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Regional labour force in the EU: recent patterns and future perspectives

The number of regions within the European Union experiencing labour force decline will probably increase drastically in the next 2-3 decades. During recent years only Eastern Germany, and some parts of Northern Italy, Spain and Sweden have been confronted with a shrinking labour supply. If current demographic and labour market trends persist, by the year 2025 almost all 204 EU regions at NUTS-2 level will face decreasing numbers of (economically) active people.

During the coming 2-3 decades also the structure of the labour force of the European Union is expected to undergo several changes. All regions will experience a strong increase of elderly (50+) in the labour force, and the vast majority of regions will see the share of women continue to rise. Also, part-time working will continue to gain importance.

Results are based on Eurostat's latest set of long-term population and labour scenarios compiled with the assistance of Statistics Netherlands. Accordingly, the figures and the more qualitative comments based on the projections reflect the model and hypotheses used (see the technical notes) and should be treated with some caution. Nevertheless, such projections are an indispensable way of showing possible trends in the workforce over the next 25 years and thus identifying their economic and social implications.

A shrinking labour force and spreading of labour force decline

In the period 1985-1995 EU's labour supply grew from 154 to 169 million people. If current demographic and labour force participation trends persist (baseline scenario), labour force will first continue to grow. Around 2010 a maximum of 183 million people is expected. Thereafter labour force will decline, and by 2050 the number of active people observed in 1985 might be reached.

If period fertility levels remain low, net migration drops significantly and female labour force participation stagnates (low scenario), labour supply will already start to decline in 1999, and falls to a level of 114 million persons by 2050. Only if fertility recovers strongly, net migration remains high and activity rates reverse or increase (high scenario), a constant level of about 210 million active people from 2015 onwards will occur (*Figure 1, Table 1*).

