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National and Regional Trends in the Labour Force in the European Union 1985 - 2050

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National and Regional Trends in the Labour Force in the European Union

1985-2050

Report on behalf of the European Commission
Directorate General XVI
Regional Policy and Cohesion

Andries de Jong
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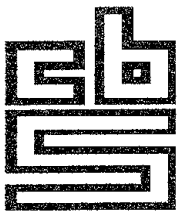
July 2000



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Preface

In the period 1996-1998 Statistics Netherlands worked on the revision and extension of Eurostat's long-term labour force scenarios for the countries of the European Union. Based on these scenarios the present report documents observed and projected national and regional trends in the labour force in the European Union for the period 1985-2050. The report was compiled by Statistics Netherlands at the request of the European Commission.

While working on this project, several people have made valuable contributions to the report. In particular we would like to thank Harri Cruijsen, Harold Eding and Noud van Giersbergen. Mrs. M. Gircour edited our non-native use of the English. Their help is greatly appreciated.

Voorburg, June 2000

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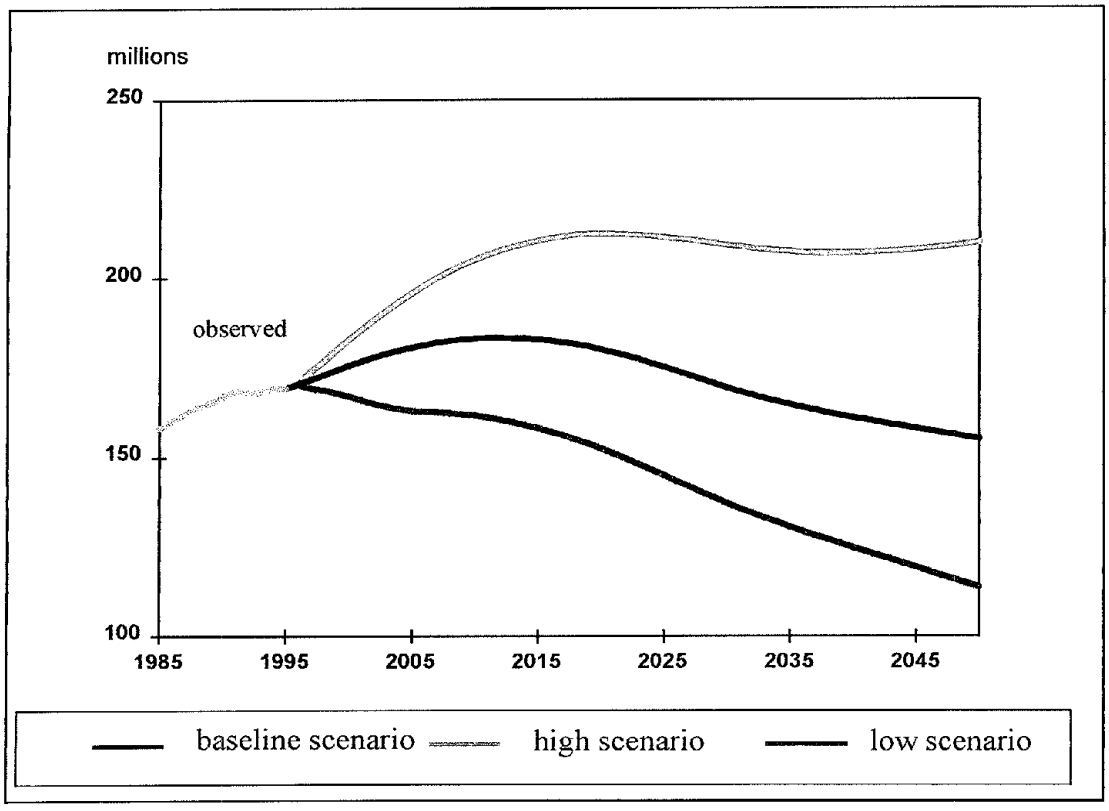
Executive summary

In this report, observed and projected labour force developments in the European Union (EU) are sketched for the period 1985-2050. Labour force growth of the European Union will slow down in the future and probably stagnate around the year 2010. 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 (economically) active population.

In the period 1985-1995 the labour force of the European Union grew from 154 to 169 million people. In the baseline scenario it is assumed that most current demographic and labour force participation trends will persist. The labour force will reach a zenith of 183 million around 2010. Hereafter the labour force will decline and by 2050 a figure of 155 million is expected.

Under the high scenario both the population growth and the rise in labour force participation will be higher. This will result in an increase of the labour force to 210 million in 2015 and a stable level hereafter. In the low scenario on the other hand, labour force growth is negative from now on, resulting in a labour force of 114 million in 2050 (*Figure 1*).

Figure 1. Labour force, EU-15, 1985-2050

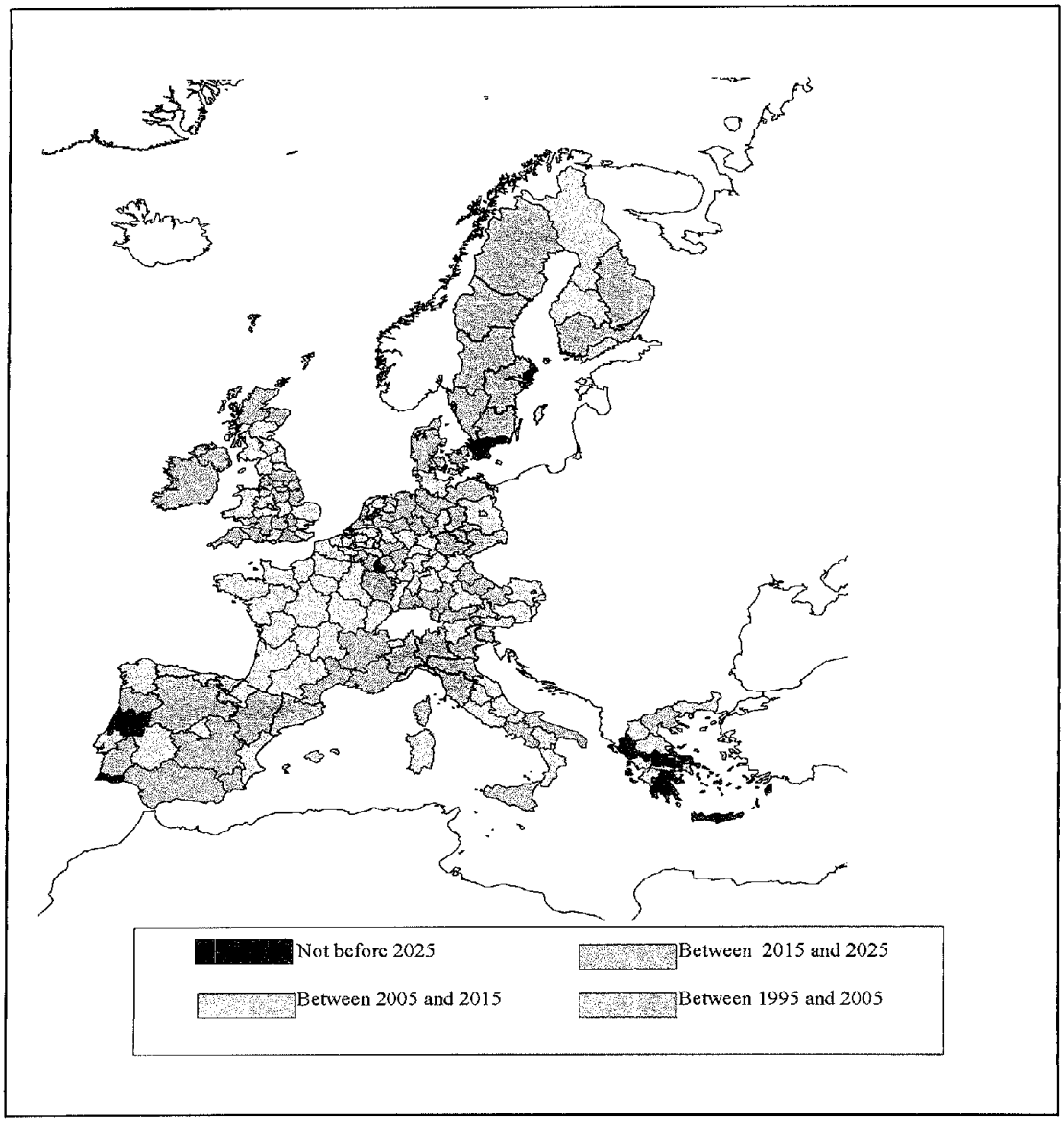


A fast growing number of regions with a shrinking labour force

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 is foreseen for Mecklenburg-Vorpommern (Germany). For this region, the labour force is expected to fall by 24 percent in 2025 compared to 1995 (*Figure 4*). Absolute leader in terms of labour force growth is Flevoland (the Netherlands) for which an increase is expected of almost 70 percent. 'Second best' is Ceuta Y Melilla (Spain) with an expected labour force growth of 45 percent.

Most regions affected by high unemployment rates over the last decade are found in Spain, the lower part of Italy and former Eastern Germany. Currently also a lot of regions in Sweden and Finland witness high unemployment rates. The larger part of these regions will be facing a declining labour force in the short or medium run, according to the Baseline scenario.

Figure 2. When will the labour force start to decline? Baseline scenario



For the worst affected areas this means that the risk of long lasting high unemployment rates will be alleviated to a large extent. On the other hand, regions with a growing labour force in the first decades of the next century are in general characterised by low unemployment rates

EU's labour force will probably reach its maximum just after 2010, alongside with France, Germany and Greece (*Figure 5*). In Belgium, Finland, Italy and Spain labour force decline might start even earlier. In Portugal and Sweden the maximum labour force will probably be reached around 2020, whilst in Luxembourg no decline is expected up to 2050.

Figure 3. Number and percentage of EU regions with a shrinking labour force (NUMBER), baseline scenario, 1995-2025

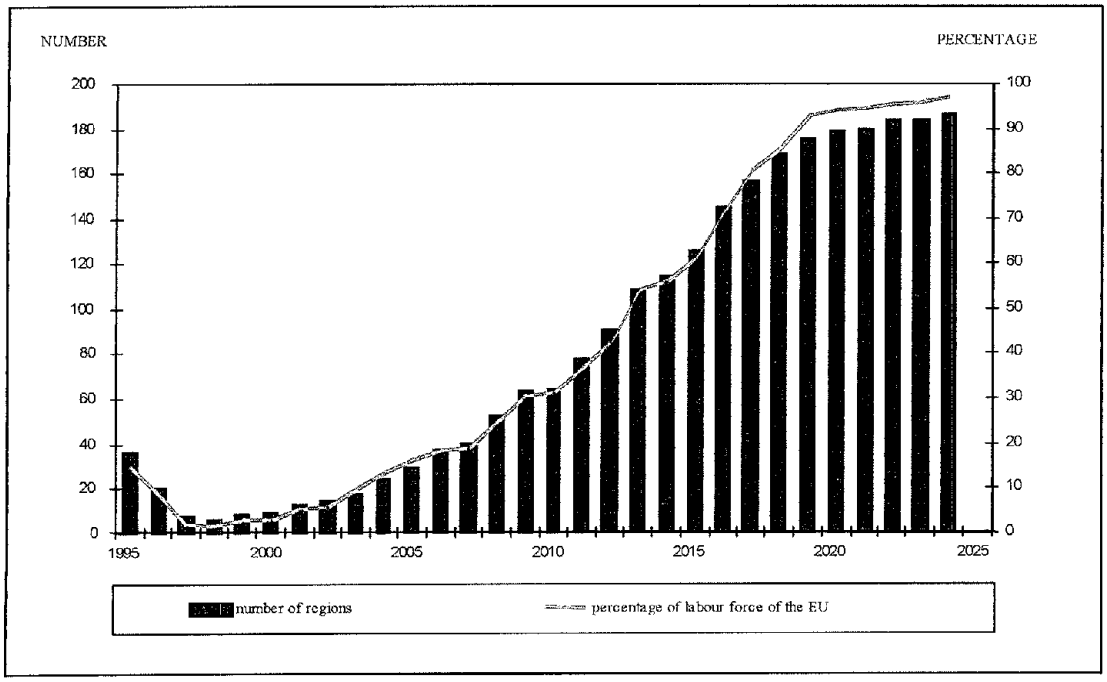
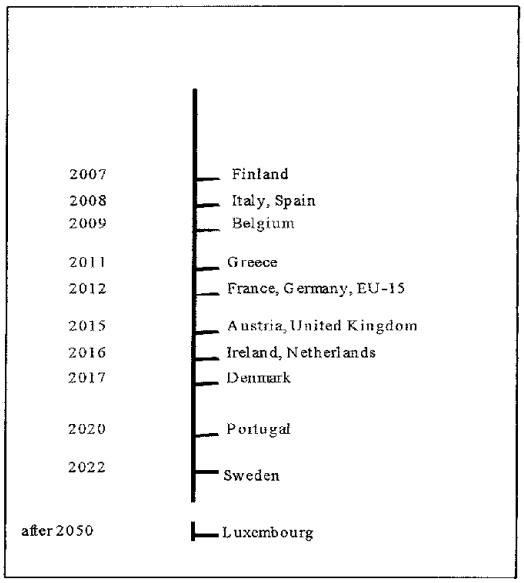


Figure 4: Ranking of labour force in 2025 (1995=1), 10 lowest, 10 highest, baseline scenario

Mecklenburg-Vorpommern (DE)	0.76
Pais vasco (ES)	0.77
Magdeburg (DE)	0.78
Liguria (IT)	0.79
Dessau (DE)	0.80
Sachsen (DE)	0.81
Thueringen (DE)	0.81
Halle (DE)	0.81
La Rioja (ES)	0.83
Piemonte (IT)	0.83
... ...	... ...
... ...	... ...
Peloponnisos (GR)	1.25
Languedoc-Roussillon (FR)	1.25
Canarias (ES)	1.25
Lincolnshire (UK)	1.26
Grampian (UK)	1.27
Sterea Ellada (GR)	1.33
Madeira (PT)	1.39
Acores (PT)	1.42
Ceuta Y Melilla (ES)	1.45
Flevoland (NL)	1.68

Figure 5: When will the labour force start to decline? baseline scenario



Labour force change: 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. However, this will undoubtedly change in the future. Immediately after 2010, when the first, large postwar 'baby-boom'generations are passing the age of 65, a fairly long period of decline will start. owever most of them will leave the labour market earlier and therefore if participation rates among both men and women would not change from 1995 on, the labour force of the European Union will fall already after 2006 (*Figure 6*).

Such a rather nearby maximum 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 rise as the trend towards early retirement is set to be curtailed in order to guarantee the sustainability of the social security and public health systems.
Secondly, participation among teenagers and young adults is expected to increase due to growing shortages on the youngsters labour market, and rising possibilities and wishes to combine study and part-time work.
Finally, labour force participation among women aged 25-54 will continue to grow. Especially in countries currently having low female participation rates, measures will be taken in order to reconcile motherhood with paid work.
In particular the latter trend will have a significant effect on EU's labour force: the falling trend will be deferred until around 2012, and the number of economically active people will be about 7% larger by 2050 compared a situation that only male participation will change

Figure 6. Labour force in case of constant participation, EU-15, 1995-2050

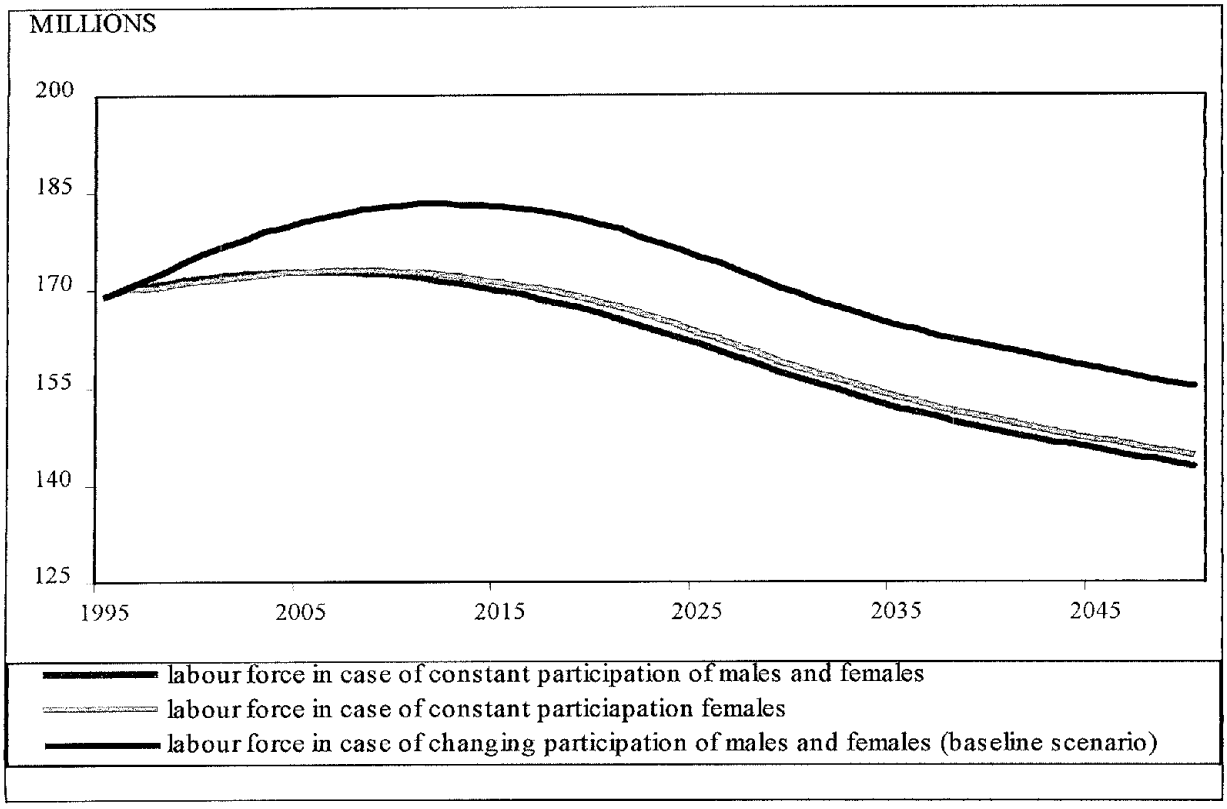


Figure 7. Components of labour force change, baseline scenario, 1995-2000

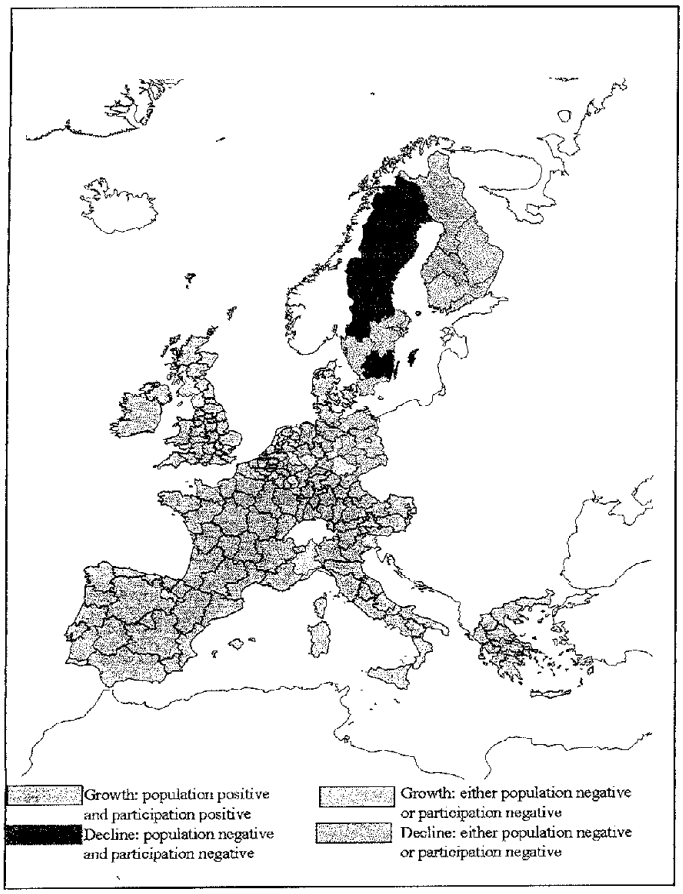
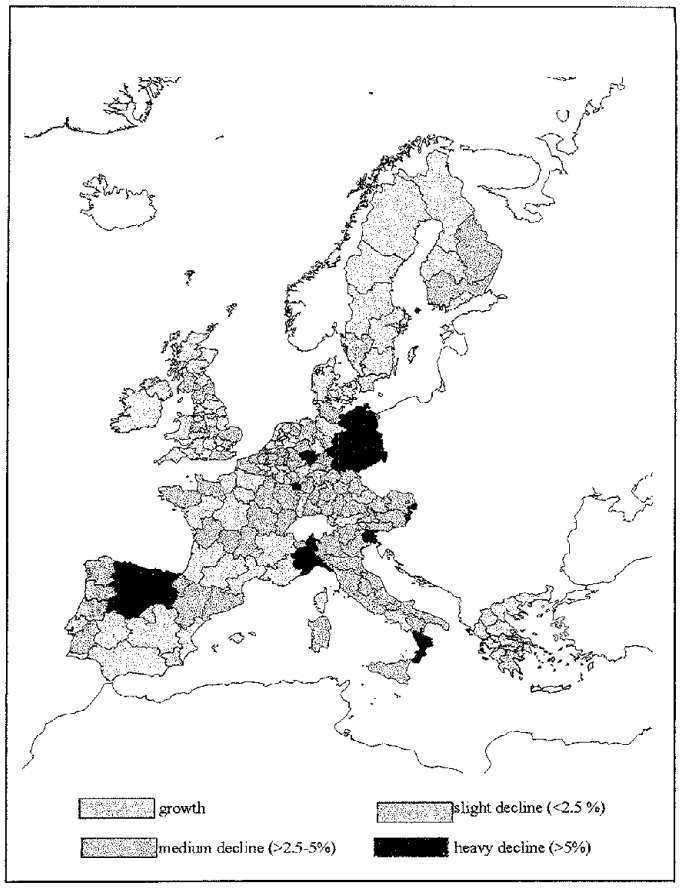


Figure 8. Labour force growth, baseline scenario, 2020-2025



In the period 1995-2000 only several regions in Sweden are characterised by both negative population growth and falling labour force participation (*Figure 7*). A vast majority of the regions are still in the phase of having both positive population growth and rising labour force participation. Nevertheless, already a lot of regions either have a negative population growth or a falling labour force participation.

In the period 2020-2025 almost all regions have entered the phase of negative labour force growth, due to a falling population combined with a stable labour force participation (*Figure 8*). A rather heavy decline is expected to occur in eastern Germany and northern Spain.

Inactive population grows faster than active population on 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 continue to decline in the short run (*Figure 9*). 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 more fierce: 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 which 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 a kind of development.

Figure 9. Dependency ratio, EU-15, 1985-2050

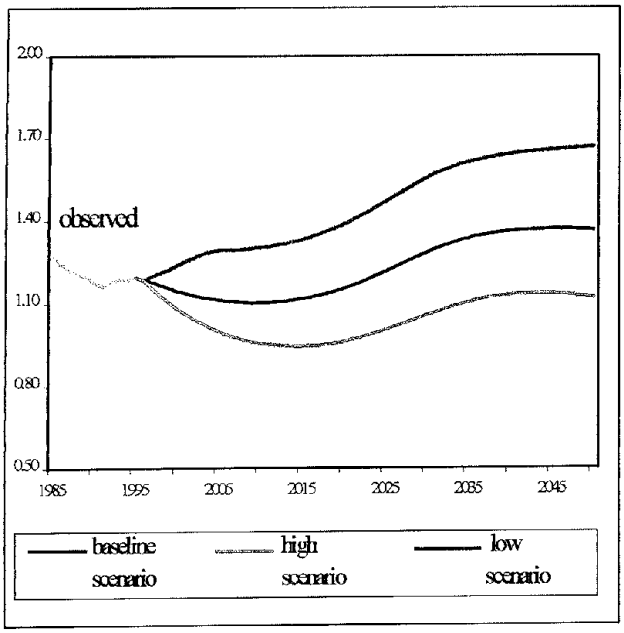
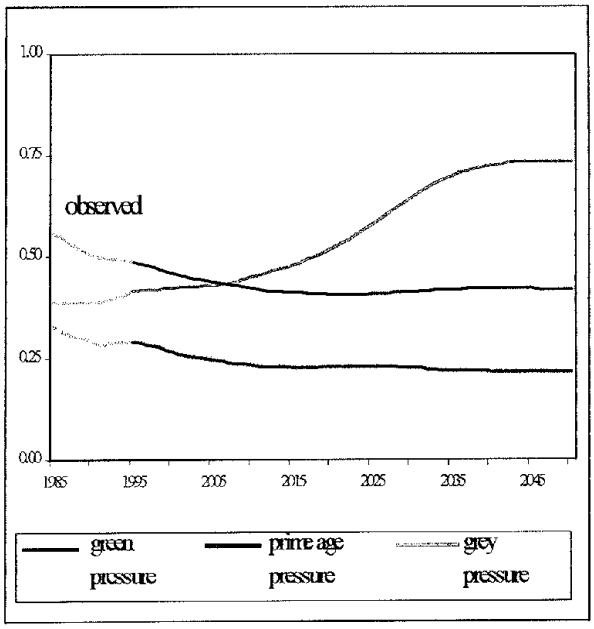


Figure 10. Green, prime age and grey pressure, EU-15, baseline scenario, 1985-2050



In the low scenario a rise of the dependency ratio is foreseen in the short run, while in both the baseline and high scenario this is expected in the long run. This may have important social implications as it could imply a choice between curtailing expenditures on all kinds of provisions (e.g. unemployment and pension allowances) or putting the burden on the working part of the population (e.g. a higher income taxation in order to sustain the non-working part). In the baseline scenario and especially in the high scenario these kinds of problems can be averted for the coming two decades. So, economic growth is considered as a prerequisite for preventing the rising costs connected with all kinds of provision offered by the welfare state.

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 (*Figure 10*). 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 do not participate in the labour force. The importance of this kind of pressure is somewhat smaller
By 1995 the pressure of elderly people is only a bit smaller than that of children. This is going to change drastically in the future. Already from 2005 this will be the largest of the three component. Especially after 2010 the ageing of the post-war baby boom will cause a sharply increased flow of people leaving the labour market. By 2050 the grey pressure will be nearly twice as large as the green pressure.

Regional differences in dependency ratio

In 1995 low dependency ratios are generally found in capital cities (*Figure 11*). Factors at play might be a flourishing economy and a low percentage of children. Most regions of Germany, the Scandinavian countries, the United Kingdom and Portugal are also characterised by low figures.

Figure 11. Dependency ratio, 1995

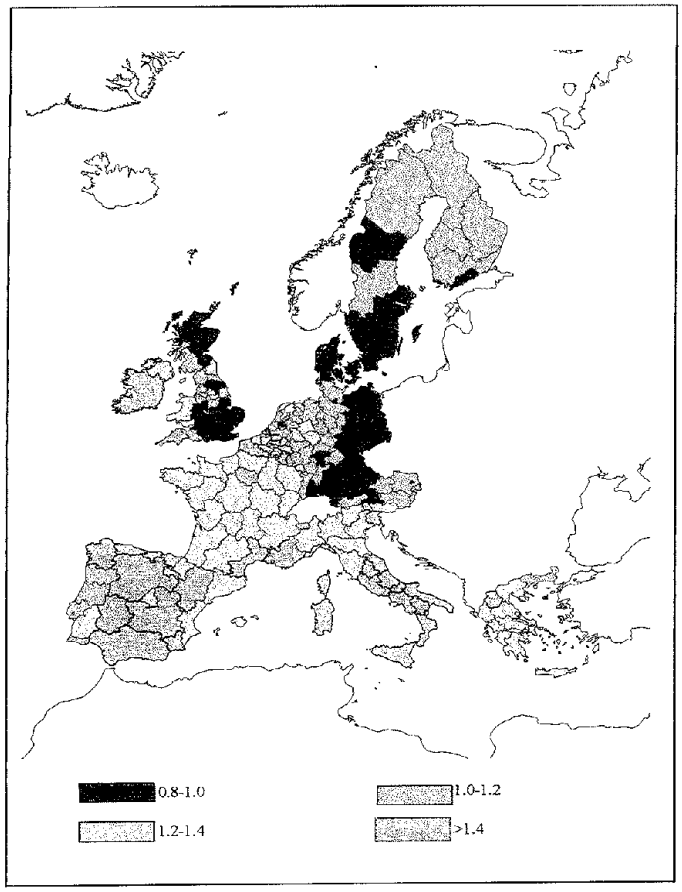


Figure 12. Dependency ratio, baseline scenario, 2025

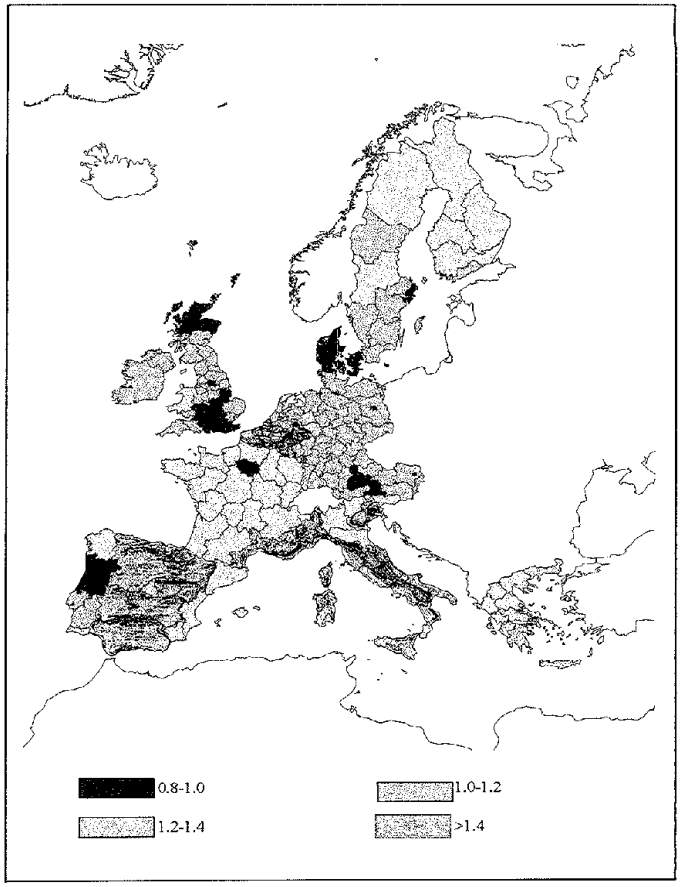


Figure 13: Ranking of dependency ratio in 2025, (1995=1), 10 lowest, 10 highest, baseline scenario

Grampian (UK)	0.86
Avon, Gloucestershire, Wiltshire (UK)	0.89
Berkshire, Buckinghamshire, Oxfordshire (UK)	0.90
Greater London (UK)	0.90
Denmark	0.91
Bedfordshire, Hertfordshire (UK)	0.91
Centro (PT)	0.92
Madeira (PT)	0.96
Hereford & Worcester, Warwickshire (UK)	0.96
Wien (AT)	0.97
.....	.....
.....	.....
Principado de Asturias (ES)	1.60
Basilicata (ITA)	1.62
Hainaut (BE)	1.63
Sardegna (IT)	1.65
Liguria (IT)	1.66
Campania (IT)	1.67
Puglia (IT)	1.68
Calabria (IT)	1.68
Limburg (BE)	1.71
Sicilia (IT)	1.73

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 the situation will get even worse in the future, for a large part due to an ageing of the population of many regions (*Figure 12*). By 2025 the number of regions with a high dependency ratios will have grown. Especially a lot of regions in Sweden and Finland will have significant higher dependency ratios in the future. On the other hand a major decrease is expected in the case of Ireland.

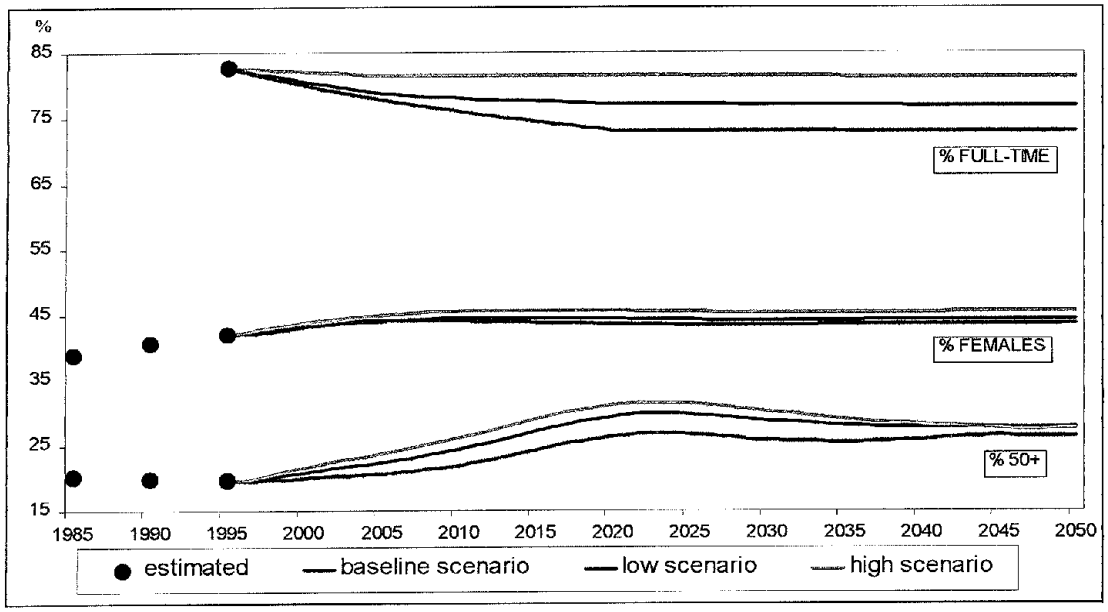
In 2025 the lowest dependency ratio is expected to be found in Grampian (United Kingdom) and the highest in Sicilia (Italy) (*Figure 13*).

Major changes in labour force composition

During the coming 2-3 decades 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

Three main developments in the future composition of the labour force are foreseen (*Figure 14*). 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 active 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 14. Labour force composition, EU-15, 1985-2050

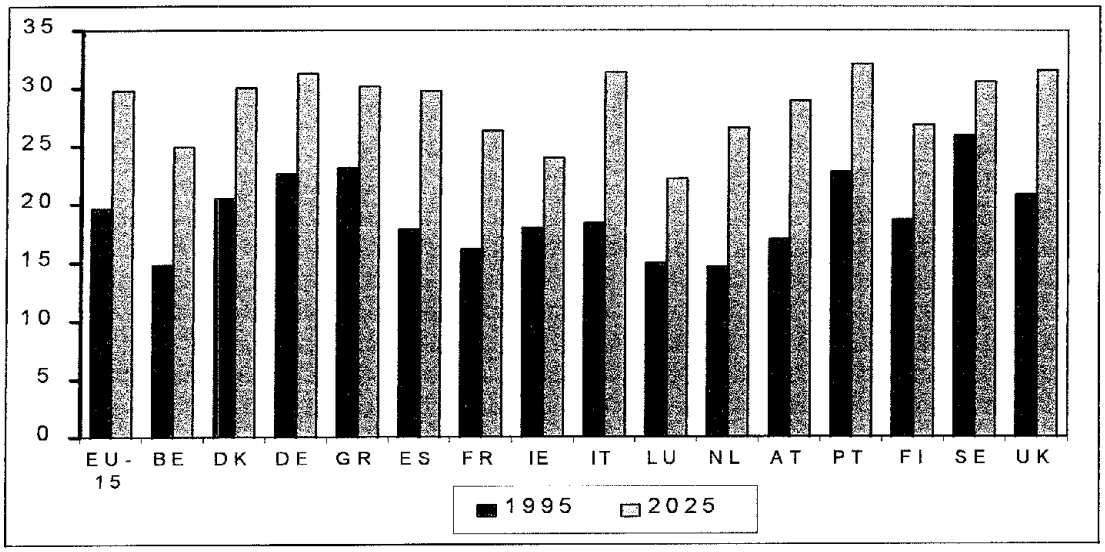


Increasing share of older workers

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 (*Figure 15*). This rise is partly due to actions undertaken by governments to raise participation among seniors in order to prevent the foreseen problems concerning the sustainability of the social security and public health systems. 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 then observed in 1995, whereas it could almost double for the Netherlands.

Figure 15. Percentage of labour force aged 50-75, 1995 and baseline scenario 2025



Regions which 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 (*Figure 16*). Low percentages are found in central and southern Europe, as well as in Ireland and Finland.

Figure 16. Percentage of labour force 50 and over, 1995

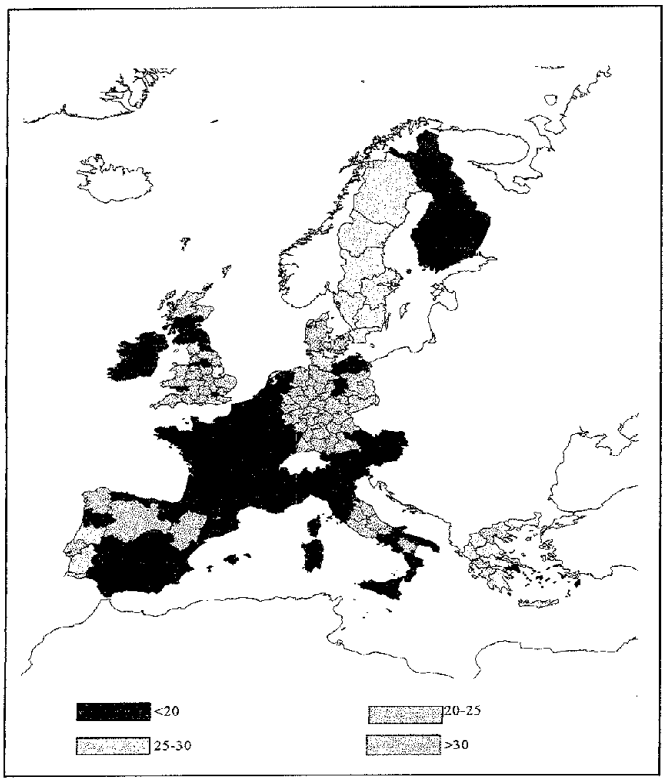


Figure 17. Percentage of labour force 50 and over, baseline scenario, 2025

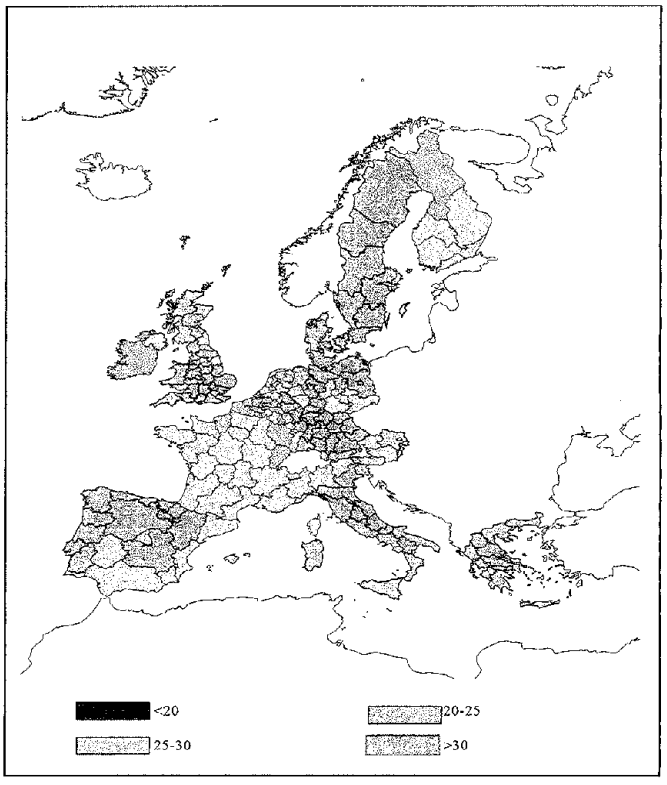


Figure 18. Change in percentage of labour force aged 50 and over, baseline scenario, 1995-2025 (1995=100)

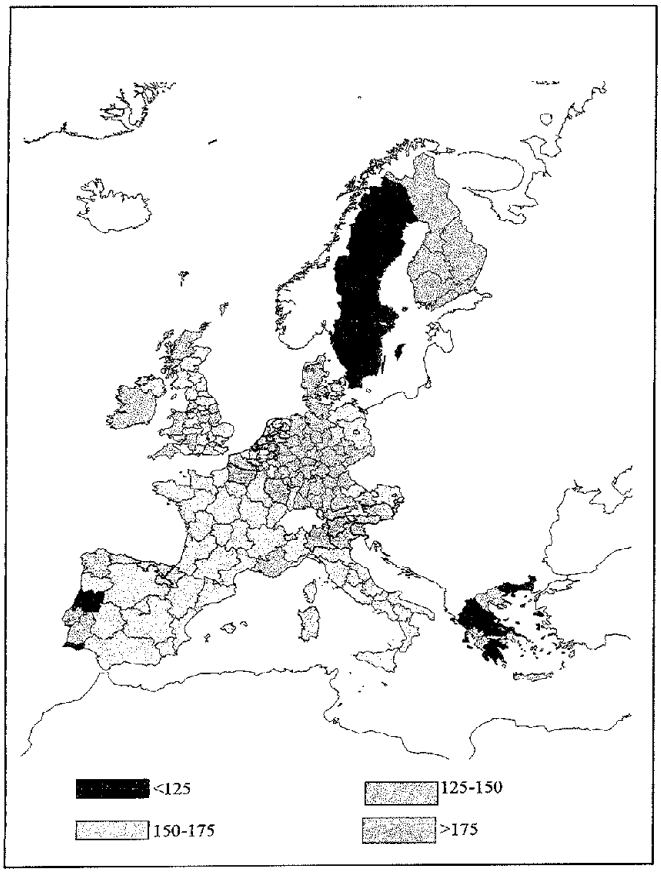


Figure 19. Ranking of change in percentage of labour force aged 50 and over, baseline scenario, 1995-2025 (1995=100)

Voreio Aigaio (Gr)	105.4
Anatoliki Makedonia, Thraki (GR)	109.6
Peloponnisos (GR)	111.7
Thessalia (SE)	111.9
Sydsverige (SE)	113.7
Mellersta Norrland (SE)	114.6
Sterea Ellada (GR)	115.0
Ipeiros (GR)	115.5
Ovre Norrland (SE)	116.2
Småland med öarna (SE)	116.4
.....	.....
.....	.....
Friesland (NL)	189.1
Comunidad Foral de Navarra (ES)	189.7
Utrecht (NL)	190.1
Veneto (IT)	190.9
Limburg (BE)	191.3
Pais Vasco (ES)	191.9
Cantabria (ES)	192.4
Sardegna (IT)	192.5
Ahvenanmaa/Aland (FI)	200.0
Flevoland (NL)	234.1

By 2025, this picture will have changed considerably leading to substantial higher values (*Figure 17*). Highest values are expected in a belt going from Sweden to Greece, as well as in the United Kingdom and the Iberian Peninsula.

