

Statistics in focus

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THEME 1 – 4/1999

REGIONS

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Regional population ageing of the EU at different speeds up to 2025

The European Union is facing an inevitable ageing of its population. Most regions will see the numbers of elderly (60+) double in the coming 30 years, but also the number of the oldest-old (80+) will grow drastically in the long run. In the near future, also the population aged 20-59 (the working-age population) will grow older.

The significant increases in the share of seniors and elderly people will have profound consequences for systems of social protection, particularly for pensions, which for the most part are funded by contributions of employees and employers. In addition, health expenditures are likely to increase significantly. The ageing of the (potential) labour force might encourage the application of new, senior friendly technologies and ways of working.

This bulletin answers questions on where these ageing trends are most prominent, both now and in the future, as well as the speed with which these developments will take place. Results presented here are based on Eurostat's latest set of national and regional population scenarios which cover the periods 1995-2050 and 1995-2025 respectively.

Population ageing : two major forces

The decline in births, which has been taking place over the last 2-3 decades, is without any doubt the main cause for the continuing ageing of the population. However, the ongoing decrease in mortality rates at higher ages is a factor which is rapidly gaining importance.

Figure 1 illustrates the major forces behind the ageing process. The numerous baby-boom generation born between 1946 and 1965 will enter the age group of 60 and over during the period 2006-2025. Out of this generation comes the much smaller baby-bust generation born in the 1970s, 1980s and 1990s, which are currently still in the age group 0-19 or entering the working age population. These strong changes in generation sizes have a wave-effect in the future on the future age structure of the population.