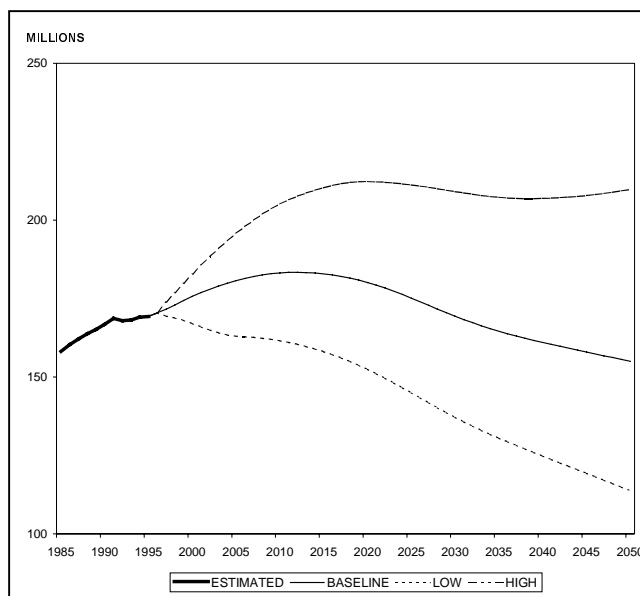
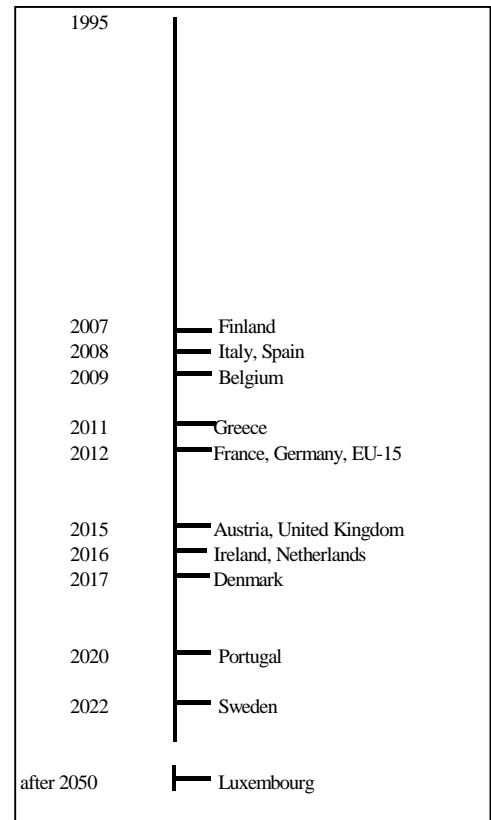
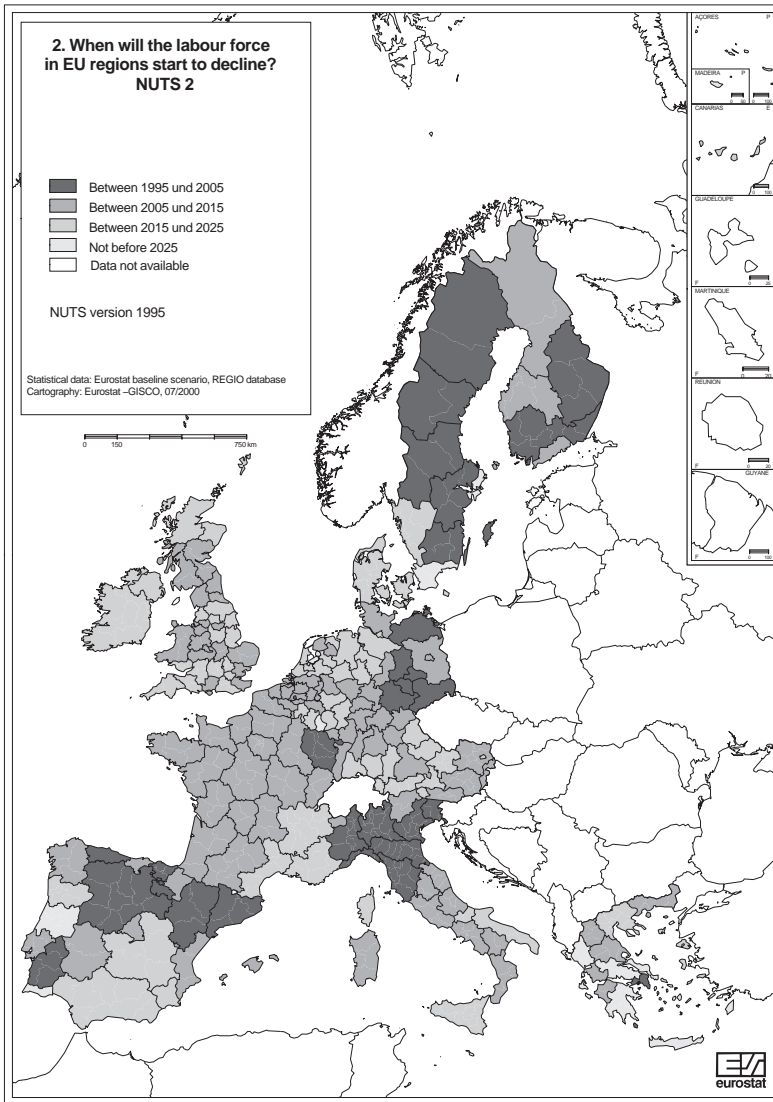


