorial units for statistics (NUTS) provides a single uniform breakdown of territorial units for the production of regional statistics for the European Union. The NUTS classification has been used for regional statistics for many decades, and has always formed the basis for regional funding policy. It was only in 2003, though, that NUTS acquired a legal basis, when the NUTS regulation was adopted by the Parliament and the Council ⁽¹⁾.

Whenever new Member States join the EU, the NUTS regulation is amended to include the regional classification in those countries. This was the case in 2004, when the EU took in 10 new Member States, and in 2007 when Bulgaria and Romania also joined the European Union.

The NUTS regulation states that amendments of the regional classification, to take account of new administrative divisions or boundary changes in the Member States, may not be carried out more frequently than every three years. In 2006, this review took place for the first time, and the re-

⁽¹⁾ More information on the NUTS classification can be found at http://ec.europa.eu/eurostat/ramon/nuts/splash_regions.html



sults of these changes to the NUTS classification have been valid since 1 January 2008.

Since these NUTS changes were introduced quite recently, the statistical data are still missing in some cases or have been replaced with national values on some statistical maps, as indicated in the footnotes to each map concerned. This applies in particular to Sweden, which introduced NUTS level 1 regions, to Denmark and Slovenia, which introduced new NUTS level 2 regions, and to the two northernmost Scottish regions, North Eastern Scotland (UKM5) and Highlands and Islands (UKM6), where the border between the two regions has changed. The regional data availability for these countries will hopefully soon be improved.

Please also note that some Member States have a relatively small population and are therefore not divided into more than one NUTS 2 region. Thus, for these countries the NUTS 2 value is exactly the same as the national value. Following the latest revision of the NUTS classification, this now applies to six Member States (Estonia, Cyprus, Latvia, Lithuania, Luxembourg and Malta), one candidate country (the former Yugoslav Republic of Macedonia) and two EFTA countries (Iceland and Liechtenstein). In all cases the whole country consists of one single NUTS 2 region.

A folding map on the inside of the cover accompanies this publication and it shows all NUTS level 2 regions in the 27 Member States of the European Union (EU-27) and the corresponding level 2 statistical regions in the candidate and EFTA countries. In the annex you will find the full list of codes and names of these regions. This will help you locate a specific region on the map.

Coverage

The *Eurostat regional yearbook 2009* mainly contains statistics on the 27 Member States of the European Union but, when available, data is also

given on the three candidate countries (Croatia, the former Yugoslav Republic of Macedonia and Turkey) and the four EFTA countries (Iceland, Liechtenstein, Norway and Switzerland).

Regions in the candidate countries and the EFTA countries are called statistical regions and they follow the same rules as the NUTS regions in the European Union, except that there is no legal base. Data from the candidate and EFTA countries are not yet available in the Eurostat database for some of the policy areas, but the availability of data is constantly improving, and we hope to have even more complete coverage from these countries in the near future.

More regional information

In the subject area 'Regions and cities' under the heading 'General and regional statistics' on the Eurostat website you will find tables with statistics on both 'Regions' and the 'Urban Audit', with more detailed time series (some of them going back as far as 1970) and with more detailed statistics than this yearbook contains. You will also find a number of indicators at NUTS level 3 (such as area, demography, gross domestic product and labour market data). This is important since some of the countries covered are not divided into NUTS 2 regions, as mentioned above.

For more detailed information on the content of the regional and urban databases, please consult the Eurostat publication *European regional and urban statistics — Reference guide — 2009 edition*, which you can download free of charge from the Eurostat website. You can also download Excel tables containing the specific data used to produce the maps and other illustrations for each chapter in this publication on the Eurostat website. We do hope you will find this publication both interesting and useful and we welcome your feedback at the following e-mail address: estat-regio@ec.europa.eu



Population

1



Unveiling the regional pattern of demography

Demographic trends have a strong impact on the societies of the European Union. Consistently low fertility levels, combined with extended longevity and the fact that the baby boomers are reaching retirement age, result in demographic ageing of the EU population. The share of the older generation is increasing while the share of those of working age is decreasing.

The social and economic changes associated with population ageing are likely to have profound implications for the EU — and also to be visible at regional level, stretching across a wide range of policy areas and impacting on the school-age population, healthcare, labour force participation, social protection and social security issues and government finances, etc.

The demographic development is not the same in all regions of the EU. Some demographic phenomena might have a stronger impact in some regions than in others.

This chapter presents the regional pattern of demographic phenomena as it is today.