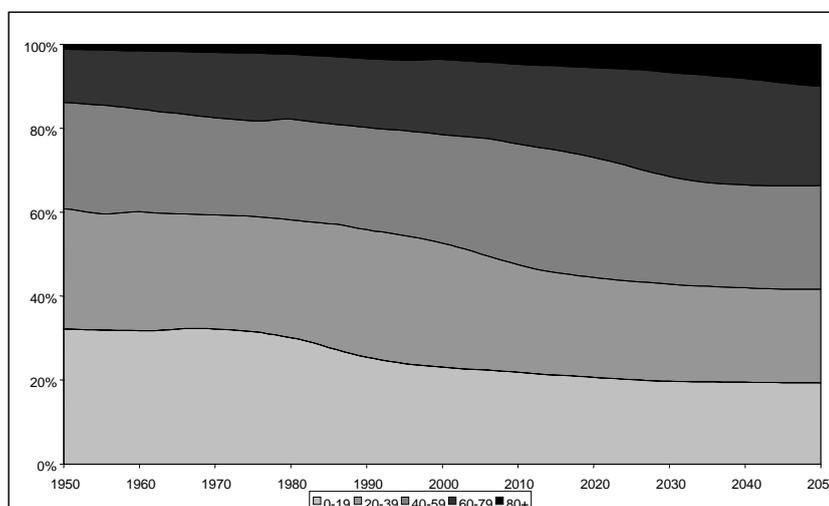
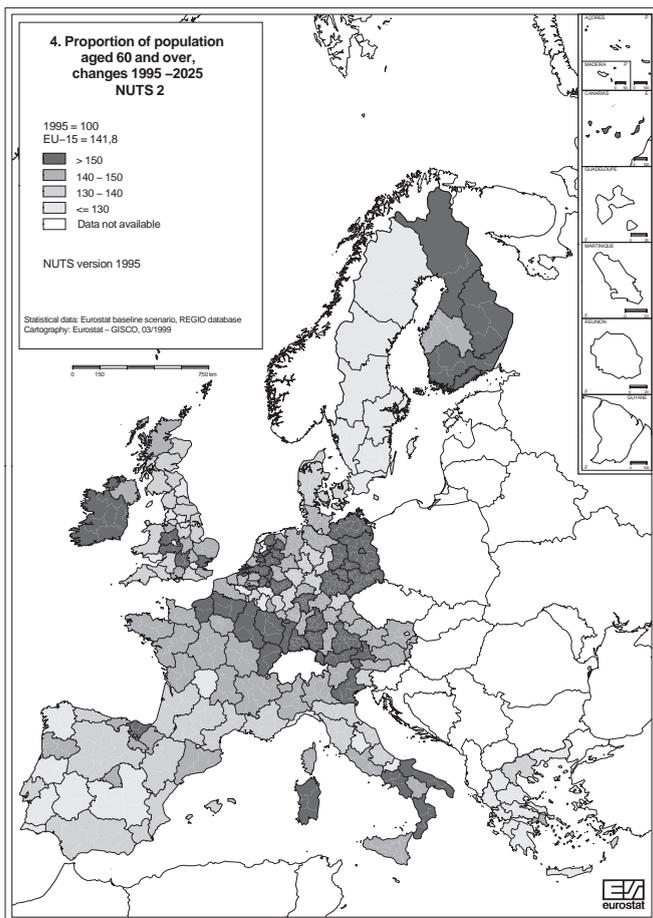
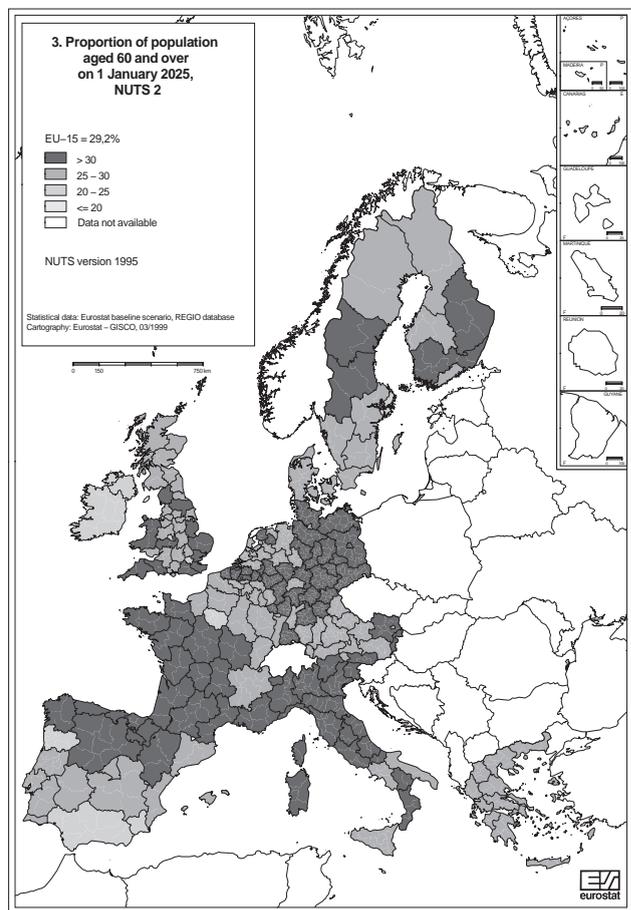
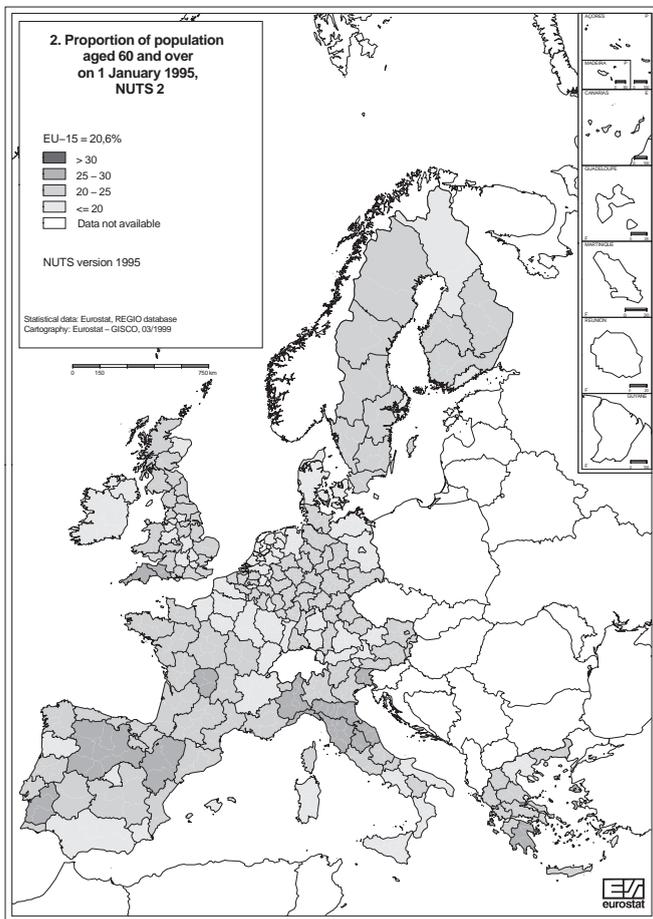