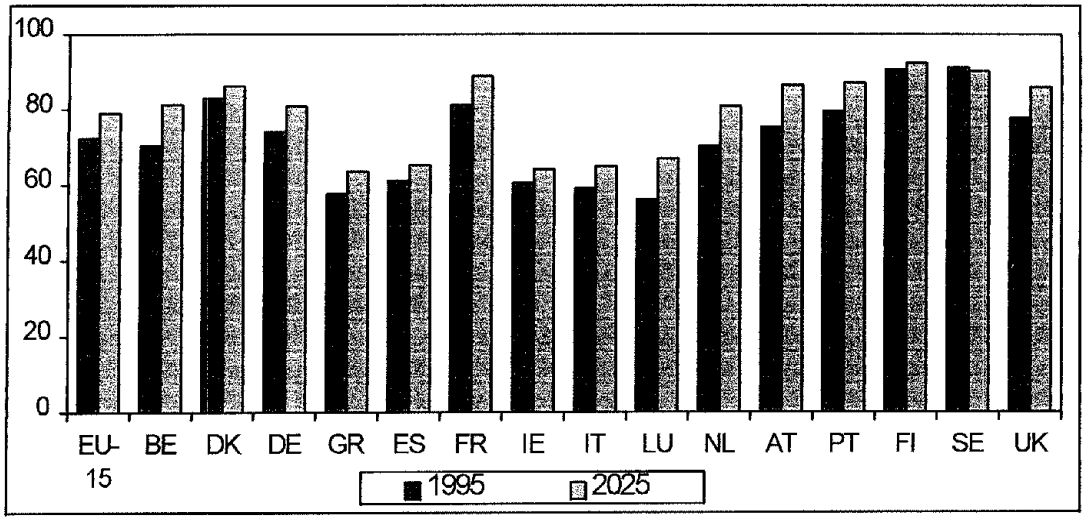
Perhaps even more interesting to know is the speed with which regions are confronted with an ageing of the labour force (*Figure 18*). Over the period 1995-2025 several regions will probably see the share of seniors almost double. Largest increases are expected to take place in Austria, Belgium and the Netherlands. Flevoland (Netherlands) will be the front runner with an increase of over 130% (*Figure 19*). Regions in which the speed of ageing is relatively low, are situated in Greece and Sweden. Especially in Voreio Aigaio (Greece) the speed will be modest, with only 5%.

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 (*Figure 20*). 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.

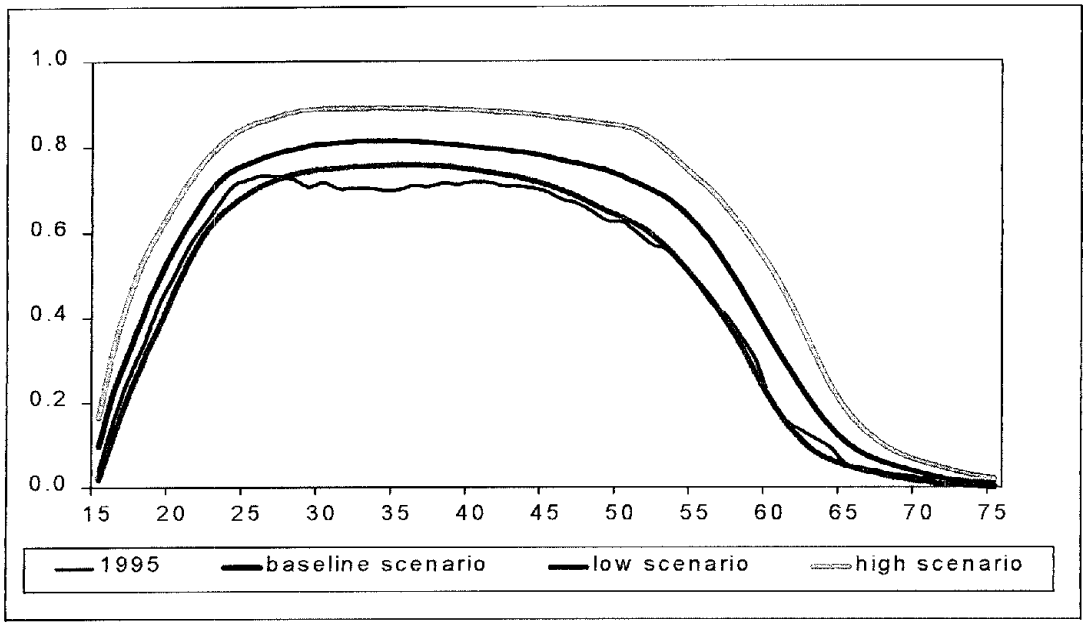
Figure 20. Percentage of females in labour force, 1995 and baseline scenario, 2025



An international comparison shows that high participation rates of women does not necessary have a negative impact on fertility. On the contrary, in northern European countries a high female labour participation seems to go hand in hand with relatively high fertility levels. Favourable facilities for childcare and parental leave, in combination with changing opinions on the combination of having children and paid labour, could be an explanation for this.

While the age-pattern of male activity rates has an inverted U-shape, that of females is still more or less M-shaped in some countries, reflecting a traditional pattern of labour force participation (*Figure 21*). In the 1970s female activity curves of most EU-countries were characterised by a left-handed peak, a result of comparatively high activity rates for women between 20 and 25 and falling activity rates at higher ages as most women withdrew from the labour market for reasons of marriage or childbirth. The rise in female participation over the last decades led to the emergence of a M-shaped curve, with a second peak due to the return of women on the labour market once the children have become less dependent. It is generally expected that this "child dip" will disappear.

Figure 21. Activity rates of females, EU-15, 1995 and 2025



In 1995, highest percentages of females in the labour force were found in Sweden, Finland and former eastern Germany (*Figure 22*). 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 23*). 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 (*Figure 24*). 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.
The largest shift in female participation is foreseen for Sicilia (Italy), namely over 25% (*Figure 25*). In Lincolnshire (United Kingdom), in contrast, the share of females in the labour force will decline with almost 5%.

Figure 22. Percentage of females in the labour force, 1995

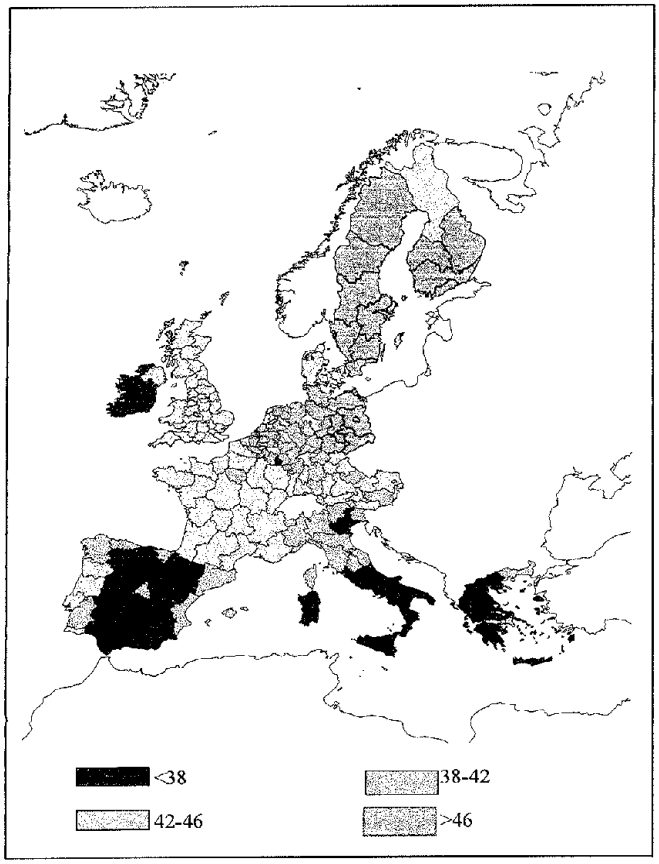


Figure 23. Percentage of females in the labour force, baseline scenario, 2025

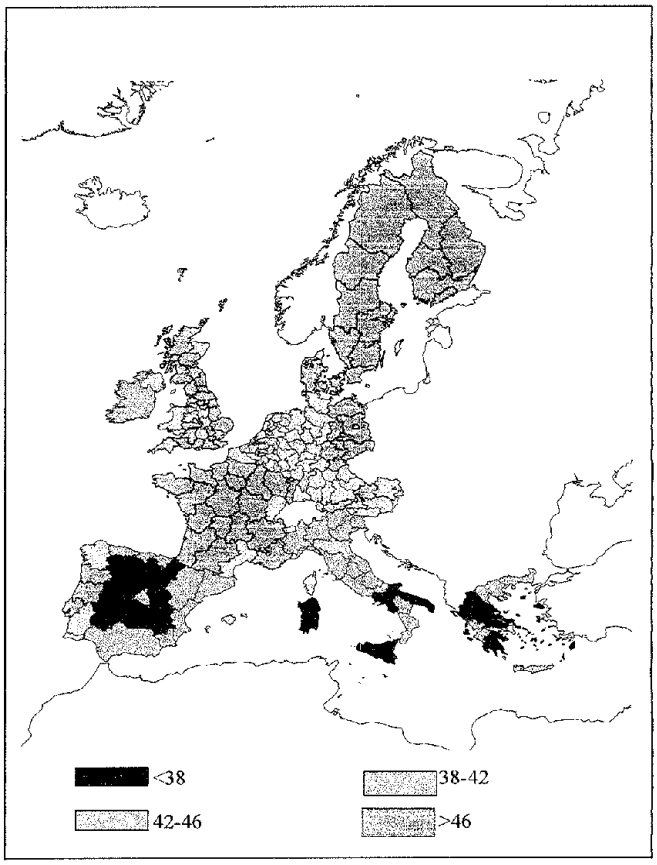


Figure 24. Change in percentage of females in the labour force, baseline scenario, 1995-2025 (1995=100)

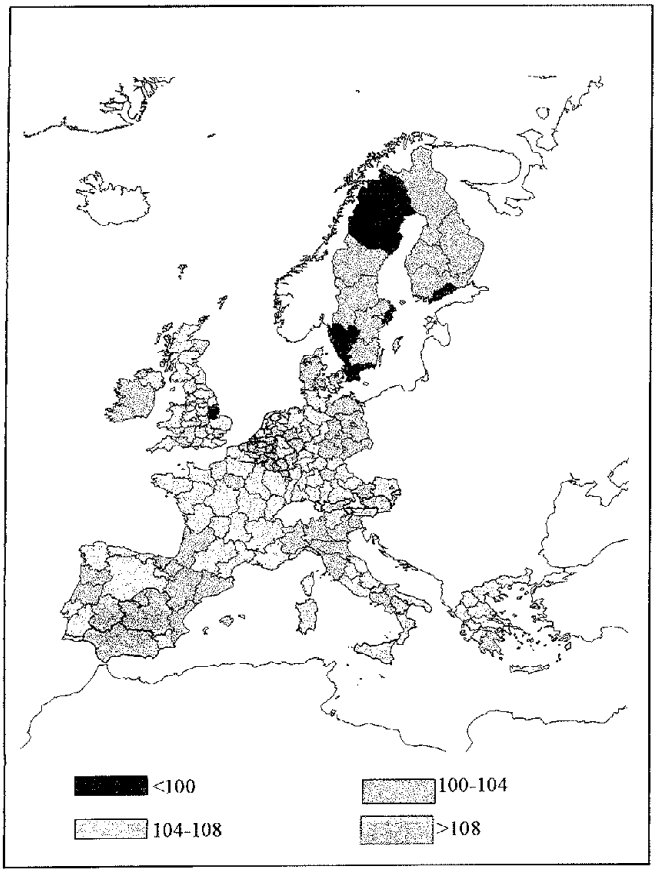


Figure 25. Ranking of change in percentage of females in the labour force, baseline scenario, 1995-2025 (1995=100)

Lincolnshire (UK)	95.5
Stockholm (SE)	98.0
Sydsverige (SE)	98.4
Ovre Norrland (SE)	98.9
Västsverige (SE)	99.5
Uusima (FI)	99.6
Ahvenanmaa/Aland (FI)	100.0
Halle (DE)	100.1
Campania (IT)	100.3
Östra Mellansverige (SE)	100.3
.....	.....
.....	.....
Luxembourg (LU)	111.6
Leicestershire, Northamptonshire (UK)	111.9
Sardegna (IT)	112.5
Basilicata (IT)	112.9
Voreio Aigaio (GR)	113.1
Calabria (IT)	113.5
Acores (PT)	116.4
Puglia (IT)	121.4
Molise (IT)	126.8
Sicilia (IT)	127.6

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). The gradual change from full-time to part-time is partly the result of a shift from employment in agriculture and industry towards services (part-time is rare in industry and agriculture). This process, which began in the early 1980s in countries such as the Netherlands and the United Kingdom, is now evident in all fifteen Member States.

In 1995 by far the highest proportion of part-time workers in the labour force was found in the Netherlands: almost 32% (*Figure 26*). "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.

When children have passed the phase of childhood, a substitution of part-time jobs for full-time jobs might occur. However, this break in the labour career could prevent to find a full-time job again. That might explain the relatively high proportions of part-time working women in the age group 50 and over. The other two groups for which part-time might be an option, the students and early pensioners, also show a differentiated international picture.

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.

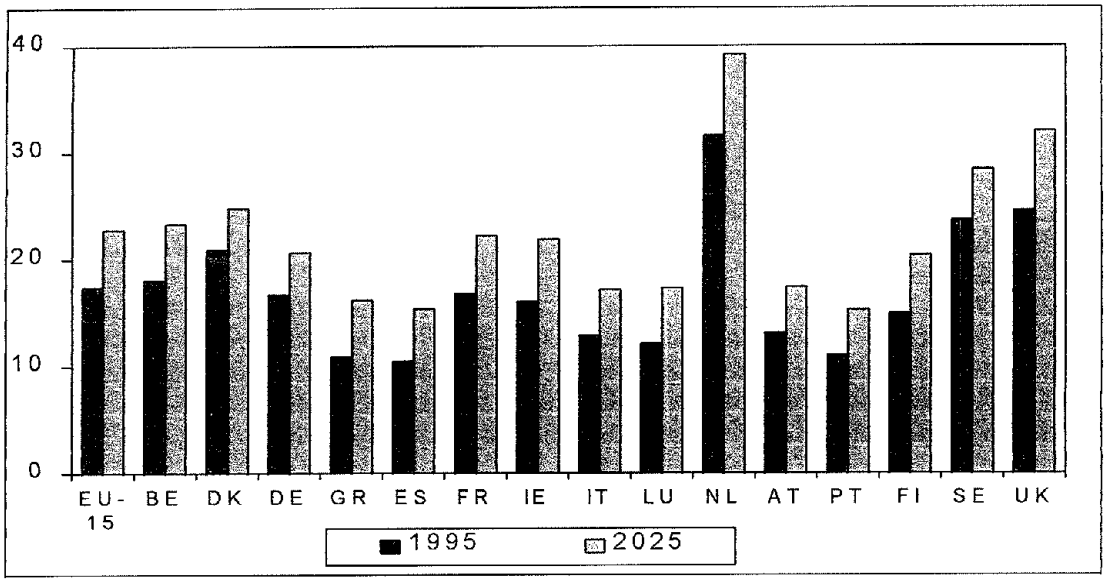
The introduction of early retirement schemes has had a negative impact on the number of elderly in the labour force. Participation rates have fallen to historically low levels.

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

Under the baseline scenario activity rates in part-time jobs of youngsters in their twenties will significantly rise in the Nordic countries. This will happen to an even greater extend in the Netherlands and the United Kingdom. At higher ages a limited rise is foreseen in all countries, especially in the northern and western part of the EU.

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%).

Figure 26. Percentage of part-time work in the labour force, 1995 and baseline scenario 2025

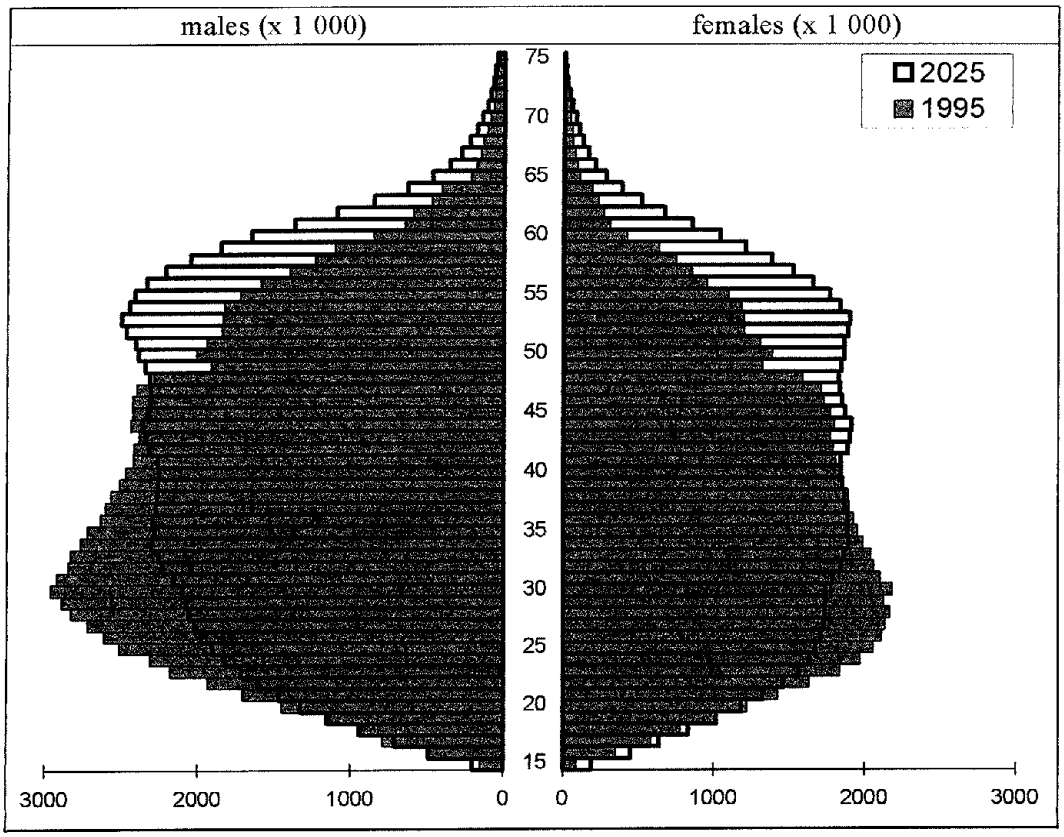


Changing labour force structure

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 27*). 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 27. Age pyramid of the labour force, EU-15



Possible consequences of a changing labour force structure

EU's labour force is facing an inevitable ageing. The numerous baby-boom generation (born between 1946 and 1965) will reach retirement age in the period 2011-2030, whilst the number of new-comers in the labour market will continue to decrease. Therefore, youth unemployment might diminish and (in the long run) be replaced by labour shortages. Moreover, as the large baby-boom generation will be replaced by the less numerous baby-bust generation (born in the 1970, 1980s and early 1990s), actions will be needed with respect to the social security systems.

A second structural change of the future labour force, is the continued increasing participation of females. This might have a positive impact on the possible future labour shortage. Women will be the main source of future labour force growth.

Related to this second trend, is the increasing role of part-time working. An ongoing trend towards more flexibility of work organisations makes it easier to employ part-time workers. The majority of women works in part-time jobs, and new groups such as students and early pensioners might increasingly choose to become respectively remain economically active.

1. Eurostat's long-term labour force scenarios 1998

1.1. Introduction

In 1995 the European Commission (Directorate-General XVI) commissioned Statistics Netherlands to revise and extend labour force scenarios for the countries of the European Union. These scenarios are part of a comprehensive research programme launched by Eurostat. In an earlier phase population scenarios were formulated based on alternative assumptions on fertility, mortality, international and interregional migration. The labour force scenarios are a refinement of these population scenarios in the sense that the dimension labour force participation has been added.

The assumptions of the national labour force scenarios cover the period 1995-2020. The baseline scenario assumes that most current trends will continue. The low and high scenario describe alternatives in different economic and cultural contexts. The low scenario presents a rather gloomy economic development and resentment of cultural changes, which have a negative influence on labour participation. In the high scenario a flourishing economy and a positive attitude toward cultural changes are supposed to boost labour market participation.

The labour force participation rates have been combined with the population scenarios in order to arrive at labour force scenario. As the population scenarios at the national level were available until 2050, computations of the labour force have also been made until this year, by keeping labour force participation rates constant after 2020. Three main scenarios on the labour force have been compiled by combining the low, baseline and high scenarios of labour force participation rates with the low, baseline and high population scenarios.

The regional scenarios consist of a refinement of the low, baseline and high scenarios to the regional level. These scenarios have been produced at the NUTS II level and cover the period 1995-2025. The scenarios describe contrasting variants of both labour force participation trends and regional imbalances. Again a low, a baseline and a high scenario have been compiled. The high scenario foresees both an impressive rise in labour force participation and a significant convergence between the regions. In the low scenario labour force growth is low and even negative and current regional imbalances will persist. The baseline scenario foresees a moderate increase in labour force participation while regional disparities will become somewhat smaller.

The labour force comprises both employed and unemployed persons. Employed persons either have a paid job or are self-employed, and pursue occupational activity of at least one hour a week. Unemployed persons are people who are not in any employment relation but who are currently available for work, actively seek a job, or intend to be self-employed.
The national labour force scenarios concern the 15 countries of the European Union and project the labour force at 1 January by sex, single years of age (15, 16, ..., 74, 75+) and working time (1-19 hours a week, 20-31 hours and 32 hours or more). The regional labour force scenarios concern the labour force at 1 January by sex and single years of age.

1.2. EU's labour force

EU's total labour force in 1995 was estimated at 169 million persons. Labour force change is the combined result of growth of the working age population and change in labour force participation. Since 1960 male labour force participation has been decreasing while female participation has been on the increase. Between 1960 and 1980 the decrease of male participation was about twice the increase in female participation, while in the period 1980-1995 the female increase surpassed the male decrease.
Not only in Europe, but also in countries elsewhere a negative trend in male participation was observed. However, in USA, Japan, Brazil and India the trend was less stronger, while the trend in Russia was quite similar.
The trends in female participation are less uniform across the world. In the USA the rise in female participation in the period 1960-1995 was about twice as large as in Europe. Brazil had an even more impressive increase. Female participation in Japan was already high in 1960, however the absence of important developments led to an almost identical level with Europe in 1995. High female labour force participation was common in the former USSR as a result of a policy oriented at combining motherhood with paid work outdoors. This was characterised by maternity grants, child allowances and ample child-care provisions. The economic recession following the break-up of the USSR in the late eighties led to massive cutbacks in child-care provisions, causing a profound fall in the participation rate of women. The female participation rate is still very low in India, possibly because of religious backgrounds.

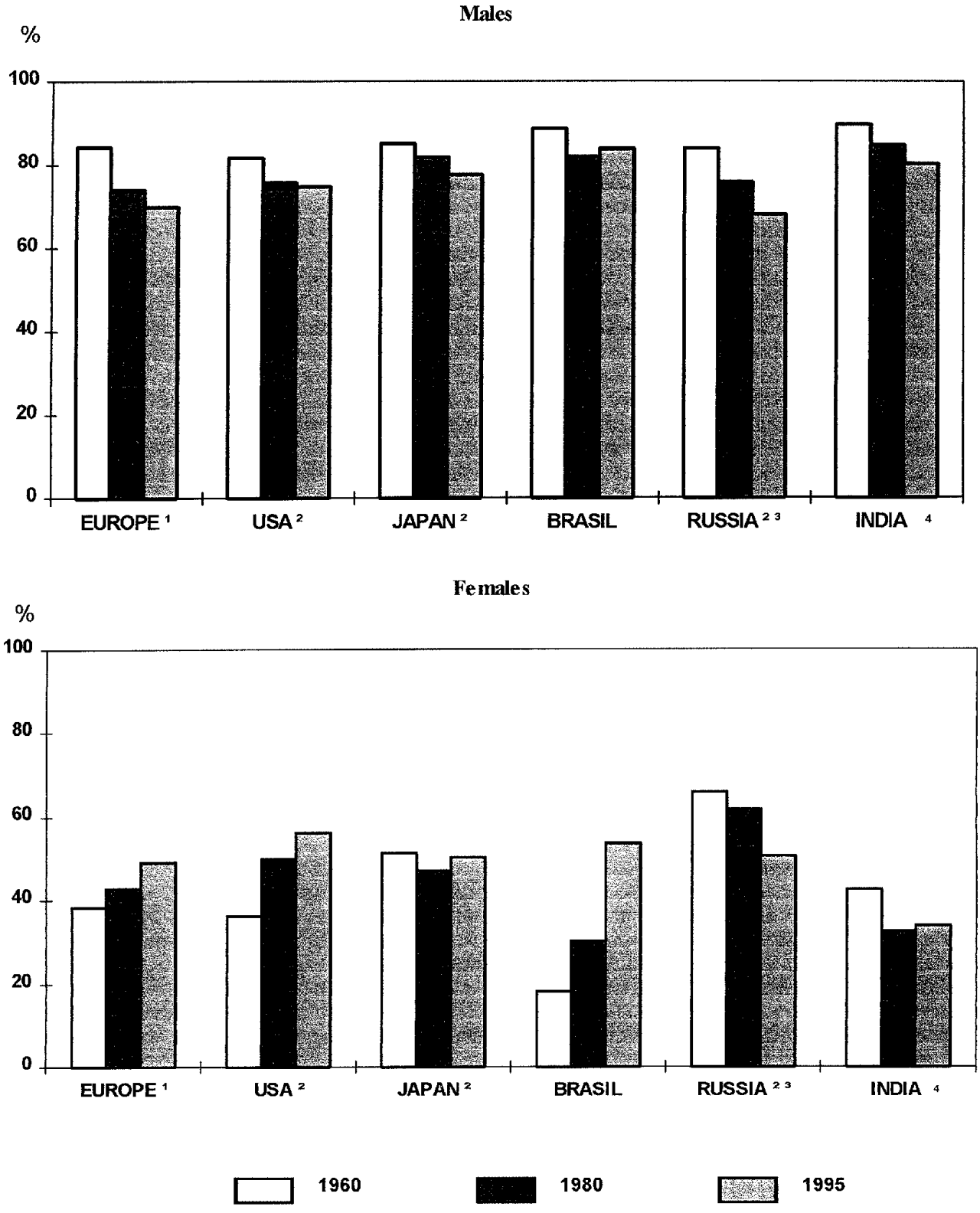
Table 1.1. Labour force participation[1], EU compared with some selected countries

	Males			Females		
	1960	1980	1995	1960	1980	1995
EUROPE [2]	84	74	70	38	43	49
USA [3]	82	76	75	36	50	56
JAPAN [3]	85	82	78	51	47	50
BRAZIL	89	82	84	18	30	54
RUSSIA [3,4]	84	76	68	66	62	50
INDIA [5]	90	85	80	43	32	34

[1] active persons as a percentage of total number of people aged 15-75
[2] 1960,1980: Europe excluding Russia; 1995: EUR 15
[3] 1996 instead of 1995
[4] 1960,1980: USSR; 1996: Russian Federation
[5] 1991 instead of 1995

Source: International Labour Office, Geneva

Figure 1.1. Labour force participation, EU compared with some selected countries



[1] 1960,1980: Europe excluding Russia; 1995: EUR 15

[2] 1996 instead of 1995

[3] 1960,1980: USSR; 1996: Russian Federation

[4] 1991 instead of 1995

1.3. Main assumptions

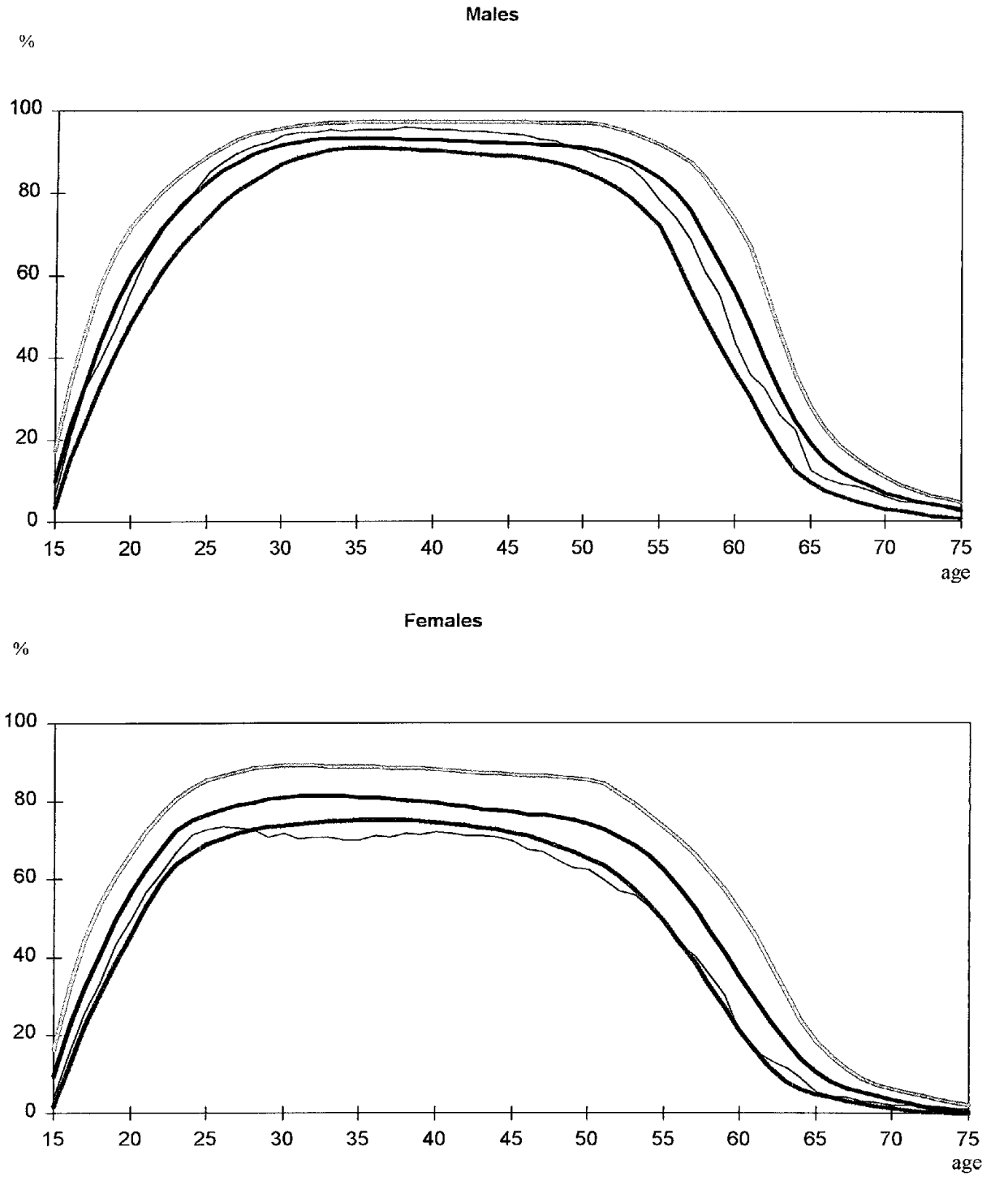
In the **baseline scenario**, it is assumed that most recently observed trends will continue. The main assumptions are:
. continued growth of the EU economy;
. modest increases in labour demand;
. moderate rise in the labour force participation of young people (under 25);
. significant increase in the labour force participation of women aged 25-49;
. considerable increase in the participation of women aged 50 and over;
. slight rise of the participation of men aged 50 and over.
The main characteristics of the **low scenario** are:
. lower economic growth than in the last 10 years;
. lack of jobs for young people leading to a further decline of the participation among young people;
. deterioration of general conditions for middle-aged men and women to be active on the labour market;
. continued trend towards earlier retirement, especially among men.
The main features of the **high scenario** are:
. higher rates of economic growth than in the recent past;
. strongly rising demand for labour;
. more young people combining education with paid work;
. ample incentives for men and women at prime age to be active on the labour market;
. older persons postponing retirement due to more flexible working arrangements.

A comparison of the situation in 2020 according to the three scenarios with 1995 leads to the following conclusions. For men all age-specific activity rates of the Low Scenario are well below those observed in 1995. In contrast, all activity rates of the high scenario are substantially above the latest observed figures. For the baseline scenario a mixed pattern emerges, for young and older men the rates are slightly above the 1995 pattern and slightly below it for men at prime age.
The picture is quite different for women. The low scenario resembles the 1995 pattern most, especially at younger and older ages. A slight rise is foreseen at prime working ages. A rise is projected for all ages in the baseline scenario and even more so in the high scenario.

Table 1.2. Average activity rates by sex and age group (%), EU-15, 1995 and 2020

	Observed 1995		Low scenario 2020		High scenario 2020		Baseline scenario 2020	
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES
15-19	29	24	23	21	44	42	33	31
20-24	70	61	60	58	80	76	71	67
25-29	89	73	81	72	93	87	87	79
30-34	95	71	89	75	97	89	93	81
35-39	96	71	91	75	97	88	93	81
40-44	95	71	90	73	97	87	93	78
45-49	93	66	88	69	97	86	92	76
50-54	87	58	81	60	95	81	89	70
55-59	67	39	58	39	86	66	74	52
60-64	32	14	24	12	56	38	39	24
65-69	10	4	6	3	19	12	13	7
70+	5	2	2	1	7	4	5	2

Figure 1.2. Activity rates, EU-15, 1995 and 2020



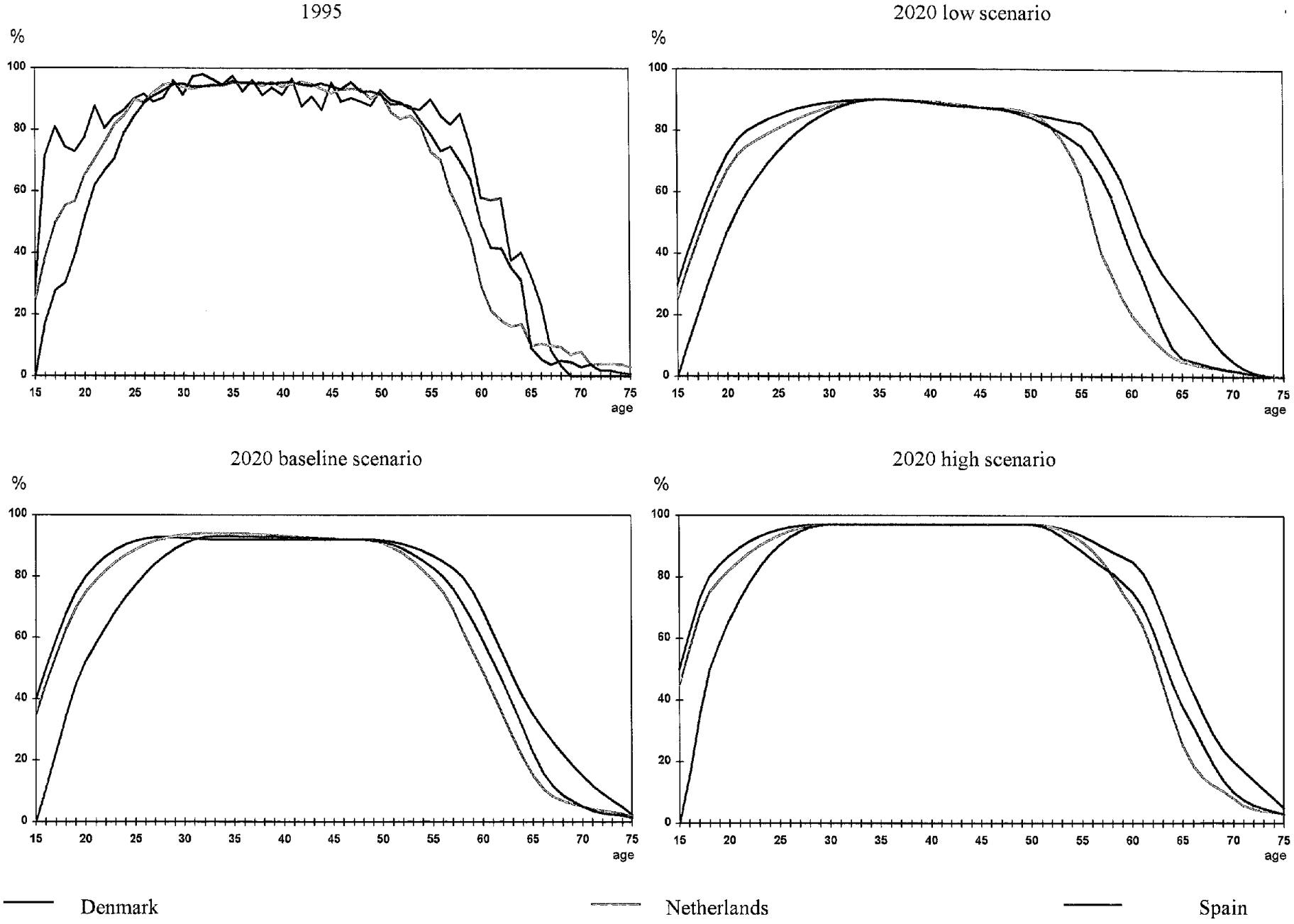
1.4. National scenarios

Three geographic clusters of countries can be distinguished on the basis of age patterns of participation rates, namely the northern, western and southern part of the EU. In compiling national scenarios on labour force participation it has been assumed that future participation trends of countries belonging to a same cluster bear more resemblance than those between countries belonging to different clusters.
In 1995 large variability in male participation rates exist predominantly at both young and old ages. Both Denmark and the United Kingdom are characterised by high participation rates among young males. In contrast, in Belgium, France, Luxembourg and the countries of the southern cluster youth participation is fairly low. If it comes to low participation for older people, Belgium, France and Luxembourg are in the lead. In Sweden, Portugal and Ireland senior participation are comparatively high.
According to the low scenario current differences between the countries will largely persist while in the high scenario they will become much smaller although they will not disappear completely. In the baseline scenario an intermediate situation applies.