Figure 1 : Total labour force, 1985-2050, EU-15



When will the labour force start to decline ? Baseline scenario

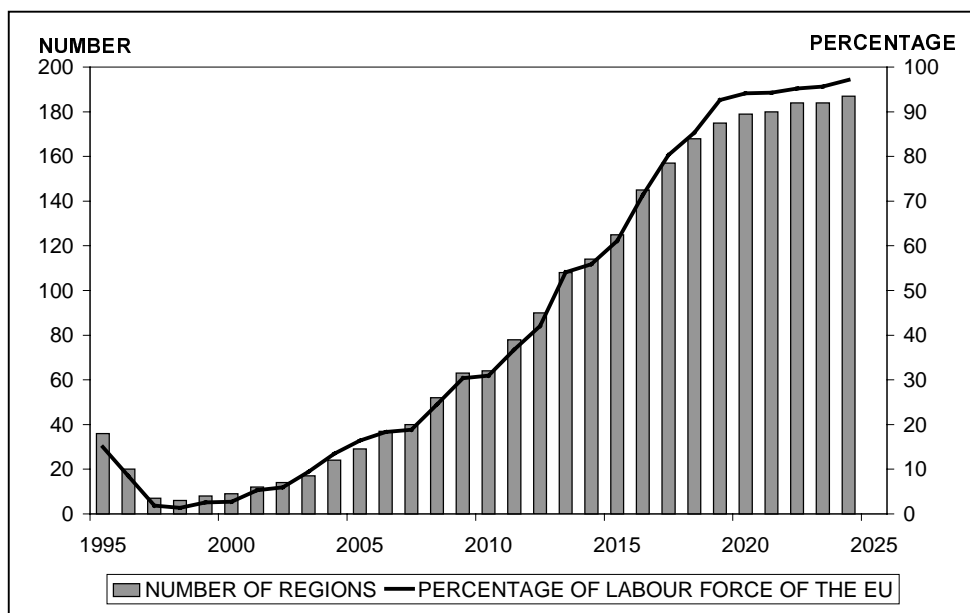


Figure 3 : Number and percentage of EU regions with a shrinking labour force (NUTS 2). 1995-2025. Baseline scenario

According to the baseline scenario, the number of regions with a declining labour force is expected to grow strongly. Between 1995 and 2005 several regions in southern and northern Europe and in eastern Germany will (again) be confronted with a shrinking labour supply (Figure 2). Around 2015 half of EU's labour force is located in regions with a declining labour force, while by 2025 almost all regions might be hit (Figure 3).

The strongest labour force decline during the next 25 years is foreseen for the eastern German regions and some regions in northern Italy and northern Spain. On the other hand labour supply will continue to grow substantially in some atypical EU regions such as Flevoland, Açores, Madeira and Ceuta Y Melilla.

Population growth versus change in participation

Labour force change is the combined result of growth of the working age population and change in labour force participation rates. Up till now working age population growth has been positive in the EU. This will change in the future. When the first, large post-war 'baby-boom' generations are passing the age of 65, a fairly long period of decline will start. (figure 4).

Such a decline of the labour force will probably be deferred by three developments. Firstly, it is expected that among those aged 55-64 participation will shortly start to rise. Secondly, participation among teenagers and young adults is expected to increase.

Finally, labour force participation among women aged 25-54 will continue to grow.