Figure 1. Population by broad age groups, as a percentage of total population, 1950-2050 - EU-15



Ranking of proportion of population aged 60 and over in 2025, 10 lowest, 10 highest; Eurostat baseline scenario

Açores (PT)	18,0
Madeira (PT)	19,3
Ceuta y Melilla (ES)	19,6
Greater London (UK)	21,6
Île de France (FR)	21,7
Ireland (IE)	23,4
Región de Murcia (ES)	23,6
Canarias (ES)	23,7
Norte (PT)	23,7
Northern Ireland (UK)	24,0
.....
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La Rioja (ES)	35,0
Castilla y León (ES)	35,0
Mecklenburg-Vorpommern (DE)	35,1
Dorset, Somerset (UK)	35,5
Piemonte (IT)	35,7
Toscana (IT)	35,8
Emilia-Romagna (IT)	35,8
Friuli-Venezia Giulia (IT)	36,5
Limousin (FR)	37,0
Liguria (IT)	38,6

Ageing will accelerate

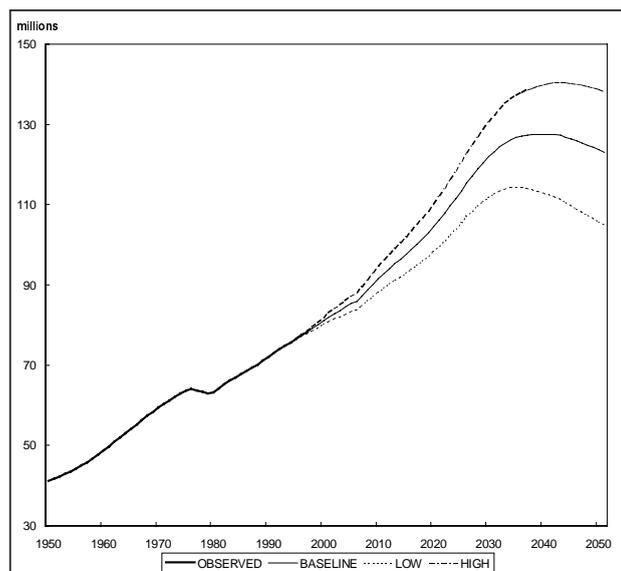


Figure 5: Population aged 60 and over, EU-15

In the European Union as a whole, the number of persons aged 60 years and over has grown with well over 40% during the last 30 years (Figure 5). In the next 30 years, an increase by almost 50% is expected and by 2040 its number will have further risen to over 65%. Thereafter, this growth will level off and even start to decline, as the smaller baby-bust generation starts entering this age group.

The share of the elderly in the total population is expected to increase from 21% now to around 34% in 2050. As a result of prolonged life expectancies, the percentage of the very old (80+) is also expected to increase substantially: from the actual 4% to about 10% in 2050. In absolute terms, 37 million people are expected to be aged 80 and over in 2050, an increase by almost 160% compared with 1995.

Young regions will age fastest

Regions which currently have a low percentage of elderly are mainly found in Ireland, the Netherlands, Denmark and northern France (Figure 2). High percentages can be found in Sweden, northern Italy, northern Spain and the south-west of France.