Population density

On 1 January 2007, 584 million people inhabited the European Union and candidate and EFTA countries. The population distribution is varied across the 317 NUTS 2 regions that make up this area.

Map 1.1 shows the population density on 1 January 2007. The population density of a region is the ratio of the population of a territory to its size. Generally, capital city regions are among the most densely populated, as Map 1.1 shows. Inner London was by far the most densely populated, but the Bruxelles-Capitale, Wien, Berlin, Praha, Istanbul, Bucureşti — Ilfov and Attiki (Greece) regions also have densities above 1 000 inhabitants per km². The least densely populated region was the region of Guyane (France), while the next least densely populated regions, with fewer than 10 inhabitants per km², were all in Sweden, Finland, Iceland and Norway. By comparison, the European Union has a population density of 114 inhabitants per km².

Population change

During the last four and a half decades, the population of the 27 countries that make up today's European Union has grown from around 400

million (1960) to almost 500 million (497 million on 1 January 2008). Including candidate countries and EFTA countries, the total population has grown over the same period from under 450 million to 587 million.

The total population change has two components: the so-called 'natural increase', which is defined as the difference between the numbers of live births and deaths, and net migration, which ideally represents the difference between inward and outward migration flows (see 'Methodological notes'). Changes in the size of a population are the result of the number of births, the number of deaths and the number of people who migrate.

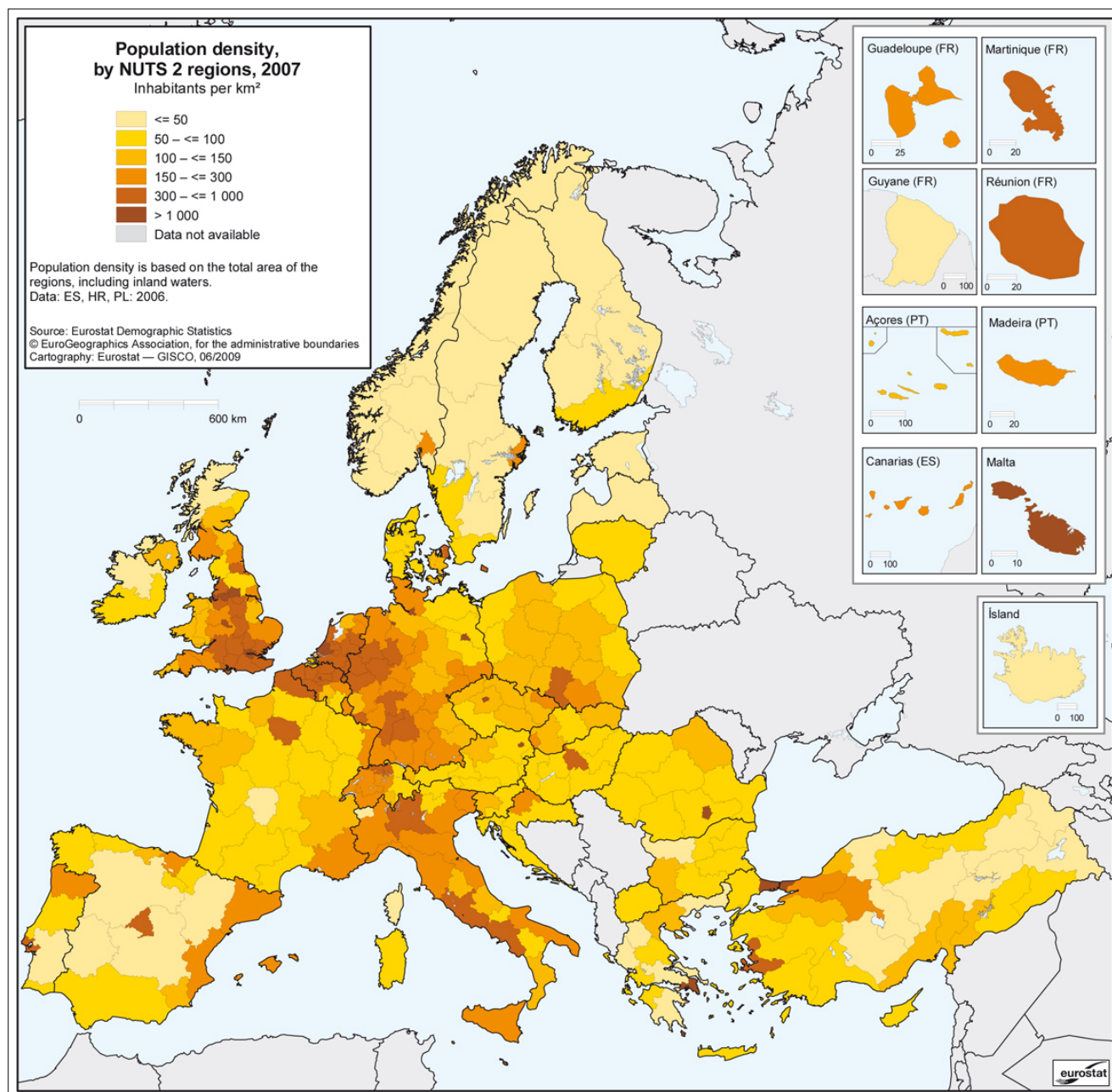
Up to the end of the 1980s, natural increase was by far the major component of population growth. However, there has been a sustained decline in the natural increase since the early 1960s. On the other hand, international migration has gained importance and became the major force of population growth from the beginning of the 1990s onwards.