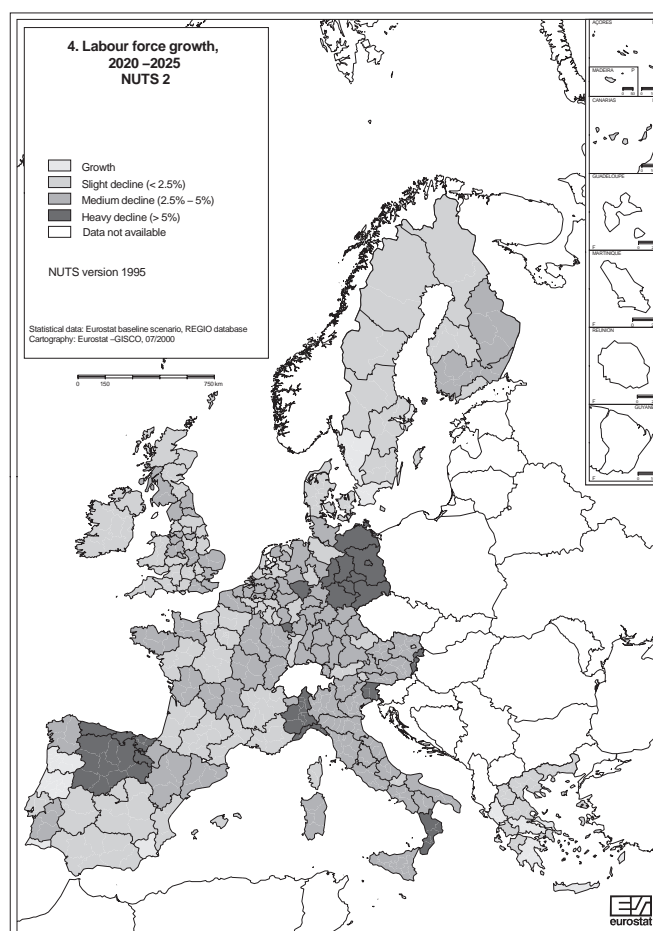


Table 1 : Labour force, 1985-2025

COUNTRY	(x million)										
	Estimated		Baseline scenario			Low scenario			High scenario		
	1985	1995	2000	2005	2025	2000	2005	2025	2000	2005	2025
European Union	158.2	169.3	175.7	180.7	175.2	167.1	163.1	145.0	182.9	195.8	211.3
Belgium	4.0	4.2	4.4	4.5	4.2	4.1	4.0	3.5	4.5	4.8	5.1
Denmark	2.8	2.8	2.9	2.9	2.9	2.8	2.7	2.4	3.0	3.1	3.4
Germany	36.1	39.8	40.8	41.8	39.8	39.2	38.9	33.8	42.5	45.1	47.0
Greece	4.0	4.4	4.7	4.8	4.8	4.4	4.4	4.0	4.9	5.3	5.9
Spain	13.9	16.3	17.2	17.9	16.8	16.3	15.9	13.8	18.1	19.7	20.8
France	24.6	25.6	27.2	28.4	27.9	25.4	24.6	22.4	28.1	30.5	33.3
Ireland	1.3	1.4	1.6	1.7	1.7	1.5	1.4	1.4	1.7	1.9	2.2
Italy	23.0	22.8	23.6	23.9	22.1	22.4	21.4	17.6	24.7	26.3	28.0
Luxembourg	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Netherlands	5.8	7.4	7.7	8.0	8.1	7.4	7.2	6.4	8.0	8.7	9.7
Austria	3.4	3.9	4.0	4.1	4.1	3.8	3.8	3.3	4.1	4.5	5.0
Portugal	4.5	4.7	4.9	5.1	5.2	4.7	4.6	4.5	5.2	5.6	6.3
Finland	2.6	2.5	2.5	2.5	2.4	2.4	2.3	2.0	2.6	2.7	2.8
Sweden	4.5	4.5	4.4	4.4	4.5	4.2	4.0	3.8	4.6	4.9	5.5
United Kingdom	27.6	28.8	29.7	30.5	30.3	28.4	27.8	25.9	30.6	32.5	35.8

Inactive population grows faster than active population in the long run

According to the baseline scenario the ratio between the number of inactive and active people in the EU, the so-called dependency ratio, will again decline in the short run (*Figure 5*). By around 2010 a minimum level of 1.1 is reached. Thereafter, it will start to rise until a maximum of 1.4 by 2040.

Under the low scenario the rise in the dependency ratio will be fiercer: a maximum of well over 1.6 is reached by 2050. As this scenario assumes meagre economic growth, this might endanger the systems of social protection and in particular the pensions that are mainly funded by contributions of the working population.

Under the high scenario the dependency ratio will first decrease faster, and after 2015 increase somewhat until levels that are lower than recently observed. High economic growth and rapid introduction of measures to promote female labour force participation are considered as prerequisites for such kind of development.

The “numerical pressure” put upon the labour force by the non-working part of the population can be distinguished into three components. Firstly, the children (up the age of 19) have to be provided for. By 1995 nearly half of the pressure of the non-working population is caused by this group. As fertility has been falling lately, the importance of the green pressure will diminish slightly in the future.