Table 1.3. Average activity rates of males by age group (%), countries, 1995 and 2020

	15-24	25-34	35-44	45-54	55-75	15-24	25-34	35-44	45-54	55-75
	1995					**2020 baseline scenario**				
AUS	64	92	97	91	24	68	92	93	90	27
BEL	35	94	94	86	19	33	90	93	88	22
DEN	75	93	92	90	37	73	93	93	91	42
FIN	53	90	89	84	23	48	89	93	88	29
FRA	37	96	96	92	19	43	94	95	91	26
GER	55	90	96	93	27	57	89	94	92	33
GRE	43	95	97	91	38	48	91	92	90	40
IRE	52	93	92	86	42	56	93	94	89	41
ITA	43	88	96	85	26	45	87	92	89	30
LUX	40	93	97	92	18	49	92	95	89	21
NET	60	93	95	89	23	67	93	93	89	28
POR	48	93	96	91	44	44	87	92	90	45
SPA	47	92	95	91	30	46	88	93	90	34
SWE	45	91	95	94	42	47	87	92	91	39
UKI	73	94	94	89	36	68	91	92	90	39
	2020 low scenario					**2020 high scenario**				
AUS	55	88	90	84	18	78	97	98	96	38
BEL	25	86	89	82	14	49	95	97	91	30
DEN	64	88	89	86	33	80	97	97	97	53
FIN	36	82	89	84	24	60	94	96	92	36
FRA	23	84	92	85	12	54	95	97	98	38
GER	47	85	93	89	24	62	91	98	97	39
GRE	38	89	89	85	30	62	97	97	96	48
IRE	43	86	88	79	31	70	96	97	94	49
ITA	37	82	89	78	20	65	96	97	96	41
LUX	36	85	94	82	14	64	96	97	96	30
NET	59	86	89	84	15	76	96	97	96	40
POR	33	80	89	84	39	57	95	97	96	55
SPA	42	84	89	84	23	58	96	97	96	44
SWE	40	82	89	85	30	61	93	95	94	47
UKI	62	89	89	84	30	74	96	98	97	50

Figure 1.3. Activity rates of males, three selected countries, 1995 and 2020



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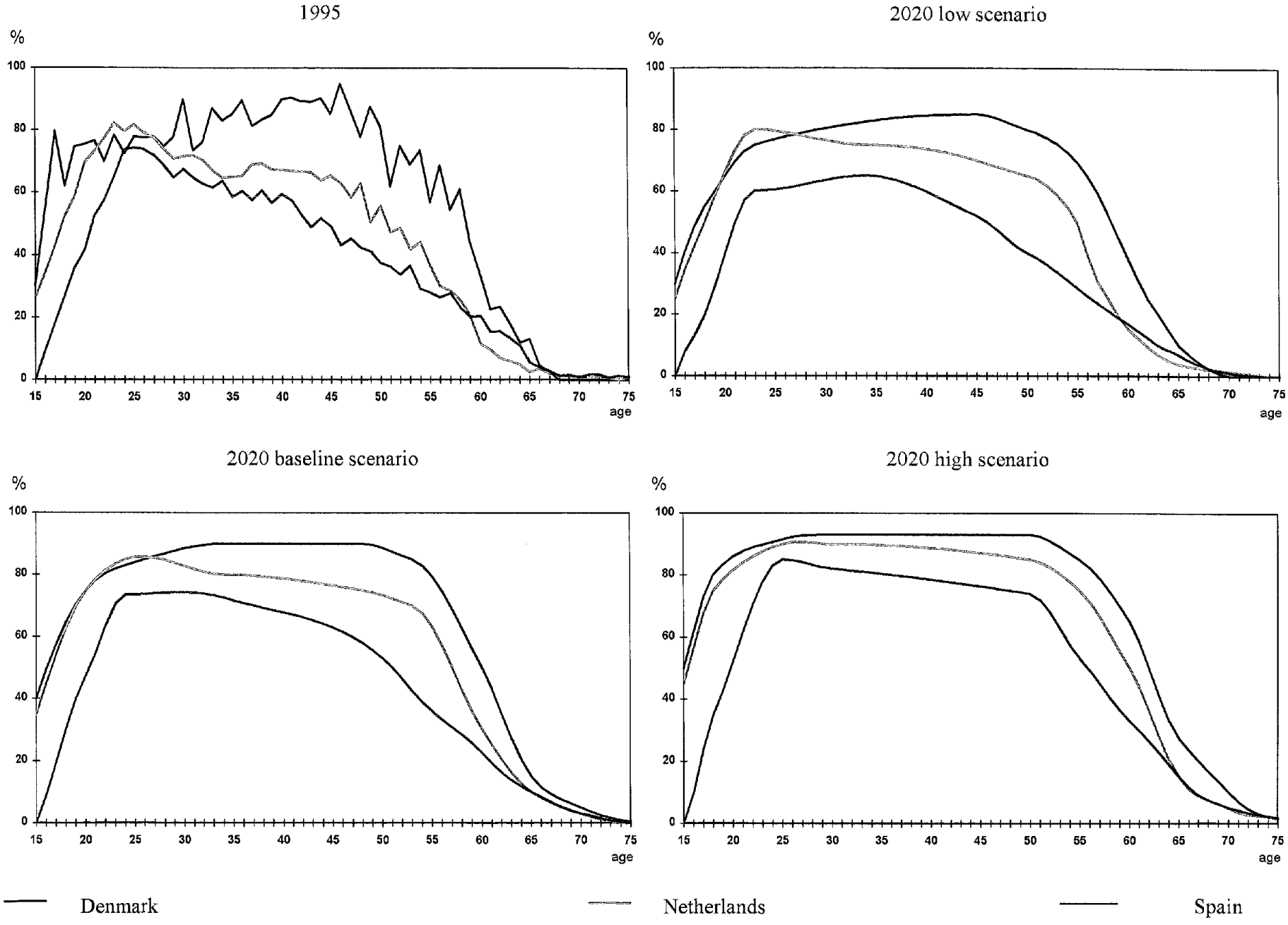
The current international differences in female participation rates are considerably larger than for men. The northern cluster takes the lead at almost all ages while in the southern cluster female participation is still fairly low. In the southern cluster, except Portugal the traditional pattern of leaving the labour market after childbirth is still dominant. Most countries of the western cluster are in a transition stage, in which having children has a limited effect on the labour participation rate of women. In the northern cluster, family obligations no longer interfere with having a paid job.
According to the low scenario the participation rate for women in the western cluster will move substantially upwards in the direction of the northern cluster. For the southern cluster only a minor rise is assumed. Both under the baseline and high scenario the female participation rates will rise steeply in the western and southern countries. In the high scenario this will lead to a virtual disappearance of the traditional age pattern in the southern countries. Between the western and northern cluster only marginal differences in participation rates will be left.

Table 1.4. Average activity rates of females by age group (%), countries, 1995 and 2020

	15-24	25-34	35-44	45-54	55-75	15-24	25-34	35-44	45-54	55-75
	1995					2020 baseline scenario				
AUS	57	78	76	65	11	62	84	84	81	24
BEL	30	80	71	49	7	34	85	81	65	15
DEN	67	80	87	79	21	68	88	90	88	28
FIN	49	77	85	84	20	47	82	89	86	26
FRA	32	79	79	72	15	46	86	87	83	20
GER	49	73	76	71	15	50	82	85	83	22
GRE	33	63	58	43	15	39	70	68	57	18
IRE	44	69	52	39	12	51	76	65	47	16
ITA	33	60	57	42	8	40	68	68	55	14
LUX	38	61	54	40	7	45	75	65	50	14
NET	60	73	67	54	10	67	83	79	73	20
POR	39	79	78	64	23	45	83	84	78	30
SPA	41	67	56	39	11	43	74	68	53	14
SWE	49	84	90	92	34	50	83	89	86	33
UKI	65	72	76	74	23	65	81	84	84	31
	2020 low scenario					2020 high scenario				
AUS	47	78	78	71	15	72	91	91	88	34
BEL	23	82	76	56	9	47	90	90	80	24
DEN	59	80	84	80	22	79	93	93	92	38
FIN	42	73	82	80	18	60	91	93	92	36
FRA	33	79	80	73	11	59	92	94	90	30
GER	43	79	80	75	16	63	92	92	89	30
GRE	31	65	62	48	13	53	79	79	74	27
IRE	39	69	55	33	7	63	85	80	66	27
ITA	25	62	63	47	7	50	77	79	73	22
LUX	37	65	55	35	6	57	85	81	61	18
NET	59	77	74	64	11	75	90	89	84	28
POR	37	78	78	70	24	50	90	91	87	42
SPA	35	63	60	42	10	48	83	79	71	21
SWE	40	77	84	80	23	64	92	92	91	47
UKI	57	75	80	74	20	72	89	92	91	40

Figure 1.4. Activity rates of females, three selected countries, 1995 and 2020



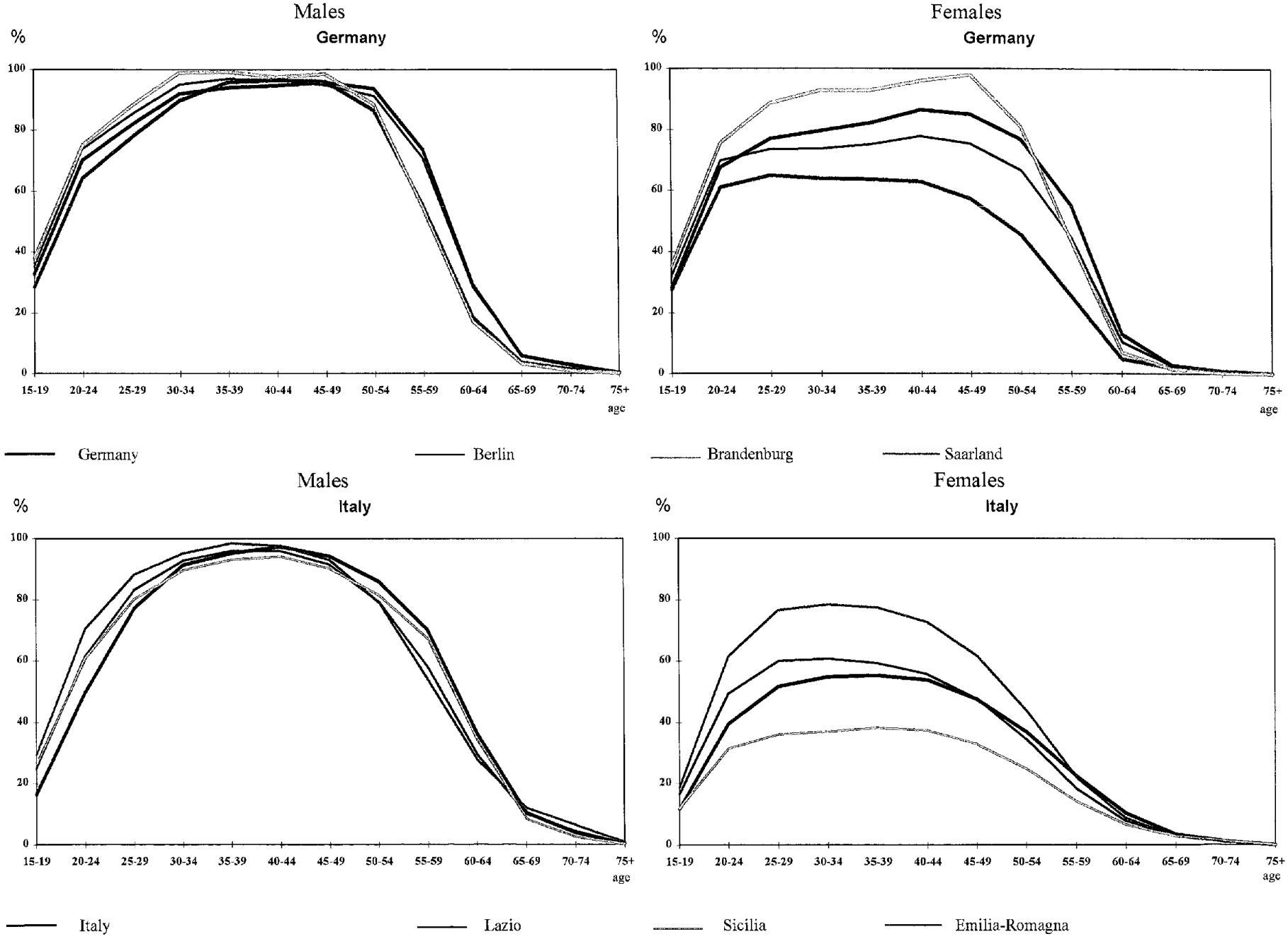
1.5. Regional scenarios

The regional scenarios consist of a refinement of the low, baseline and high scenarios to the so called NUTS II level and cover the period 1995-2025. The scenarios have been prepared for only 12 countries of the EU15, as for Denmark, Luxembourg and Ireland no NUTS II regions are being distinguished.
It is assumed that the national differentiation within the EU dominates the regional differentiation. Therefore, in compiling regional scenarios a 'top-down' method has been used, in stead of a 'bottom-up' approach. The main assumptions of the scenarios concern the theme of divergence or convergence of labour participation of regions within a country.
In the low scenario it is envisaged that the current regional deviations from the national level will persist in the future. However, the combination of demographic developments at the regional level and participation trends at the national level lead to changing participation rates in the future. In the high scenario significant convergence between the regions is foreseen. Also in the baseline convergence is assumed, although the degree of convergence is smaller.

Although in general current regional differences in participation are less important than national differences, some Member States stand out for having substantial regional variability. The regional pattern of activity rates in Germany is to a large degree determined by the contrast between the former West and East Germany. Although a transition is taking place from a centralised and planned economy to a market economy, activity rates remain remarkably high in East Germany. This applies especially for females. Ample child-care facilities and a public opinion encouraging female participation might explain the high activity rates of females before Unification. The restructuring of the economy of the former German Democratic Republic goes hand in hand with high unemployment levels. Nevertheless, females still want to participate in the labour market, which is reflected in high numbers in self-employment. Low female activity rates can be found in Saarland. This is an old industrial region, which economy used to be based on coal and steel products.
Also in Italy female participation is characterised by large regional disparities. The economy of Sicilia is suffering by insufficiency of transport and communication systems. Serious industrial problems and a significant influx of (illegal) immigration are an explanation for relative high unemployment levels. The flourishing economy of Emilia-Romagna, in contrast, has led to a rapid expansion of the service sector, which offers women plenty of opportunities to work outdoor.

In view of the fact that the importance of regional variability varies across the countries of the EU, the degree to which regional deviations from the national average will change is not uniform in the projection period for each country.
For the NUTS II regions located in the former German Democratic Republic the rate of convergence will be higher than in the regions of the former German Federal Republic, due to the assumption that the actual differences in economic structure will gradually disappear. The southern countries Spain, Greece and Italy are characterised by large regional disparities in female activity rates. In the future the process of integration of these national economies into the common market of the European Union will invoke economic convergence at the regional scale causing regional disparities to shrink at a rate higher than assumed in other countries.

Figure 1.5. Activity rates, three selected regions, 1995



2. Trends and patterns in labour force participation

2.1. People aged 15-24

Young people are on the verge of leaving education and entering the labour force. This transition is not clear-cut in the EU, given inter-country differences in the duration of compulsory education and institutional characteristics, such as apprenticeships in schools and on the job training.
The level of education among young people has increased steadily since the 1970s (European Commission, 1996). In the wake of it, the labour force participation rates have fallen. However, this relationship is not unambiguous. In Denmark, the Netherlands and the United Kingdom more and more students combine work 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 rather than to combine study with work.
The increasing educational participation is partly a reflection of structural changes in the economy, which demands a highly educated work force. Economic conditions are another explanation as a downturn may encourage young people to remain in education.
The average education level of women and men has come closer together and is also reflected in their labour participation rates. Although labour participation among men is still higher, the gap with women is narrowing.

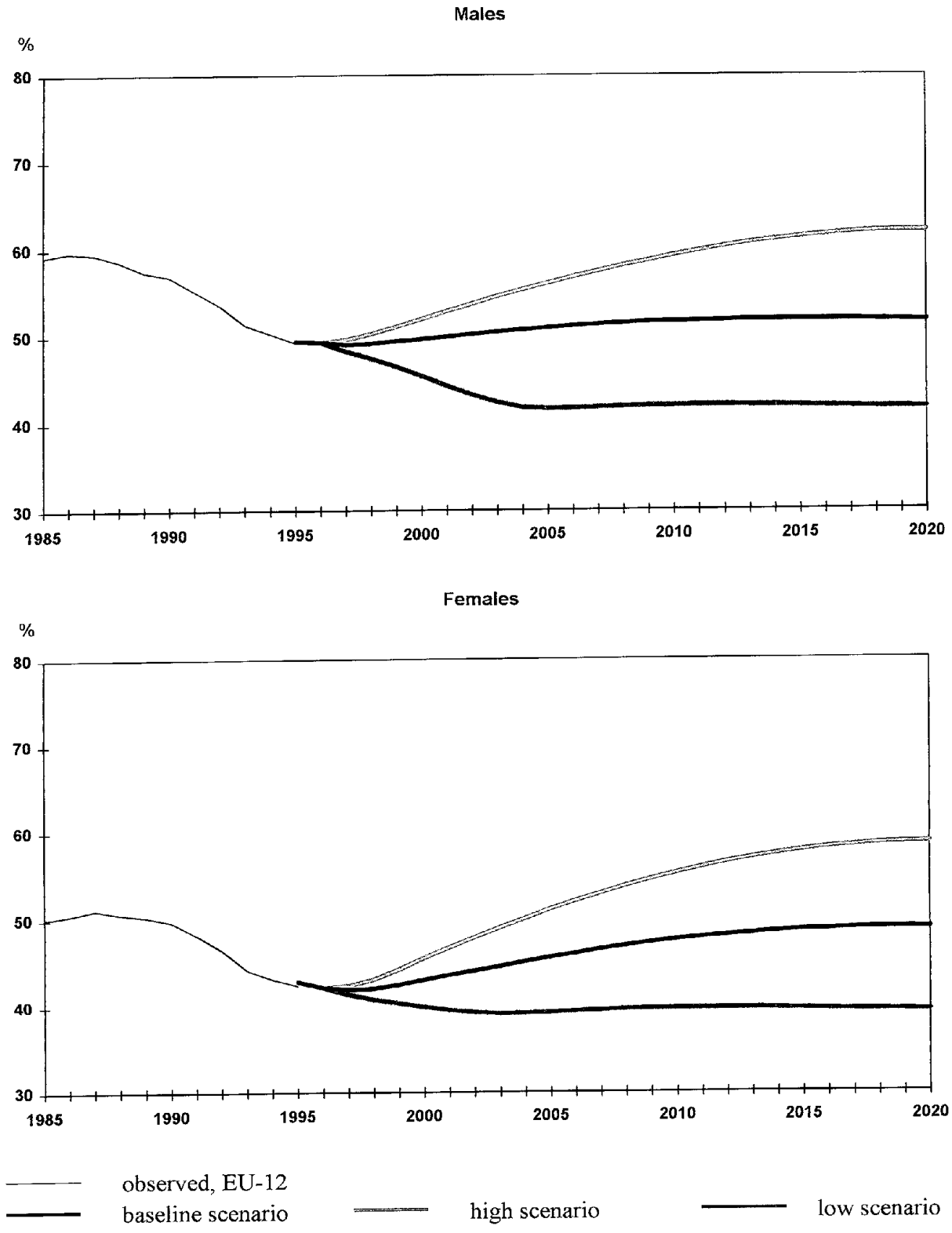
According to the baseline scenario the fall in labour participation among young people will end in the near future. A moderate creation of new jobs will counter the tendency to postpone entry into the labour force. This entry will be centred on small part-time jobs.
In the low scenario economic stagnation and a lack of jobs should induce young people to stay in education longer, and thus to a continued decline in labour force participation.
The high economic growth rate in the high scenario will make it easier to enter the labour market. Flexible forms of employment will spread all across the economy. Part-time jobs will strongly increase, making it easier for young people to combine education and paid work.

Table 2.1. Labour force participation of age group 15-24[1], EU-15, 1985-2020

	Observed		Low scenario			High scenario			Baseline scenario		
	1985 [2]	1995	2000	2005	2020	2000	2005	2020	2000	2005	2020
Males	59	51	46	42	43	53	57	62	50	52	52
Females	50	44	41	40	40	46	52	58	44	46	49

[1] Active persons aged 15-24 as a percentage of total number of people aged 15-24
[2] EU-12

Figure 2.1. Average activity rate of age group 15-24, EU-15, 1985-2020



National trends

Notwithstanding a general rise in educational attainment in the EU, the labour participation among young people remained high in all Member States. In Denmark juvenile activity has shown an enormous rise in the seventies and the first half of the eighties. An economic downturn led to a fall in activity in the early nineties. The economic revival of the mid nineties was a stimulus to combine education with work again. More or less the same development could be observed in the United Kingdom. The economic recession of the early nineties did not hamper the participation rate of young people in the Netherlands, which kept on rising due to a restructuring of the labour market yielding an abundance of part-time and flexible jobs. Spain is a fine example of falling activity rates among young people in the wake of increasing education. However, the steep decline since the mid eighties appears to have tapered off around the mid nineties.

In most countries the current activity rate has been taken as an anchor point for the baseline scenario. This is not the case for the Netherlands, were a sustained rise leading to the level of Denmark has been assumed. In the low scenario a gloomy economic development should lead to a further reduction of activity rates among young people in all Member States. In contrast, under the high scenario more and more young people will combine education with mostly part-time jobs in all countries of the EU.

Table 2.2. Labour force participation of age group 15-24[1] , countries, 1995 and 2020

	Observed 1995		Low scenario 2020		High scenario 2020		Baseline scenario 2020	
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES
AUS	65.1	59.3	56.5	48.9	77.9	71.7	68.8	62.7
BEL	36.5	31.7	26.3	24.0	48.7	47.1	32.7	33.9
DEN	75.4	68.2	65.0	60.2	80.5	79.3	72.8	68.7
FIN	52.2	48.2	37.6	42.8	59.8	59.9	48.2	47.9
FRA	38.9	33.7	23.3	33.8	53.5	57.8	43.3	45.6
GER	56.2	50.8	48.8	44.8	62.3	62.6	58.2	50.9
GRE	43.7	33.7	38.3	30.7	60.8	52.4	47.4	38.4
IRE	49.0	41.9	42.9	39.4	68.7	61.5	56.1	50.6
ITA	44.5	34.4	37.3	25.4	64.7	49.0	44.6	39.8
LUX	42.5	40.9	38.1	39.4	64.3	57.5	50.7	46.6
NET	62.4	61.9	59.6	59.6	76.2	75.2	67.9	67.5
POR	48.3	39.5	33.5	37.3	55.8	49.4	43.9	45.0
SPA	49.6	42.8	43.7	37.4	59.0	49.0	47.0	44.7
SWE	49.0	52.7	42.6	42.2	62.1	66.1	49.5	52.7
UKI	75.9	66.0	64.0	59.3	75.5	73.1	70.0	67.0

[1] Active persons as a percenatge of total number of people aged 15-75

Figure 2.2. Average activity rates of age group 15-24 by sex, three selected countries, 1975-2020, baseline scenario

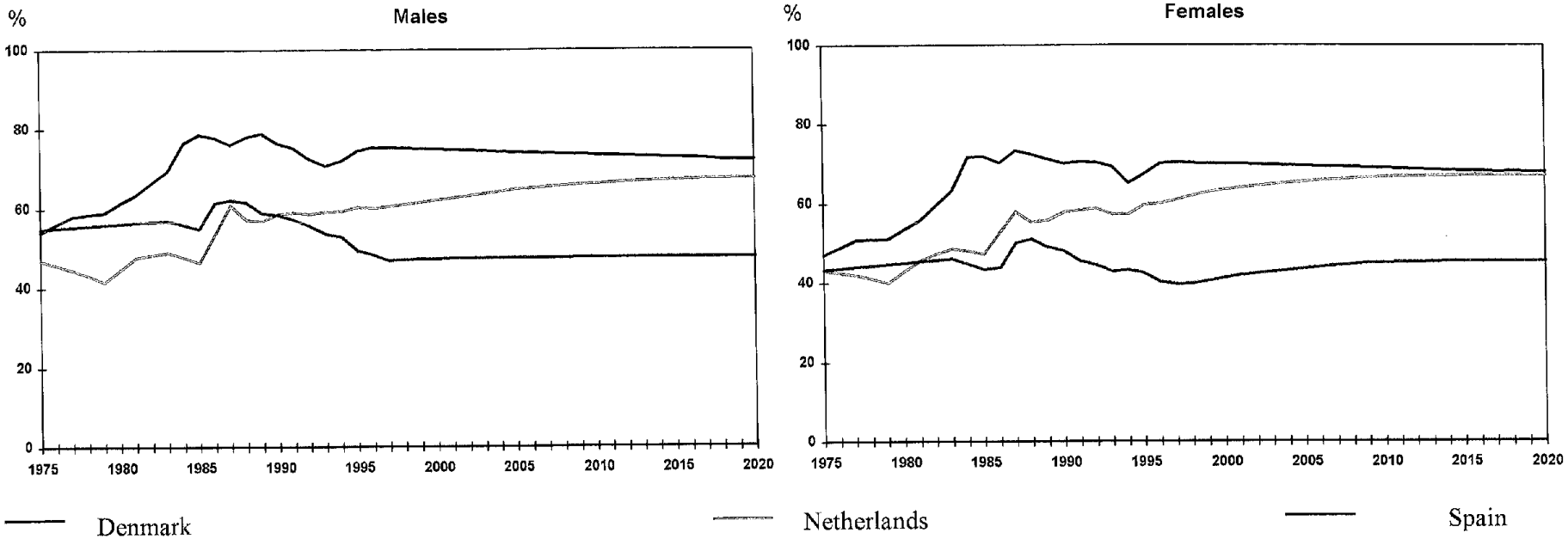
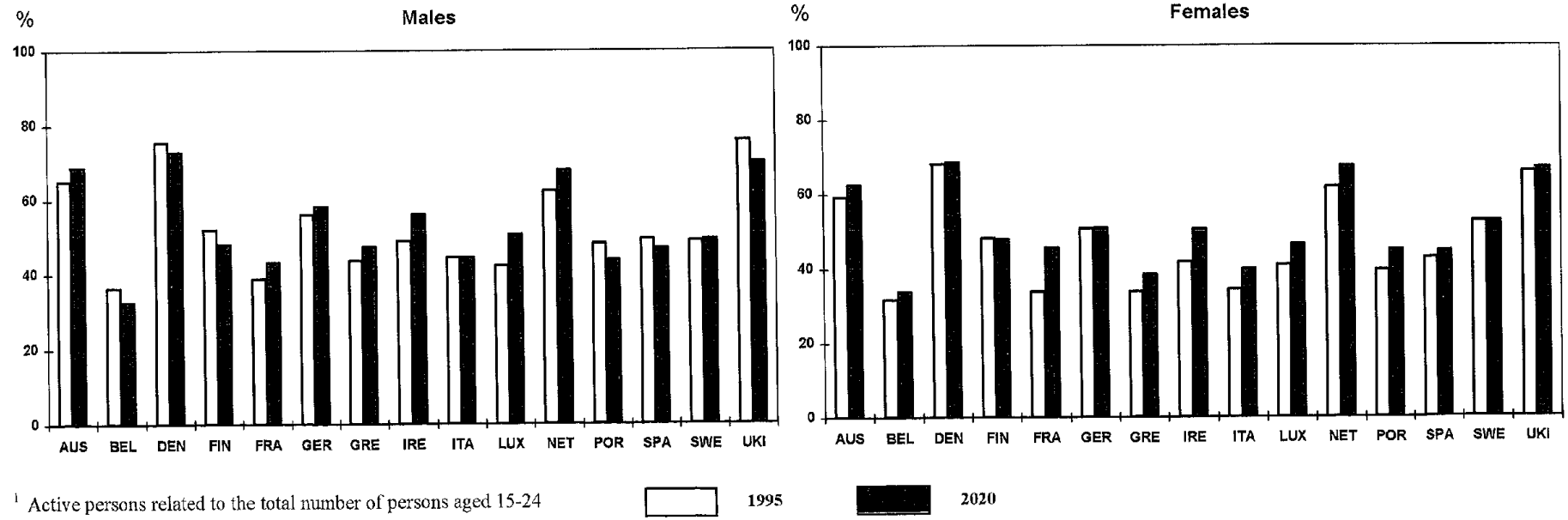


Figure 2.3. Labour force participation of age group 15-24 by sex [1], countries, 1995 and baseline scenario 2020



[1] Active persons related to the total number of persons aged 15-24

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Regional trends

The regional pattern in the labour force participation of young men is characterised by high participation rates in Denmark and almost all regions of Austria, the Netherlands and the United Kingdom. In Germany only the eastern regions show high figures. Many young people in all these regions combine education with part-time jobs. Low participation rates can be found in several regions of Belgium, France and the southern part of Italy.

According to the coefficient of variation, regional variability is high in all Southern countries. If this measure is computed for the EU as a whole (with Denmark, Luxembourg and Ireland considered as separate NUTS II regions) a much higher level is revealed than that observed in the separate Member States. This indicates that national differences are more important than regional ones.

Under the baseline scenario most regions with low participation rates right now, will have moved towards higher levels in 2025.

Table 2.3. Average activity rates of males aged 15-24 years (%), highest and lowest regions, 1995 and baseline scenario 2025

	Highest region [1]			Lowest region			Difference [2]		Coefficient of variation [3]	
		1995	2025		1995	2025	1995	2025	1995	2025
AUS	Niederoesterreich	71	74	Wien	56	62	15	12	0.08	0.06
BEL	W-Vlaanderen	43	38	Waals Brabant	25	25	18	13	0.13	0.10
DEN		75	73							
FIN	Etelea-Suomi	54	49	Ahvenanmaa/Aaland	42	41	12	8	0.08	0.06
FRA	Centre	46	50	Rhone-Alpes	35	40	11	10	0.08	0.06
GER	Oberfranken	69	69	Koeln	48	52	22	17	0.09	0.07
GRE	Ionia Nisia	61	62	Attiki	38	43	23	19	0.14	0.11
IRE		49	56							
ITA	Trentino-Alto Adige	57	55	Lazio	35	38	23	17	0.16	0.12
LUX		43	51							
NET	Zeeland	66	71	Groningen	56	63	10	8	0.05	0.04
POR	Acores	57	51	Lisboa e Vale Do Tejo	42	40	15	11	0.11	0.08
SPA	Comunidad Valenciana	51	47	Principado de Asturias	34	35	16	12	0.12	0.09
SWE	Smaland Med Oeama	55	51	Stockholm	40	40	15	10	0.10	0.07
UKI	Grampian	79	71	Northern Ireland	62	59	18	13	0.05	0.04
EU15	UKI Grampian	79		BEL Waals Brabant	25		55		0.23	
EU15	AUS Niederoesterreich		74	BEL Waals Brabant		25		49		0.21

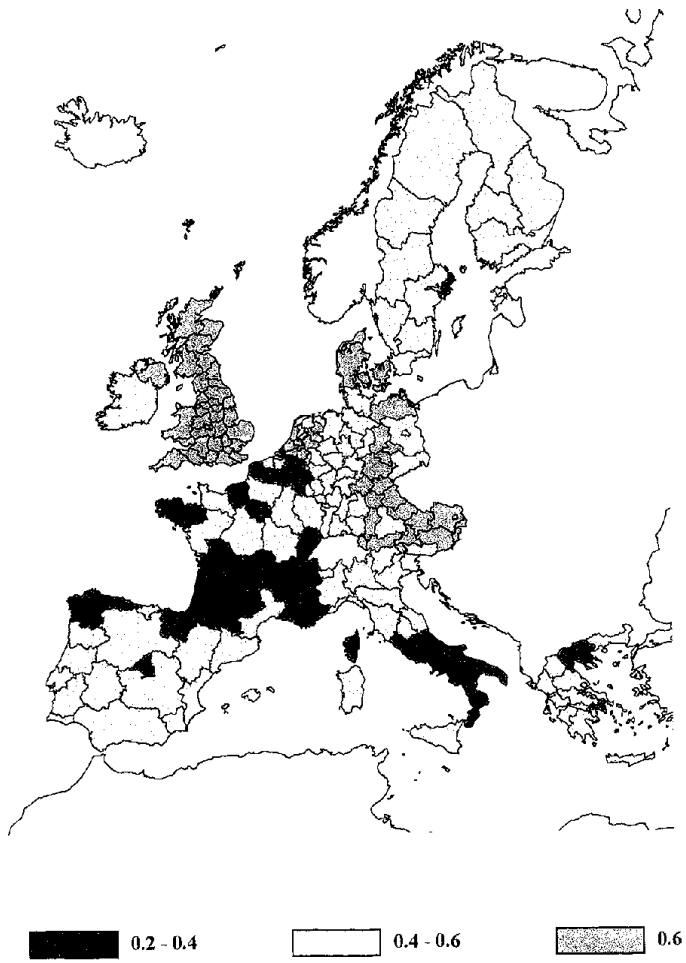
[1] Denmark, Ireland and Luxembourg do not contain NUTS II regions

[2] Level of highest region minus level of lowest region

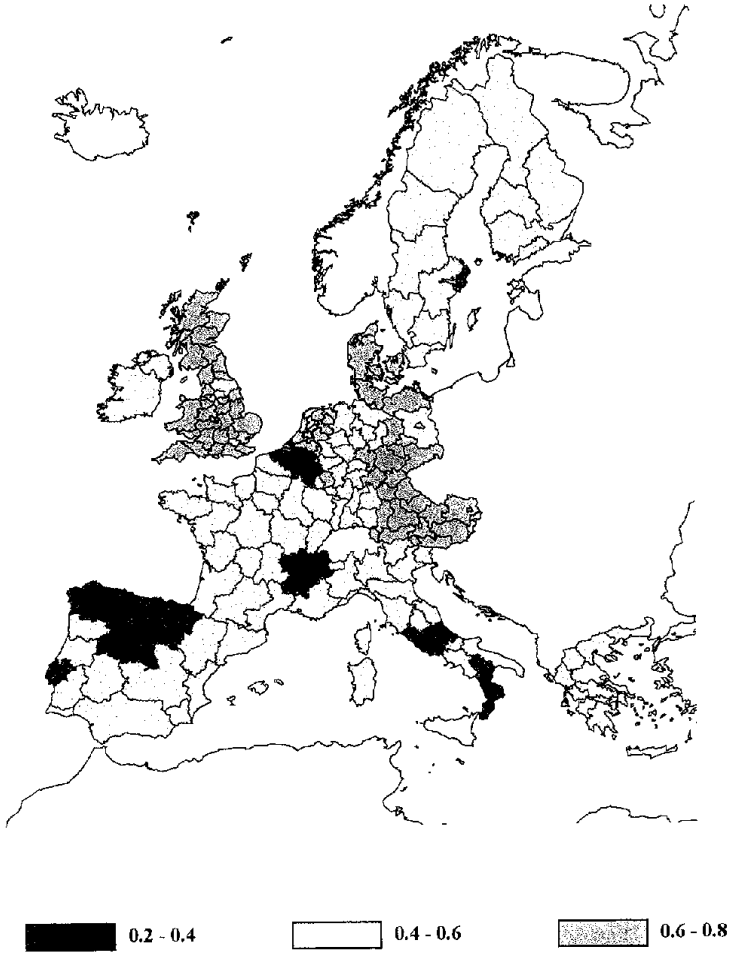
[3] Standard deviation divided by average level

Figure 2.4. Average activity rates of males aged 15-24 (%), regions, 1995 and baseline scenario 2025

1995



2025



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The regional pattern of labour force participation among young women is quite similar to that of young men. Nevertheless, the regional dimension is somewhat more important than for men, considering the higher coefficient of variation for 1995. The baseline scenario predicts that this sex difference will vanish in the future, and that the coefficient of variation for the EU will have reached the same value for both sexes in 2025. Even more important is the fact that the regional figures, which generally used to be considerably higher for men in 1995, will no longer show much difference between men and women in 2025.

Table 2.4. Average activity rates of females aged 15-24 years (%), highest and lowest regions, 1995 and baseline scenario 2025

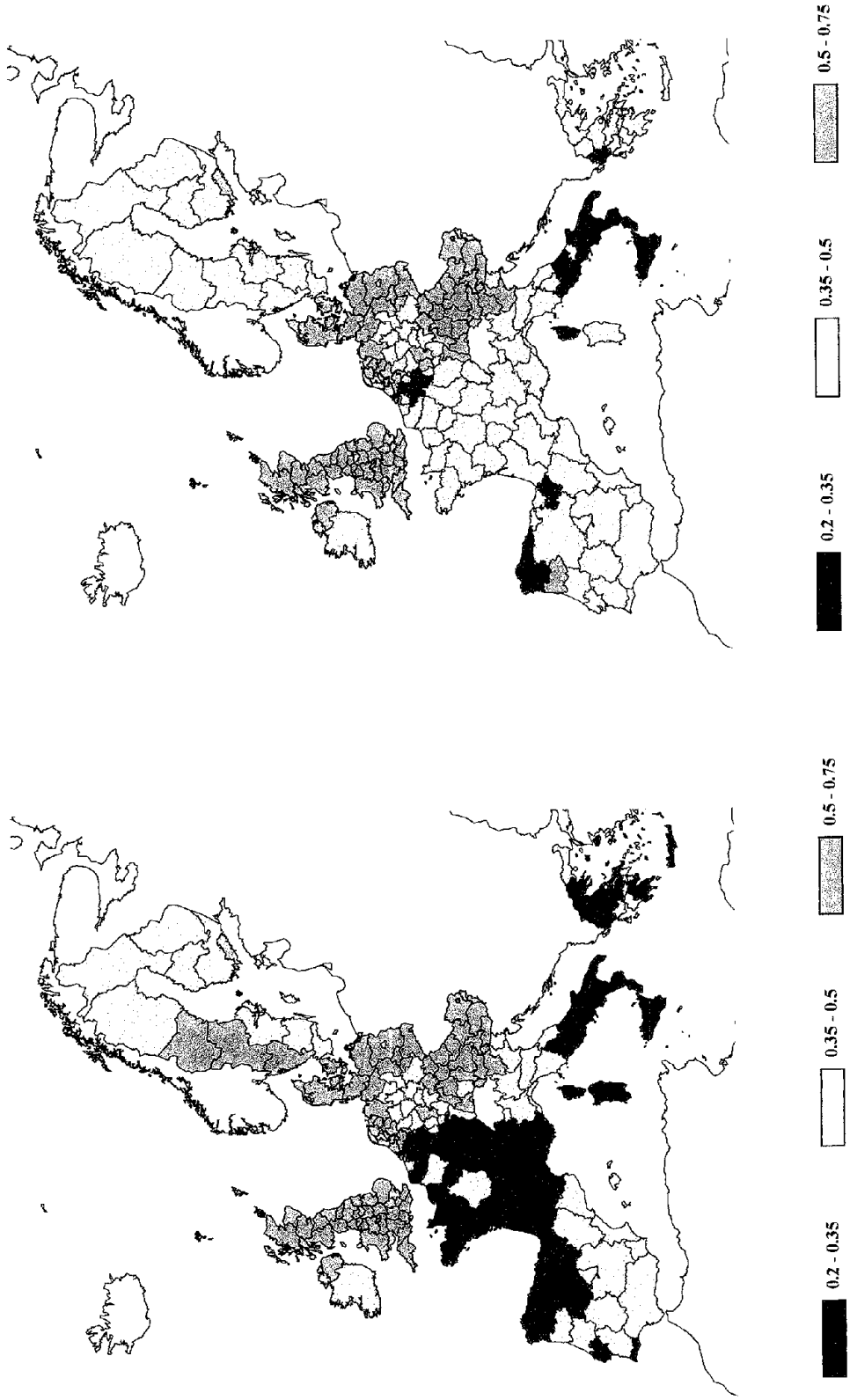
Highest region[1]			Lowest region			Difference[2]		Coefficient of variation[3]	
	1995	2025		1995	2025	1995	2025	1995	2025
AUS Vorarlberg	63	66	Kaernten	52	57	12	9	0.07	0.05
BEL W-Vlaanderen	39	40	Waals Brabant	23	27	16	13	0.14	0.11
DEN	68	69							
FIN Uusimaa	54	51	Ahvenanmaa/Aaland	30	34	23	17	0.16	0.12
FRA Alsace	40	53	Corse	22	34	18	19	0.10	0.08
GER Oberpfalz	64	62	Bremen	42	45	22	17	0.11	0.08
GRE Anatoliki Makedonia, Thraki	41	46	Ipeiros	26	33	16	14	0.13	0.09
IRE	42	50							
ITA Trentino-Alto Adige	51	55	Sicilia	22		29		0.25	
ITA			Calabria		30		24		0.18
LUX	41	46							
NET Utrecht	67	72	Groningen	55	62	12	10	0.05	0.04
POR Norte	47	52	Algarve	29	36	18	16	0.15	0.11
SPA Cataluna	48	49	La Rioja	26	31	22	17	0.16	0.12
SWE Mellersta Norrland	53	50	Oevre Norrland	41	42	12	8	0.07	0.05
UKI Dorset, Somerset	72	70	Humberside	51	54	21	16	0.08	0.06
EU15 UKI Dorset, Somerset	72		ITA Sicilia	22		50		0.27	
EU15 NL Utrecht		72	BEL Waals Brabant		27		45		0.21

[1] Denmark, Ireland and Luxembourg do not contain NUTS II regions

[2] Level of highest region minus level of lowest region

[3] Standard deviation divided by average level

Figure 2.5. Average activity rates of females aged 15-24 (%), regions, 1995 and baseline scenario 2025



2.2. People aged 25-49

Male and female labour force participation rates among people aged 25-49 have been diverging over the last 10 years. As yet, only a small proportion (i.e. 6%) of the men between 25 and 49 is not active on the labour market. However, a slight fall is visible, and some acceleration in the early nineties, as the economic recession may have induced a discouraged worker effect.
Activity rates among women have shown a marked growth over the last decades. The growing participation of women in the labour market has been underpinned by their increasing educational qualifications and is reinforced by drastic changes in the social and cultural environment. Compared with some decades ago, women are marrying later, more women remain single and childless, and those who became mother have got on average fewer children. Especially married women and mothers with young children have entered the labour market. The increase was particularly pronounced in countries that facilitated the combination of motherhood and paid work. The Scandinavian countries may be considered forerunners in this respect with their active policy of encouraging the combination of work and parenthood through subsidised day care, flexible working hours and a progressive structure of taxes in combination with separate taxation of spouses.