The analysis on the following pages is mainly based on demographic trends observed over the period from 1 January 2003 to 1 January 2008. For this purpose, five-year averages have been calculated of the total annual population change and its components. Given that demographic trends are long-term developments, the five-year averages provide a stable and accurate picture. They help to identify regional clusters, which often stretch well beyond national borders. For the sake of comparability, the population change and its components are presented in relative terms, calculating the so-called crude rates, i.e. they relate to the size of the total population (see 'Methodological notes'). Maps 1.2, 1.3 and 1.4 show these figures on total population change and its components.

In most of the north-east, east and part of the south-east of the area made up by the European Union and the candidate and EFTA countries, the population is on the decrease. Map 1.2 is marked by a clear divide between the regions there and in the rest of the EU. Most affected by the decreasing population trend are Germany (in particular the former eastern Germany), Poland, Bulgaria, Slovakia, Hungary and Romania, and to the north the three Baltic States and the northern parts of Sweden and the Finnish region of Itä-Suomi. Decreasing population trends are also evident in many regions of Greece. To the east, on the other hand, the total population change is positive in Cyprus and, to a lesser extent, in the former Yugoslav Republic of Macedonia and Turkey.

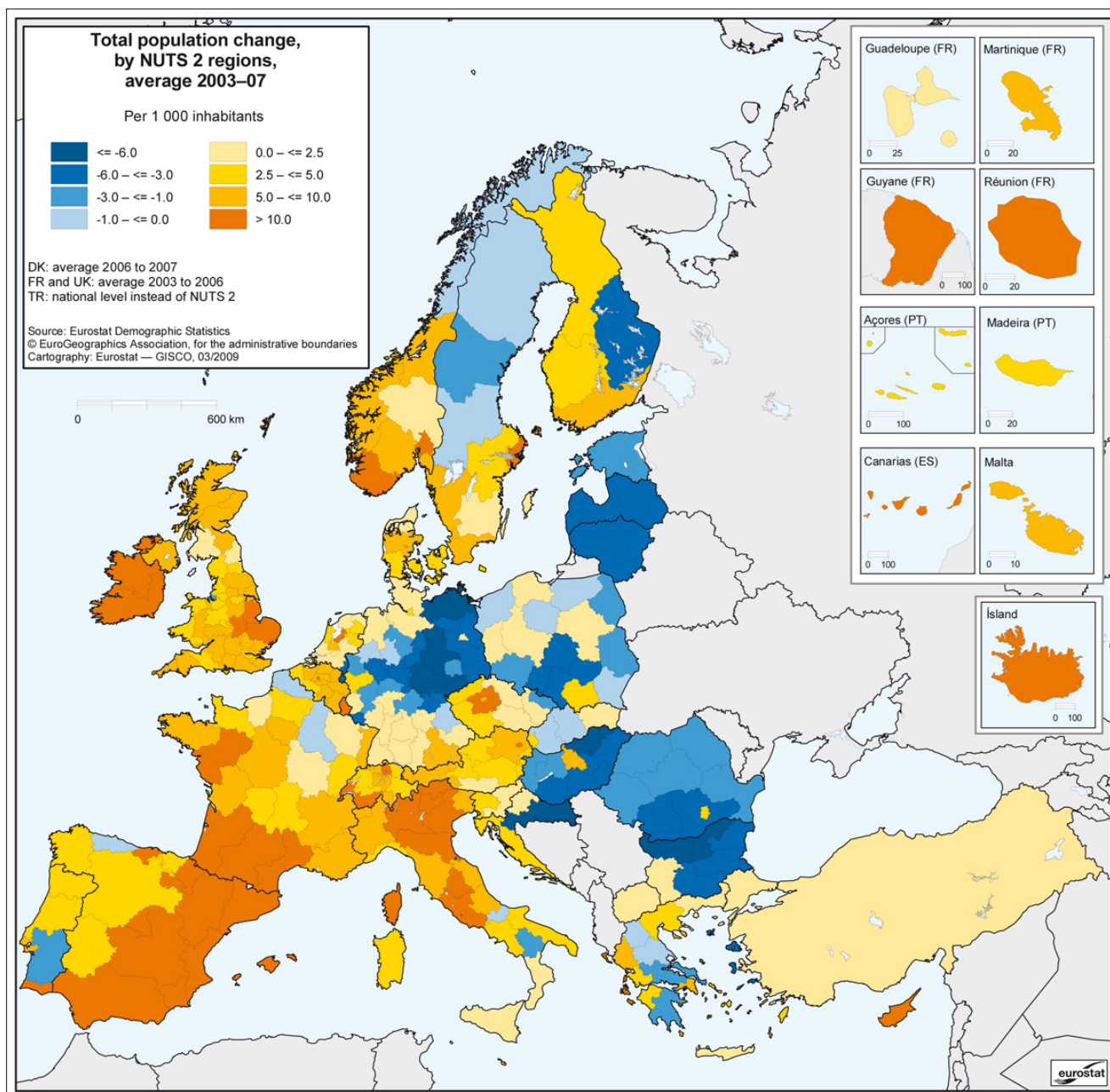


Map 1.1: Population density, by NUTS 2 regions, 2007
Inhabitants per km²





Map 1.2: Total population change, by NUTS 2 regions, average 2003–07
Per 1 000 inhabitants





In nearly all western and south-western regions of the EU the population increased over the period 2003–07. This is particularly evident in Ireland and in almost all regions of the United Kingdom, Italy, Spain, France and Portugal, including the French overseas departments and the Spanish and Portuguese islands in the Atlantic Ocean. There has also been positive total population change in Austria, Switzerland, Belgium, Luxembourg and the Netherlands.

The picture provided by Map 1.2 can be refined by analysing the two components of total population change, namely natural change and migration.

Map 1.3 shows that in many regions of the EU more people died than were born in the period

2003–07. The resulting negative ‘natural population change’ is widespread and affects almost 50 % of the EU’s regions.

A single extended cross-border region can be identified showing a natural increase of population, made up of Ireland, the central United Kingdom, most regions in France, Belgium, Luxembourg, the Netherlands, Switzerland, Iceland, Lichtenstein, Denmark and Norway: in these regions, in the period 2003–07, live births were more numerous than deaths.

Deaths are more numerous than births in Germany, the Czech Republic, Slovakia, Hungary, Slovenia, Croatia, Romania and Bulgaria, and also in the Baltic States and Sweden in the north and