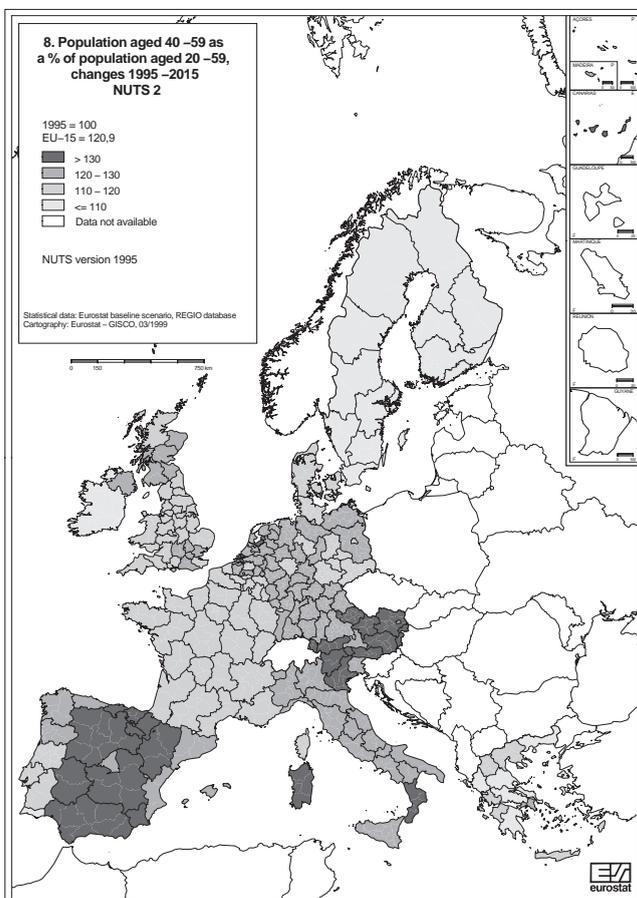
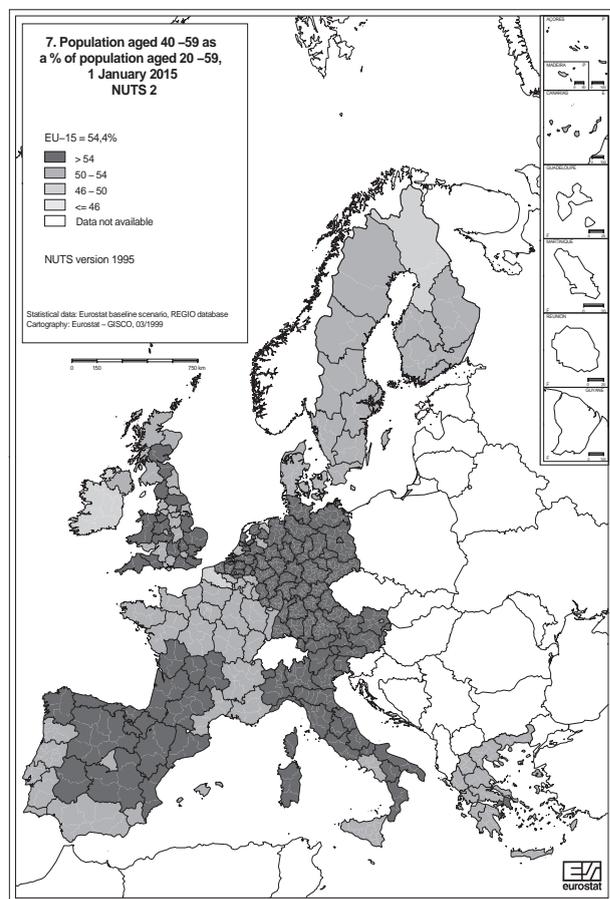
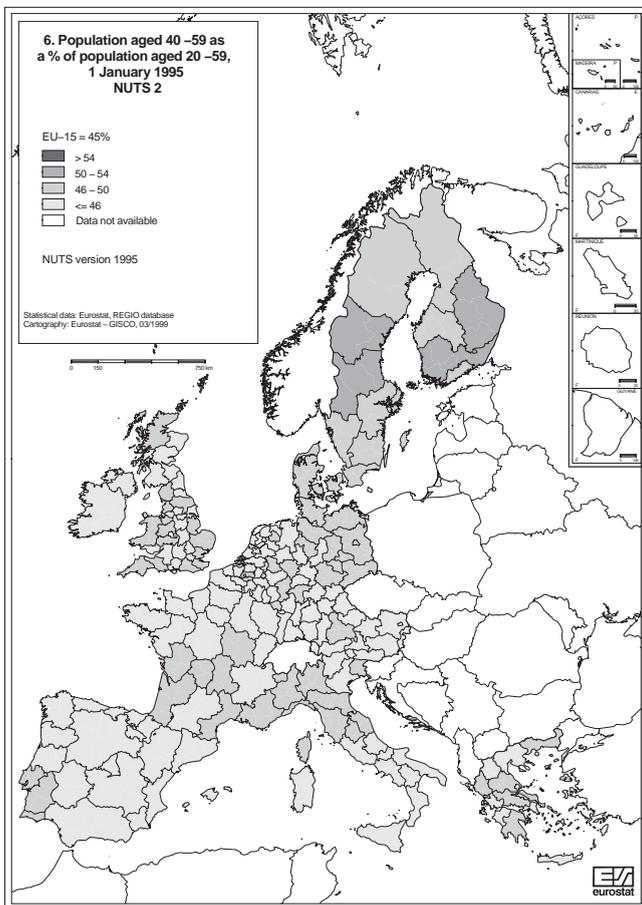
By 2025, this picture will have changed completely leading to substantially higher values (Figure 3). Highest values are expected in northern Spain, south-west of France, Italy and Germany. The region of Liguria (IT) was in 1995 the region with the highest percentage, and will also remain the most aged region in the future (almost 40%).