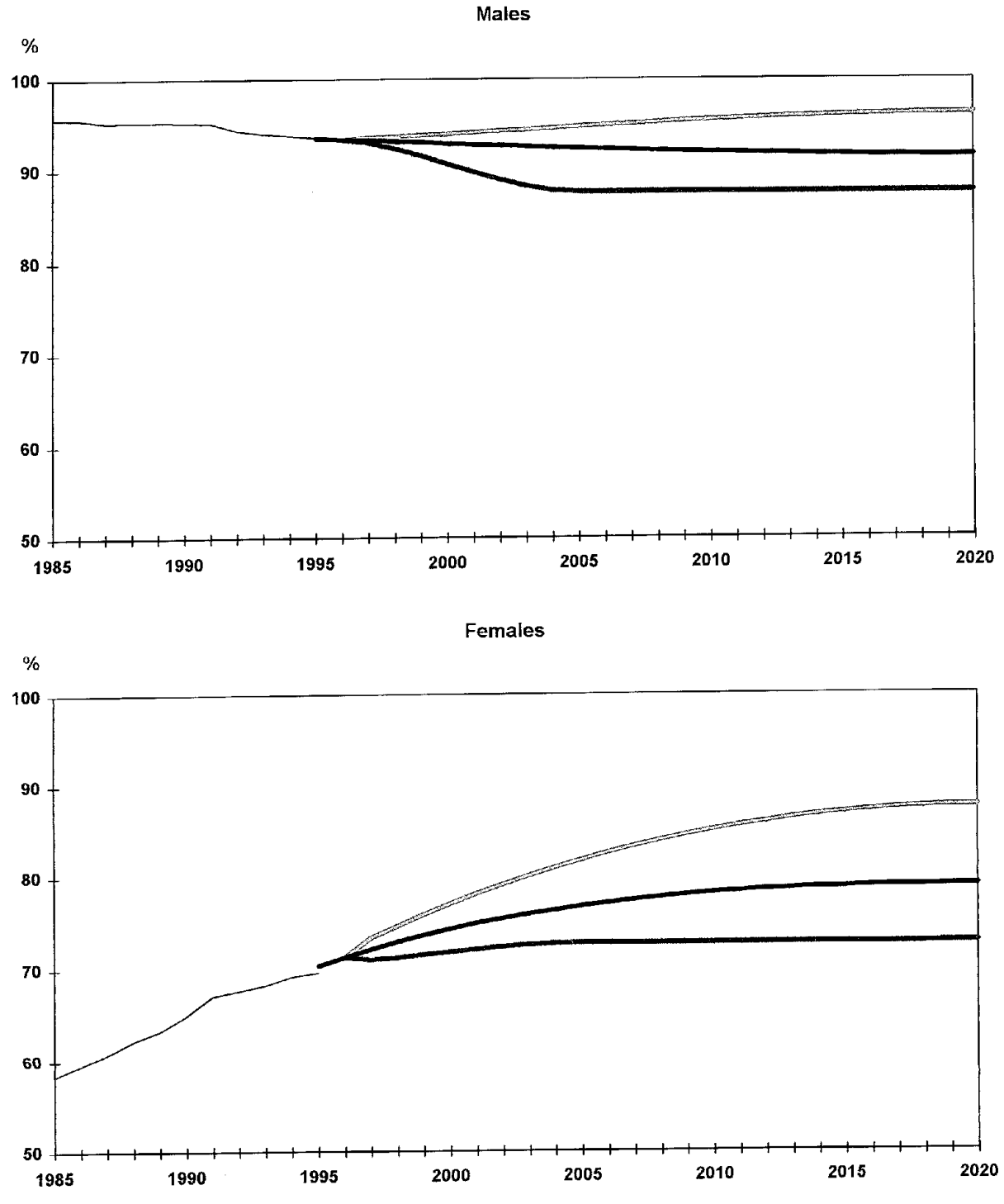
In the baseline scenario it is assumed that the current trends in labour force participation will continue in the future. Male participation in the prime age group will keep on falling slightly. In contrast, female participation shows a sustained rise. Norms and values toward the combination of paid labour with having young children will become more permissive. However, this will only lead to a limited increase of participation of mothers, most of them working part-time, reflecting a modest move towards more flexible working arrangements and increased child-care facilities.
In the low scenario the possibilities for mothers to combine care for children with professional work will not improve. The introduction of more flexible forms of employment contracts stagnates. Confronted with increasing unemployment and worsening conditions in the labour market more and more men and women are discouraged to acquire a job. Male participation will drop while the rise in female participation will soon come to an end.
In the high scenario high economic growth stimulates the spread of flexible forms of employment over all sectors of the economy. Especially a growing service sector offers opportunities for women to combine motherhood with the pursuit of a career. Participation of men and notably women will rise, for women towards levels seen in Sweden and Denmark.

Table 2.5. Labour force participation of age group 25-49[1], EU-15, 1985-2020

	Observed		Low scenario			High scenario			Baseline scenario		
	1985[2]	1995	2000	2005	2020	2000	2005	2020	2000	2005	2020
Males	96	94	91	88	88	94	95	96	93	93	92
Females	59	70	72	73	73	77	82	88	74	77	79

[1] Active persons aged 24-49 as a percentage of total number of people aged 25-49
[2] EU-12

Figure 2.6. Average activity rate of age group 25-49, EU-15, 1985-2020



National trends

The participation rate of men in their prime working ages has shown a steady but slow decrease over the last two decades. Denmark was an exception to this rule. Here the economic downturn of the early nineties was translated into sharp drop in participation rates. However, around the mid nineties a strong economic recovery brought the participation rate back to its previous level. Also in the United Kingdom the economic recession caused rapidly falling participation rates in first half of the nineties.
The international differences in male participation are almost negligible, although falling participation during the prime working ages seems to be slightly more virulent in the southern countries. Also in the coming decades international differences are expected to be marginal.
While male participation is characterised by a smooth downward trend, female participation has shown an almost incredible rise over the last two decades. However, the rising trend has not been uniform in the EU countries. In Denmark the rise in female participation seems to have reached the upper limit at the end of the eighties. The economic recession of the early nineties brought a fall for the first time. In the Netherlands female participation used to be very low. However, a sustained rise has brought the Netherlands up to the average. Low female participation rates are found in the southern countries nowadays, with the exception of Portugal, where participation has always been rather high due to a relatively large primary sector.
According to the baseline scenario female participation will continue to rise in all western and southern countries, while in the northern countries female participation is expected increase or decrease(Sweden) some what.

Table 2.6. Labour force participation of age group 25-49[1], countries, 1995 and 2020

	Observed 1995		Low scenario 2020		High scenario 2020		Baseline scenario 2020	
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES
AUS	94.3	75.8	88.4	77.4	97.3	90.4	92.2	83.7
BEL	93.7	72.0	87.4	75.3	95.5	88.6	91.4	80.9
DEN	92.4	83.9	88.2	82.3	96.9	92.9	92.1	89.0
FIN	89.2	82.8	85.5	78.5	94.6	92.0	91.2	85.9
FRA	95.8	78.5	88.0	79.5	96.7	92.6	93.8	86.0
GER	93.3	74.2	89.9	79.3	95.0	91.4	91.8	83.8
GRE	95.5	57.9	88.5	61.2	96.6	78.7	91.3	67.1
IRE	91.9	57.6	86.4	56.9	96.4	80.3	93.2	66.5
ITA	91.3	56.9	85.4	60.0	96.6	60.0	90.1	66.0
LUX	94.6	55.8	88.8	56.3	96.4	80.4	93.5	67.4
NET	93.6	68.2	87.5	73.6	96.7	88.8	92.7	79.7
POR	94.7	77.0	85.2	76.6	96.3	90.3	90.1	83.1
SPA	93.5	59.4	86.7	57.6	96.6	79.1	91.0	67.7
SWE	93.4	88.3	85.7	80.8	94.3	91.8	90.3	86.2
UKI	93.6	74.6	88.4	77.3	97.3	91.2	91.3	83.1

[1] Active persons aged 25-49 as a percentage of total number of persons aged 25-49

Figure 2.7. Average activity rates of age group 25-49, three selected countries, 1975-2020, baseline scenario

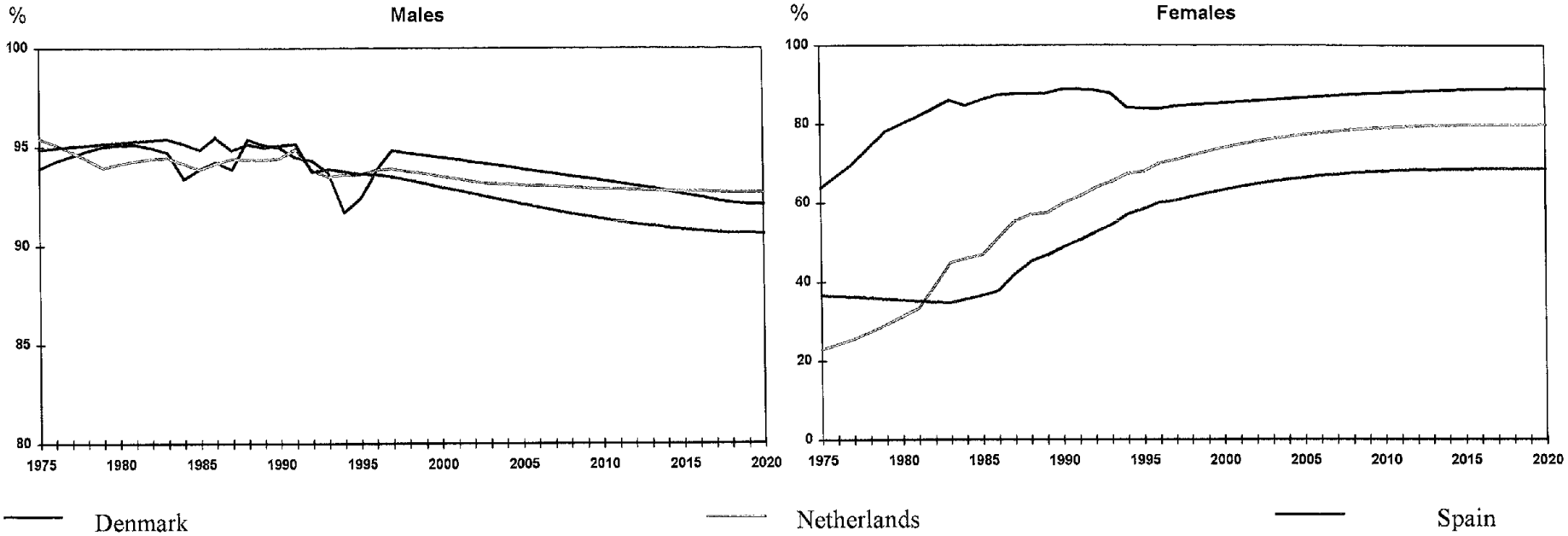
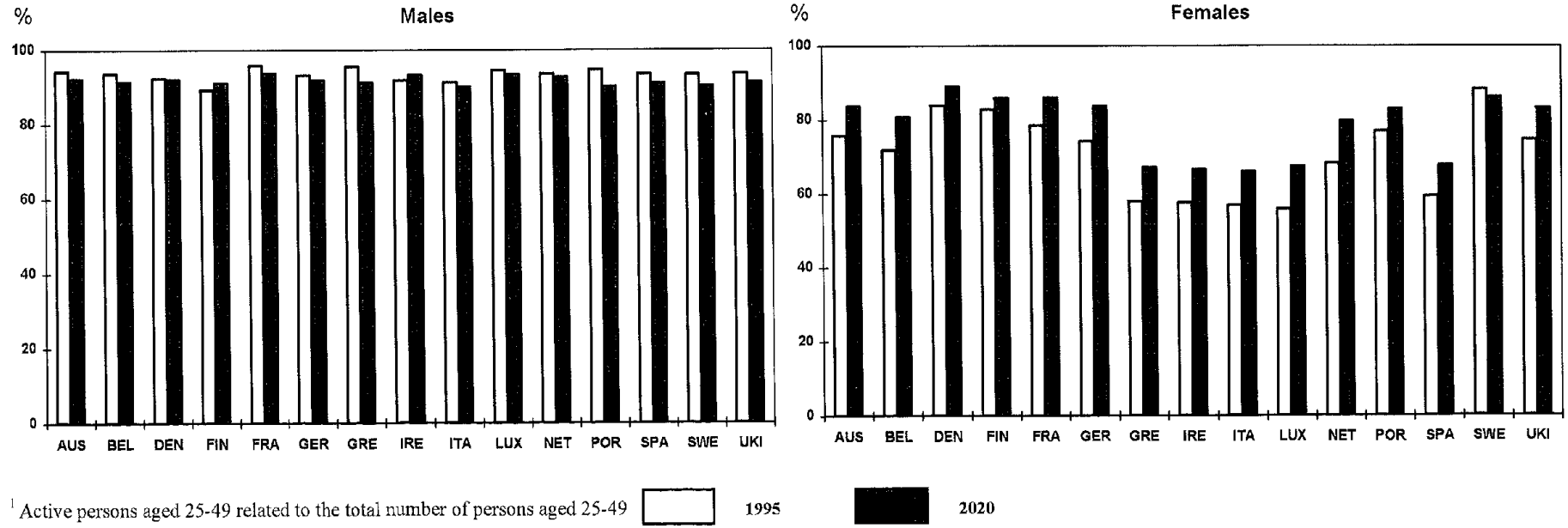


Figure 2.8. Labour force participation of age group 25-49[1], countries, 1995 and baseline scenario 2020



[1] Active persons aged 25-49 related to the total number of persons aged 25-49

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Regional trends

High activity rates among men aged 25-49 can be found in the regions situated in former East Germany and most regions of France and Greece. Rather low figures can be observed in the more peripheral regions of Italy, Scandinavia and the United Kingdom. In most countries the impact of the regional differential is not very impressive; this is especially the case for France and Portugal. Nevertheless, within the EU the difference between the region with the lowest value (namely Calabria in Italy) and that with the highest value (namely North Yorkshire in the United Kingdom) amounts to 14 percentage points.
The national dimension does not play an important role in the regional variability, as the coefficient of variation for the EU as a whole is still beneath that of the United Kingdom and Italy.
Under the baseline scenario the regional variability will be brought back even further in 2025. The general drift is that those regions that currently experience high levels will have somewhat lower figures in the future, while the low scoring regions in 1995 will approximately keep the current figures.

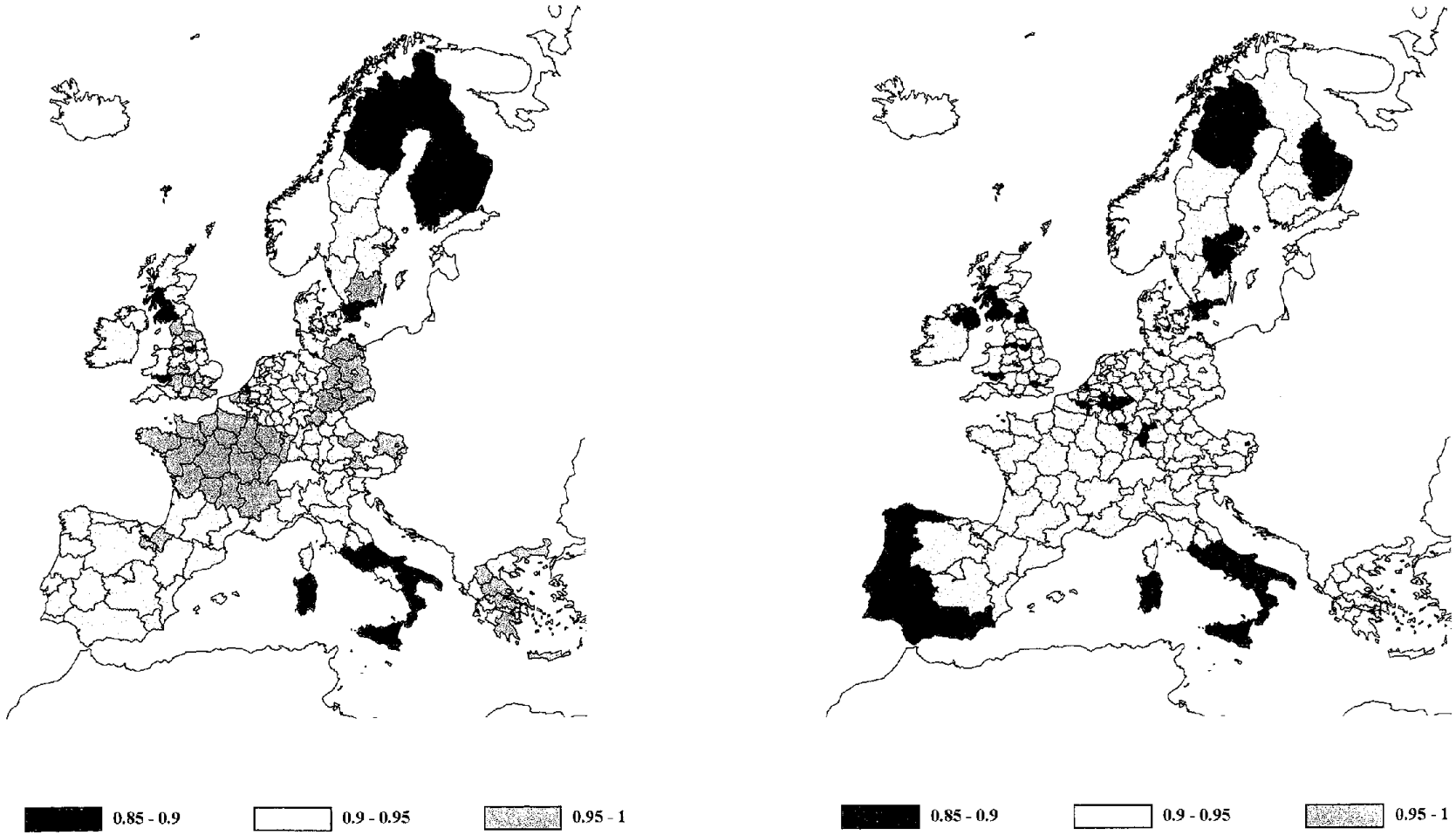
Table 2.7. Average activity rates of males aged 25-49 years (%), higehest and lowest regions, 1995 and baseline scenario 2025

	Highest region [1]			Lowest region			Difference [2]		Coefficient of variation [3]	
		1995	2025		1995	2025	1995	2025	1995	2025
AUS	Salzburg	97	94	Wien	92	90	5	4	0.02	0.01
BEL	W-Vlaanderen	97	94	Brussel	89	88	7	6	0.02	0.02
DEN		92	92							
FIN	Ahvenanmaa/Aaland	92		Itae-Suomi	85		7		0.02	
FIN	Pohjois-Suomi		92	Itae-Suomi		88		4		0.02
FRA	Haute-Normandie	97	95	Languedoc-Roussillon	94	92	4	3	0.01	0.01
GER	Dessau	97	94	Bremen	89	89	8	5	0.02	0.01
GRE	Kriti	97	92	Ionia Nisia	95	91	2	2	0.01	0.00
IRE		92	93							
ITA	Trentino-Alto Adige	94		Calabria	85		10		0.03	
ITA	Emilia-Romagna		92	Calabria		86		6		0.02
LUX		95	94							
NET	Zeeland	96	94	Groningen	91	91	5	4	0.01	0.01
POR	Lisboa e Vale Do Tejo	95		Madeira	93		3		0.01	
POR	Alentejo		90	Madeira		89		1		0.01
SPA	La Rioja	96		Canarias	90		7		0.02	
SPA			93	Ceuta Y Melilla		88		5		0.01
SWE	Smaaland Med Oearna	96	93	Oevre Norrland	90	88	7	5	0.02	0.02
UKI	North Yorkshire	98	95	Merseyside	87	87	11	9	0.03	0.02
EU15	UKI North Yorkshire	98	95	ITA Calabria	85	86	14	10	0.03	0.02

[1] Denmark, Ireland and Luxembourg do not contain NUTS II regions
[2] Level of highest region minus level of lowest region
[3] Standard deviation divided by average level

Figure 2.9. average activity rates of males aged 25-49 (%), regions, 1995 and baseline scenario 2025

1995 **2025**



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The regional dimension in activity rates is far more important for women than for men. However, regional variability in the EU is especially apparent at the national level and not so much at the NUTS II level. Only Germany shows a clear divide between former West and East while in Italy a North-South divide is visible with low female activity rates in the Southern part and high female activity rates in the Nothern part. In general high female activity rates can be found in almost all regions of Scandinavia, Portugal and France. Many regions in the United Kingdom, Germany and Austria also have high female activity rates.

The difference between the region with the highest female activity rate in the EU (namely Halle in Germany) and the region with the lowest activity rate is enormous: nearly 60 percentage points. If we consider individual countries, the largest difference can be found in Italy with a score of almost 40 percentage points. Both the Scandinavian countries and the Netherlands, are situated at the other end of the continuum, with a difference of less than 10% between the highest and lowest region.

Under the baseline scenario the regional differences between 1995 and 2025 will diminish with about one-third, comparing the coefficient of variation for the EU. With exception of the regions of former East Germany, all regions will have higher activity rates in 2025. However, the rise will be more prominent in regions which currently have rather low activity rates. As a result the difference between the highest and the lowest region within the EU will shrink to just over 40 percentage points.

Table 2.8. Average activity rates of females aged 25-49 years (%), highest and lowest regions, 1995 and baseline scenario 2025

	Highest region [1]			Lowest region			Difference [2]		Coefficient of variation [3]	
		1995	2025		1995	2025	1995	2025	1995	2025
AUS	Wien	81	88	Tirol	69	78	11	10	0.05	0.04
BEL	Vlaams Brabant	80	88	Limburg	65	74	15	14	0.06	0.04
DEN		84	89							
FIN	Ahvenanmaa/Aaland	88	90	Itae-Suomi	81	85	7	5	0.03	0.02
FRA	Limousin	85		Nord-Pas-De-Calais	68		17		0.06	
FRA	Limousin		92	Corse		78		14		0.04
GER	Halle	94	95	Saarland	62	75	32	20	0.13	0.07
GRE	Anatoliki Makedonia,	64		Voreio Aigaio	41		23		0.11	
GRE	Kriti		73	Voreio Aigaio		57		16		0.07
IRE		58	66							
ITA	Emilia-Romagna	73		Sicilia	36		37		0.19	
ITA	Emilia-Romagna		82	Campania		54		28		0.12
LUX		56	68							
NET	Utrecht	73	84	Overijssel	65	77	8	7	0.03	0.02
POR	Lisboa e Vale Do Tejo	80	86	Acores	57	66	23	20	0.10	0.08
SPA	Islas Baleares	67	75	Castilla-La Mancha	47	60	20	15	0.10	0.06
SWE	Mellersta Norrland	91	88	Vaestsverige	87	85	4	3	0.01	0.01
UKI	Hereford & Worcester, Warwickshire	83	90	Merseyside	67	77	16	13	0.05	0.04
EU15	GER Halle	94		ITA Sicilia	36		58		0.16	
EU16	GER Halle		95	ITA Campania		54		41		0.11

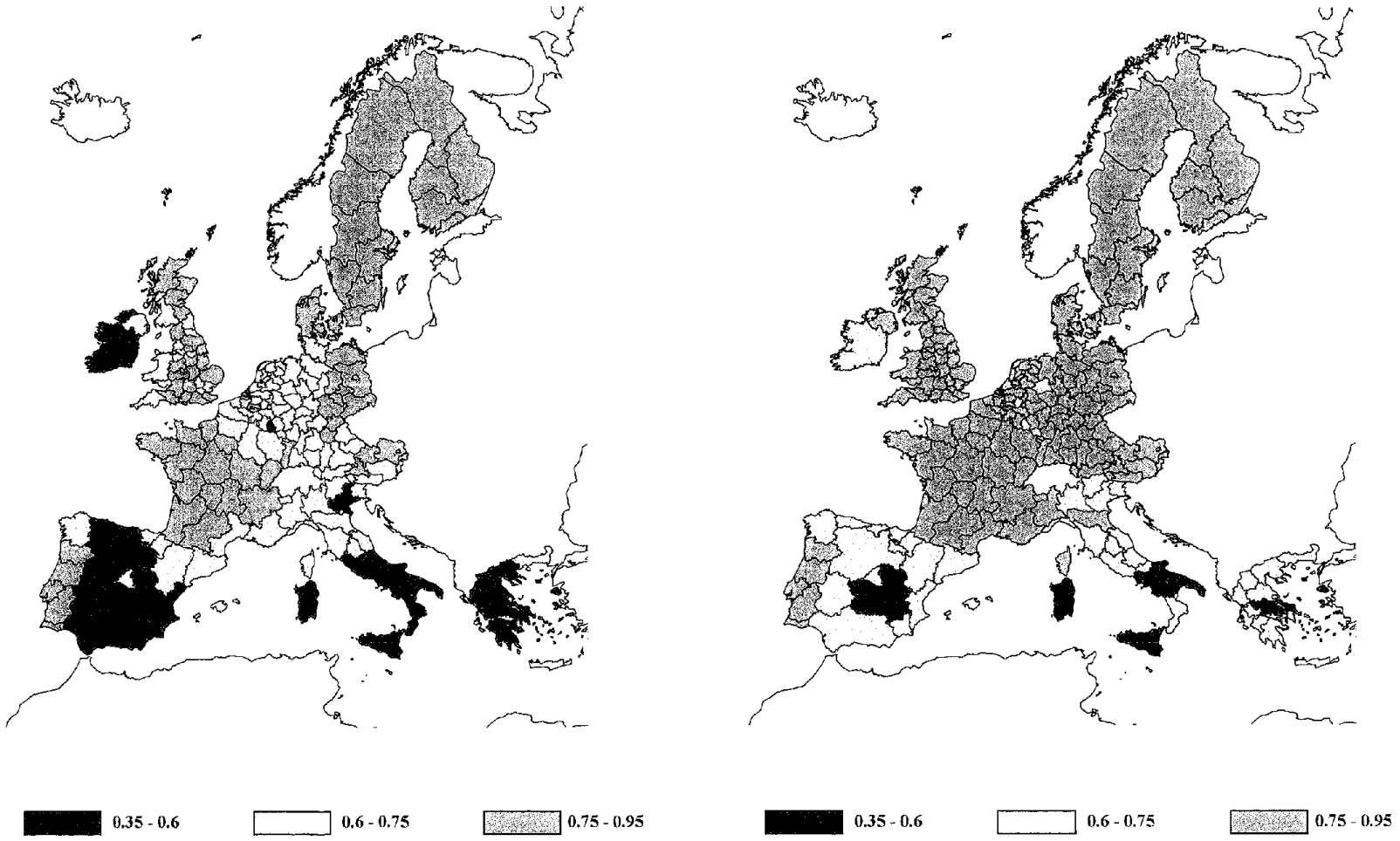
[1] Denmark, Ireland and Luxembourg do not contain NUTS II regions

[2] Level of highest region minus level of lowest region

[3] Standard deviation divided by average level

Figure 2.10. Average activity rates of females aged 25-49 (%), regions, 1995 and baseline scenario 2025

1995 **2025**



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2.3. People aged 50 and over

There has been a consistent trend towards early retirement among men in the EU over the last two decades. The labour participation rate of women aged 50 and over has risen, in line with the general increase in female participation.
The trend towards early retirement is stimulated by the need to reduce the size of the workforce, especially in times of economic recessions. At the political level early retirement is considered more socially acceptable than making younger employees redundant. This rationale behind early retirement may change in the (near) future as the ageing of the population presents a threat to the sustainability of the public pension systems. Moreover, early retirement will lead to a further deterioration in the ratio between the number of people in productive employment (who pay taxes etc.) and the number of benefit recipients. European governments are already taking or preparing measures to contain the costs of future pension commitments. Hence, measures such as stricter eligibility rules and raising statutory retirement age, might reverse the current trend of the falling participation rate of men over 50.
In most Member States a shift in focus is already discernible in the instruments of labour market policy: from passive measures of income support for people out of work to active measures designed to help people to find or keep jobs (European Commission, 1996b).

In the baseline scenario it is assumed that the trend towards early retirement among men will slow down in the short run. However, when governments give priority to the absorption of young people in the labour market it will prevent a rise in participation rates in the short term. In the long run the ageing of the population may lead to shortages of workers, inducing older employees to stay in the labour force.
A continued rise in the participation rate of women is foreseen. In the low scenario the trend towards early retirement continues, especially among men. Moreover those remaining in employment will work full-time because of fears of losing their job altogether if they switch to working part-time.
In contrast, in the high scenario more and more elderly persons will switch to part-time work when they approach retirement age, leading to a pronounced rise in participation in the future among both men and women.

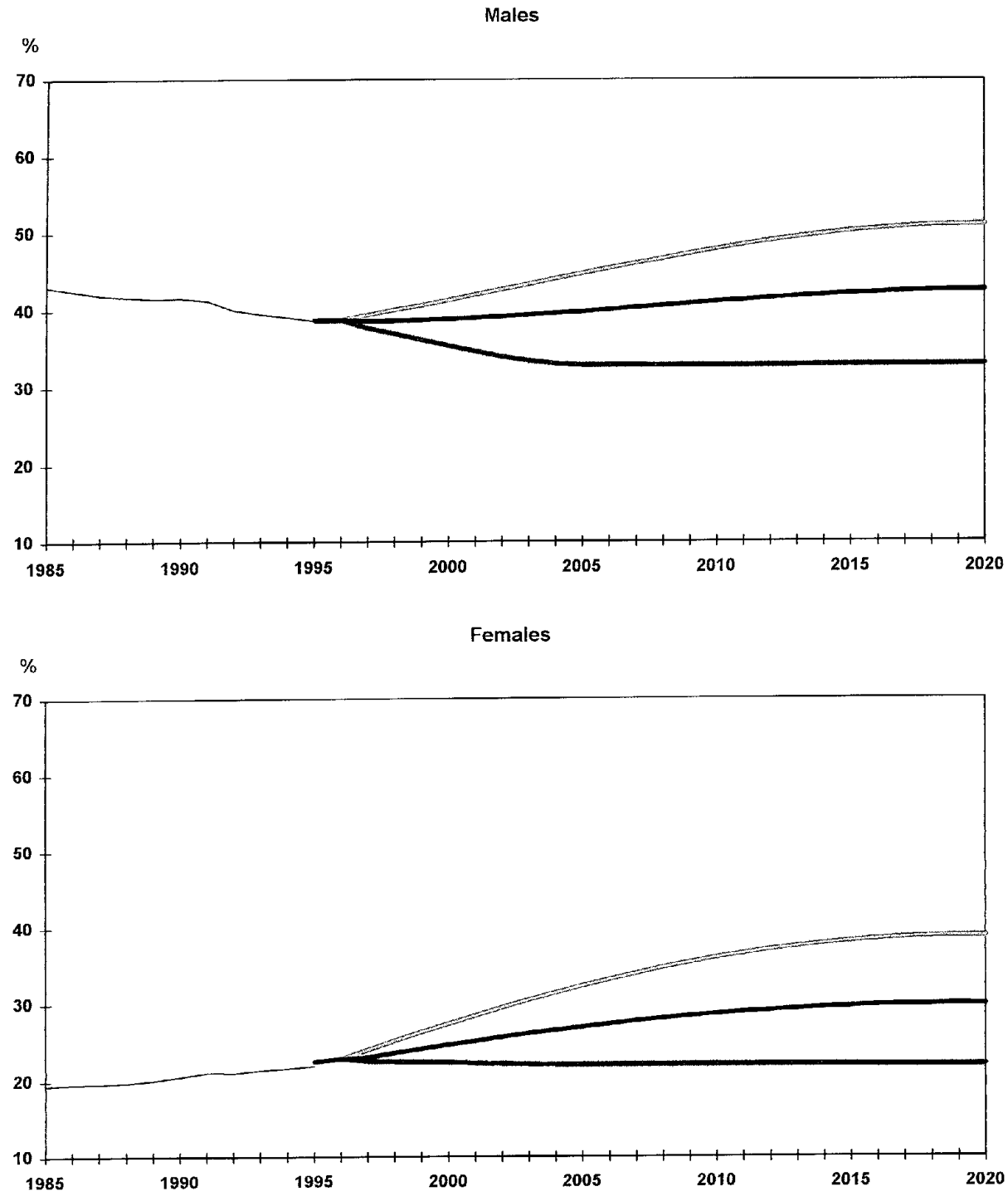
Table 2.9. Labour force participation of age group 50-75[1], EU-15, 1985-2020

	Observed		Low scenario			High scenario			Baseline scenario		
	1985 [2]	1995	2000	2005	2020	2000	2005	2020	2000	2005	2020
Males	52	45	42	39	39	48	51	58	45	46	49
Females	21	24	25	25	25	30	35	43	27	30	33

[1] Active persons aged 50-75 as a percentage of total number of people aged 50-75

[2] EU-12

Figure 2.11. Average activity rate of age group 50-75[1], EU-15, 1985-2020



National trends

The labour participation of older men has shown a sustained fall in most Member States since 1975. However, it seems that the lowest point was reached in most countries around the mid nineties. National differences are more significant for older than for middle-aged men. There are high participation rates in Sweden, Denmark, Portugal, Ireland and the United Kingdom. The lowest figures can be found in Belgium and France. The large national differences are mainly due to characteristics of the pension systems. The statutory retirement age for men is 65 in most Member States. Denmark has the highest retirement age with 67 and France the lowest with 60.

Under the baseline scenario the activity rates of older men are expected to rise in almost all countries. This rise would be due to actions taken by governments to raise participation in order to prevent the foreseen problems concerning the sustainability of the social security system.

Labour participation among older women is well below that of their male counterparts in all Member States. Sweden is the sole exception to this rule. It most countries participation has been rising among older women. Belgium, Spain, Italy and Luxembourg not only used to have, but still have a very low level of participation of older women.

Under the baseline scenario the low performing countries are expected to catch up with the majority of the Member States. In contrast, not much change will take place in the countries with high activity rates.

Table 2.10. Labour force participation of age group 50 and over [1] countries, 1995 and 2020

	1995		Low scenario 2020		High scenario 2020		Baseline scenario 2020	
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES	MALES	FEMALE
AUS	43.8	22.1	43.8	28.5	56.7	49.6	47.1	39.7
BEL	33.6	13.8	29.8	17.4	44.4	35.3	37.7	24.9
DEN	53.5	34.0	47.2	35.1	63.6	49.7	55.1	41.6
FIN	40.5	33.4	36.5	28.7	46.1	44.4	40.8	35.9
FRA	35.6	24.1	28.3	22.9	52.3	42.0	41.7	32.4
GER	49.6	28.2	44.5	31.2	58.6	46.1	52.6	38.7
GRE	51.4	20.3	44.5	19.9	60.8	37.0	54.1	25.9
IRE	54.7	17.9	42.7	12.1	59.8	34.4	52.4	22.4
ITA	39.4	13.7	35.0	15.0	56.5	33.1	47.2	22.5
LUX	38.4	12.6	30.7	11.8	47.9	27.1	38.9	21.4
NET	41.9	18.8	31.9	23.0	54.8	41.3	44.5	31.7
POR	54.9	30.9	51.9	34.0	66.8	52.8	57.5	40.8
SPA	43.9	15.8	41.0	16.8	59.5	32.7	51.0	22.1
SWE	55.6	46.1	42.1	33.8	57.6	54.8	50.1	43.0
UKI	49.6	32.8	45.2	32.4	63.0	52.3	53.4	43.8

[1] Active persons aged 50-75 as a percentage of total number of people aged 50-75

Figure 2.12. Average activity rates of age group 50 and over, three selected countries, 1975-2020, baseline scenario

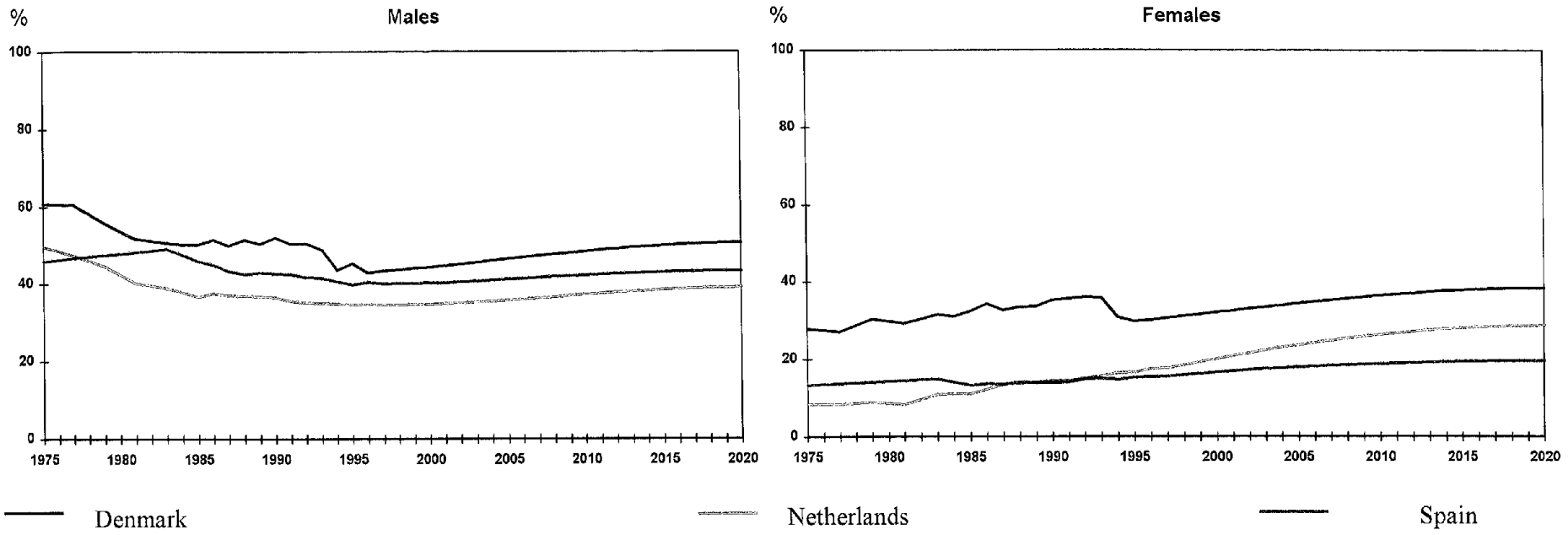
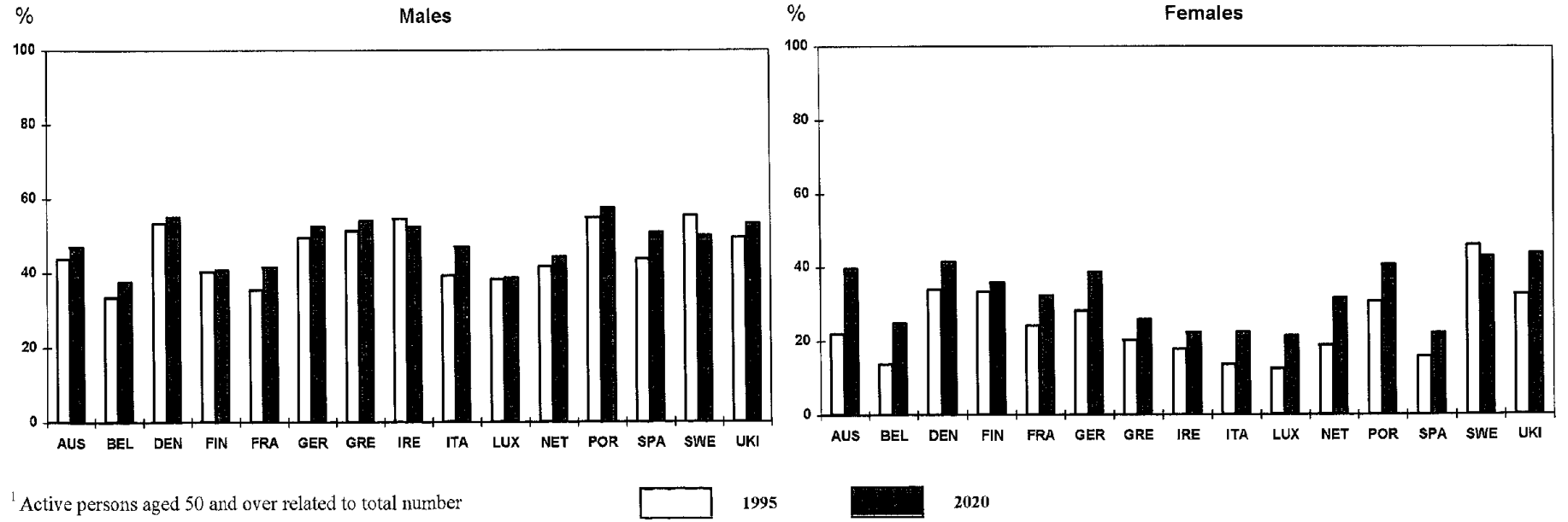


Figure 2.13. Labour force participation of age group 50 and over [1], countries, 1995 and baseline scenario 2020



[1] Active persons aged 50 and over related to total number of persons aged 50-75.

Regional trends

Denmark, Sweden and most regions of Portugal, Greece and several regions in Germany and the United Kingdom are characterised by high activity rates among older men. However, their backgrounds may be quite different. In regions where agriculture is dominant, many people continue to work in order to escape poverty. Elsewhere governments are taking measures to increase participation at higher ages in order to contain the cost of future pension commitments. This might be the reason for rather high participation rates of older people in Sweden and Denmark.