Figure 1.1: Total fertility rates by country, 1986 and 2006
Children per woman

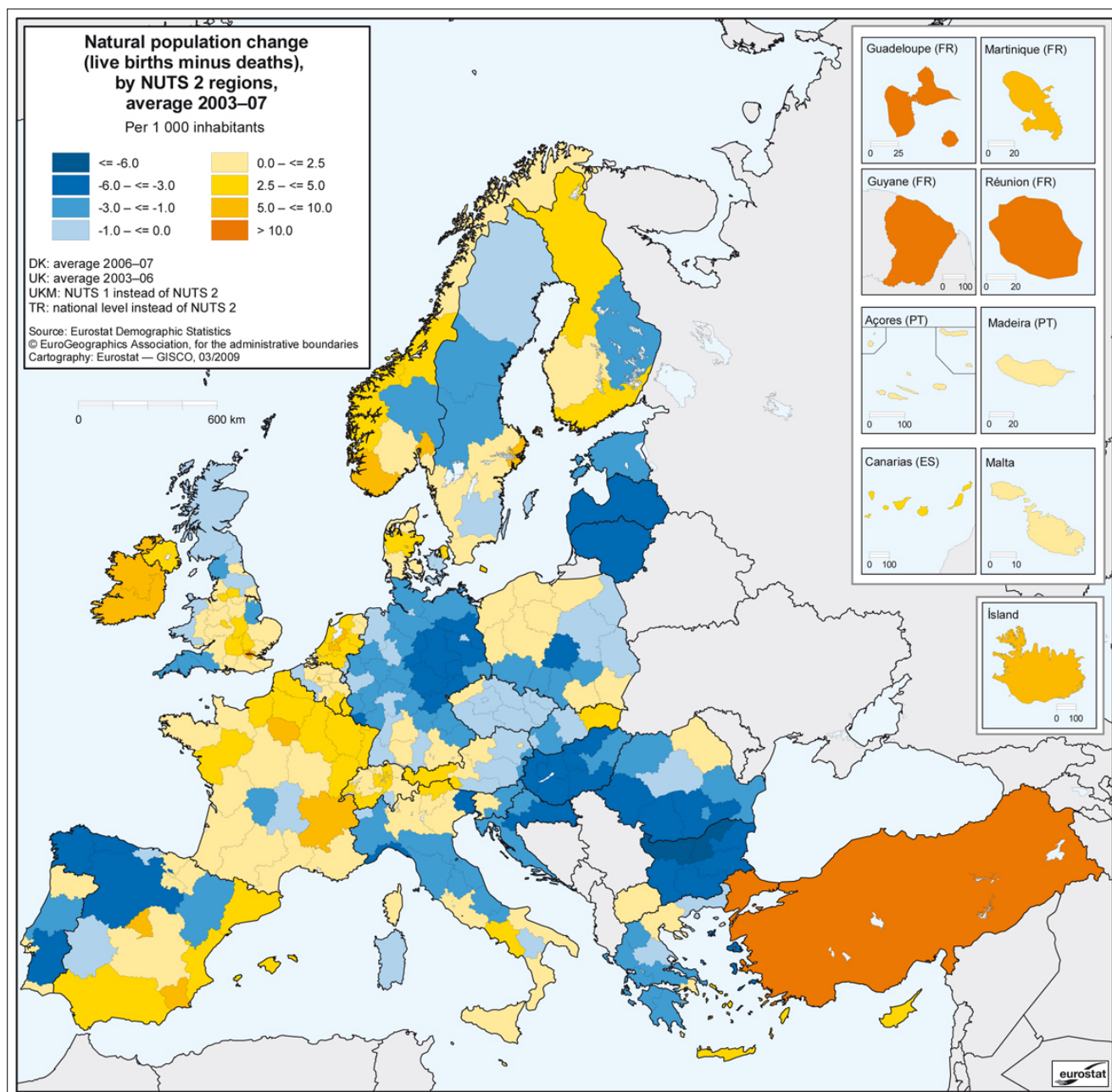


Source: Eurostat Demographic Statistics

Notes: 1986 data: EE, PL, MT: national estimates; LI: 1985 national estimate; HR: 1990; TR: 1990 national estimate; MK: 1994
2006 data: IT, BE, TR: national estimates



Map 1.3: Natural population change (live births minus deaths), by NUTS 2 regions, average 2003–07
Per 1 000 inhabitants



Greece, Italy and Portugal in the south. The other countries have an overall more balanced situation.

A major reason for the slowdown of the natural increase of the population is the fact that inhabitants of the EU have fewer children. At aggregated level, in the 27 countries that today form the European Union, the total fertility rate has declined from a level of around 2.5 in the early 1960s to a level of about 1.5 in 1993, where it has remained since (for the definition of the total fertility rate, see the 'Methodological notes').

At country level, in 2006, a total fertility rate of less than 1.5 was observed in 17 of the 27 Member States. To compare, Figure 1.1 also includes figures for 1986 and for the candidate and EFTA countries.

Relatively high fertility rates tend to be recorded in countries that have implemented a range of family-friendly policies, such as the introduction of accessible and affordable childcare and/or more flexible working patterns; this is the case for France, the Nordic countries and the Netherlands.

The (slight) increase in the total fertility rate that is observed in some countries between 1986 and 2006 may be partly attributable to a catching-up process following postponement of the decision to have children. When women give birth later in life, the total fertility rate first indicates a decrease in fertility, followed later by a recovery.

By comparison, in the more developed parts of the world today, a total fertility rate of around

Figure 1.2: Crude birth rates, by NUTS 2 regions, 2007
Births per 1 000 inhabitants