At prime working ages (between 20 and 59 years) students, disabled persons and early-retired people

mostly do not participate in the labour force. This kind of pressure is of minor importance: it is and remains about half of the green pressure.

By 1995 the pressure of elderly people is slightly lower than that of children. This is going to change drastically in the future. Already from 2005 grey pressure will exceed green pressure. Especially after 2010 the ageing of the post-war baby boom will cause a sharply increasing flow of people leaving the labour market. By 2050 the grey pressure will be nearly twice as large as the green pressure.

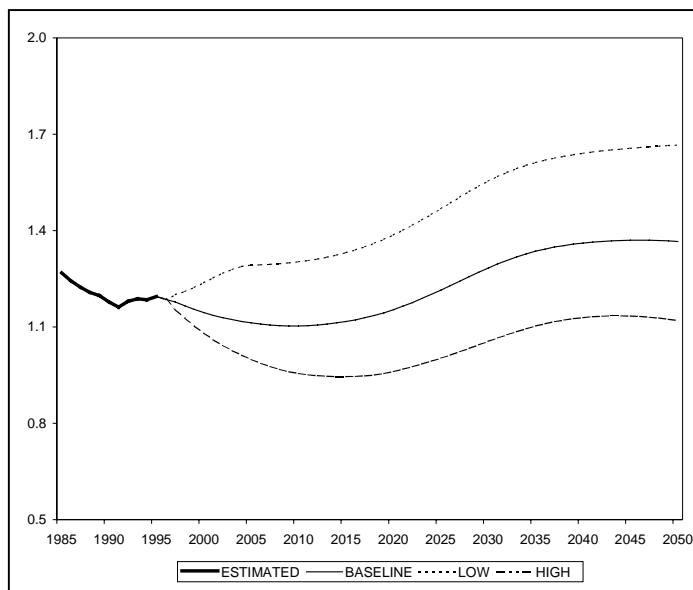


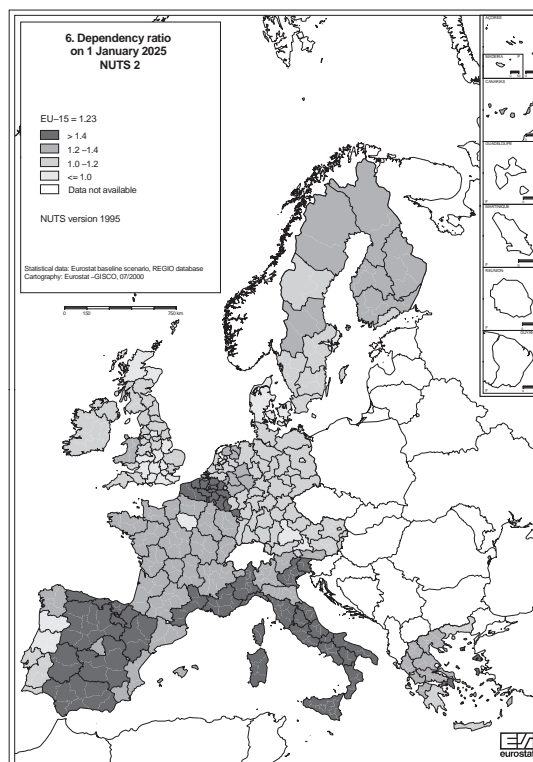
Figure 5 : Dependency ratio, 1985-2050, EU-15

Regional differences in dependency ratio

In 1995 low dependency ratio are generally found in capital cities. Factors at play might be a flourishing economy and low percentages of children. Most regions of Germany, the Scandinavian countries, the United Kingdom and Portugal are also characterised by relatively low figures. High dependency ratios generally occur in regions where there is an above average proportion of both children and elderly persons outside the labour force. These regions are mainly found in Ireland, Belgium, the southern part of Italy and central Spain.