The national dimension is more important than the regional dimension given the fact that the coefficient of variation for the EU as a whole was much higher than for each individual Member State in 1995. Under the baseline scenario it is assumed that regional disparities will diminish and as a result the regions with the highest levels nowadays will have slightly lower levels in 2025, while regions with the lowest levels will have somewhat higher activity rates in the future.

Table 2.11. Average activity rates of males aged 50-75 years (%), highest and lowest regions, 1995 and baseline scenario 2025

	Highest region [1]			Lowest region			Difference [2]		Coefficient of variation [3]	
		1995	2025		1995	2025	1995	2025	1995	2025
AUS	Vorarlberg	51		Steiermark	38		12		0.11	
AUS	Salzburg		47	Kaernten		39		8		0.08
BEL	Waals Brabant	40		Hainaut	28		12		0.10	
BEL	Brussel		40	Limburg		30		10		0.08
DEN		54	56							
FIN	Uusimaa	49	45	Pohjois-Suomi	35	35	14	11	0.13	0.10
FRA	Ile De France	48	52	Lorraine	28	34	19	18	0.13	0.09
GER	Berlin	58		Saarland	39		19		0.11	
GER	Hamburg		55	Saarland		39		16		0.09
GRE	Kriti	58		Attiki	44		15		0.09	
GRE	Peloponnisos		60	Attiki		47		13		0.07
IRE		55	52							
ITA	Lazio	46	52	Liguria	33		13		0.09	
ITA				Valle d'Aosta		40		12		0.07
LUX		38	36							
NET	Zeeland	44		Groningen	39		5		0.05	
NET	Utrecht		45	Limburg		39		6		0.05
POR	Centro (P)	62	64	Alentejo	51		12		0.06	
POR				Lisboa e Vale Do Tejo		55		9		0.05
SPA	Comunidad de madrid	52	57	Principado de Asturias	35	43	17	14	0.09	0.07
SWE	Stockholm	59	53	Norra Mellansverige	52	48	6	6	0.04	0.04
UKI	Berkshire, Buckinghamshire, Oxfordshire	62	61	Merseyside	38	43	24	18	0.13	0.10
EU15	POR Centro (P)	62	64	BEL Hainaut	28		35		0.18	
EU15				BEL Limburg		30		34		0.15

[1] Denmark, Ireland and Luxembourg do not contain NUTS II regions

[2] Level of highest region minus level of lowest region

[3] Standard deviation divided by average level

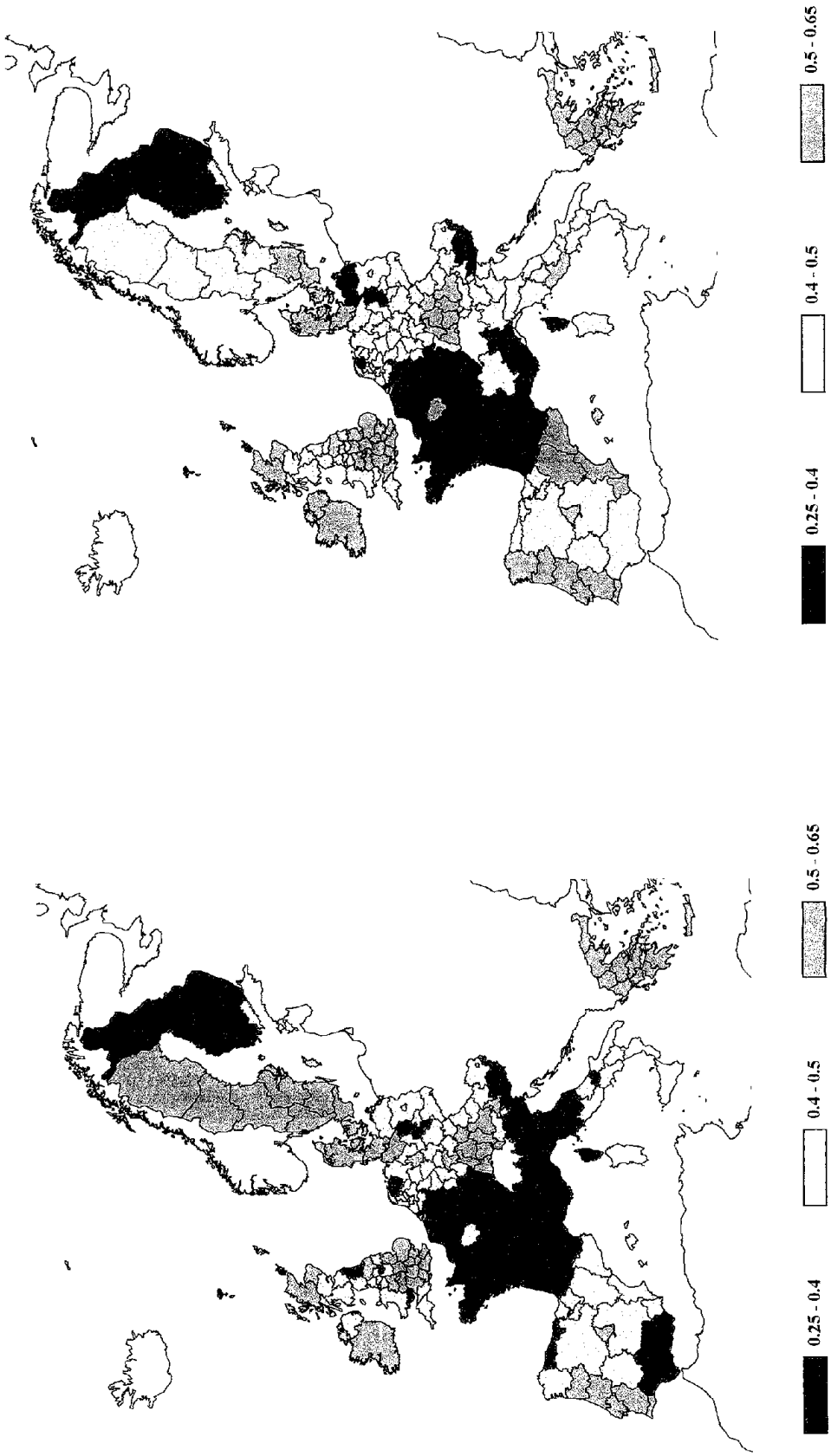


Figure 2.14. Average activity rates of males aged 50-75 (%), regions, 1995 and baseline scenario 2025

The map of regional activity rates of older women is again dominated by national differences, as was the case for their male counterparts. There are high participation rates in Denmark, Sweden, most regions of the United Kingdom and several regions in Germany. Low participation rates can be found in most regions of Italy, Spain, the Netherlands and Belgium. These low rates might be considered remnants of a traditional structure in which women were not supposed to be economically active.

The regional variations in female activity rates at higher ages have more impact than is the case with men. The difference between the region with the highest and the lowest rates in the EU amounts to nearly 40 percentage points, against nearly 35 percentage points for men. In contrast, where the regional activity rates for men in 2025 according to the baseline scenario were more or less a reflection of the current situation, there should be an almost general move upwards in activity rates for women.

Table 2.12. Average activity rates of females aged 50-75 years (%), highest and lowest regions, 1995 and baseline scenario 2025

	Highest region [1]			Lowest region			Difference [2]		Coefficient of variation [3]	
		1995	2025		1995	2025	1995	2025	1995	2025
AUS	Salzburg	25		Kaernten	18		6		0.11	
AUS	Tirol		41	Kaernten		32		9		0.08
BEL	Brussel	19	31	Limburg	11	19	8	12	0.18	0.15
DEN		34	42							
FIN	Uusimaa	42	40	Pohjois-Suomi	30	32	11	9	0.12	0.09
FRA	Ile De France	32	40	Corse	15	21	17	19	0.15	0.12
GER	Berlin	37		Saarland	17		21		0.15	
GER	Oberbayern		40			23		17		0.10
GRE	Kriti	29	36	Attiki	13	19	17	17	0.22	0.17
IRE		18	22							
ITA	Valle d'Aosta	18	28	Sardegna	10	19	8	9	0.17	0.12
LUX		13	20							
NET	Utrecht	23	35	Groningen	14		9		0.13	
NET				Drenthe		24		11		0.11
POR	Centro (P)	40	50	Acores	17	29	23	22	0.24	0.17
SPA	Galicia	24	29	Castilla-La Mancha	10	18	14	11	0.19	0.12
SWE	Mellersta Norrland	50		Norra Mellansverige	42		8		0.06	
SWE	Stockholm		47			40		7		0.05
UKI	Bedfordshire, Hertford	42	51	Dumfries & Galloway, Strathclyde	25	34	17	17	0.14	0.10
EU15	SWE Mellersta Norrla	50		ITB Sardegna	10		40		0.36	
EU15	UKI Bedfordshire, Hertfordshire		51	SPA Castilla-La Mancha		18		33		0.25

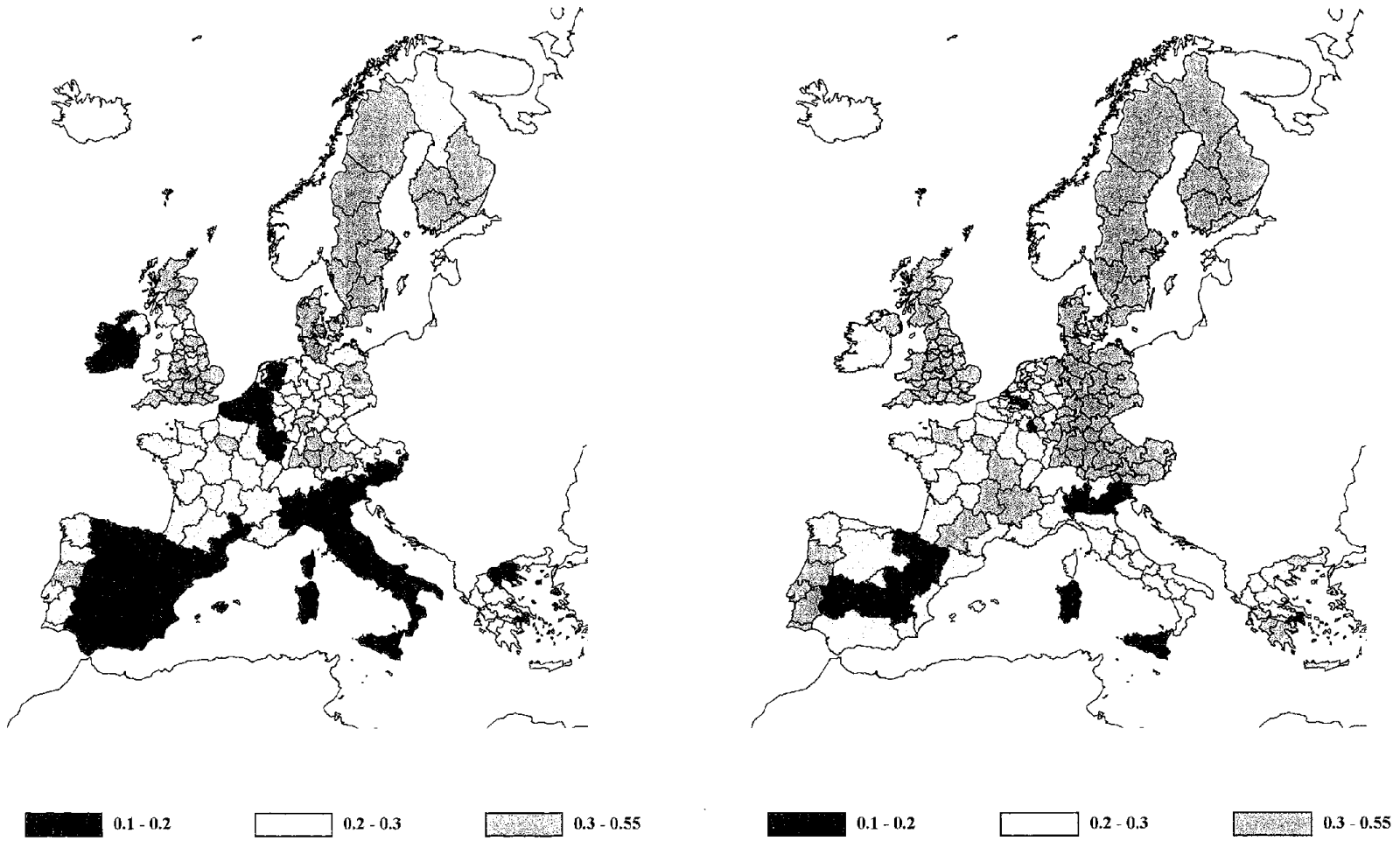
[1] Denmark, Ireland and Luxembourg do not contain NUTS II regions

[2] Level of highest region minus level of lowest region

[3] Standard deviation divided by average level

Figure 2.15. Average activity rates of females aged 50-75 (%), regions, 1995 and baseline 2025

1995 **2025**



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2.4. Total labour force participation

When we look at the trend in the average of age-specific activity rates in the age range of 15-75 we see that the participation rate of men in the labour force is slowly but surely falling. This is an expression of the decline in age specific rates at the younger and older ages, while there is also a downward trend in the prime working ages. For women the labour participation rate in all groups of working age is rising. However, here it is primarily the result of rapidly increasing participation in the middle age range. At young ages the participation rate has been falling steadily, and at older ages only a modest rise in participation has been accomplished.

In the baseline scenario the downward trend in the male participation will not continue, but it will stabilise at the level of nearly 70%. In the low scenario the gloomy economic circumstances will lead to a further fall in the male participation rate, where around 60% of the males will be active on the labour market in 2020. In the high scenario a modest rise in participation is foreseen, leading to a level of 75%. The high scenario for women anticipates a marked growth: from nearly 50% in 1995 to almost 65%. Also in the baseline scenario the trend upward will continue, leading to a level of nearly 55% in 2020. Only the low scenario foresees a stagnation of female participation.

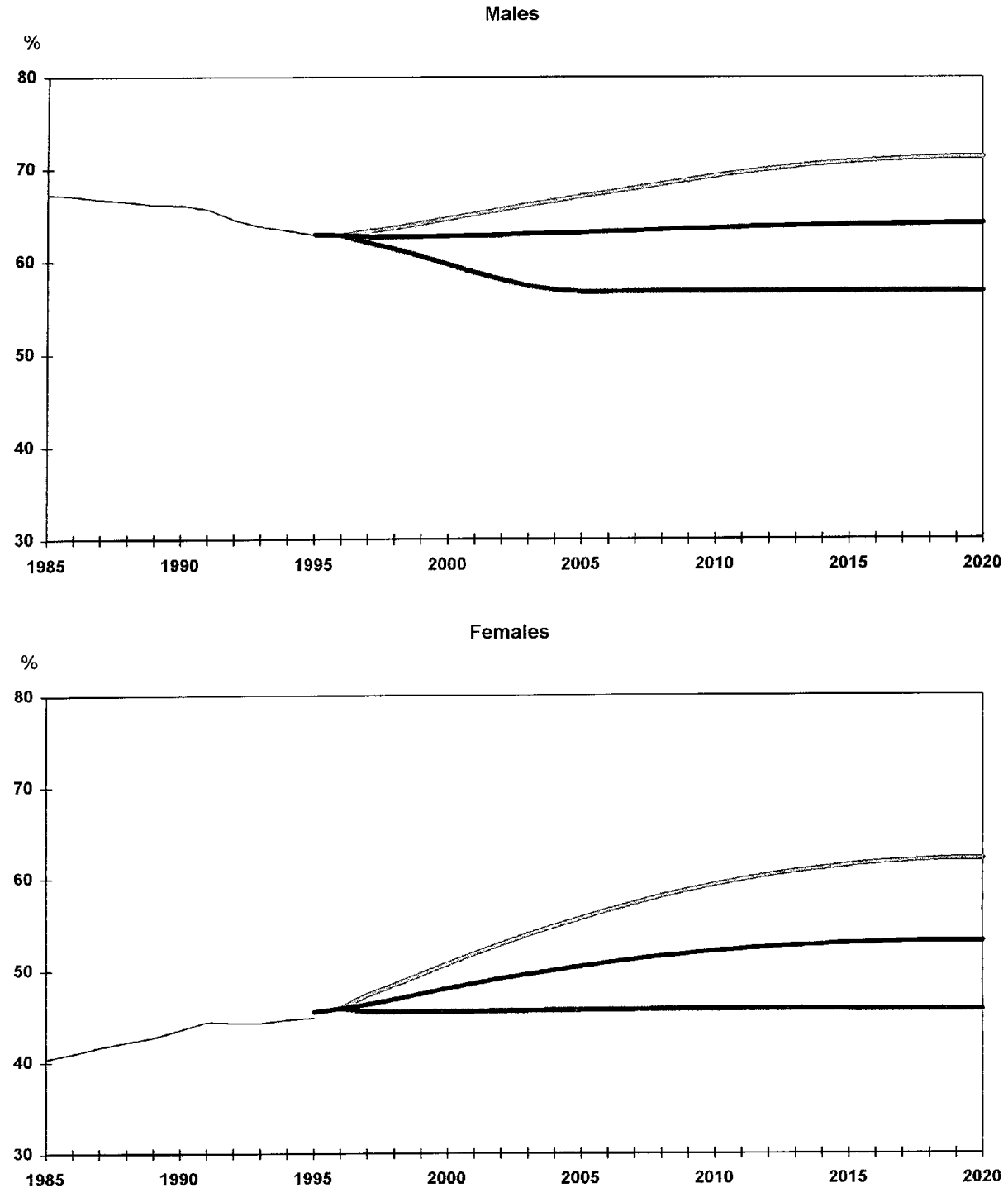
Table 2.13. Labour force participation of age group 15-75[1], EU-15, 1985-2020

	Observed		Low scenario			High scenario			Baseline scenario		
	1985 [2]	1995	2000	2005	2020	2000	2005	2020	2000	2005	2020
Males	74	70	67	63	61	71	73	75	70	70	68
Females	44	49	50	50	47	55	60	63	52	54	54

[1] Active persons as a percentage of total number of people aged 15-75

[2] EU-12

Figure 2.16. Average activity rate of age group 15-75, EU-15, 1985-2020



National trends

In most EU countries the total labour participation rate of men has shown a steady downward trend. The economic recession of the early nineties increased the effect in several countries, such as Denmark and Spain, while in other countries, such as the Netherlands, male participation remained constant.
International differences are not very impressive on the whole, although the male participation rates in Belgium and Italy is over 10 percentage points lower than in the leading country Denmark.
According to the baseline scenario the male participation rate will be somewhat lower in most countries in 2025, primarily due to falling participation rates at the prime working ages.
The average participation rate of women in the Member States has generally shown a significant rise over the last decades, although the pace of change has been far from uniform. The Netherlands used to have very low participation rates, especially compared with the surrounding countries, but a tremendous rise has taken place, leading this country to the middle ranks. Maybe a parallel can be found in the fertility rates, which used to be quite high, but a very rapid fall has led an 'average' level. Combining child rearing with paid work generally met with disapproval in the past. However Dutch women have found a way out of this situation by changing from working full-time to working part-time after childbirth. In this way they could have the 'best of both worlds'.
Nowadays the Scandinavian countries have the highest female participation rates, closely followed by the United Kingdom. It seems as if the participation rate of women has reach its top in this part of Europe, for Denmark experienced a falling rate for the first time in the early nineties.
The lowest female participation rates in Europe can be found in the Southern part, with the exception of Portugal. According to the baseline scenario the average female participation rate will continue to rise in most Western and Southern countries, while in the Northern countries it will remain nearly constant (Denmark) or even decrease somewhat (Sweden and Finland).

Table 2.14. Labour force participation of age group 15-75[1], countries, 1995 and 2020

			Low scenario		High scenario		Baseline scenario	
	1995		2020		2020		2020	
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES
AUS	73.5	53.6	61.4	51.0	77.1	69.5	69.3	60.8
BEL	64.0	44.3	53.6	41.8	66.1	58.4	59.2	48.6
DEN	76.9	63.9	67.2	58.2	80.4	72.2	73.5	65.2
FIN	68.2	60.2	57.1	50.4	67.7	65.3	62.6	57.3
FRA	66.3	52.1	53.6	47.9	71.3	65.1	64.4	56.4
GER	72.5	52.7	64.1	52.1	74.2	66.5	69.8	58.3
GRE	69.9	39.4	63.4	39.0	76.5	56.8	69.5	45.1
IRE	71.0	42.4	63.7	36.6	78.6	59.9	72.4	46.9
ITA	64.8	36.7	56.7	34.2	74.2	53.0	64.7	42.0
LUX	68.9	38.5	56.5	33.9	72.1	54.6	64.3	44.4
NET	73.0	51.5	58.9	48.3	75.6	65.7	68.0	56.3
POR	71.6	53.0	64.8	53.2	78.4	68.4	70.4	59.8
SPA	68.6	40.9	62.3	36.9	75.9	54.7	68.6	44.6
SWE	73.2	67.1	61.1	54.7	74.4	72.1	67.5	62.6
UKI	76.2	58.4	66.5	54.7	79.5	71.3	72.0	63.2

[1] Active persons as a percentage of total number of people aged 15-75

Figure 2.17. Average activity rates of age group 15-75, three selected countries, 1975-2020, baseline scenario

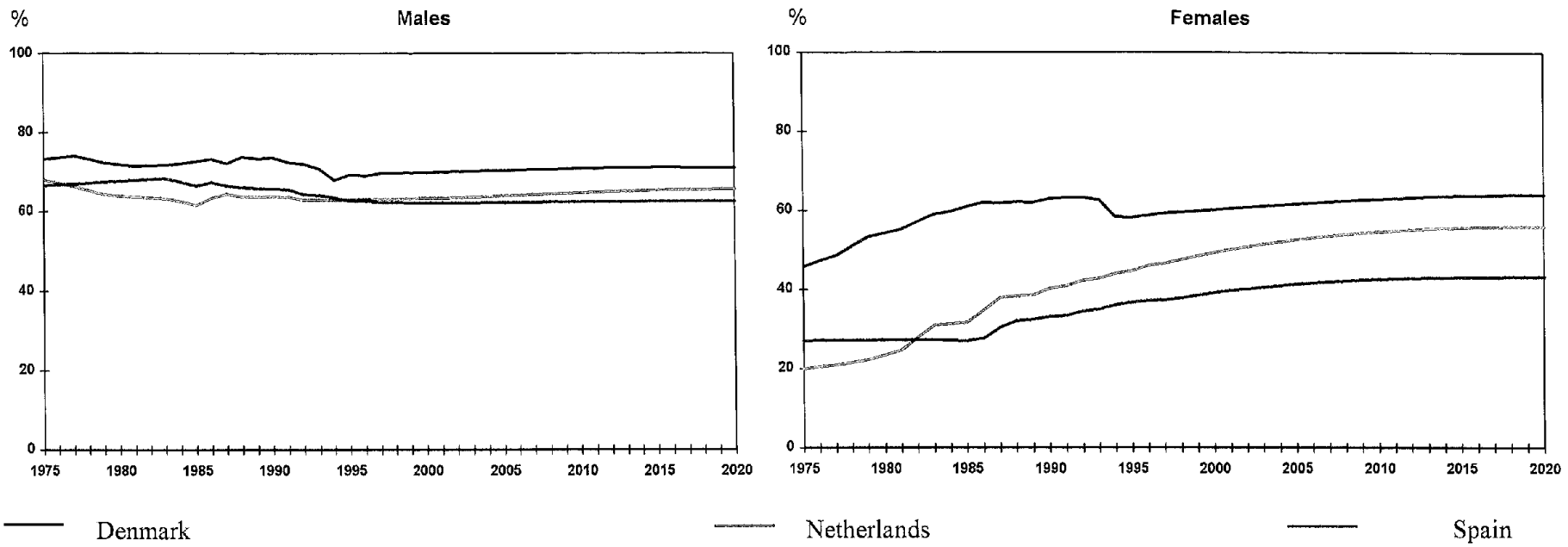
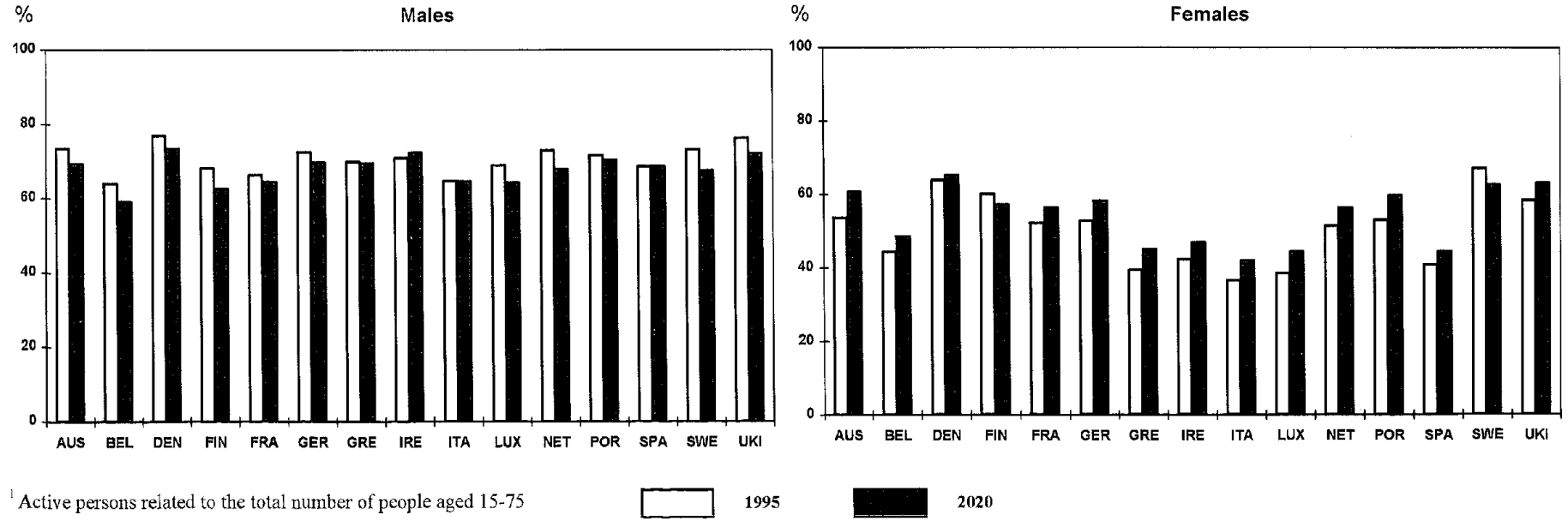


Figure 2.18. Labour force participation of age group 15-75[1], countries, 1995 and baseline scenario 2020



[1] Active persons related to the total number of people aged 15-75

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Regional trends

High total male participation rates are currently observed in most regions of Austria, Denmark, Germany, Ireland, the Netherlands, Sweden and the United Kingdom. In France the more peripheral regions have low participation rates, while the capital region and to a lesser extent the surrounding regions have high rates. In Spain and Italy many regions are characterised by low participation rates for men.

In most countries the difference between the regions with the highest and lowest rates stays within 10 percentage points. The United Kingdom has by far the largest regional differences, although the coefficient of variation is below that of the EU as a whole. The gap between the highest region (Grampian in the United Kingdom) and lowest region (Basilicata in Italy) amounts to over 20 percentage points.

Under the baseline scenario for 2025 the male participation rate will have moved downwards in nearly every region of the EU.

Table 2.15. Average activity rates of males aged 15-75 years (%), highest and lowest regions, 1995 and baseline scenario 2025

	Highest region [1]			Lowest region			Difference [2]		Coefficient of variation [3]	
		1995	2025		1995	2025	1995	2025	1995	2025
AUS	Vorarlberg	78		Kaernten	70		9		0.04	
AUS	Salzburg		70	Kaernten		63		7		0.04
BEL	Vlaams Brabant	66		Hainaut	61		5		0.03	
BEL	Luxembourg		61	Limburg		55		6		0.03
DEN		77	74							
FIN	Uusimaa	73	67	Itae-Suomi	64	59	9	8	0.04	0.04
FRA	Ile De France	71	70	Limousin	62	59	10	10	0.04	0.04
GER	Oberbayern	76		Saarland	66		10		0.03	
GER	Tuebingen		71	Saarland		61		10		0.03
GRE	Kriti	74		Attiki	67		8		0.03	
GRE	Ionia Nisia		73	Attiki		64		9		0.03
IRE		71	72							
ITA	Trentino-Alto Adige	70		Basilicata	60		10		0.04	
ITA	Trentino-Alto Adige		65	Liguria		59		6		0.03
LUX		69	63							
NET	Flevoland	77		Groningen	69		7		0.03	
NET	Utrecht		69	Limburg		63		6		0.03
POR	Acores	74		Alentejo	69		5		0.02	
POR	Madeira		72	Lisboa e Vale Do Tejo		68		5		0.02
SPA	Islas Baleares	70		Principado de Astur	61		9		0.03	
SPA	Comunidad de madrid		69	Principado de Asturias		60		9		0.03
SWE	Smaaland Med Oea	75		Oevre Norrland	70		6		0.02	
SWE	Stockholm		69	Oevre Norrland		65		4		0.02
UKI	Grampian	82	76	Merseyside	66	64	16	12	0.05	0.04
EU15	UKI Grampian	82		ITA Basilicata	60		22		0.07	
EU16	UKI Grampian		76	BEL Limburg		55		21		0.06

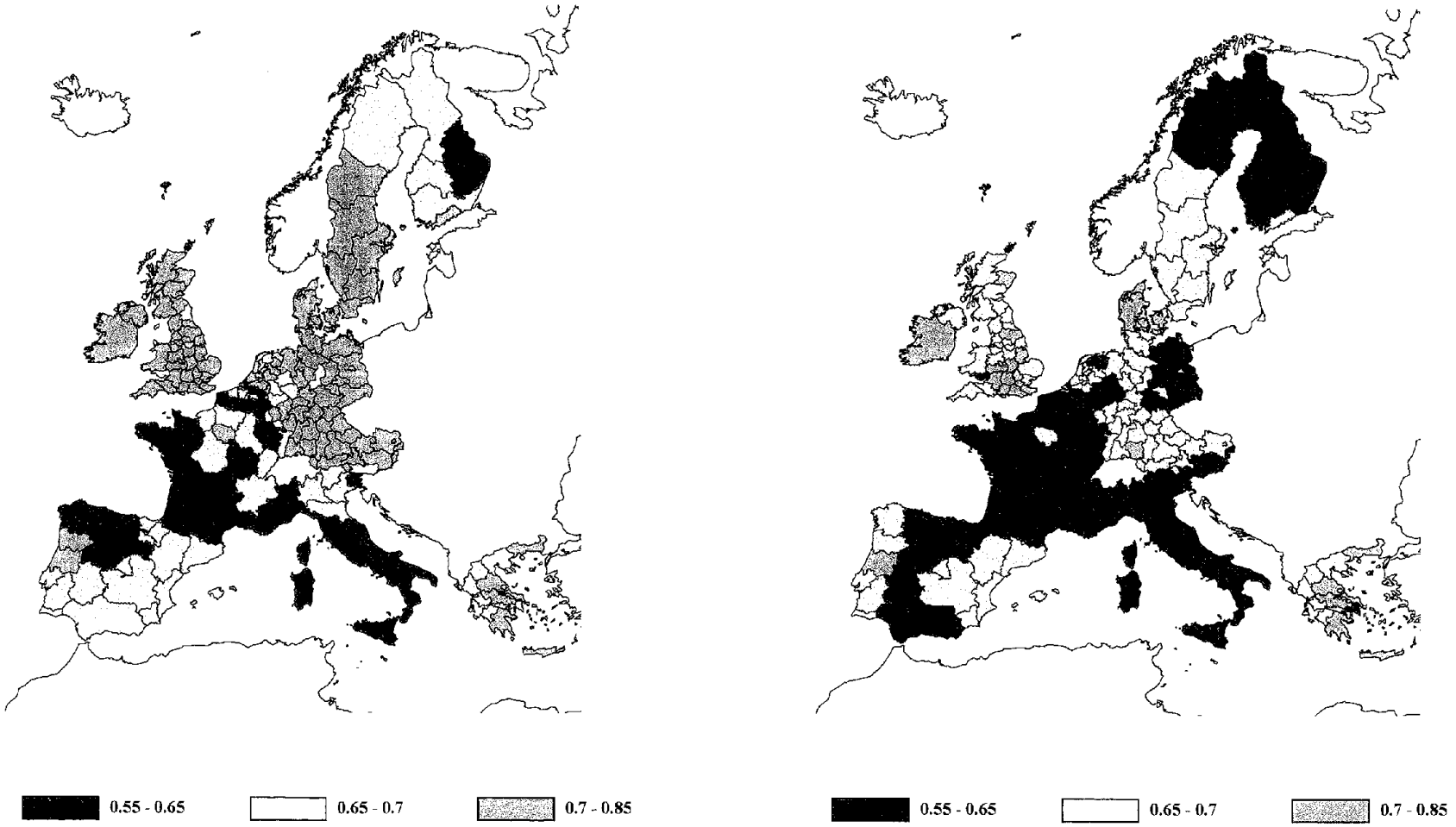
[1] Denmark, Ireland and Luxembourg do not contain NUTS II regions

[2] Level of highest region minus level of lowest region

[3] Standard deviation divided by average level

Figure 2.19 Average activity rates of males aged 15-75 (%), regions, 1995 and baseline scenario

1995 **2025**



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The regional differential has a large impact on the participation rates of women. However, the variation within countries is less important than between countries, although Greece, Portugal and Spain stand out for having a large coefficient of variation. Within the EU the difference between the highest region (Stockholm in Sweden) and the lowest region (Sicilia in Italy) is about 40 percentage points. At the country level, Italy has the largest regional differences, amounting to over 20 percentage points.

High female activity rates are registered in the Scandinavian countries, the eastern part of Germany and most regions of the United Kingdom. Low female activity rates are observed in the Southern part of Italy and a large part of Spain.

Under the baseline scenario the regional map will be coloured by 2025, due to an upward move in female activity rates. However, this does not apply to regions that currently have high rates, in a European perspective. In the future more regional homogeneity is expected and, as a result, the difference between the highest and lowest region within the EU will decrease to just over 30 percentage points.

Table 2.16. Average activity rates of females aged 50-75 years (%), highest and lowest regions, 1995 and baseline scenario 2025

	Highest region [1]			Lowest region			Difference [2]		Coefficient of variation [3]	
		1995	2025		1995	2025	1995	2025	1995	2025
AUS	Salzburg	25		Kaernten	18		6		0.11	
AUS	Tirol		41	Kaernten		32		9		0.08
BEL	Brussel	19	31	Limburg	11	19	8	12	0.18	0.15
DEN		34	42							
FIN	Uusimaa	42	40	Pohjois-Suomi	30	32	11	9	0.12	0.09
FRA	Ile De France	32	40	Corse	15	21	17	19	0.15	0.12
GER	Berlin	37		Saarland	17		21		0.15	
GER	Oberbayern		40			23		17		0.10
GRE	Kriti	29	36	Attiki	13	19	17	17	0.22	0.17
IRE		18	22							
ITA	Valle d'Aosta	18	28	Sardegna	10	19	8	9	0.17	0.12
LUX		13	20							
NET	Utrecht	23	35	Groningen	14		9		0.13	
NET				Drenthe		24		11		0.11
POR	Centro (P)	40	50	Acores	17	29	23	22	0.24	0.17
SPA	Galicia	24	29	Castilla-La Mancha	10	18	14	11	0.19	0.12
SWE	Mellersta Norrland	50		Norra Mellansverig	42		8		0.06	
SWE	Stockholm		47			40		7		0.05
UKI	Bedfordshire, Hertf	42	51	Dumfries & Galloway, Strathclyde	25	34	17	17	0.14	0.10
EU15	SWE Mellersta No	50		ITB Sardegna	10		40		0.36	
EU15	UKI Bedfordshire, Hertfordshire		51	SPA Castilla-La Mancha		18		33		0.25

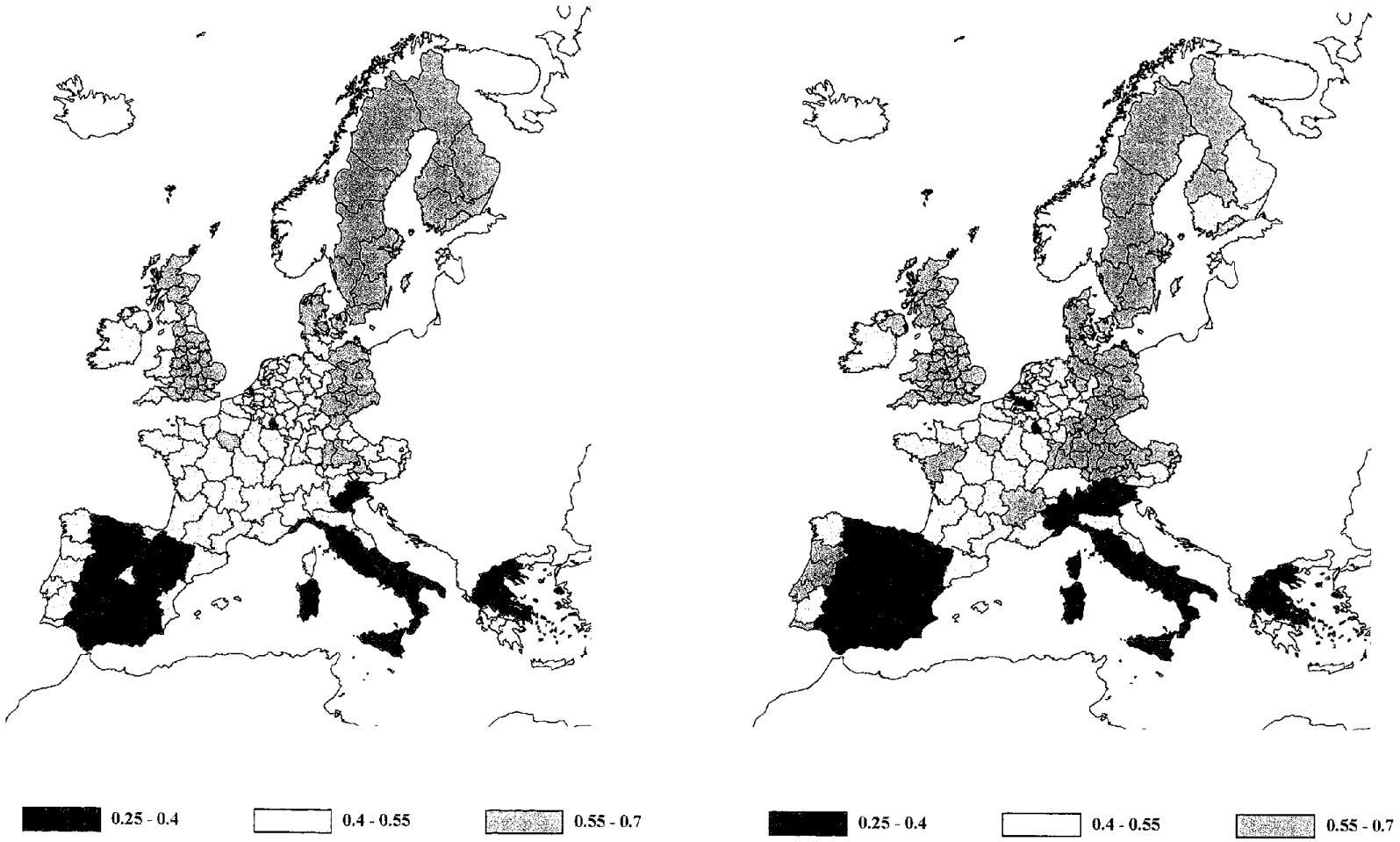
[1] Denmark, Ireland and Luxembourg do not contain NUTS II regions

[2] Level of highest region minus level of lowest region

[3] Standard deviation divided by average level

Figure 2.20 Average activity rates of females aged 15-75 (%), regions, 1995 and baseline scenario 2025

1995 **2025**



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2.5. Gender differences

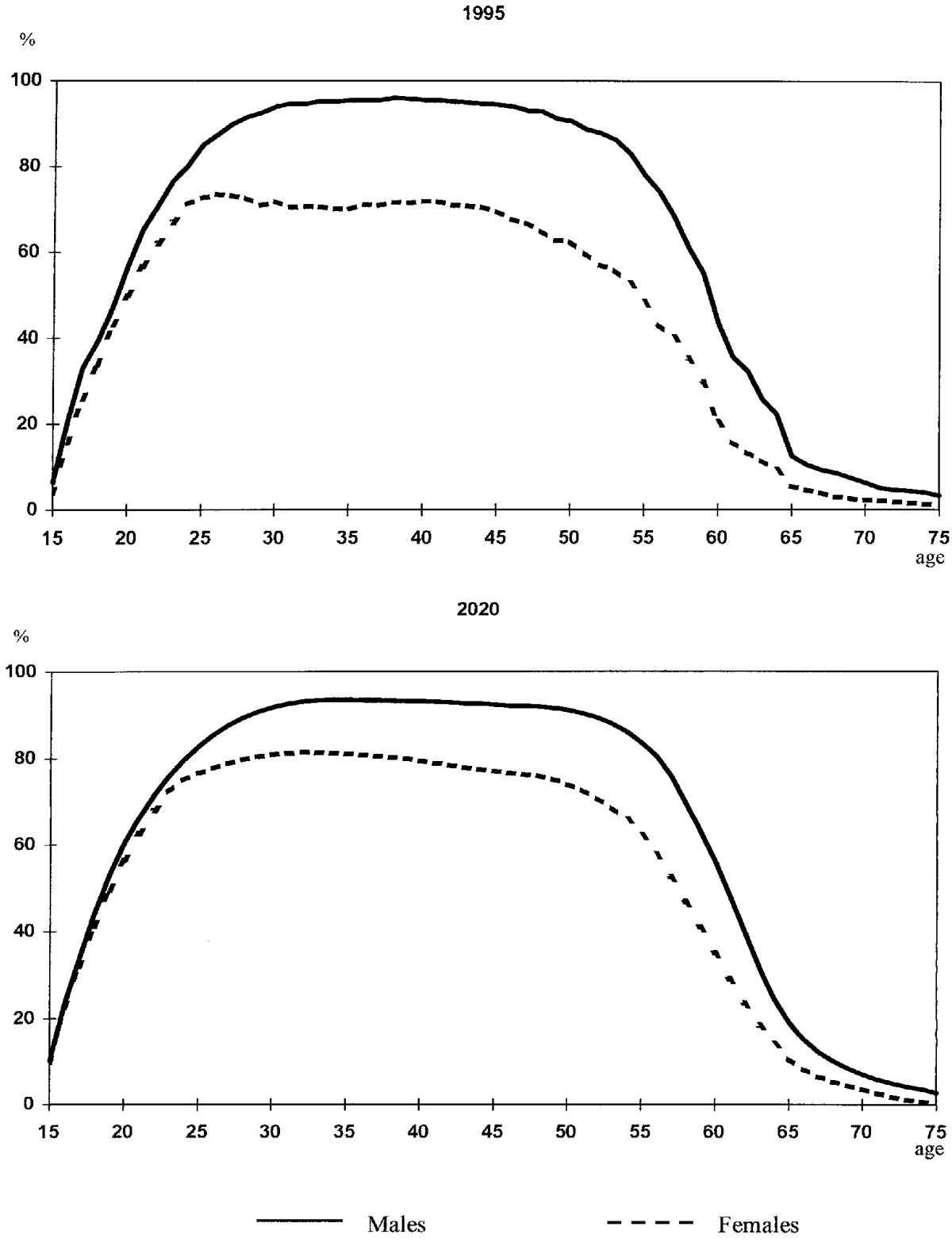
In spite of the downward trend in male activity rates, and the upward trend in female activity rates, male labour force participation is still higher at all working ages. While the male age pattern has an inverted U-shape the female age pattern is more or less M-shaped, reflecting a traditional pattern of labour force participation.
In the seventies the activity curves of most EU countries were characterised by a left-handed peak, a result of comparatively high activity rates for unmarried women between 20 and 25, and falling activity rates at later ages when most women withdrew from the labour market after marriage or childbirth. The rise in the participation rate of women over the last decades led to the emergence of a M-shaped age pattern: a first peak indicating that the presence of children reduces activity rates and a second peak that women re-enter the labour market once the children are older. In the Scandinavian countries the female age curve resembles that of males with a plateau in the age-group 30-50. These countries seem to have reached the phase in which having children no longer significantly affects women's economic activity.