Perhaps even more interesting to know is the speed with which the regions see their share of elderly increase (Figure 4). Over the period 1995-2025, only the region Voreio Aigaio (GR) might experience a (slight) decrease of the share of elderly. All other regions will probably see their shares increase, ranging from slightly higher values up to around double the 1995 value. Largest increases in proportion of elderly between now and 2025 show a pattern which more or less mirrors the current regional patterns of the percentage of elderly. Regions which currently have a low percentage of elderly are likely to experience the strongest growth in the next decades, whereas regions with high percentages will tend to experience modest increases, or even a stabilisation of the proportion. This reflects differences in the timing of ageing across the

regions. Fastest ageing regions are mainly found in Finland, the Netherlands, Ireland, eastern Germany and the north of France. Regions in which the speed of ageing is relatively low, are situated in Sweden, Greece, Portugal and central Spain.

Concerning the oldest old, largest changes are expected to take place after 2025, and as the regional population scenarios have been compiled until 2025, no comprehensive future story can be given. Regions which currently have a relatively low share of oldest old within their population are mainly found in the Netherlands, Ireland, the south of Spain and northern Finland. By 2025, highest values can be found in eastern Germany, northern Italy and northern Spain. Regions which experience the fastest growth of oldest old are mainly found in regions with mild climates (Greece, Italian coasts, Spanish Costa's) and eastern Germany. In the period 1995-2025, only the region of Greater London will see the share of oldest old slightly decrease. All other regions will see the shares increase modestly up to more than double the 1995 value. In 2025, the region Liguria will have the highest percentage of oldest old (over 8%)

Population ageing will no doubt have a bearing on the financial aspects of pension schemes and health expenditure. In addition, the increasing numbers of older people will increase the demand for health care and social services, resulting probably in greater demand for personnel in these sectors.



Ranking of percentage of 40-59 in 20-59
In 2015, 10 lowest, 10 highest; Eurostat baseline scenario

Açores (PT)	46,2
Ireland (IE)	46,2
Madeira (PT)	47,9
Pohjois-Suomi (FI)	49,5
Nord-Pas-de-Calais (FR)	49,5
West Midlands (County) (UK)	50,0
Ceuta y Melilla (ES)	50,1
Île de France (FR)	50,1
Greater London (UK)	50,2
Väli-Suomi (FI)	50,2
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Pais Vasco (ES)	58,8
Niederösterreich (AT)	58,8
Valle d'Aosta (IT)	59,2
Drenthe (NL)	59,5
Toscana (IT)	59,7
Piemonte (IT)	59,8
Veneto (IT)	60,0
Emilia-Romagna (IT)	60,6
Friuli-Venezia Giulia (IT)	61,5
Liguria (IT)	62,6

Working age population will decline and grow older

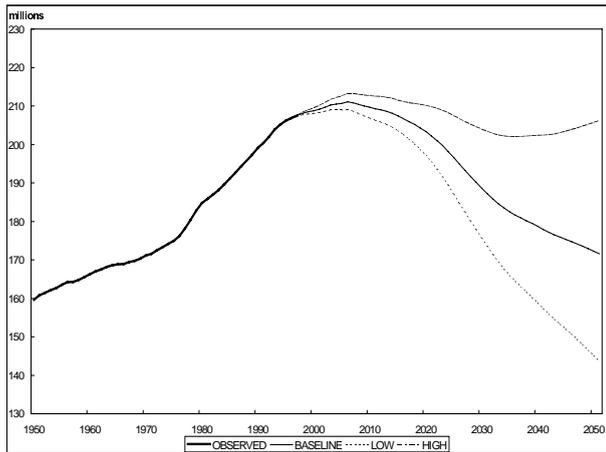


Figure 9: Population aged 20-59, EU-15

The population of working age (20-59) has been increasing over the last 50 years (Figure 9). A decline, however, is expected after 2005, when the first baby-boom generations will reach the age of 60.