According to the baseline scenario several regions will see their dependency ratio grow, largely due to population ageing (*Figure 6*). Especially a lot of regions in Sweden and Finland will be confronted with significant higher dependency ratios in the future. On the other hand a major decrease is expected in the case of Ireland.

In 2025 the lowest dependency ratio (0.83) is expected to be found in Grampian (United Kingdom) and the highest (1.73) in Sicilia (Italy).



Major changes in labour force composition

Three main developments in the future composition of the labour force are foreseen (*Figure 7*). Firstly, the labour force will age drastically. Currently around 20% of the EU labour force is aged 50 years and over. Between 2020 and 2025, a maximum of around 30% could be reached. By then the second part of the large post-war baby-boom generation (those born around 1960) will start to leave the labour market, which has a mitigating effect on the share of elderly in the labour force.

Secondly, full-time jobs (32 hours or more per week) will lose in importance in favour of part-time jobs (1-31 hours per week). In 1995 close to 83% of the employed population was employed in, or looking for, full-time jobs. By 2020 this share may have decreased to about 77%.

Finally, the share of women in the labour force of the Union is expected to rise further from just under 42% in 1995 to well over 44% in 2010 and later (in 1985 it was less than 39%).

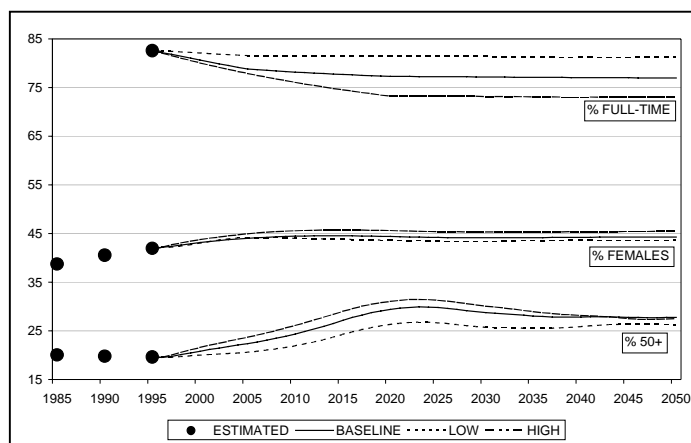


Figure 7 : Labour force composition, 1985-2050, EU-15

Increasing share of older workers in all regions

All countries of the EU will see the share of older workers (aged 50 to 75) in the total labour force increase significantly, from around 20% in 1995 to around 30% in 2025. The major reason, however, is the ageing of the numerous post-war generations.

In the European Union as a whole, the number of economically active seniors will increase from 33 million in 1995 to 52 million in 2025, which is an increase of almost 60%. However, there are big differences between countries. By 2025, Sweden might have around 20% more seniors in the labour force than observed in 1995, whereas it could almost double for the Netherlands.

The comparison of the age-pyramid of 1995 with that of 2025 according to the baseline scenario shows that the shape will change drastically (*Figure 8*). While the 1995 pyramid has a large base and is getting smaller at middle ages, the 2025 pyramid has a narrow basis and is getting larger at higher ages, reaching its widest part around the age of 55.

This bottom-up ageing of the labour force is predominantly due to population changes, as the post-war baby-boom generation will grow older and be replaced by less numerous generations born in the 1970s, 1980s and 1990s. The discrepancy between the male and female part of the labour force has become significantly smaller in 2025 due to the expected continuous rise in future female participation.