The baseline scenario supposes that male participation rates will slightly decrease at the middle ages and will moderately rise for the older or younger ages. It foresees an impressive rise for women of all ages. As a result the gap between the sexes in the age curves will narrow. This tendency is expected to be most pronounced at the prime working ages. However, the male activity rates will remain higher than female activity rates.

Table 2.17. Differences between male and female average activity rates (in percent points), EU-15, 1995-2020

		Low scenario	High scenario	Baseline scenario
	1995	2020	2020	2020
15-19	5	2	3	2
20-24	9	2	4	4
25-29	17	8	5	7
30-34	24	14	8	12
35-39	25	16	9	13
40-44	24	17	10	14
45-49	27	19	11	16
50-54	30	21	14	18
55-59	28	19	21	20
60-64	18	11	18	15
65-69	6	3	7	6
70+	3	1	3	3

Figure 2.21. Activity rates, EU-15, 1995 and baseline scenario 2020



3. Trends in the labour force

3.1. Total labour force

Labour force scenarios result from the multiplication of population numbers with labour force activity rates. The population scenarios were provided by Eurostat and compiled by Statistics Netherlands and the Netherlands Interdisciplinary Demographic Institute. These scenarios are based on various combinations of a low, medium and high variant of fertility, life expectancy, and net migration. The baseline scenario is the main reference scenario and describes the outcome of a continuation of current trends, while the other two give an indication of the uncertainty of the future population size.
The low, baseline and high scenarios on labour force participation rates have been combined with the low, baseline and high population scenarios respectively. Because the low scenario on labour force is based on both low population growth and low participation rates while the high scenario combines high population growth with high participation rates, the two scenarios on the labour force represent quite extreme developments. The assumptions on the activity rates apply to the period until 2020. However, as the population scenarios at the national level were available until 2050, computations of the labour force have also been made until this year, by keeping labour force participation rates constant after 2020.

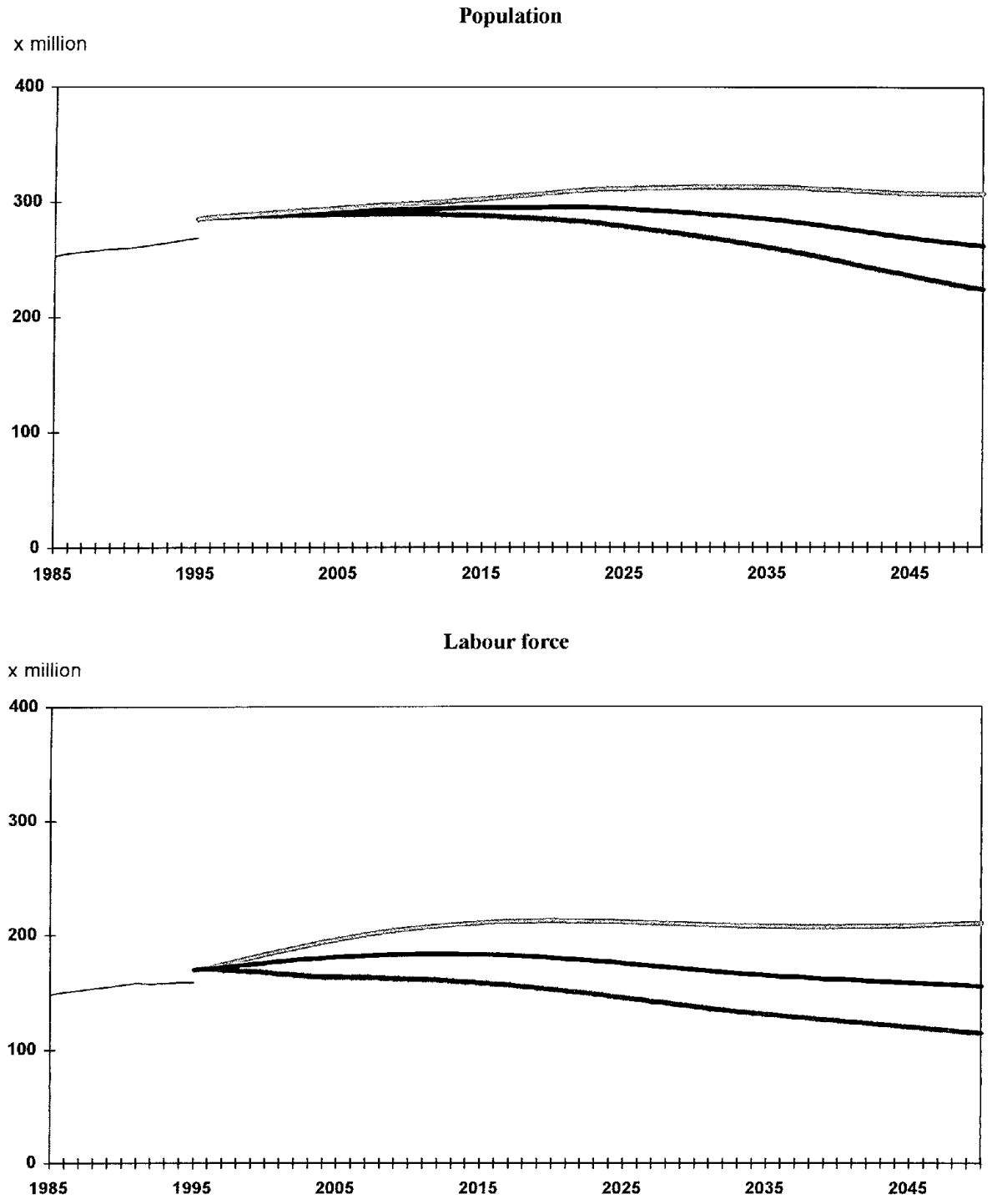
In the baseline scenario the population in the EU in the age-group 15-75 will grow moderately up to 2020. After this the EU will be struck by an impressive population decline. In the low population scenario no population growth is foreseen and the EU will be confronted with a rapid decrease after 2020. In the high scenario a rather strong population growth is expected in the short run followed by stabilisation.
The combination of population trends with the trends in the activity rates according to the three scenarios lead to more or less the same developments in the labour force and the population of working age.
In the baseline scenario the labour force will grow from nearly 170 million in 1995 to about 180 million in 2020. Population decline leads to a reduction to around 155 million in 2050. In the low scenario the labour force will decline continuously until by 2020 around 150 million persons will be left. The high scenario envisages a rise leading to a stock of labourers of over 210 million in 2020.

Table 3.1. Population and labour force aged 15-75, EU-15, 1985-2050

	Observed			Low scenario			High scenario			Baseline scenario		
x mln	985 [1]	1995	1995	2000	2020	2050	2000	2020	2050	2000	2020	2050
Population	253	268	285	288	285	224	290	308	307	289	296	262
Labour force	148	158	169	167	152	114	183	212	210	176	180	155

[1] EU-12

Figure 3.1. Population and labour force aged 15-75, EU-15, 1985-2050



National trends

According to the baseline scenario the labour force will grow slightly in most Member States until around 2020, in line with the labour force trends in the EU as a whole. Due to falling population numbers in the second quarter of the 21st century, the labour force will shrink and become somewhat smaller than the current size in most Member States by 2050. However, in Germany, Italy and Spain the labour force will be significantly smaller by then, due to a sustained low fertility level. France, in contrast, will have a considerable larger labour force by the middle of the 21st century, partly as the consequence of a rather high fertility rate. Under the high scenario all countries will have a growing labour force in the first half of the 21st century while under the low scenario all countries will face a continuously diminishing labour force.

The trends in the labour force are not alike for men and women. Under the baseline scenario the male labour force will have about the same size in most Member States in 2020 as in 1995. Major exceptions to this rule are Luxembourg and Ireland, where some growth is still ahead. Stimulated by a relative high fertility rate, the future labour force in Ireland will have enough potential to grow.

While the male labour force will stagnate in the coming decades, the female labour force will grow in the first quarter of the 21st century in a substantial part of Europe. However, in the Scandinavian and Southern countries growth is expected to slow down. In Scandinavia this is because the participation rates are already high and approaching those of men while in the Southern countries the cause is a long-term low fertility level. Also the labour force growth for women will be reversed when falling population numbers will come into play. By the mid 21st century the female labour force will be back at the current size in most countries, whereas Italy and Spain will be confronted with a much smaller female labour force.

Table 3.2. Labour force, countries, 1985-2025

	Observed			Low			High			Baseline		
x mln	1985	1990	1995	2000	2005	2025	2000	2005	2025	2000	2005	2025
AUS			3.9	3.8	3.8	3.3	4.1	4.5	5.0	4.0	4.1	4.1
BEL	4.0	3.9	4.2	4.1	4.0	3.5	4.5	4.8	5.1	4.4	4.5	4.2
DEN	2.8	2.9	2.8	2.8	2.7	2.4	3.0	3.1	3.4	2.9	2.9	2.9
FIN			2.5	2.4	2.3	2.0	2.6	2.7	2.8	2.5	2.5	2.4
FRA	24.6	25.0	25.6	25.4	24.6	22.4	28.1	30.5	33.3	27.6	29.4	30.5
GER	36.1	38.7	39.8	39.2	38.9	33.8	42.5	45.1	47.0	40.8	41.8	39.8
GRE	4.0	4.1	4.4	4.4	4.4	4.0	4.9	5.3	5.9	4.7	4.8	4.8
IRE	1.3	1.3	1.4	1.5	1.4	1.4	1.7	1.9	2.2	1.6	1.8	1.9
ITA	23.0	23.7	22.8	22.4	21.4	17.6	24.7	26.3	28.0	23.6	23.9	22.1
LUX	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2
NET	5.8	6.9	7.4	7.4	7.2	6.4	8.0	8.7	9.7	7.7	8.0	8.1
POR	4.5	4.7	4.7	4.7	4.6	4.5	5.2	5.6	6.3	4.9	5.1	5.2
SPA	13.9	15.6	16.3	16.3	15.9	13.8	18.1	19.7	20.8	17.2	17.9	16.8
SWE			4.5	4.2	4.0	3.8	4.6	4.9	5.5	4.4	4.4	4.5
UKI	27.6	29.1	28.8	28.4	27.8	25.9	30.6	32.5	35.8	29.7	30.5	30.3

Table 3.3. Labour force aged 15-24, countries, 1985-2025

	Observed			Low			High			Baseline		
x mln	1985	1990	1995	2000	2005	2025	2000	2005	2025	2000	2005	2025
AUS			0.6	0.5	0.5	0.4	0.6	0.7	0.8	0.6	0.6	0.6
BEL	0.7	0.5	0.4	0.4	0.3	0.2	0.4	0.5	0.7	0.4	0.4	0.4
DEN	0.6	0.6	0.5	0.4	0.4	0.3	0.5	0.5	0.6	0.5	0.4	0.5
FIN			0.3	0.3	0.3	0.2	0.3	0.4	0.4	0.3	0.3	0.3
FRA	4.4	3.8	2.9	2.4	2.2	1.8	3.0	3.7	4.8	2.8	3.2	3.3
GER	7.7	6.8	5.0	4.3	4.4	3.4	4.9	5.7	6.5	4.7	5.1	4.7
GRE	0.6	0.6	0.6	0.6	0.5	0.4	0.6	0.7	0.9	0.6	0.6	0.6
IRE	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.4	0.3	0.3	0.3
ITA	4.5	4.3	3.2	2.5	1.9	1.5	2.9	2.7	4.1	2.7	2.4	2.6
LUX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NET	1.2	1.4	1.3	1.1	1.1	1.0	1.2	1.4	1.7	1.2	1.2	1.4
POR	1.1	1.0	0.7	0.6	0.5	0.4	0.7	0.7	0.8	0.7	0.6	0.6
SPA	2.8	3.2	2.7	2.3	1.8	1.4	2.6	2.4	2.8	2.5	2.1	1.9
SWE			0.5	0.4	0.4	0.4	0.5	0.6	0.8	0.4	0.5	0.5
UKI	6.5	6.2	4.8	4.2	4.1	3.4	4.7	5.0	5.4	4.5	4.7	4.2

Table 3.4. Labour force aged 25-49, countries, 1985-2025

	Observed			Low			High			Baseline		
x mln	1985	1990	1995	2000	2005	2025	2000	2005	2025	2000	2005	2025
AUS			2.6	2.6	2.6	2.1	2.8	2.9	2.7	2.7	2.7	2.3
BEL	2.6	2.9	3.1	3.1	3.0	2.5	2.0	2.0	2.0	3.2	3.2	2.8
DEN	1.6	1.8	1.7	1.7	1.6	1.4	1.8	1.8	1.7	1.7	1.7	1.6
FIN			1.7	1.5	1.4	1.3	1.6	1.6	1.6	1.6	1.5	1.5
FRA	15.6	16.9	18.6	18.4	17.5	15.6	19.4	19.5	18.9	19.1	18.9	17.3
GER	12.4	13.1	13.7	26.8	26.3	20.7	28.0	28.6	25.5	14.6	15.0	13.0
GRE	2.3	2.5	2.8	2.9	2.9	2.5	3.1	3.3	3.2	3.0	3.1	2.8
IRE	0.7	0.8	0.9	0.9	0.9	0.9	1.0	1.1	1.3	1.0	1.0	1.1
ITA	13.8	14.8	15.4	15.8	15.6	11.3	16.9	17.8	14.7	16.3	16.6	12.6
LUX	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
NET	3.7	4.5	5.0	5.0	4.8	4.0	5.3	5.4	5.2	5.2	5.1	4.6
POR	2.5	2.7	2.9	3.0	3.0	2.7	3.2	3.5	3.4	3.1	3.3	3.0
SPA	7.9	9.4	10.6	11.0	11.2	8.6	12.0	13.2	11.5	11.6	12.4	9.9
SWE			2.8	2.6	2.5	2.3	2.7	2.8	3.0	2.7	2.6	2.6
UKI	15.2	16.9	18.0	17.8	17.4	15.2	18.7	19.2	18.6	18.3	18.3	16.6

Table 3.5. Labour force aged 50 and over, countries, 1985-2025

	Observed			Low			High			Baseline		
x min	1985	1990	1995	2000	2005	2025	2000	2005	2025	2000	2005	2025
AUS			0.7	0.7	0.7	0.9	0.8	0.9	1.6	0.7	0.8	1.2
BEL	0.7	0.6	0.6	0.7	0.7	0.8	0.8	1.0	1.4	0.7	0.9	1.1
DEN	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	1.1	0.7	0.7	0.9
FIN			0.5	0.6	0.6	0.5	0.6	0.8	0.8	0.6	0.7	0.6
FRA	4.6	4.2	4.1	4.7	4.8	4.9	5.7	7.2	9.6	5.3	6.3	7.4
GER	6.9	8.5	9.0	8.1	8.2	9.6	9.6	10.7	15.0	8.8	9.5	12.5
GRE	1.0	1.0	1.0	1.0	0.9	1.1	1.2	1.3	1.8	1.1	1.1	1.5
IRE	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.6	0.3	0.3	0.4
ITA	4.7	4.6	4.2	4.1	3.9	4.7	4.9	5.8	9.2	4.5	4.9	6.9
LUX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
NET	0.9	1.0	1.1	1.3	1.3	1.5	1.5	1.9	2.8	1.4	1.6	2.2
POR	0.9	1.0	1.1	1.1	1.1	1.4	1.3	1.4	2.1	1.2	1.3	1.7
SPA	3.2	3.0	2.9	2.9	2.8	3.8	3.5	4.2	6.5	3.1	3.4	5.0
SWE			1.2	1.2	1.1	1.1	1.4	1.5	1.7	1.3	1.3	1.4
UKI	5.9	6.0	6.0	6.3	6.3	7.3	7.2	8.3	11.7	6.8	7.4	9.5

Figure 3.2. Labour force, three selected countries, 1985-2020, baseline scenario

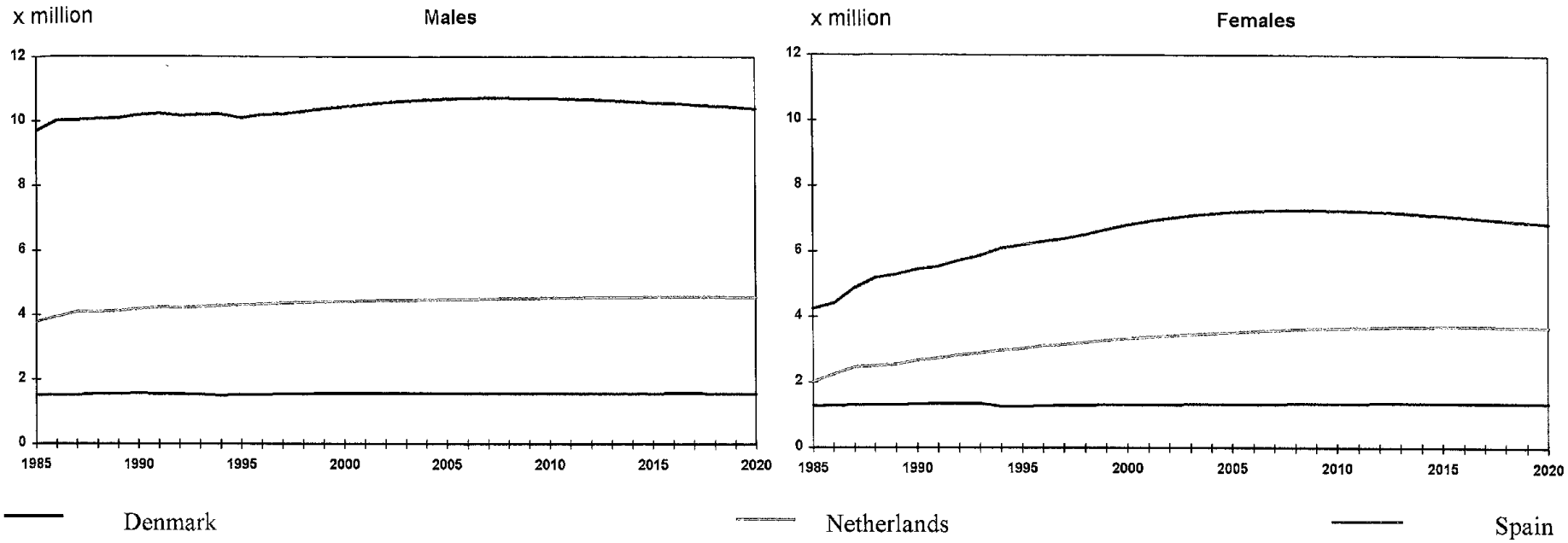
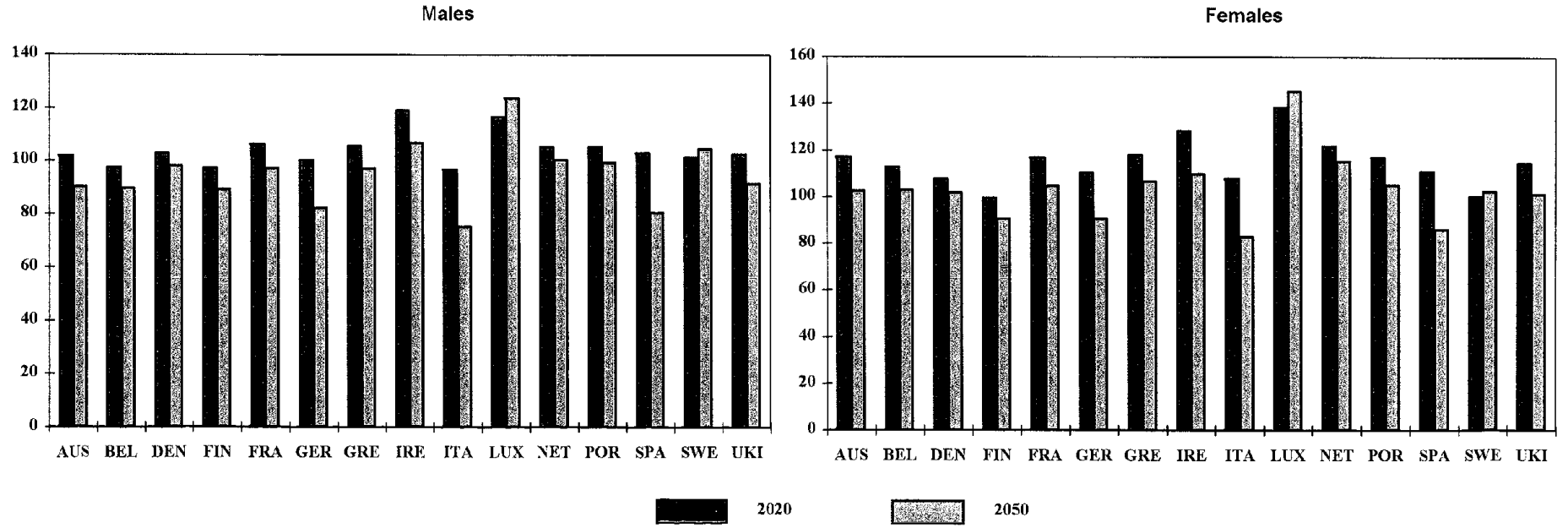


Figure 3.3. Labour force, countries, baseline scenario 2020 and 2050, 1995 = 100



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Regional trends

Under the baseline scenario each EU country will have quite a lot of regions where the male labour force will be smaller in 2025 than in 1995. In several regions in Germany, Italy and Spain the male labour force will be reduced by a quarter, whereas in most countries the loss will be about one tenth of the original labour force. In most Member States the regions with the highest short-term increase in the male labour force will have about as many men in the labour force in 2025 as in 1995. However, Ireland and some regions in France, Greece, the Netherlands, Portugal, Spain and the United Kingdom will attain a significant growth.

The regional map showing the growth rate for the female labour force demonstrates that only in a minority of the regions a setback might be expected in the future. In most countries, with the exception of Scandinavia, a large part of the territory will have a substantially larger female labour force around 2025.

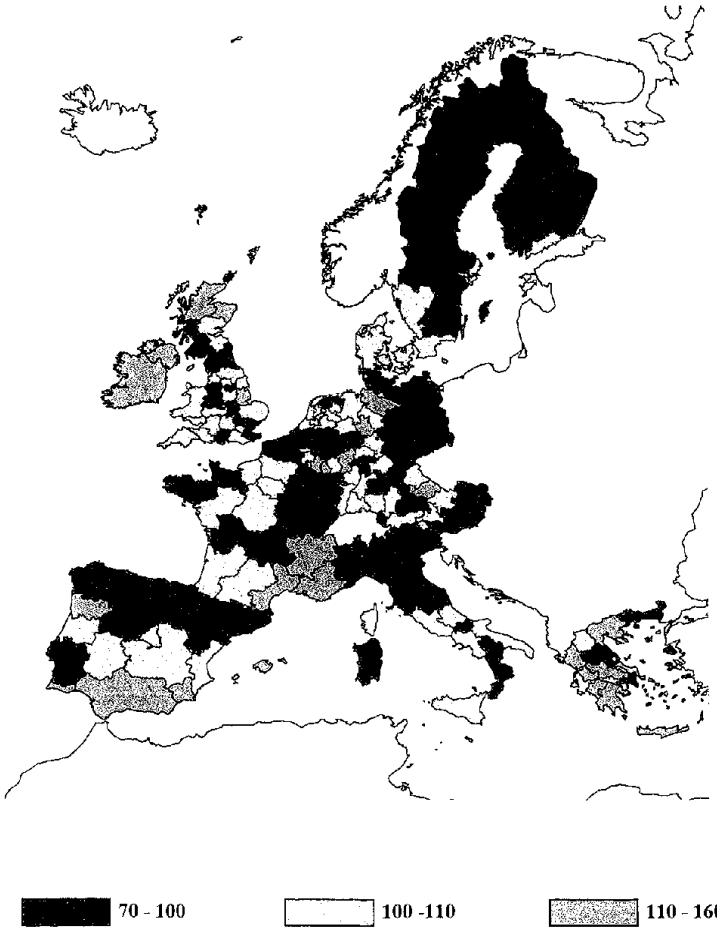
Table 3.6. Labour force, highest and lowest regions, baseline scenario 2025 (1995=100)

	Highest region[1]			Lowest region		
		males	emales		males	females
AUS	Tirol	109	128	Burgenland	89	104
BEL	Luxembourg	116	136	Brussel	88	98
DEN	Denmark	102	106			
FIN	Uusimaa	106	105	Itae-Suomi	87	90
FRA	Languedoc-Roussillon	120		Lorraine	89	
FRA	Languedoc-Roussillon		131	Limousin		99
GER	Lueneburg	115	130	Mecklenburg-Vorpommern	75	77
GRE	Sterea Ellada	129	140	Attiki	91	106
IRE	Ireland	119	126			
ITA	Campania	102		Liguria	77	
ITA	Molise		147	Liguria		84
LUX	Luxembourg	116	138			
NET	Flevoland	159	181	Limburg	90	103
POR	Madeira	139		Alentejo	83	
POR	Acores		164	Alentejo		93
SPA	Ceuta Y Melilla	144	147	Pais Vasco	77	78
SWE	Sydsverige	109	106	Mellersta Norrland	86	89
UKI	Lincolnshire	130		Cumbria	91	
UKI	Grampian		131	Dumfries & Galloway, Strathclyde		103

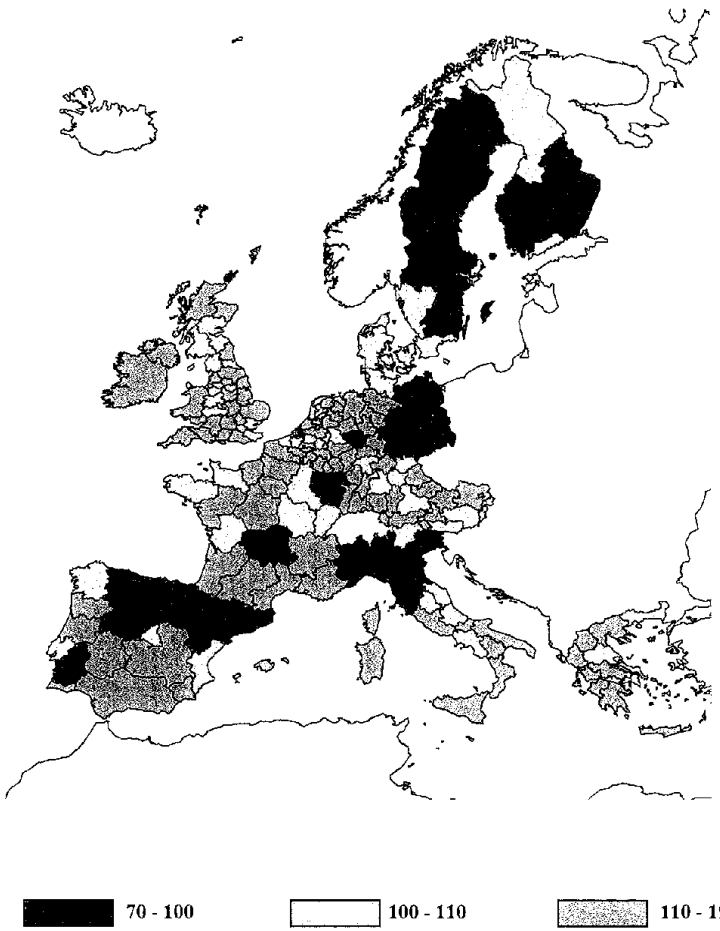
1Denmark, Ireland and Luxembourg do not contain NUTS II regions

Figure 3.4. Labour force aged 15-75, regions, baseline scenario 2025 (1995=100)

Males



Females



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3.2. Labour force aged 15-24

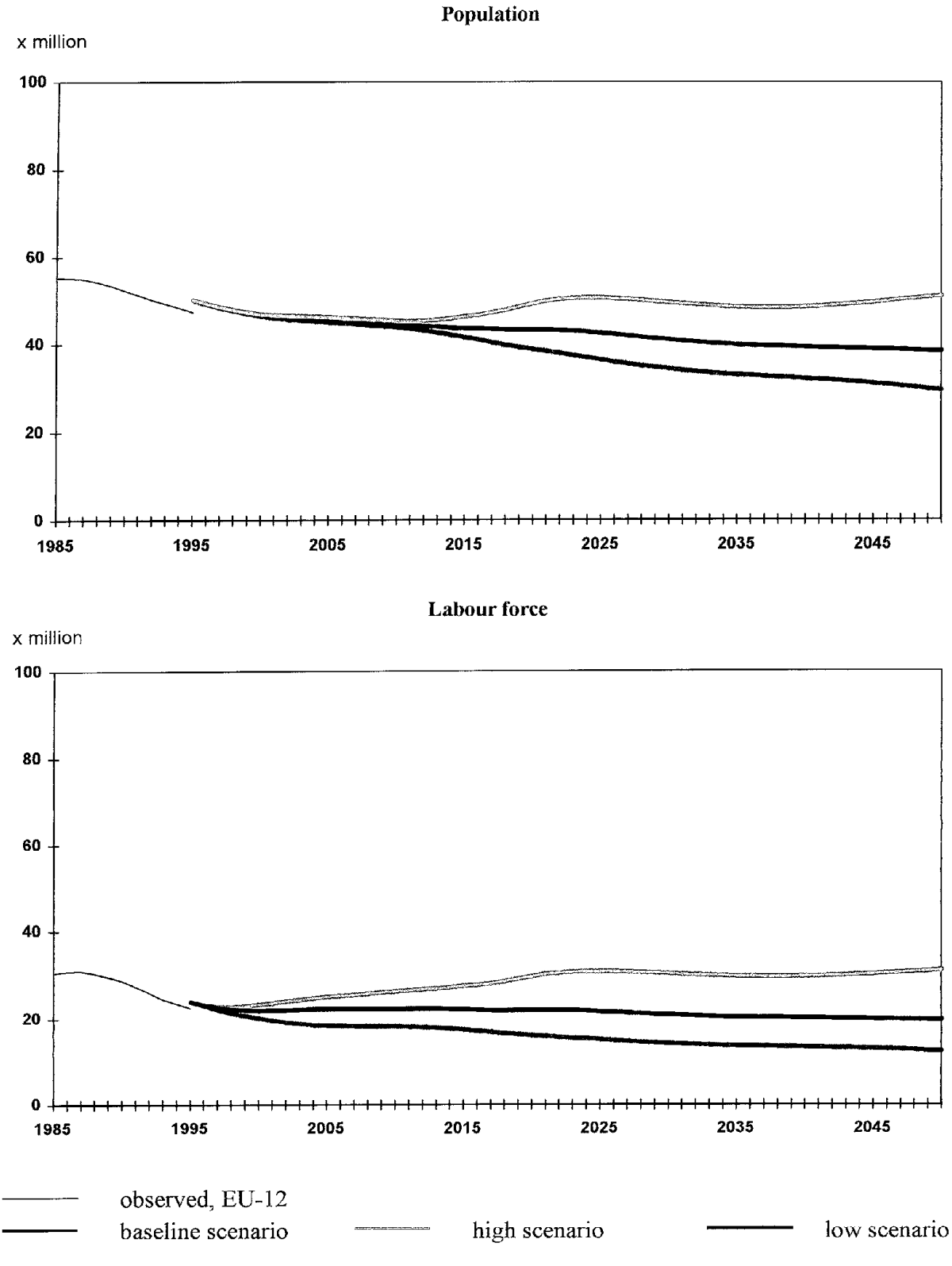
The current population trends in the age group 15-24 shows a marked contrast with the development of total population. While is segment of the population is getting smaller, the total population was still growing up to 1995. This fall in the population aged 15-24 is expected to continue in the coming decades. Up to 2010 the differences between the three population scenarios are minimal, as most of this age group was already born in 1995. After 2010 the effects of the different fertility assumptions of the population scenarios become visible. According to both the low and baseline population scenario the almost certain fall in the number of youngsters in the short run will persist in the long run, although the low scenario predicts a more rapid pace. In the high scenario a reversal of the trend is expected, due to a steep rise in birth figures in the next decades.
The downward trend in the number of young people over the last 10 years is reflected in a falling stock of young labour supply. This situation will change in the future when, according to the baseline scenario, the fall in population will be counterbalanced by rising activity rates, leading to an almost stable green labour supply in the first half of the 21st century. The low scenario of the labour force, in contrast, foresees a continuing decrease in the labour force aged 15-24, although in a slower pace than in the period 1985-1995. In the high scenario the labour supply of young people will grow in the first quarter of 21st century, due to both rising activity and high fertility rates.

Table 3.7. Population and labour force aged 15-24, EU-15, 1985-2050

	Observed			Low scenario			High scenario			Baseline scenario		
x mln	985[1]	1995	1995	2000	2020	2050	2000	2020	2050	2000	2020	2050
Population	55	47	50	47	39	30	47	49	51	47	44	39
Labour force	30	23	24	20	16	12	23	30	31	22	22	20

[1] EU-12

Figure 3.5. Population and labour force aged 15-24, EU-15, 1985-2050



Regional trends

Under the baseline scenario, the regional map showing developments of the youngest segment of the male labour force is characterised by a fierce decline in most of the EU. Only in the former West Germany and the Netherlands most regions will have a growing young male labour force in the period 1995-2025, while France and Greece have many regions which might expect considerable growth. In the eastern part of Germany, and in Spain, Italy and Portugal a lasting low fertility level will be translated into a declining green male labour force in the short run.
In case of the female green labour force, all regions of France and the vast majority of regions in Germany, the Netherlands and Greece will see growth. Regions that might expect a considerably smaller female labour force around 2025 are largely restricted to former East Germany and the northern parts of both Spain and Italy.

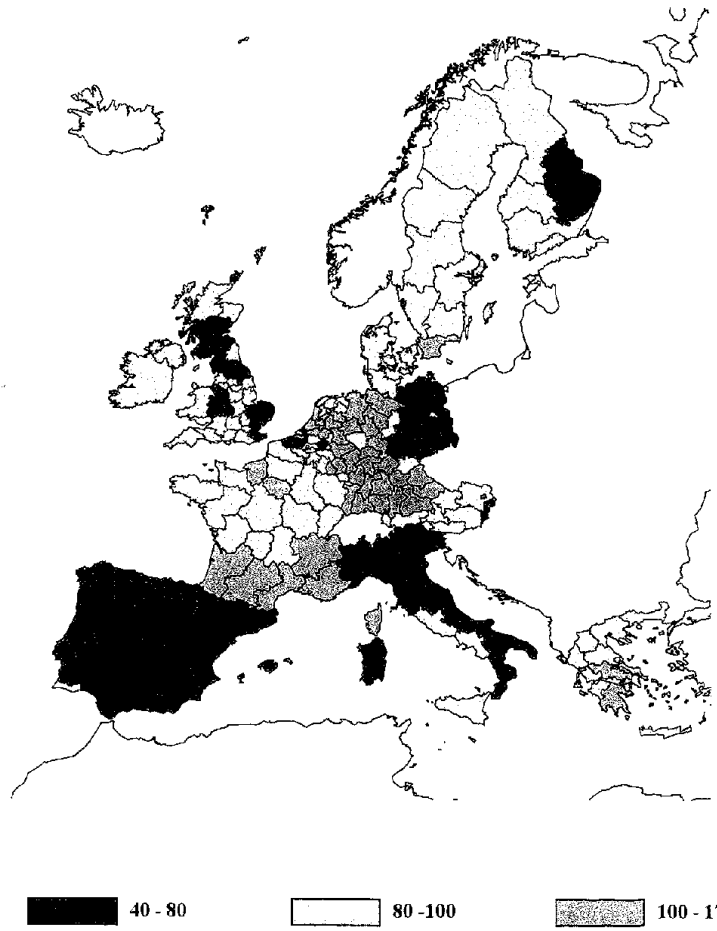
Table 3.8. Labour force aged 15-24, highest and lowest regions, baseline scenario 2025 (1995=100)

	Highest region [1]			**Lowest region**		
		males	**females**		**males**	**females**
AUS	Wien	112	108	Burgenland	77	80
BEL	Luxembourg	100		O-Vlaanderen	75	
BEL	Luxembourg		120	Limburg		89
DEN	Denmark	91	94			
FIN	Ahvenanmaa/Aaland	100	105	Itae-Suomi	78	84
FRA	Languedoc-Roussillon	117		Limousin	83	
FRA	Corse		167	Lorraine		104
GER	Koblenz	121		Mecklenburg-Vorpomm	51	
GER	Lueneburg		118	Mecklenburg-Vorpommern		53
GRE	Notio Aigaio	118		Attiki	84	
GRE	Voreio Aigaio		133	Attiki		94
IRE	Ireland	90	94			
ITA	Campania	94		Piemonte	63	
ITA	Sicilia		120	Piemonte		71
LUX	Luxemborg	150	130			
NET	Flevoland	164		Friesland	92	
NET	Flevoland		160	Drenthe		94
POR	Acores	92		Alentejo	60	
POR	Algarve		129	Alentejo		71
SPA	Ceuta Y Melilla	100	100	Pais Vasco	47	52
SWE	Stockholm	110	106	Mellersta Norrland	83	83
UKI	Lincolnshire	100		Dumfries & Galloway,	71	
UKI	Grampian		104	Cumbria		79

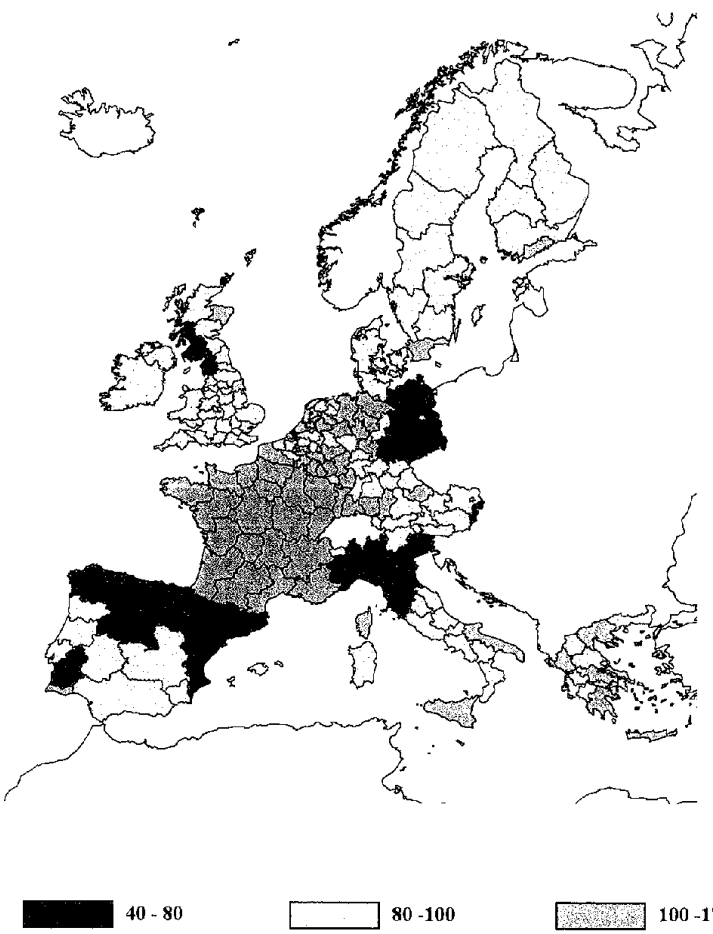
[1] Denmark, Ireland and Luxembourg do not contain NUTS II regions

Figure 3.6. Labour force aged 15-24, regions, baseline scenario 2025 (1995=100)

Males



Females



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3.3. Labour force, aged 25-49

The rise in the population of the prime working ages will soon come to an end. According to all three population scenarios an almost stable size of the age group between 25-49 may be expected up to 2010, followed by unavoidable fall. Only in the high scenario this fall is expected to slow down around 2020 and to be reversed into a rising trend. In the baseline scenario the rather rapid decrease of the middle segment of the population will gradually evolve into a moderate decrease in the second quarter of the 21st century. In the low population scenario this population will shrink in a rapid pace up to 2050.