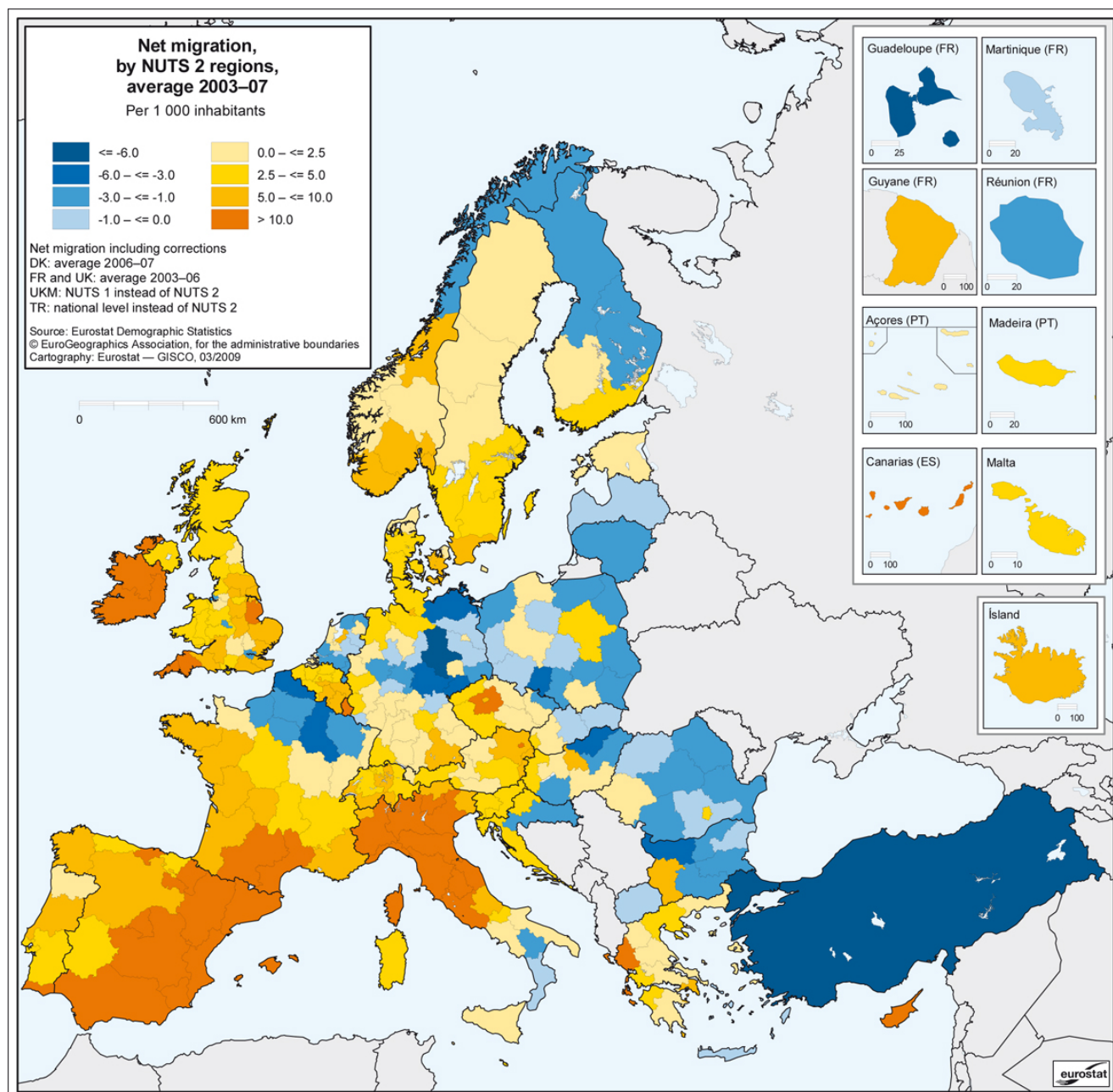
Source: Eurostat Demographic Statistics.

Notes: FR, UK: 2006

TR: national level



Map 1.4: Net migration, by NUTS 2 regions, average 2003–07
Per 1 000 inhabitants





2.1 children per women is considered to be the replacement level, i.e. the level at which the population would remain stable in the long run if there were no inward or outward migration. At present (2006 data), practically all of the EU and the candidate and EFTA countries, with the exception of Turkey and Iceland, are still well below the replacement level.

The analysis of Map 1.3 can also be refined by isolating the contribution of live births to the natural population change. Figure 1.2 shows the regional differences within each country of the so-called crude birth rates (see the 'Methodological notes'). The largest regional differences in 2007 were in France, where the highest crude birth rate is more than three times the lowest, followed by Spain, where the highest crude birth rate is also three times the lowest. For the other countries, regional differences in crude birth rates are less pronounced but still significant.

The third determinant of population change (after fertility and mortality) is migration. As many countries in the EU are currently at a point in the demographic cycle where 'natural population change' is close to being balanced or negative, the importance of immigration increases when it comes to maintaining population size. Moreover, migration also contributes indirectly to natural change, given that migrants have children. Migrants are also usually younger and have not yet reached the age at which death is more frequent.