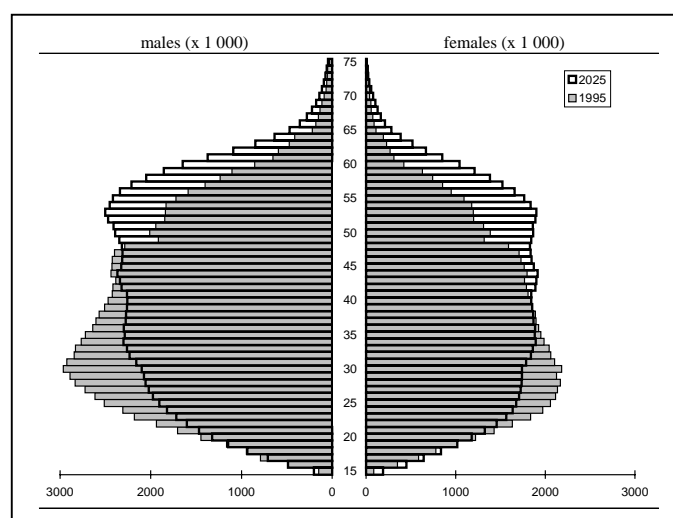
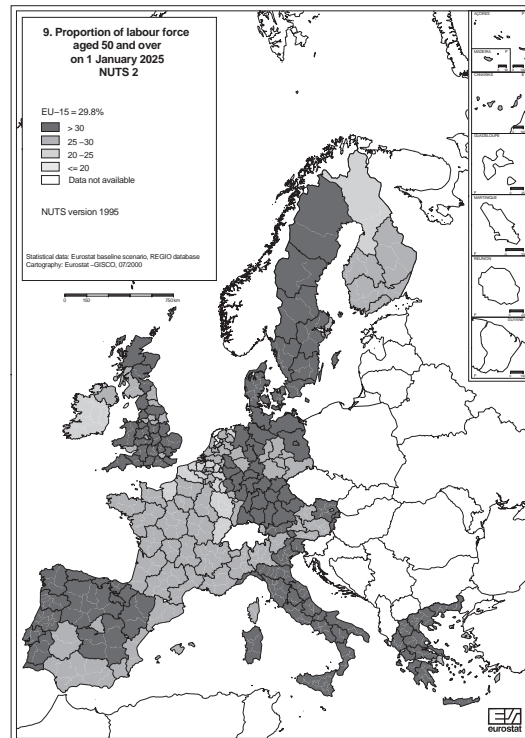


Figure 8 : Age pyramid of the labour force, EU-15

Regions that currently have a relatively high percentage of older workers in the labour force are mainly found in Sweden, Germany, Greece, Portugal and the United Kingdom. Low percentages are found in central and southern Europe, as well as in Ireland and Finland.

By 2025, this picture will have changed considerably leading to substantial higher values (*Figure 9*). Highest values are expected in a belt going from Sweden to Greece, as well as in the United Kingdom and the Iberian Peninsula.

Perhaps even more interesting to know is the speed with which regions are confronted with an ageing of the labour force. Over the period 1995-2025 several regions will probably see the share of seniors almost double. Largest increases are expected to take place in Austria, Belgium and the Netherlands. Regions in which the speed of ageing is relatively low, are situated in Greece and Sweden.



Increasing share of females

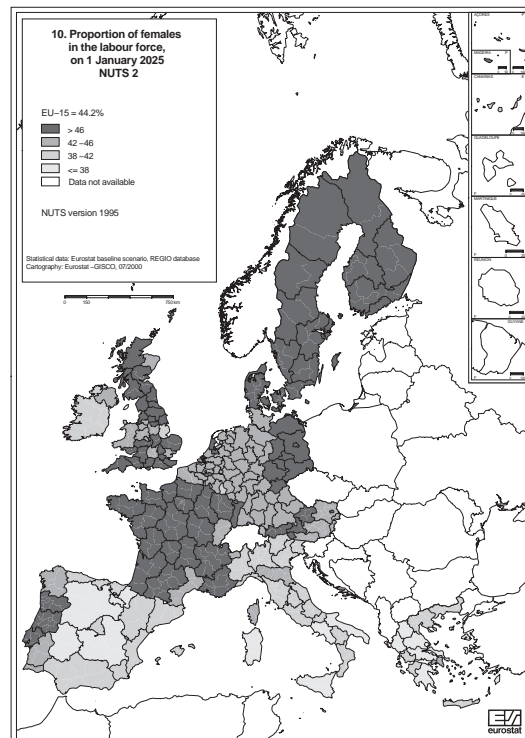
Activity rates among females have shown a marked growth over the last decades. This has been facilitated by their increasing acquisition of educational qualifications and is reinforced by drastic changes in the social and cultural environment.