The percentage of people aged 40-59 within the working age population is expected to increase strongly, reaching a peak between 2010 and 2020 as the smaller generations born in the 1970s reach the age of 40 and the baby-boomers reach early retirement age.

Decreasing and ageing working age population will occur virtually everywhere

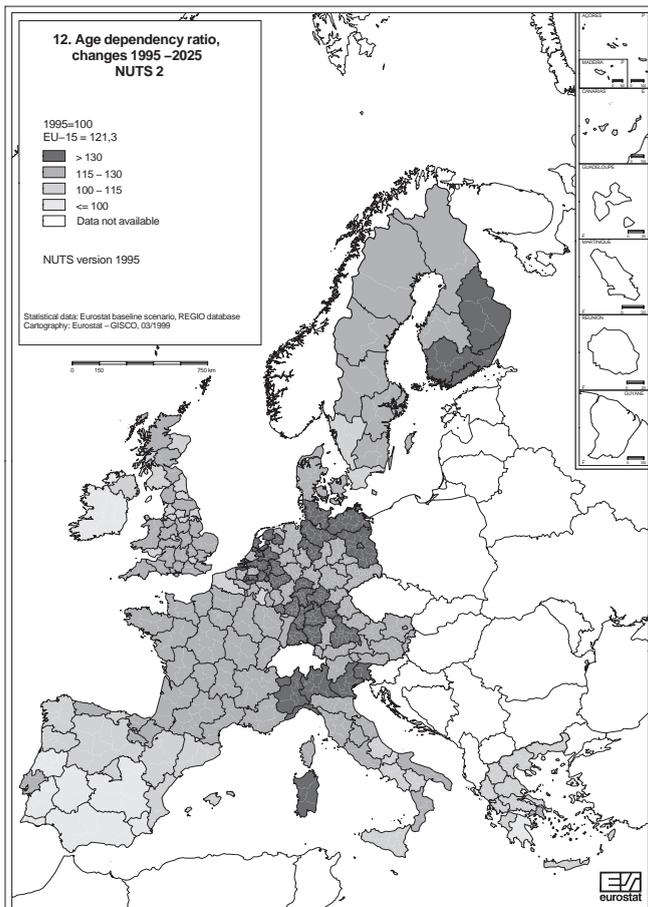
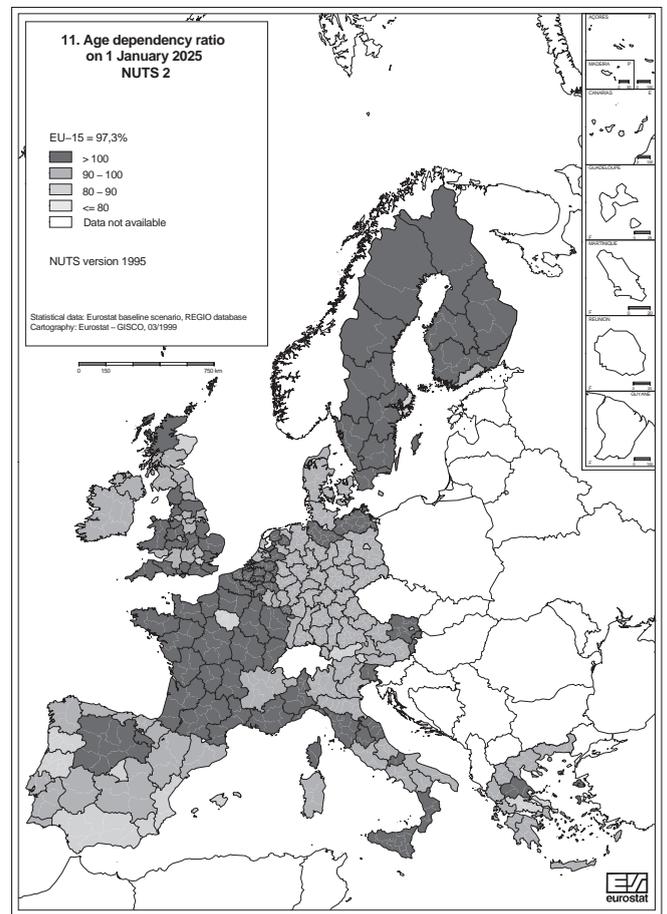
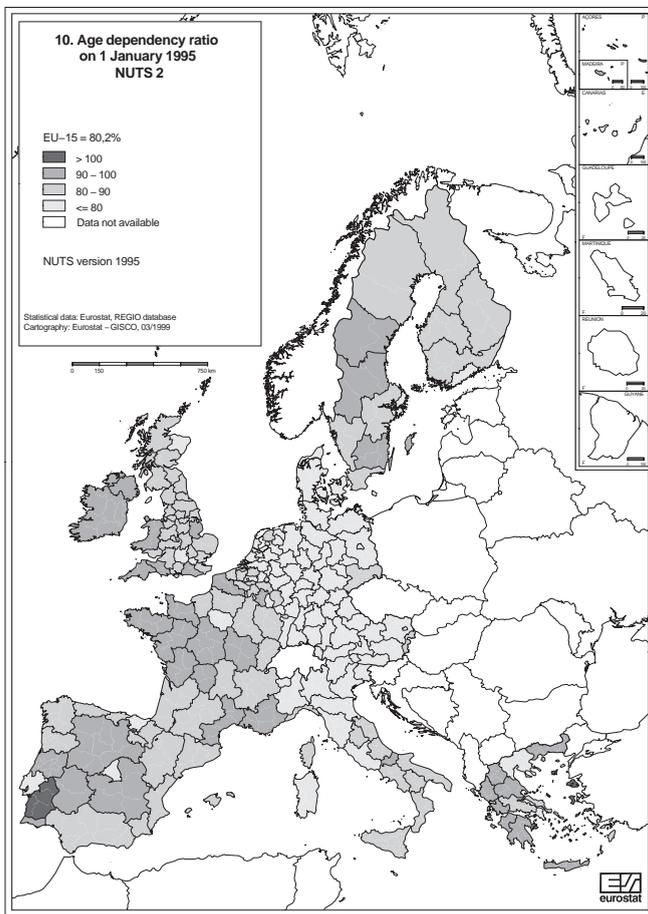
In the period 1995-2005, about two thirds of all regions are expected to still see the number of persons aged 20-59 increase. For the following decade 2005-2015, just half of the regions are expected to experience an increase of the working age population, and in the ten years to follow (2015-2025) only 18 regions (9%) will keep positive growth. This strong reduction is being caused by the baby-boom generation which will enter the age group 60 and over after 2005.