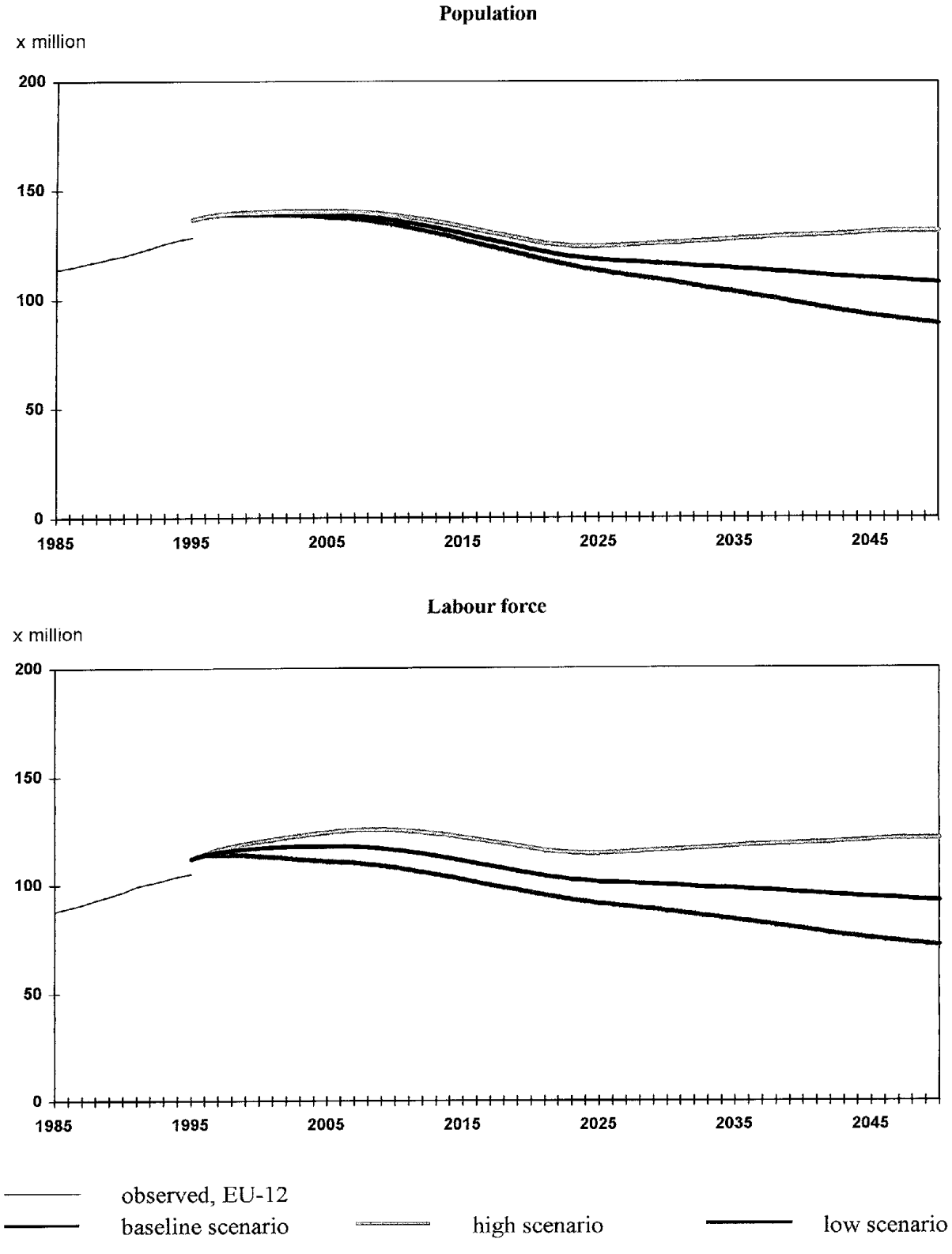
The fairly steep rise in the population aged between 25-49 over the period 1985-1995 was reflected in the rising trend of the prime labour force. This semblance will not be as strong in the near future. While the three population scenarios did not diverge much up to 2020, this is not the case for the three labour force scenarios. The course of the prime labour supply according to the baseline scenario is more or less identical to the baseline population scenario: a stable size up to around 2010 followed by a slow decline. In the low scenario a decline is visible right from the start. In contrast, in the high scenario the current rise in the prime labour force will be sustained up to around 2010. After this a slow decline is expected.

Table 3.9. Population and labour force aged 25-49, EU-15, 1985-2050

	Observed			Low scenario			High scenario			Baseline scenario		
x mln	985 [1]	1995	1995	2000	2020	2050	2000	2020	2050	2000	2020	2050
Population	114	128	137	139	120	89	140	127	131	140	123	108
Labour force	88	105	112	113	96	72	120	117	121	117	105	92

[1] EU-12

Figure 3.7. Population and labour force aged 25-49, EU-15, 1985-2050



Regional trends

EU regions with a growing male labour force in the prime working ages will be hard to find in the future. Besides a few scattered regions, only Ireland and a cluster of regions in Greece are expected to experience an increassy male labour force in the 25-49 age bracket under the baseline scenario. Over half of all regions will be confronted with a decline of one to two tenths of the current labour force over the coming 2-3 decades. In about a quarter of all regions the loss will even more impressive, with a decline running from 20 to 40 percentage points. These regions with major losses will predominantly be found in former East Germany, and the northern parts of Italy and Spain.
The perspectives for the female labour force are somewhat different. A growing labour force is foreseen in many regions of the Netherlands, Germany, Spain and Greece, Ireland and the United Kingdom. A significant reduction of the female labour force in the 25-49 age bracket is mainly expected in former East Germany and the northern part of Italy.

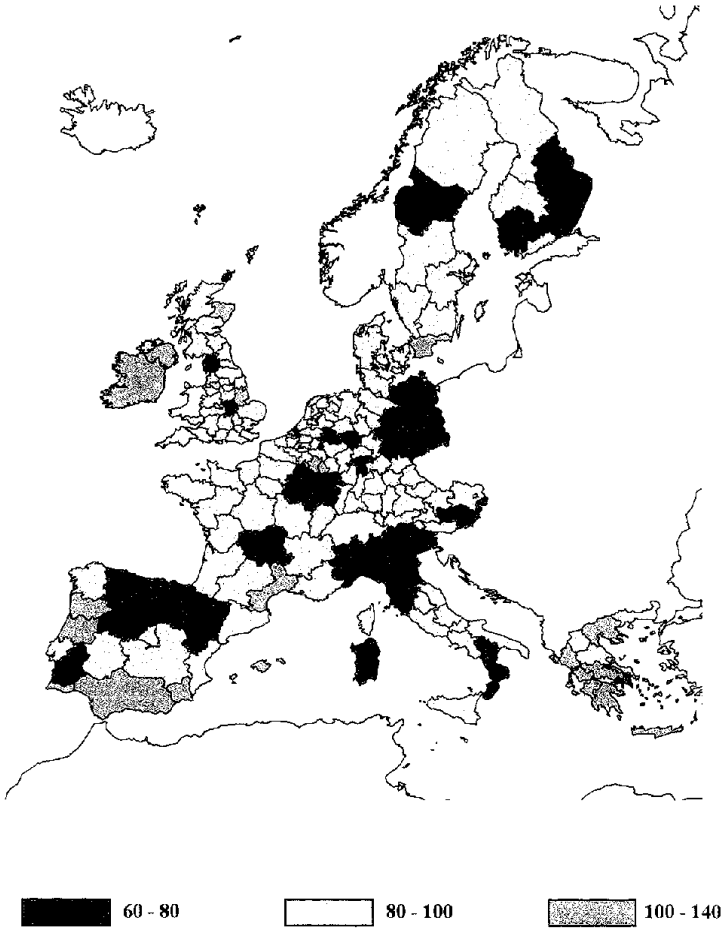
Table 3.10. Labour force aged 25-49, highest and lowest regions, baseline scenario 2025 (1995=100)

	Highest region [1]			**Lowest region**		
		males	**emales**		**males**	**females**
AUS	Tirol	93	106	Burgenland	74	86
BEL	Luxembourg	102	117	Brussel	79	84
DEN	Denmark	89	93			
FIN	Ahvenanmaa/Aaland	100		Itae-Suomi	78	
FIN	Ahvenanmaa/Aaland		100	Etelea-Suomi		81
FRA	Languedoc-Roussillon	103	111	Auvergne	75	83
GER	Lueneburg	98	114	Mecklenburg-Vorpommern	65	70
GRE	Sterea Ellada	122	141	Attiki	77	94
IRE	Ireland	116	123			
ITA	Abruzzo	86		Liguria	62	
ITA	Molise		129	Liguria		69
LUX	Luxembourg	103	123			
NET	Flevoland	121	143	Limburg	74	85
POR	Madeira	134		Alentejo	79	
POR	Acores		155	Alentejo		85
SPA	Ceuta Y Melilla	129		Pais Vasco	63	
SPA	Ceuta Y Melilla		136	Ceuta Y Melilla		69
SWE	Sydsverige	104	101	Mellersta Norrland	80	84
UKI	Lincolnshire	116		Cumbria	78	
UKI	Northern Ireland		120	Kent		89

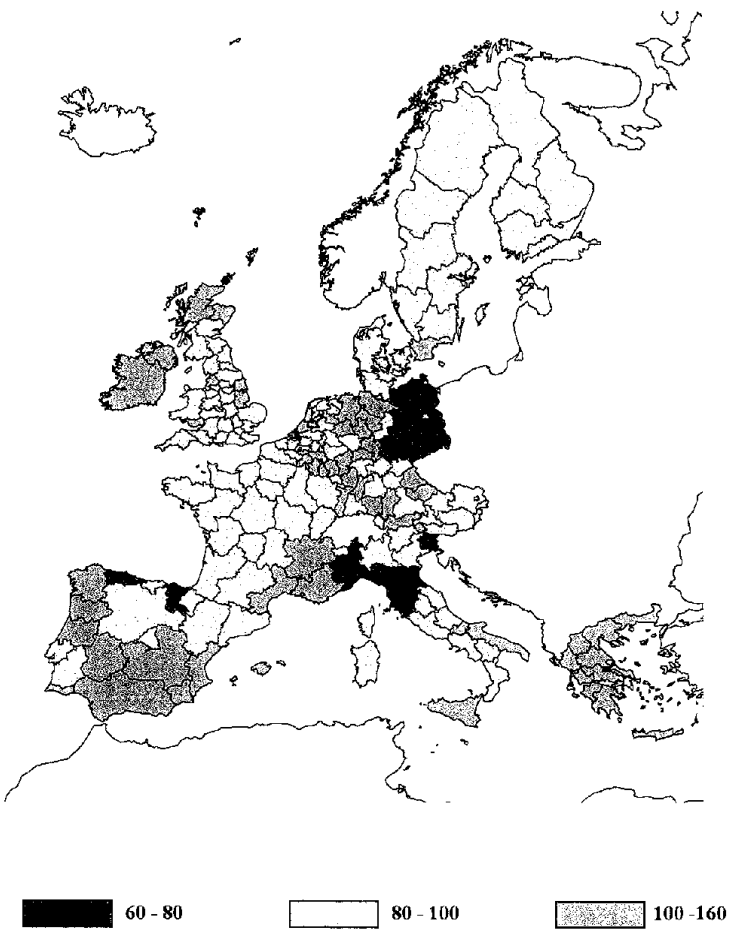
[1] Denmark, Ireland and Luxembourg do not contain NUTS II regions

Figure 3.8. Labour force aged 25-49, regions, baseline scenario 2025 (1995=100)

Males



Females



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3.4. Labour force aged 50 and over

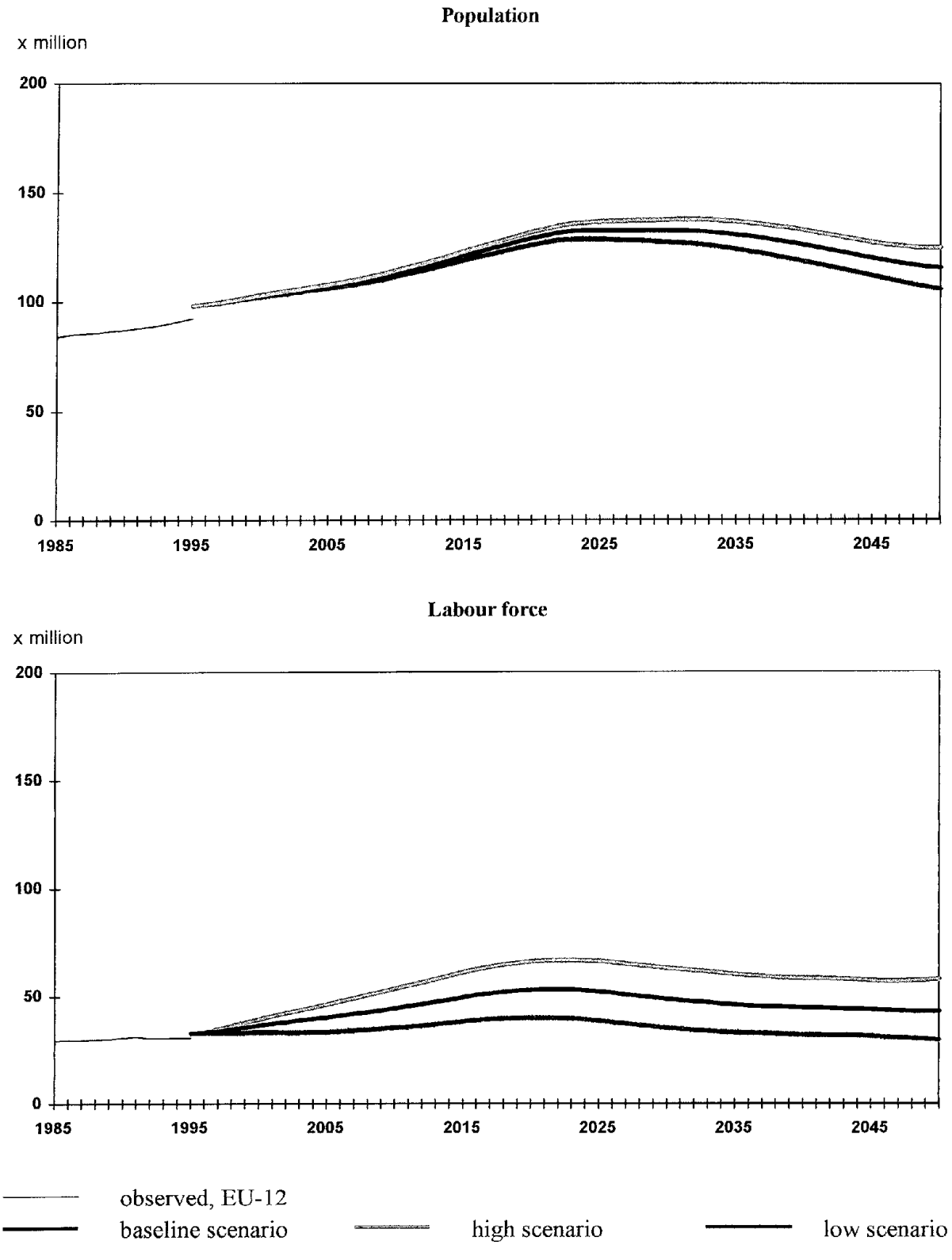
The size of the population aged 50-75 has steadily inceased during the period 1985-1995. In the coming 1-2 decades the rise of this population segment will accelerate and is expected to reach its peak around 2025. It is an expression of both an increasing life expectancy over the last decades and a shift of the widest part of the age pyramid into the higher age brackets. In 1995 the age pyramid has its most sizeable groups in the age classes between 30 to 50 due to the baby-boom generation born in the period 1946-1965. In the near future the first part of this generation will approach (early) retirement age. After 2025 they will gradually leave the age group 50-75.
Therefore, it is very likely that the oldest part of the labour force will continue to grow in the short run. Only the low scenario foresees a relatively modest growth, while the baseline scenario and even more so the high scenario foresee an impressive increase up to 2020. In the high scenario the older labour force in 2020 will be twice as large as in 1995. All three scenarios expect that the number of older workers will decline in the second quarter of the 21st century.

Table 3.11. Population and labour force aged 50-75, EU-15, 1985-2050

	Observed			Low scenario			High scenario			Baseline scenario		
x mln	985 [1]	1995	1995	2000	2020	2050	2000	2020	2050	2000	2020	2050
Population	84	93	98	102	126	106	103	132	125	103	129	116
Labour force	30	31	33	33	40	30	39	66	58	37	53	43

[1] EU-12

Figure 3.9. Population and labour force aged 50-75, EU-15, 1985-2050



Regional trends

The inevitable ageing of the labour force in the EU is reflected at the regional scale: under the baseline scenario there will be no region with a smaller labour force aged 50-75 in 2025 than is currently the case. This conclusion not only holds for the female but also for the male labour force, although the ageing of women will have the greatest regional impact. Concentrations of regions where the older labour force is expected to grow only moderately will be in Finland, Sweden, the former East Germany and the southern part of Portugal.

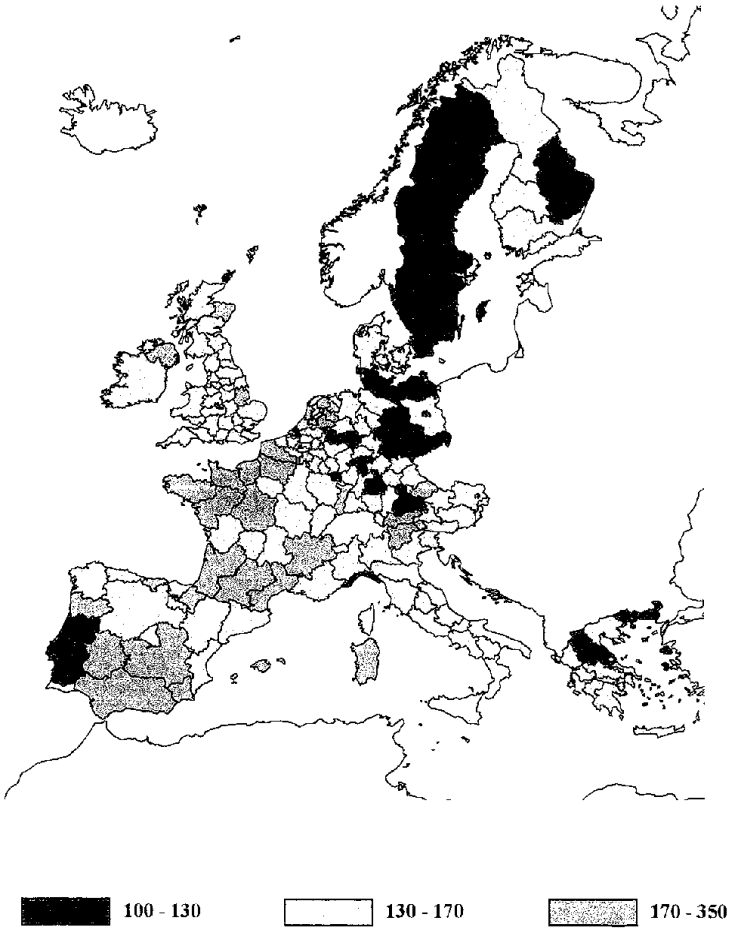
Table 3.12. Labour force aged 50-75, highest and lowest regions, baseline scenario 2025 (1995=100)

	Highest region [1]			**Lowest region**		
		males	**females**		**males**	**females**
AUS	Tirol	174	270	Wien	129	179
BEL	Namur	171		Brussel	124	
BEL	Luxembourg		260	Brussel		169
DEN	Denmark	146	161			
FIN	Ahvenanmaa/Aaland	200	200	Itae-Suomi	128	125
FRA	Languedoc-Roussillon	191	213	Limousin	150	156
GER	Niederbayern	171		Bremen	110	
GER	Niederbayern		200	Sachsen		106
GRE	Notio Aigaio	169	200	Anatoliki Makedonia,	104	119
IRE	Ireland	150	198			
ITA	Sardegna	177	277	Liguria	126	151
LUX	Luxembourg	161	243			
NET	Flevoland	340	500	Limburg	148	225
POR	Madeira	192		Alentejo	103	
POR	Acores		240	Alentejo		123
SPA	Ceuta Y Melilla	233		La Rioja	140	
SPA	Ceuta Y Melilla		250	Galicia		151
SWE	Stockholm	131	127	Mellersta Norrland	100	100
UKI	Grampian	189	213	West Midlands (Cou	126	150

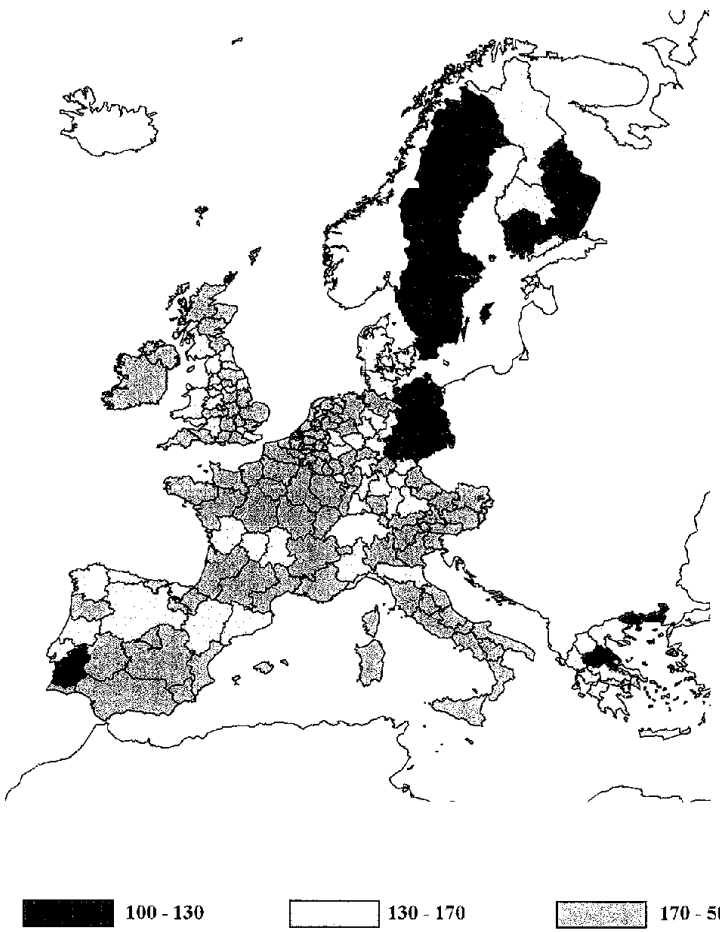
[1] Denmark, Ireland and Luxembourg do not contain NUTS II regions

Figure 3.10. Labour force aged 50-75, regions, baseline scenario 2025 (1995=100)

Males



Females



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3.5. Men and women in the labour force

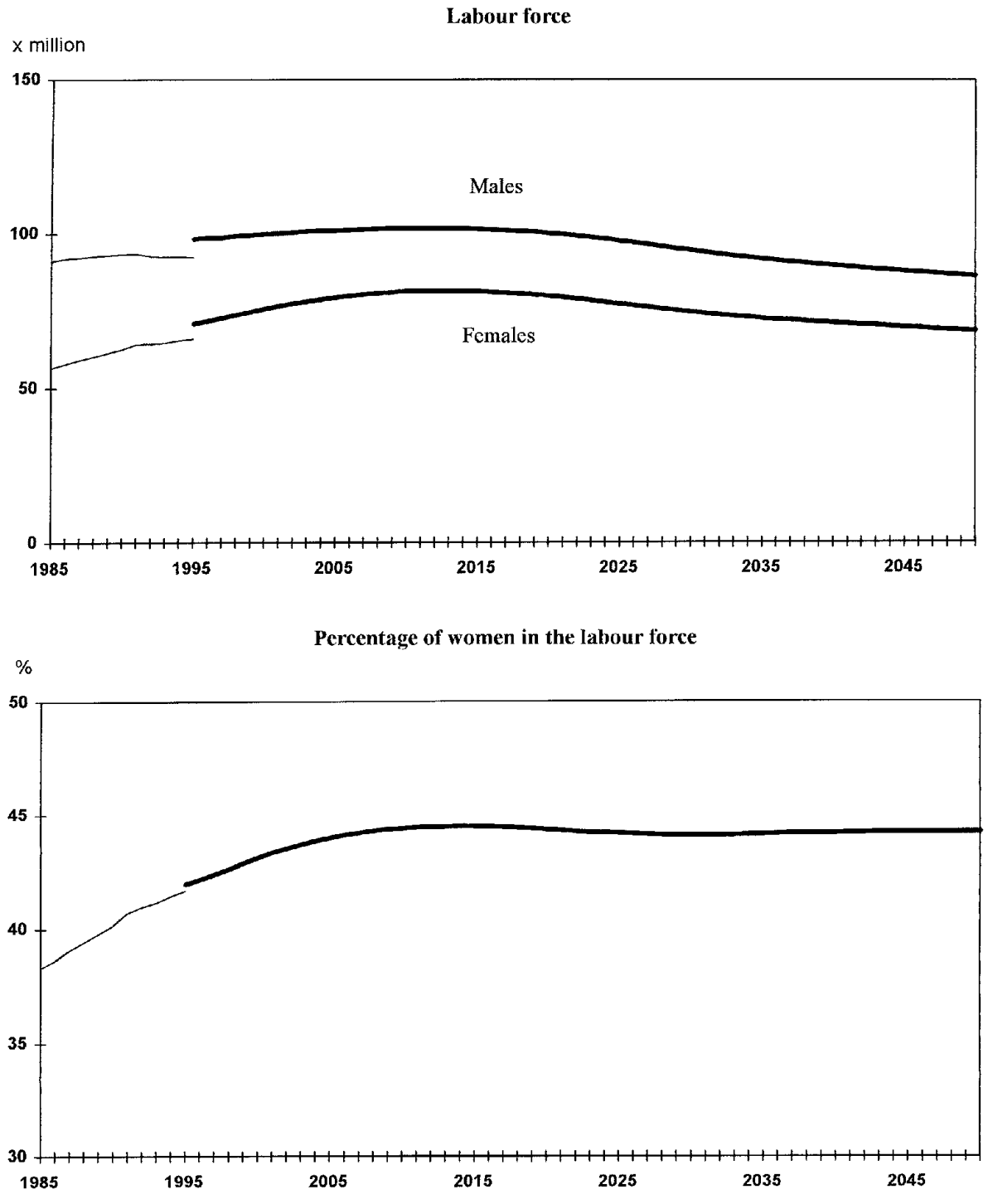
Over the period 1985-1995 the male and female labour force has developed in different ways. The share of men in the labour force has been more or less constant, while the share of women has risen. According to the baseline scenario the number of men in the labour force will more or less remain at the same level in the short run. After 2015 the male labour force will slowly decline. The female labour force will continue to rise up to 2015 and also decline after that.

Due to the opposite trends in labour force participation between the sexes a gradual feminisation of the labour force is likely to happen. The gap between the male and female labour force of about 27 million in 1995 will be cut to 20 million in 2020, if the assumptions of the baseline scenario are fulfilled.

Table 3.13. Males and females in the labour force, EU-15, 1995-2050

	Observed	Low scenario			High scenario			Baseline scenario		
	1995	2000	2020	2050	2000	2020	2050	2000	2020	2050
	x million									
Males	98	95	86	64	103	116	114	100	100	86
Females	71	72	66	50	80	97	95	76	80	69
	%									
Women in the labour force	42	43	44	44	44	46	45	43	44	44

Figure 3.11. Labour force by sex, EU-15, 1985-2050



3.6. Annual labour force growth in the EU

Over the past thirty years fluctuations in the employment figures in the Community coincided with variations in the rate of economic growth. Upturns in the growth rate of the Gross Domestic Product (GDP) have been followed on every occasion by an increase in employment within a period of about half a year. Equally consistently, downturns have led to a reduction of growth or in some cases to a fall in the employment figures. In the 1960s and 1970s the annual change in GDP was about 4% in the EU12, against a rise in employment of about 1%. All countries of the EU12 experienced a marked decline in output growth around the mid-seventies, following the first oil crisis. Since the second oil crisis in 1979-1980 the trend productivity growth had fallen to not much more than 2% a year. Nevertheless, the annual change in employment was still around 1%. So a slowdown in productivity growth prevented a negative development from an employment perspective. This fall in productivity growth might on the one hand be explained by a reduction in the working hours of the employees. On the other hand, it might be related to a shift in the structure of the economy. There has been a long-term shift of employment away from agriculture to industry and then from industry to services. Especially the service sector has less scope for the introduction of mechanisation and other labour saving devices.

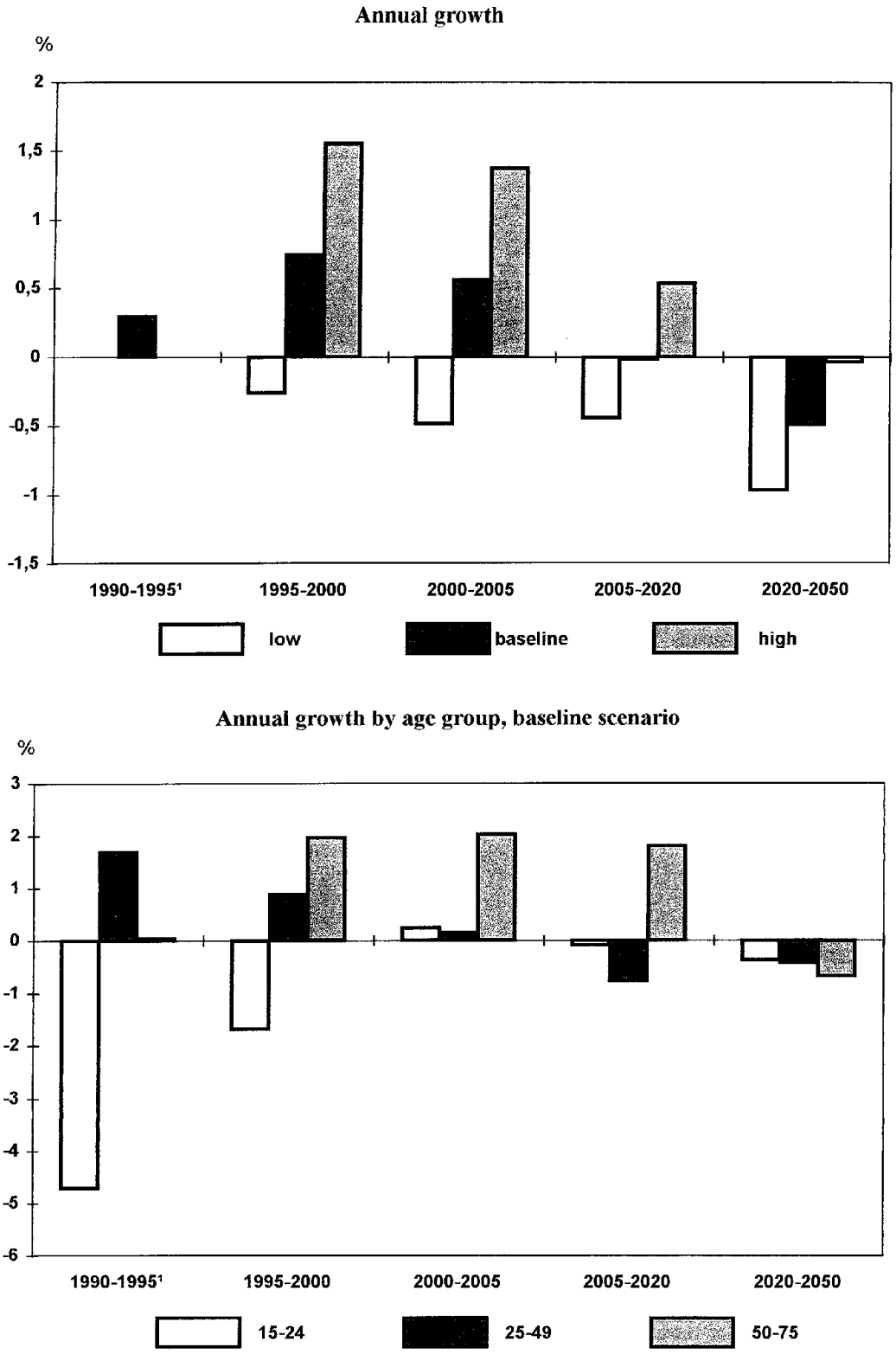
The labour force in the EU12 grew by less than a 0.5% a year over the period 1990-1995. While the labour force in the Union grew by over 1% a year between 1985 and 1990, growth slowed down markedly during the recession of the early nineties.
Under the baseline scenario the annual growth rate in the labour force for the EU will be just over 0.5% up to 2000, which is slightly more the annual growth rate during the recession in the early nineties. After this, labour force growth will slow down significantly and turn negative after 2020.
Under the high scenario the annual labour force growth rate in the short run is expected to exceed that of the late 1980s. After 2005 labour force growth will decline.
In the low scenario the EU will suffer from negative growth right from the start. When we look at the labour force growth by age group we not only see large differences between the age categories, but also that the annual growth rate of each age group is going to change markedly in the future.

Table 3.14. Labour force growth, EU-15, 1990-2050

	Observe	Low scenario			High scenario			Baseline scenario		
	1990 to 1995 [1]	1995 to 2000	2000 to 2020	2020 to 2050	1995 to 2000	2000 to 2020	2020 to 2050	1995 to 2000	2000 to 2020	2020 to 2050
	x million									
Total	2,3	-2,2	-14,6	-38,6	13,6	29,5	-2,5	6,4	4,4	-25,1
15-24	-6,2	-3,8	-4,1	-3,8	-0,7	6,3	1,3	-2,0	0,0	-2,4
25-49	8,4	1,3	-17,2	-24,6	8,0	-3,4	4,4	5,0	-11,9	-12,8
50-75	0,1	0,3	6,7	-10,3	6,3	26,5	-8,2	3,4	16,4	-9,9
	annual growth in %									
Total	0,3	-0,3	-0,5	-1,0	1,6	0,8	0,0	0,7	0,1	-0,5
15-24	-4,7	-3,4	-1,1	-0,9	-0,6	1,2	0,1	-1,7	0,0	-0,4
25-49	1,7	0,2	-0,8	-1,0	1,4	-0,1	0,1	0,9	-0,5	-0,4
50-75	0,0	0,2	0,9	-1,0	3,5	2,6	-0,4	2,0	1,9	-0,7

[1] EU-12

Figure 3.12. Labour force growth, EU-15, 1990-2050



[1] observed, EU-12

3.7. Growth rate of the male labour force

While the total labour force in the EU12 experienced positive annual growth rates over the period 1990-1995, that of the male labour force was already negative. According to the baseline scenario a positive growth rate is possible over the next 10 years. During the economic upturn of the late 1980s an annual growth rate of 0.5% was registered in the EU12 and according to the baseline scenario the male labour force will grow by a slightly lower percentage in the short run. In the low scenario the negative growth rate will continue in the future while the high scenario foresees an annual growth rate of almost 1%.

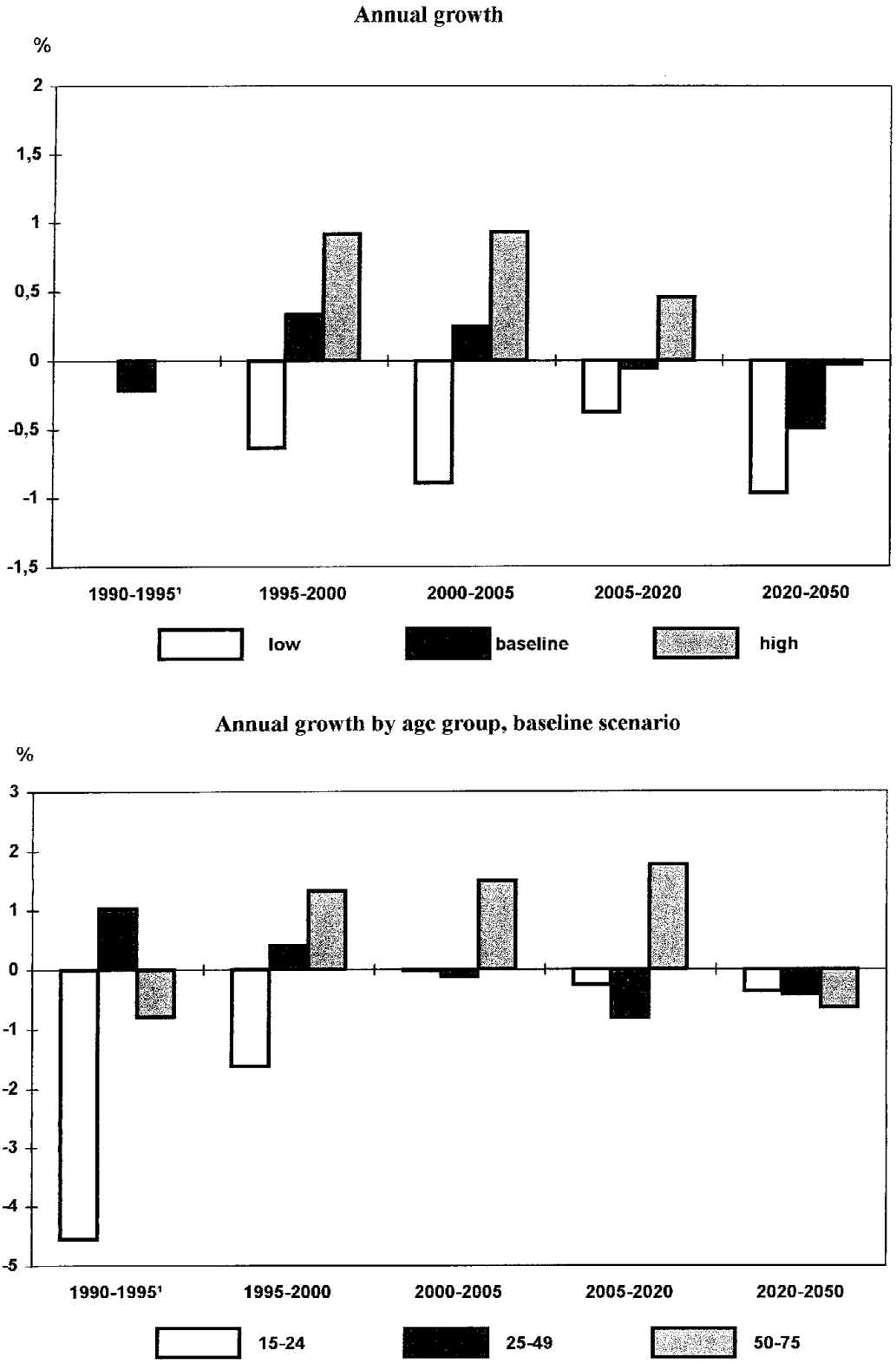
When we look at the labour force by age group we see negative growth especially among young persons, and a positive growth for men in their prime working ages. Although the annual growth rate has been negative for older men in the period 1990-1995, this situation is going to change in the near future according to the baseline scenario. Up to 2020 the segment of the labour force constituted by older men will grow by well over 1% a year. On the contrary, the positive growth rate of men between 25 and 49 will diminish and be negative from the turn of the century onwards. The negative contribution of young men to the annual growth rate will rapidly become smaller and reach close to zero in the first decades of the 21st century.