In some regions of the European Union, negative 'natural change' has been offset by positive net migration. This is at its most striking in Austria, the United Kingdom, Spain, the northern and central regions of Italy and some regions of western Germany, Slovenia, southern Sweden, Portugal and Greece, as can be seen in Map 1.4. The opposite is much rarer: in only a few regions (namely in the northern regions of Poland and of Finland and in Turkey) has positive 'natural change' been cancelled out by negative net migration.

Four cross-border regions where more people have left than arrived (negative net migration) can be identified on Map 1.4:

- the northernmost regions of Norway and Finland;
- an eastern group, comprising most of the regions of eastern Germany, Poland, Lithuania and Latvia and most parts of Slovakia, Hungary, Romania, Bulgaria and Turkey;

- regions in the north-east of France and the French overseas departments;
- a few regions in the south of Italy, in the Netherlands and in the United Kingdom.

Regions where the two components of population change do not compensate for, but rather add to, one another are often exposed to major developments, upwards or — in some regions — downwards. In Ireland, Luxembourg, Belgium, Malta, Cyprus, Switzerland, Iceland, many regions in France and in Norway and some regions in Spain, the United Kingdom and the Netherlands, a natural increase has been accompanied by positive net migration. However, in eastern German regions, Lithuania and Latvia and some regions in Poland, Slovakia, Hungary, Bulgaria and Romania, both components of population change have moved in a negative direction, as can also be seen from Map 1.2. In these regions this trend has led to sustained population loss.

In 2007, the average population in the EU-27 aged 65 and older was 17 %, which means an increase of 2 percentage points in the last 10 years. This ageing population, especially in rural areas, raises issues about infrastructure and the need for social services and healthcare.

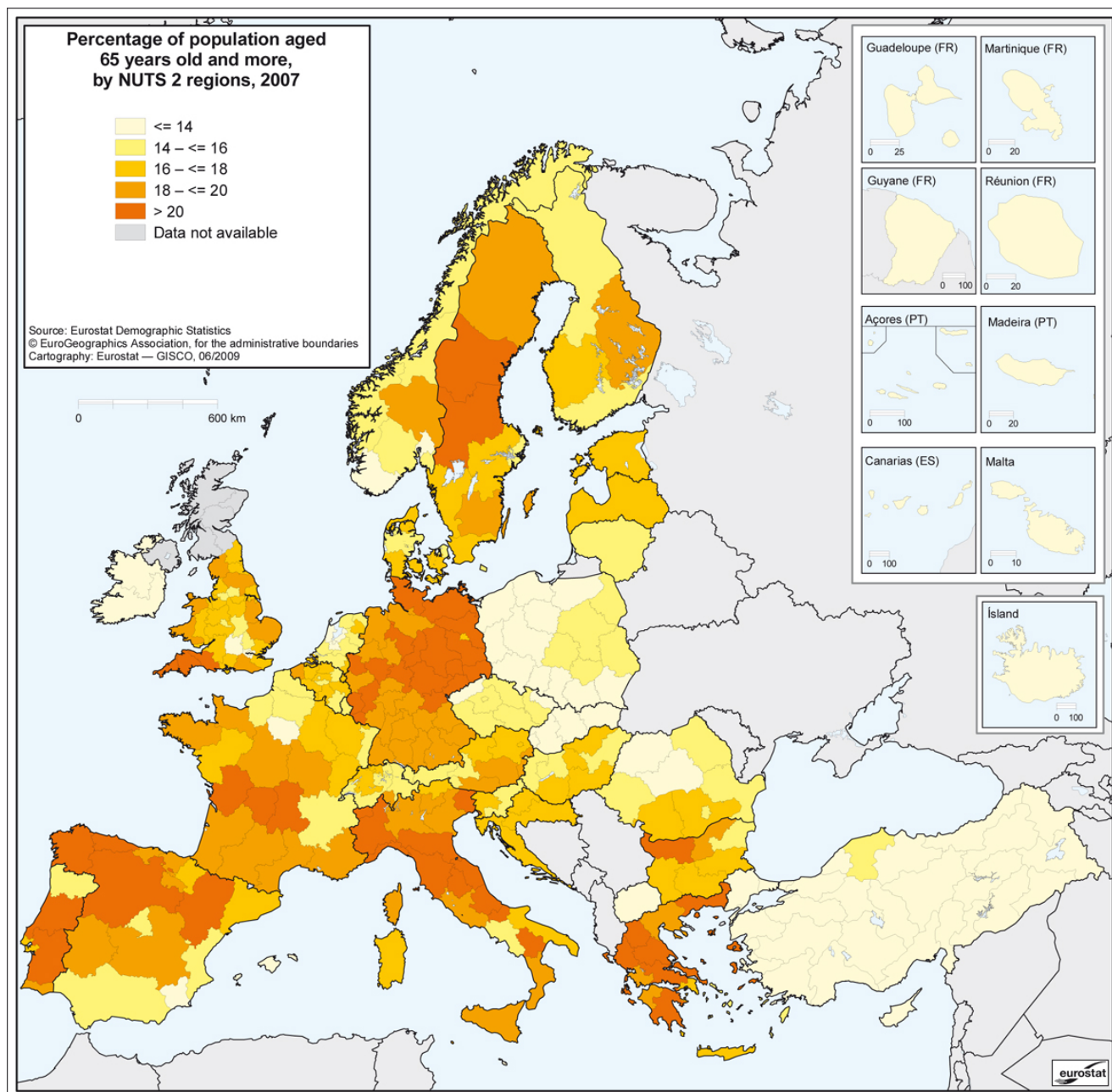
The highest percentage of population aged 65 and older can be found in Liguria (Italy), at 27 %. Germany follows with up to 24 % in the region of Chemnitz and a further 14 regions above 20 %. Some regions in Greece, Portugal, France and Spain also show high figures, with up to 23 % of their population aged 65 years and older. These regions also show low and even negative natural population change, with more people dying than being born.