Regions with the highest percentage of working age population are currently found in the highly urbanised and densely populated corridor which runs from the Netherlands, via west and south-west Germany and a cluster of regions in Austria to northern Italy. In addition to these regions, high percentages are also found in highly urbanised areas in other parts of the EU. Until 2025, a decrease is expected in almost all regions. This decline is strongest in those regions with the highest values in 1995.

Regions in which the share of persons aged 40 to 59 in the age group 20 to 59 is currently lowest, are mainly found in Spain, Austria, Ireland, the Netherlands, southern Germany and the north of France (Figure 6). High values can be observed in the Scandinavian countries, eastern Germany, Greece, northern Italy, the south of France, parts of Great Britain and Portugal.

By around 2015, this ratio is expected to reach its zenith as the baby-boom generation is leaving the potential labour force, whilst the smaller baby-bust generation enters the age group of 40 and over. Highest levels of ageing in 2015 are expected for Austria, Germany, Italy, Spain, south-west of France, the Netherlands and parts of England and Wales (Figure 7). All regions will see their shares increase in this period. Strongest increases are expected to take place in Spain and Austria (Figure 8). Weakest increases are set to occur in Finland, Sweden, Ireland and Greece.

The prospective ageing of the work force and the increased number of older workers raises questions about the effect on the ability to adapt to changes in technology and new ways of working. In the past, the steady stream of young, freshly educated people joining the labour market provided employers, in some degree, with up-to-date technical knowledge and recently acquired skills at a relatively low wage. The decline in this stream and the changing circumstances mean that there will be more need to develop other ways to ensure that the skills of the work force are renewed and that firms can respond to advances in technology and new working methods. This implies more life-long learning, retraining existing members of the work force and updating the skills of women returning to work after a period of absence for family reasons.