In all countries (except Sweden), the participation of females is expected to show a further increase. Due to (future) shortages in labour supply and further growth of the services sector, employers are (on average) more inclined to make working hours more flexible and expand parental leave arrangements. Furthermore, the relatively small and low participating female generations born in or before World War II will be replaced by more numerous and more economically active post-war generations of women.

In 1995, highest percentages of females in the labour force were found in Sweden, Finland and former eastern Germany. Lowest percentages were observed in Greece, southern Italy, Spain, Luxembourg and Ireland.

By 2025, the picture still shows similarities with the one of 1995. High percentages are by then also found in France (*Figure 10*). Low values are still to be found in Greece, southern Italy and central Spain.

Only six regions show within the period 1995-2025 a decrease in the share of females in the labour force. Of those regions, five are located in the Scandinavian region where the percentages were already relatively high in 1995. Relatively high growth rates are mainly found in southern Italy, southern Spain, Austria and large parts of the Benelux region.



Part-time jobs will gain importance

Over the last decade there has been a general tendency throughout the European Union for a growing popularity to work part-time (less than 32 hours per week).

In 1995 by far the highest proportion of part-time workers in the labour force was found in the Netherlands: almost 32% "Second best" were Sweden and the United Kingdom with about 24%. Relatively low percentages of around 11% were recorded in Greece, Portugal and Spain.

Especially for women, working in large part-time jobs (20-31 hours per week) has gained importance in the EU. In the Nordic countries most mothers take up large part-time jobs or continue to work full-time in order to combine having children with professional labour. In the Netherlands and the United Kingdom the majority of women change from a full-time job towards either a large or a small part-time job (1-19 hours per week)

after childbirth. In the southern countries both males and females hardly participate in small part-time jobs.

In Denmark, the Netherlands and the United Kingdom more and more students combine study and employment. In Germany and Austria a dual-training system dominates post-compulsory education. In the remaining countries it is still common to concentrate on education alone, rather than to combine studying with work.

The recent rise in female participation in the labour force is expected to continue in the future. Therefore also part-time work will increase.

All countries will see their share of part-time workers increase with between 4 and 8 percentage points. By 2025, the Netherlands will continue to have the highest share (over 39%) whereas Greece, Portugal and Spain will remain at the lowest level (around 16%).

Eurostat's national and regional labour force scenarios

Eurostat's regional labour force scenarios, compiled in 1998 with the assistance of Statistics Netherlands, concern 204 regions of the European Union at the so-called NUTS-2 level and cover the period 1995-2025. At national level the projection period is 1995-2050. This new set of long-term labour force scenarios replaces the set of projections produced and published in 1993-1995 (see further reading). All scenarios project the labour force at 1 January by sex and single years of age from 15 up to the age group of 75+. At national level, a further distinction into working time has been made, dividing the labour force in full-time (32 hours or more per week), large part-time (20-31 hours) and small part-time jobs (1-19 hours). The scenarios are based on assumptions on participation rates which have been combined with the results from Eurostat's latest national and regional population scenarios compiled in 1997.

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 labour force growth and regional imbalances. The low scenario describes a future in which a rather gloomy economic development will have a negative influence on labour force participation, and regional imbalances will be high. In the high scenario labour force growth will be high as a result of a flourishing economy and a positive attitude towards cultural changes. Furthermore, regional imbalances are assumed to be low. The baseline scenario assumes that most current trends will continue. Regional imbalances will decrease somewhat.

Comprehensive statistical information is available by consulting Eurostat's database NewCronos.

Further reading

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