In Turkey the percentage of the population aged 65 and older is as low as 3 % in the region of Van, and on average 8 % in the other regions. Although Turkey has negative net migration, the high fertility results in a young population. Similarly, with high fertility, coupled with high net migration, only 11 % and 12 % of the population in the two regions of Ireland are 65 and older.

According to projections, elderly people would account for an increasing share of the population and this is due to sustained reductions in mortality in past and future decades. The ageing process can be typified as ageing from the top, as it largely results from projected increases in longevity, moderated by the impact of positive net migration flows and some recovery in fertility.



Map 1.5: Percentage of population aged 65 years old and more, by NUTS 2 regions, 2007





Conclusion

This chapter highlights certain features of regional population development in the area made up by the EU-27 Member States and the candidate and EFTA countries over the period from 1 January 2003 to 1 January 2008. As far as possible, typologies of regions in the different demographic phe-

nomena have been identified, spreading across national boundaries. While population decline is evident in several regions, at aggregated level the EU-27 population still increased in that period by around 2 million people every year. The main driver of population growth in this area is migration, which counterbalanced, as seen in the maps, the negative natural change in many regions.

Methodological notes

Sources: Eurostat — Demographic Statistics. For more information please consult the Eurostat website at <http://www.ec.europa.eu/eurostat>.

Total fertility rate is defined as the average number of children that would be born to a woman during her lifetime if she were to pass through her childbearing years conforming to the age-specific fertility rates that have been measured in a given year.

Migration can be extremely difficult to measure. A variety of different data sources and definitions are used in the Member States, meaning that direct comparisons between national statistics can be difficult or misleading. The net migration figures here are not directly calculated from immigration and emigration flow figures. Since many countries either do not have accurate, reliable and comparable figures on immigration and emigration flows or have no figures at all, net migration is generally estimated on the basis of the difference between total population change and natural increase between two dates (in the Eurostat database, it is then called **net migration including corrections**). The statistics on net migration are therefore affected by all the statistical inaccuracies in the two components of this equation, especially population change. In effect, net migration equals all changes in total population that cannot be attributed to births and deaths.

Crude rate of total population change is the ratio of the total population change during the year to the average population of the area in question in that year. The value is expressed per 1 000 inhabitants.

Crude rate of natural change is the ratio of natural population increase (live births minus deaths) over a period to the average population of the area in question during that period. The value is expressed per 1 000 inhabitants. It is also the difference of the **crude birth rate** minus the **crude death rate**, which are, respectively, the ratio of live births during the year over the average population and of deaths over the average population.

Crude rate of net migration is the ratio of net migration during the year to the average population in that year. The value is expressed per 1 000 inhabitants. As stated above, the crude rate of net migration is equal to the difference between the **crude rate of total change** and the **crude rate of natural change** (i.e. net migration is considered as the part of population change not attributable to births and deaths).

Population density is the ratio of the population of a territory to the total size of the territory (including inland waters), as measured on 1 January.