Ranking of age dependency ratio in 2025, 10 lowest, 10 highest; Eurostat baseline scenario

Madeira (PT)	77,9
Canarias (ES)	79,4
Greater London (UK)	80,3
Wien (AT)	82,1
Île de France (FR)	83,2
Ceuta y Melilla (ES)	83,5
Hamburg (DE)	83,9
Norte (PT)	84,6
Comunidad de Madrid (ES)	85,1
Açores (PT)	86,8
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Auvergne (FR)	113,1
Bretagne (FR)	113,1
Zeeland (NL)	113,6
Cornwall, Devon (UK)	113,7
Itä-Suomi (FI)	115,3
Centre (FR)	115,6
Bourgogne (FR)	115,9
Poitou-Charentes (FR)	117,3
Limousin (FR)	118,0
Dorset, Somerset (UK)	118,9

Age dependency ratio will reverse

For the Union as a whole, the age dependency ratio (i.e. the sum of the number of people aged 0-19 and 60+ expressed as a percentage of the population aged 20-59) has decreased from the mid 1970s from 100% to 80% in 1995, due to the sharp declining number of young people. In the next ten years the ratio will be fairly constant but thereafter a steady and perhaps even strong increase might occur to all-time high levels of well above 120%.

At the regional level, the lowest dependency ratios are generally found in capital cities and surrounding regions, though they are also low in most regions in Germany and Austria as well as in the North and Centre of Italy because of the low birth rates in these areas (Figure 10). The highest dependency rates generally occur in regions where there is an above average proportion of children, reflecting relatively high birth rates which more than offset relatively small numbers of

people of retirement age. These regions are mainly found in Ireland, Greece, western France and central Spain.

Projections indicate that the increase in the number of elderly people will push up the dependency ratio, despite the fall in relative numbers of children. By 2025, the lowest values are expected for southern Spain and some capital cities (Madrid, Paris, Vienna, Berlin, Stockholm, London) (Figure 11). Highest values are set to be reached in Sweden, Finland, France, major parts of Belgium, Netherlands and the United Kingdom.

Strongest increases will occur in the Netherlands, southern and north-eastern Germany, southern Finland and northern Italy (Figure 12). Decreases in age dependency ratios are expected for Ireland and some regions in southern Spain, Portugal and Greece.

Eurostat's regional population scenarios

Eurostat's regional population scenarios, compiled in 1997 with the assistance of the Netherlands Interdisciplinary Demographic Institute and Statistics Netherlands, concern 204 regions of the European Union at the so-called NUTS-2 level and cover the period 1995-2025. All scenarios project the population at 1 January by sex and single years of age up to the age group of 90+. The scenarios are based on key assumptions on fertility, life expectancy, international and internal migration and results are consistent with the national population scenarios produced in 1996, which cover the period 1995-2050.

Three scenarios were prepared: a baseline, low and high scenario. The low and high scenarios can be considered as plausible extremes with respect to both population growth and regional imbalances. The low

scenario describes a demographic future in which current low fertility levels will persist, life expectancies will hardly increase, total net migration will drop by 50 percent, and regional imbalances will be high. In the high scenario population growth will be high as a result of a recovery of fertility levels, strongly increasing life expectancies and an increasing, and therefore high net inflow of migrants. Furthermore, regional imbalances are assumed to be low. The baseline scenario describes a continuation of current trends.

More detailed descriptions of the assumptions used can be found in Eurostat's series Working Papers (see list below); comprehensive statistical information is available by means of a CD-ROM and by consulting Eurostat's database NewCronos.

Further reading

De Jong, A (1998), Long-term fertility scenarios for the countries of the European Economic Area. Eurostat Working Paper, 3/1998/E/n° 17.

De Jong, A. and H. Visser (1997), Long-term international migration scenarios for the European Economic Area. Eurostat Working Paper E4/1997-6.

Eurostat (1997), Beyond the predictable: demographic changes in the EU up to 2050. Statistics in Focus. Population and social conditions, n° 7/1997.

Eurostat (1999), Regional population decline in the EU: recent trends and future perspectives. Statistics in Focus. General Statistics – Regions, n° 3/1999 (forthcoming)

Van Hoorn W. and J. De Beer (1998), Long-term mortality scenarios for the countries of the European Economic Area. Eurostat Working Paper 3/1998/E/n° 8.

Van Der Gaag, N., L. Van Wissen, E. Van Imhoff, and C. Huisman (1999), National and Regional Population Trends in the European Union, 1975-2025. Eurostat Working Paper 3/1999/E/n°8

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