Table 3.15. Labour force growth of males, EU-15, 1990-2050

	Observe	Low scenario			High scenario			Baseline scenario		
	1990 to 1995 [1]	1995 to 2000	2000 to 2020	2020 to 2050	1995 to 2000	2000 to 2020	2020 to 2050	1995 to 2000	2000 to 2020	2020 to 2050
	x million									
Total	-1.0	-3.1	-9.2	-21.8	4.6	12.6	-1.1	1.7	0.3	-13.8
15-24	-3.2	-2.1	-2.5	-2.0	-0.4	2.9	0.6	-1.0	-0.5	-1.3
25-49	3.0	-0.5	-10.4	-13.8	2.3	-4.1	2.4	1.3	-8.0	-7.1
50-75	-0.8	-0.5	3.7	-6.0	2.7	13.9	-4.1	1.4	8.8	-5.5
	annual growth in %									
Total	-0.2	-0.6	-0.5	-1.0	0.9	0.6	0.0	0.3	0.0	-0.5
15-24	-4.6	-3.5	-1.3	-0.9	-0.6	1.0	0.1	-1.6	-0.2	-0.4
25-49	1.0	-0.2	-0.9	-1.0	0.7	-0.3	0.1	0.4	-0.6	-0.4
50-75	-0.8	-0.5	0.8	-1.0	2.5	2.4	-0.4	1.3	1.7	-0.7

[1] EU-12

Figure 3.13. Labour force growth of males, EU-15, 1990-2050



¹ observed, EU-12

3.8. Growth rate of the female labour force

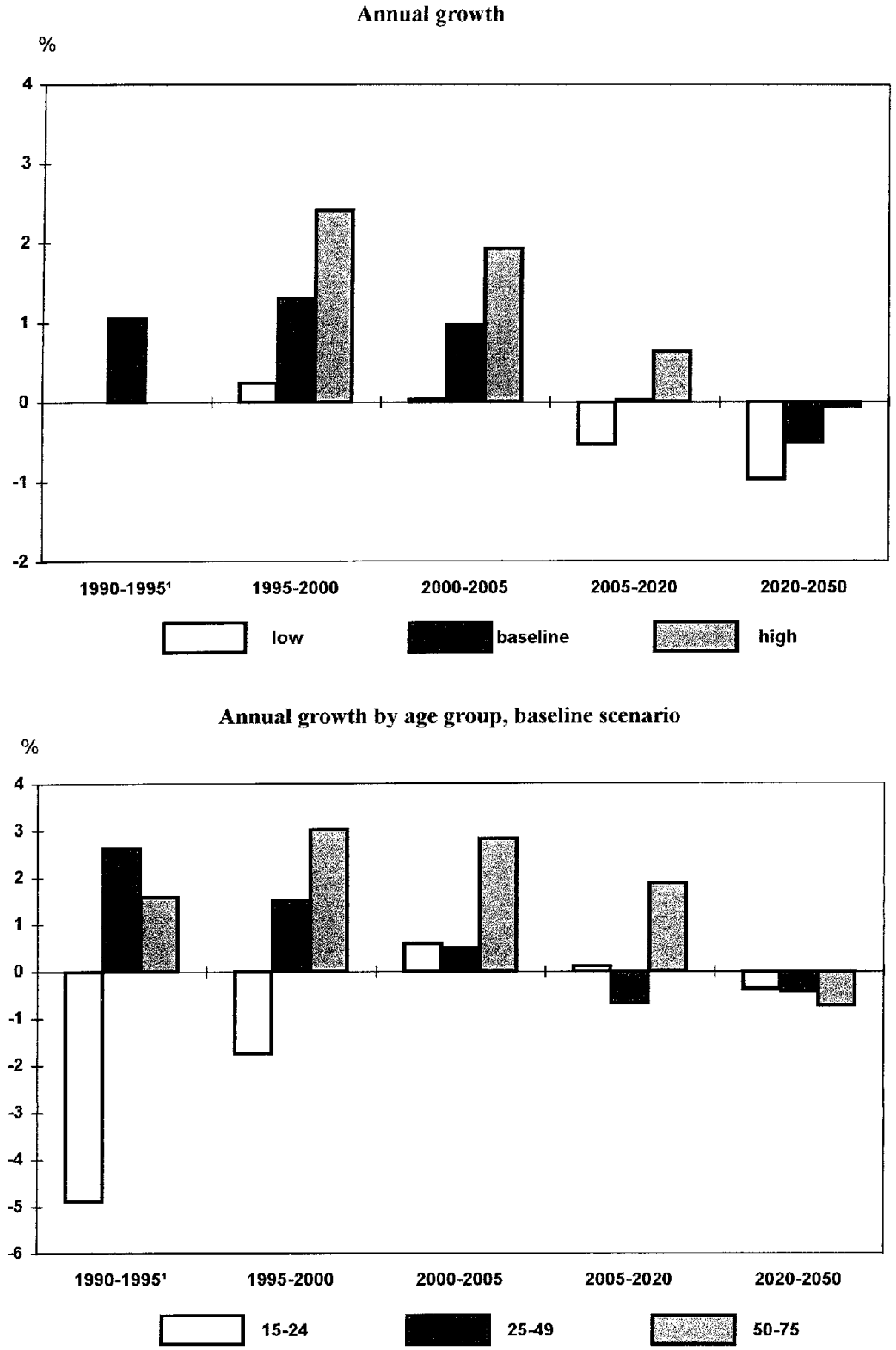
The female labour force in the EU12 increased by 1% a year over the period 1990-1995. According to the baseline scenario this growth rate will sustain at least until 2005. By then the female labour force will have reached its peak and will grow stop to grow. In the high scenario the growth rate in the short run equals that of the second half of the 1980s for the EU12. Only the low scenario foresees no substantial growth up to 2005.
The annual growth rate of the female labour force aged 15-24 has been negative, like its male counterpart. However, this is more than compensated for by the older women and women in their prime working ages. According to the baseline scenario the negative growth rate of young women will be come substantially smaller in the period 1995-2000. While the annual growth rate of female labour force aged between 25 and 49 will slow down, that of older women will accelerate. In the first decades of the 21st century all age groups will have a positive growth rate, although that of older women is by far the highest.

Table 3.16. Labour force growth of females, EU-15, 1990-2050

	Observe	Low scenario			High scenario			Baseline scenario		
	1990 to 1995 [1]	1995 to 2000	2000 to 2020	2020 to 2050	1995 to 2000	2000 to 2020	2020 to 2050	1995 to 2000	2000 to 2020	2020 to 2050
	x million									
Total	3.4	0.9	-5.4	-16.8	9.0	16.8	-1.5	4.8	4.1	-11.3
15-24	-2.9	-1.7	-1.6	-1.8	-0.3	3.4	0.6	-0.9	0.5	-1.1
25-49	5.4	1.8	-6.8	-10.8	5.7	0.7	2.0	3.7	-3.9	-5.8
50-75	0.9	0.7	3.0	-4.3	3.6	12.7	-4.1	2.0	7.6	-4.4
	annual growth in %									
Total	1.1	0.2	-0.4	-1.0	2.4	1.0	-0.1	1.3	0.3	-0.5
15-24	-4.9	-3.3	-0.9	-0.9	-0.5	1.4	0.1	-1.8	0.2	-0.4
25-49	2.6	0.8	-0.7	-1.0	2.3	0.1	0.1	1.5	-0.4	-0.4
50-75	1.6	1.1	1.0	-1.0	5.1	3.0	-0.5	3.0	2.1	-0.7

[1] EU-12

Figure 3.14. Labour force growth of females, EU-15, 1990-2050



[1] observed, EU-12

3.9. Components of labour force growth

It is possible to disentangle the effects of changes in the population and participation rates in the growth of the labour force. The negative growth of the male labour force in the EU12 in the period 1990-1995 was the result of a positive population growth being surpassed by a negative change in male participation. According to the baseline scenario the population growth will continue up to 2000, while the negative effect of changes in male participation will be minimal. However, after the turn of the century the positive effect of the population growth will get considerable smaller and eventually it will be reversed into negative population growth. A small positive effect of male participation will not be enough to compensate for the negative effect of demographic changes. When participation rates are kept constant in each country of the EU, a large negative population change after 2020 will lead to a substantial reduction of the male labour force.

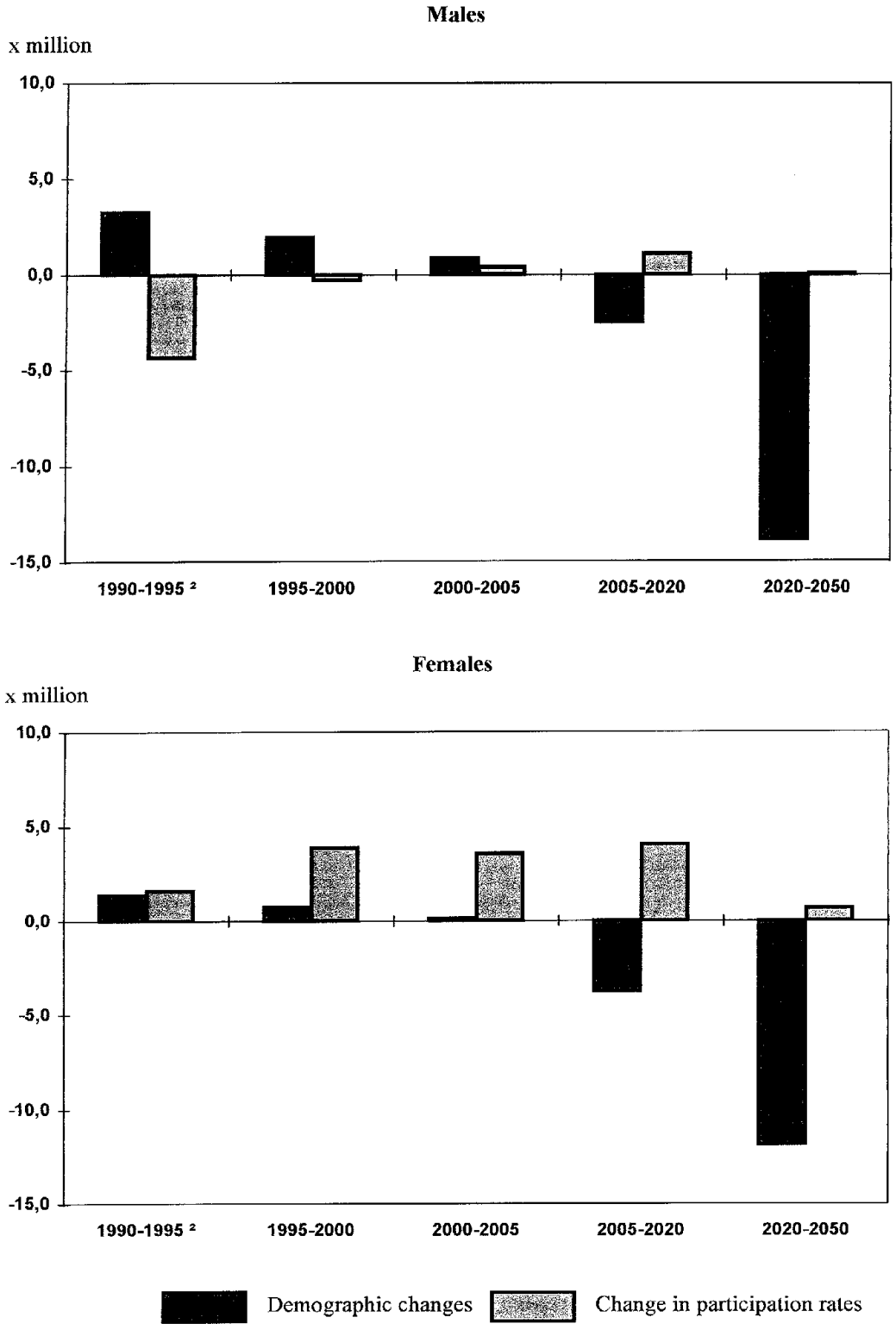
Quite a different picture emerges when we look at women. Over the period 1990-1995 the effects of both demographic changes and changes in participation rates were positive and about equal in size. In the period 1995-2000 the positive effect of the change in participation rates will probably increase, while that of population growth will diminish. In the 21st century female population growth will be reduced until it becomes negative, paralleling male population growth. Up to 2020 the effect of higher female participation rates will remain positive and compensate for negative population changes. After 2020 the female labour force will be reduced because of a large negative population effect.

Table 3.17. Decomposition of labour force growth, EU-15, 1990-2050

	Observe	Low scenario			High scenario			Baseline scenari		
	1990	1995	2000	2020	1995	2000	2020	1995	2000	2020
	to	to	to	to	to	to	to	to	to	to
	1995 [1]	2000	2020	2050	2000	2020	2050	2000	2020	2050
	x million									
Males										
Demographic changes	3.3	1.6	-4.8	-21.8	2.3	2.5	-1.2	1.9	-1.6	-13.9
Change in participation rates	-4.4	-4.7	-4.4	0.0	2.2	9.1	0.1	-0.3	1.5	0.1
Interaction effect	0.1	0.0	0.0	0.0	0.1	1.0	0.0	0.0	0.4	0.0
Females										
Demographic changes	1.4	0.5	-5.7	-17.4	1.0	-0.8	-2.0	0.7	-3.6	-11.9
Change in participation rates	1.6	0.2	0.3	0.7	7.7	17.0	0.6	3.9	7.6	0.7
Interaction effect	0.4	0.2	0.0	-0.2	0.3	0.7	0.0	0.2	0.2	-0.1
Total										
Demographic changes	4.6	2.1	-10.6	-39.2	3.3	1.7	-3.2	2.7	-5.2	-25.7
Change in participation rates	-2.8	-4.5	-4.0	0.7	10.0	26.1	0.7	3.6	9.1	0.8
Interaction effect	0.5	0.2	0.0	-0.2	0.3	1.6	0.0	0.2	0.6	-0.1

[1] EU-12

Figure 3.15. Decomposition of labour force growth[1], EU-15, baseline scenario 1990-2050



[1] Due to the relative insignificant contribution of the interaction effect, this effect has been omitted
[2] observed, EU-12

3.10. Changing labour force age pyramid

The 1995 labour force age pyramid is a reflection of trends in labour force participation in the past. The male part of the age-pyramid is bigger than the female part because of higher male participation. The female labour force reaches its peak around the age of 30, when it just surpasses 2 million. Up to the age of 50 the female labour force is slowly getting smaller, but then it starts to drop fast and at the age of 60 almost all women have left the labour market.

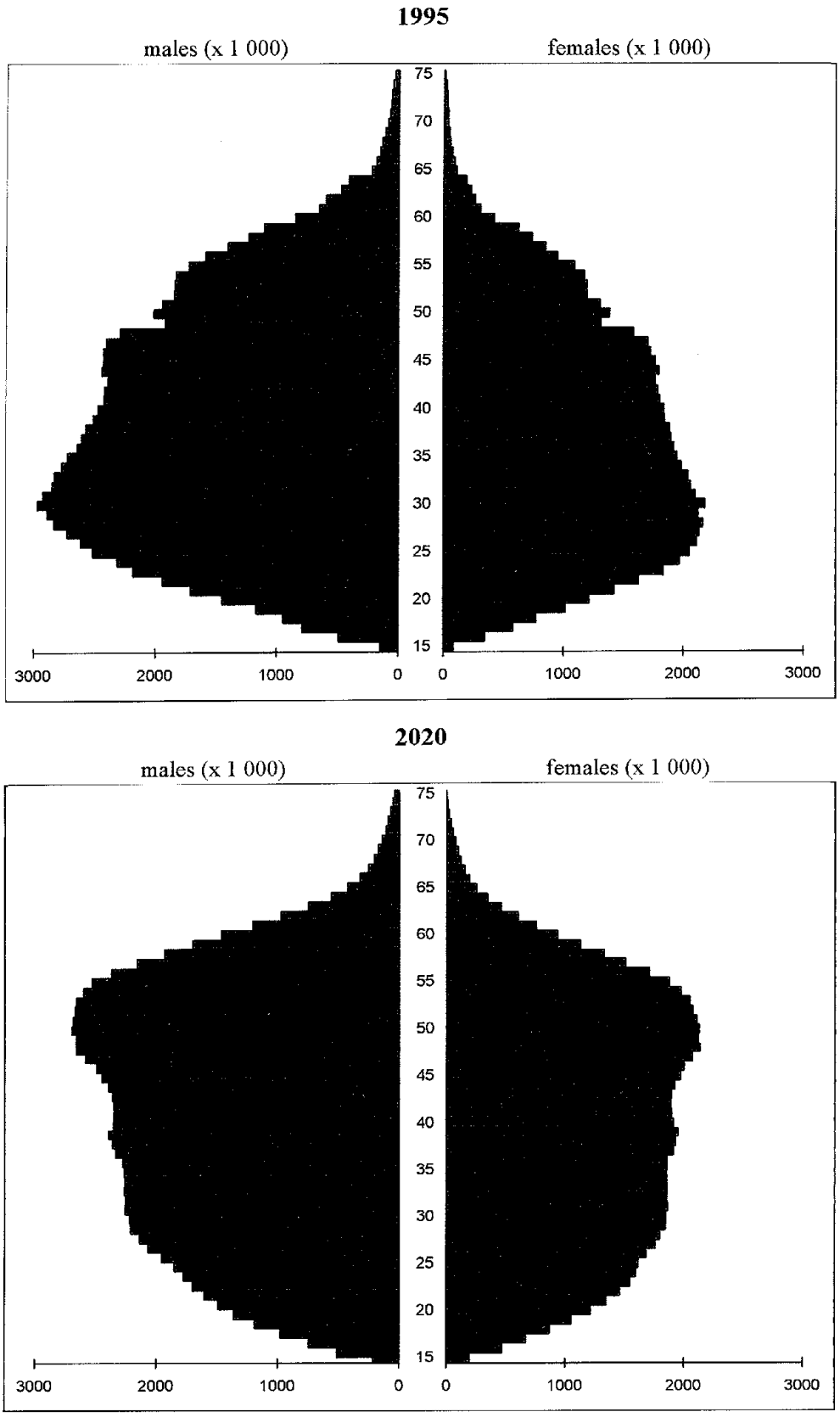
The shapes of the male and female sections of the age pyramid resemble each other, although the contribution of men in each age group is higher. This is especially the case at the age of 30 where the size is about 3 million.

The comparison of the age pyramids of 1995 and 2020 according to the baseline scenario shows a totally different shape. While the 1995 pyramid has a large base and is getting smaller at middle ages, the 2020 pyramid has a narrow base and is getting larger reaching its widest part around the age of 50. This bottom-up ageing of the labour force is predominantly due to population changes as a declining birth rate in the past will lead to smaller generations entering the future labour force. The baby-boom generation born in the period 1946-1965 causes the large contribution of the age classes 55-65 in the labour force. The discrepancy between the male and female labour force will be significantly smaller in 2020 due to a rise in future female participation.

Table 3.18. Labour force by sex and age, EU-15, 1995 and 2020

	Observed		Low scenario		High scenario		Baseline scenari	
	1995		2020		2020		2020	
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES	MALES	FEMALE
	x million							
15-19	3.5	2.8	2.2	1.9	5.7	5.1	3.6	3.3
20-24	9.6	8.1	6.2	5.7	9.9	8.9	7.9	7.2
25-29	13.6	10.6	9.2	7.8	11.2	9.9	10.2	8.7
30-34	14.3	10.4	10.5	8.4	12.1	10.5	11.3	9.3
35-39	13.0	9.5	10.9	8.6	12.6	10.8	11.6	9.5
40-44	12.1	9.0	11.1	8.6	12.8	10.9	11.8	9.5
45-49	11.5	8.1	12.0	9.1	13.9	11.9	12.9	10.3
50-54	9.5	6.3	11.9	8.7	14.6	12.1	13.3	10.4
55-59	7.1	4.3	8.2	5.6	12.6	9.6	10.7	7.6
60-64	2.1	1.0	2.0	1.0	5.1	3.6	3.5	2.2
65-69	0.8	0.4	0.7	0.4	2.2	1.5	1.4	0.8
70+	0.4	0.2	0.2	0.1	0.8	0.5	0.5	0.2

Figure 3.16. Labour force by sex and age, EU-15, 1995 and baseline scenario 2020



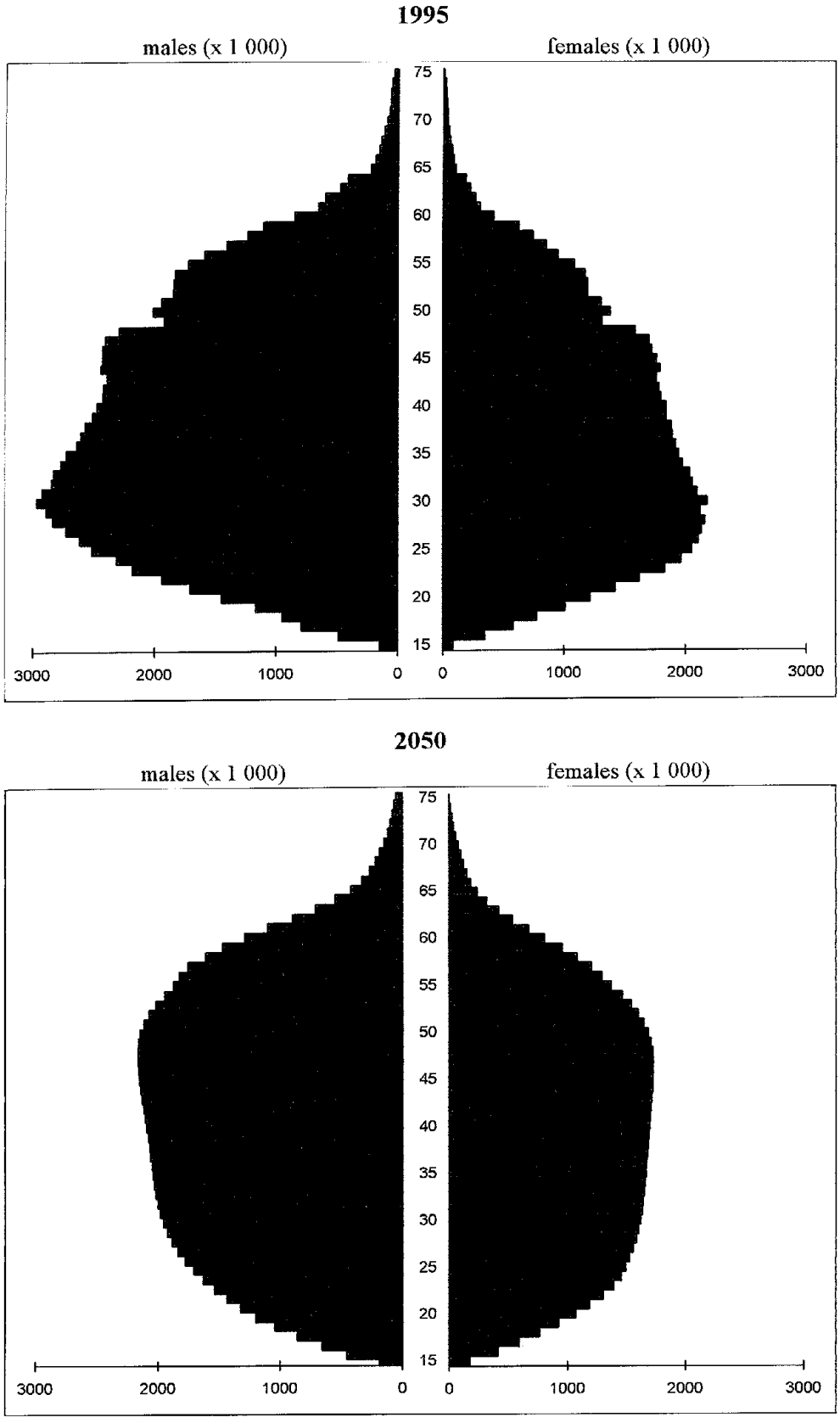
3.11. Labour force age pyramid in 2050

The labour force scenarios result from the combination of labour force activity rates with population figures. The assumptions on the labour force participation rates concern the period 1995-2020. Thereafter, this the participation rates have been kept constant. The age pyramid of 2050 gives an idea of the long-term effects of the ageing of the labour force. According to the baseline scenario up to the age of 30 both the male and female labour force will significantly decrease at each age. At the age of 50 the size of the labour force will remain more or less the same as a result of a both stable fertility rates and constant participation rates. Compared with 1995 fewer women and especially fewer men will be found in the labour force at the prime working ages. In contrast, at the ages running from 50 to 65 the labour force will count more active men and women in 2050.

Table 3.19. Labour force by sex and age, EU-15, 1995 and 2050

	Observed		Low scenario		High scenario		Baseline scenari	
	1995		2050		2050		2050	
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES	MALES	FEMALE
	x million							
15-19	3.5	2.8	1.7	1.5	5.8	5.2	3.2	2.9
20-24	9.6	8.1	4.7	4.4	10.4	9.5	7.1	6.4
25-29	13.6	10.6	6.8	5.8	12.1	10.8	9.1	7.8
30-34	14.3	10.4	7.8	6.2	12.8	11.0	10.0	8.2
35-39	13.0	9.5	8.2	6.5	13.1	11.2	10.3	8.4
40-44	12.1	9.0	8.4	6.6	13.5	11.5	10.6	8.6
45-49	11.5	8.1	8.7	6.7	13.6	11.5	10.8	8.6
50-54	9.5	6.3	8.3	6.1	12.5	10.2	10.3	8.0
55-59	7.1	4.3	6.2	4.2	10.5	7.8	8.5	5.9
60-64	2.1	1.0	1.8	0.9	5.0	3.3	3.3	2.0
65-69	0.8	0.4	0.7	0.4	2.3	1.5	1.4	0.8
70+	0.4	0.2	0.2	0.1	1.0	0.6	0.6	0.2

Figure 3.17. Labour force by sex and age, EU-15, 1995 and baseline scenario 2050



4. Trends and patterns in full –and part time working

4.1. Labour force scenarios by working hours

In order to gain more insight in the fundamental trends in employment, labour force participation has also been distinguished by working hours. The economic recovery of the mid 1990s seemed to go together with an increase in part-time jobs. An ongoing trend towards a more flexible organisation of work makes it easier to employ part-time workers or people on fixed-term contracts. This creates job opportunities especially for mothers with young children.

The quantitative assumptions of the labour force scenarios by working hours concern a subdivision of the low, baseline and high scenario into three categories, i.e. 1-19, 20-31 and 32 or more working hours a week. Data on working hours at the outset of the scenario period are derived from the Labour Force Survey and relate to the number of hours people normally work each week in their main job, including any overtime or extra hours if these were usual. In the scenarios the remaining category of the labour force, namely the unemployed, is omitted due to the fact that this requires a projection of labour demand. In the year the scenarios start off, the share of the unemployed in the activity rate has been distributed proportionally over the three categories of working hours. In other words, it has been assumed that unemployed people would like to work parttime or full-time in similar proportions as workers do.

The qualitative assumptions of the labour force scenarios on working hours are mainly related to the effects of economic growth on the division between full-time versus part-time jobs. In the baseline scenario it is assumed that a limited reorganisation of the labour market toward more flexibility will take place. A satisfactory growth of the economy will lead to a moderate creation of new jobs. And most of the employment growth will go into part-time jobs.

In the low scenario a relatively low economic growth rate will lead to a meagre creation of new jobs. The additional jobs will be part-time rather than full-time. On the other hand in some countries recession might lead to a decline in employment and if firms have to fire employees especially part-timers will have to leave. Job incentives for marginal groups are minimal.

The conditions in the high scenario are quite the opposite. Due to high economic growth, job opportunities are abundant. The labour market will become more flexible. Part-time employment is rapidly growing due to the absorption of groups who previously stood along the sidelines.

Figure 4.1. Average activity rate by working hours per week,
EU-15, baseline scenario 1995-2020

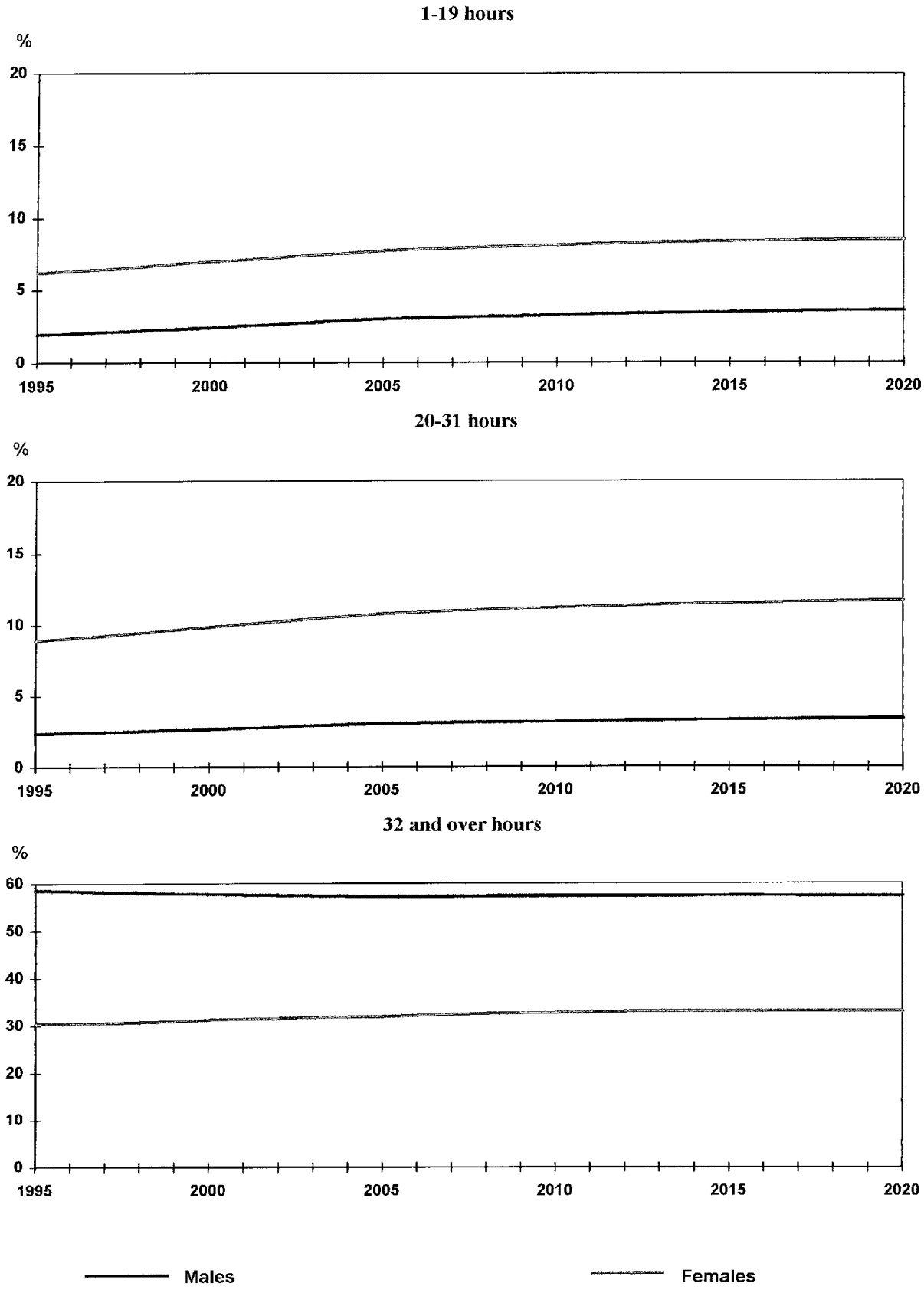


Table 4.1. Average activity rate by sex and working hours per week (%), EU-15, 1995 and 2020

	Observed	Low scenario			High scenario			Baseline scenario		
	1995	2000	2005	2020	2000	2005	2020	2000	2005	2020
1-19 hours										
Males	1.9	1.9	2.0	2.0	2.6	3.4	5.4	2.4	3.0	3.6
Females	6.2	6.2	6.2	6.2	7.5	8.8	11.3	7.0	7.7	8.5
20-31 hours										
Males	2.4	2.3	2.2	2.2	2.8	3.3	4.6	2.7	3.0	3.4
Females	8.9	8.9	8.9	8.8	10.6	12.1	15.0	9.9	10.7	11.6
32 or over hours										
Males	58.7	55.5	52.6	52.6	59.2	60.4	61.4	57.7	57.2	57.2
Females	30.4	30.5	30.6	30.7	32.6	34.7	35.8	31.2	32.0	33.0

4.2. Full-time jobs

Over the last decades there has been a gradual decline throughout the Community of working in full-time jobs. The gradual change from full-time to part-time employment is partly the result of the shift away from employment in agriculture and industry and towards services. Since part-time jobs are rare in agriculture and industry, while in the service sector flexibility in working arrangements is more common, this has stimulated part-time employment at the cost of full-time employment.

As yet, almost all men still work full-time during their prime working ages. However, in the future a drop is foreseen in all three scenarios. In 2020 the three scenarios are very similar for the prime working ages, although the backgrounds differ in each scenario. In case of the low scenario the reduction is caused by a fall in general activity rates for men. In the high scenario future general activity rates are well above that of 1995, but an impressive increase in part-time working has a downward effect on the activity rate for full-time working. The baseline scenario does not foresee much movement in the general activity rate, but a moderate shift towards part-time work causes the activity rate for full-time jobs to fall. At relative young and old ages the activity rates for full-time jobs according to the high scenario exceed that of the baseline and the low scenarios, notwithstanding the fact that part-time working is more popular in this scenario.

For women the three scenarios are also similar for the prime working ages, while at relatively young and old ages the high scenario shows the highest activity rates. However, the age pattern of the female activity curve is not similar to that of males, since the peak is reached around the age of 25. After this age the activity rates are gradually declining due to the preference of mothers to either leave the labour market or take up a part-time job.

Figure 4.2. Activity rates of persons working 32 or over hours per week, EU-15, 1995 and 2020

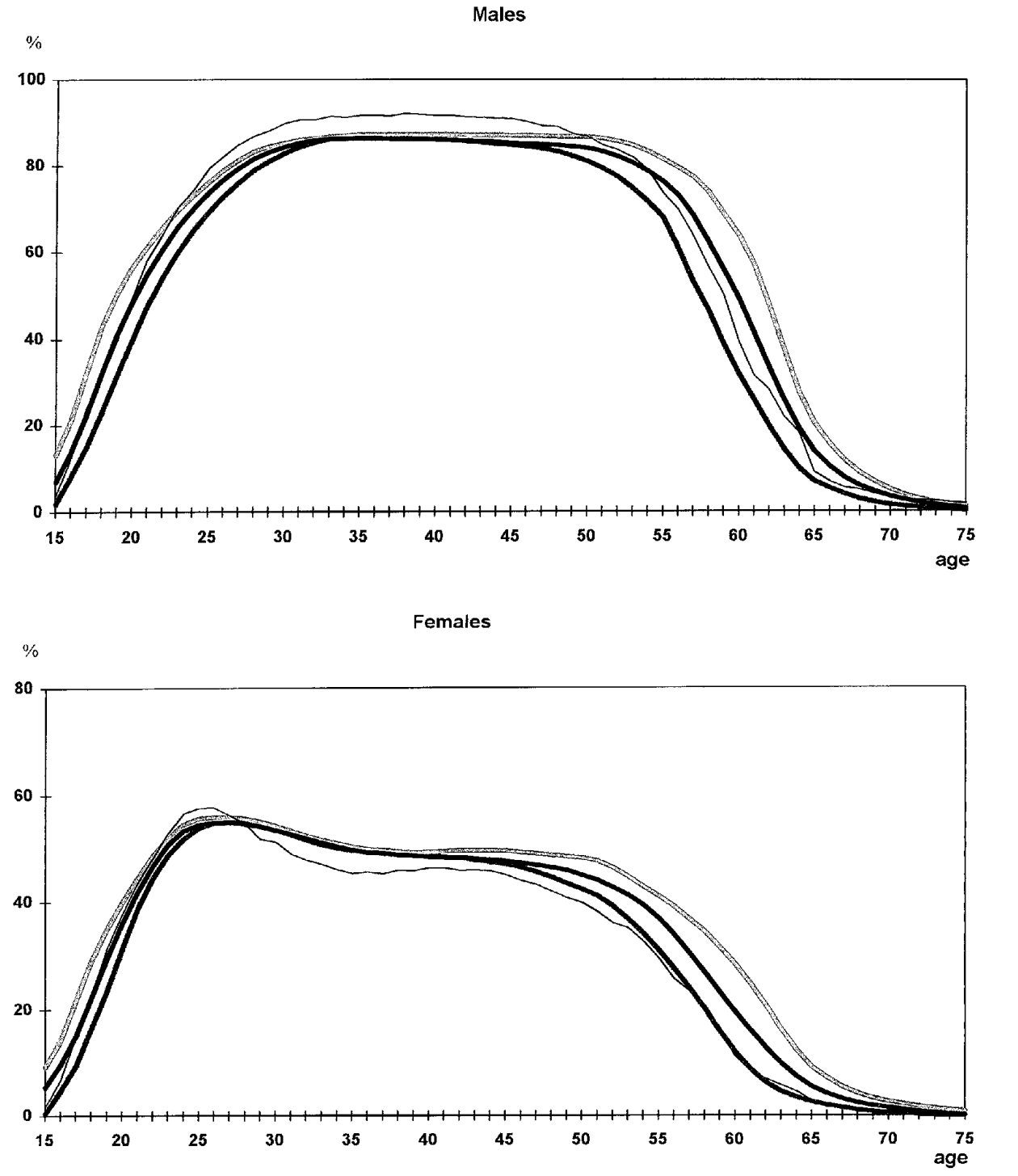


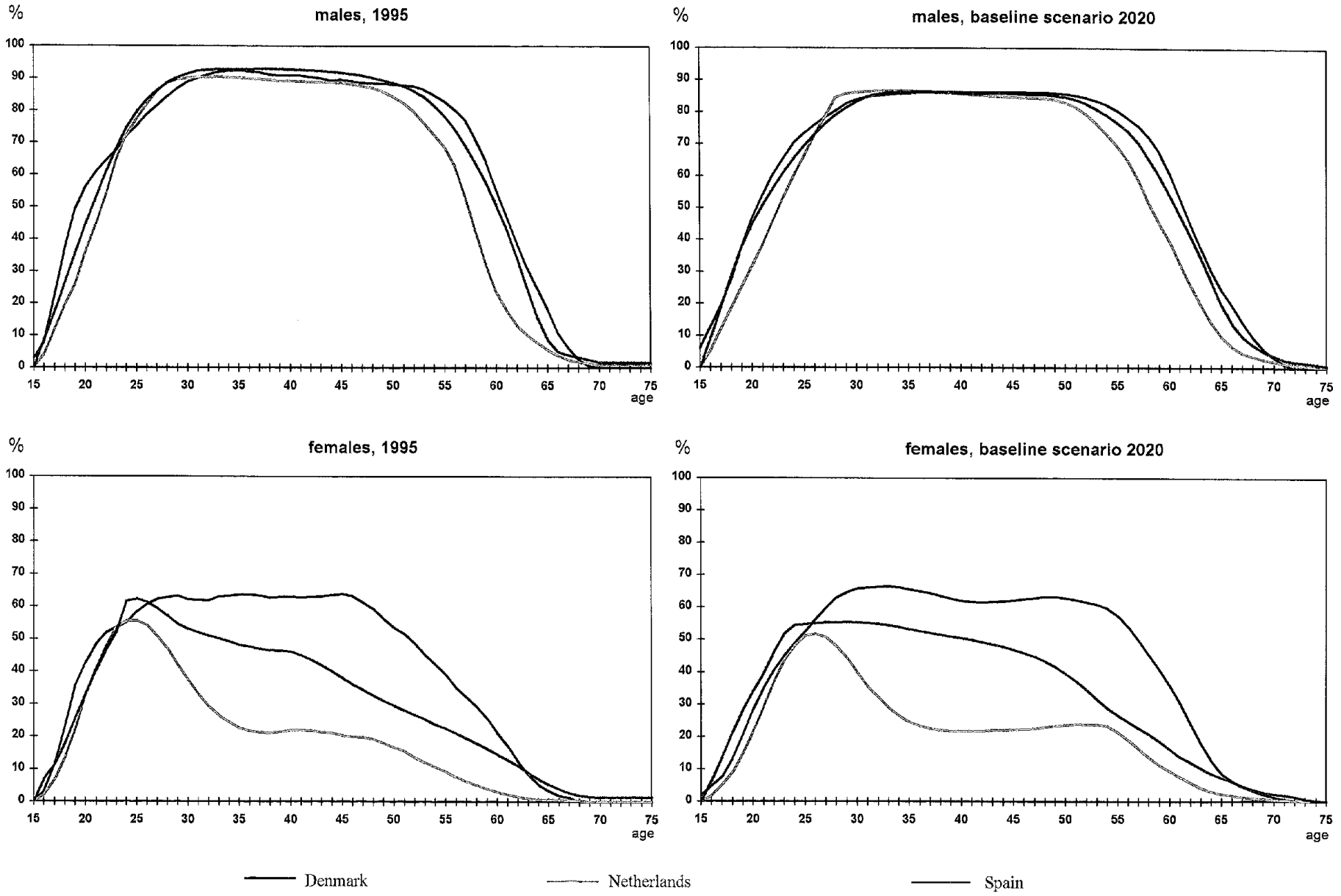
Table 4.2. Average activity rates of persons working 32 or over hours per week (%), EU-15, 1995 and 2020

	Observed		Low scenario		High scenario		Baseline scenario	
	1995		2020		2020		2020	
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES
15-19	22.0	15.3	15.7	10.7	31.8	21.7	23.1	16.3
20-24	63.3	47.7	53.2	42.9	65.2	47.8	60.0	45.7
25-29	84.3	55.5	75.6	54.5	80.9	55.6	79.0	54.6
30-34	90.7	48.2	85.1	51.7	86.2	52.5	85.6	51.9
35-39	91.8	45.6	86.6	49.2	87.2	49.7	86.3	49.1
40-44	91.3	46.1	85.6	48.1	87.2	49.5	85.8	48.2
45-49	89.4	43.0	83.7	45.4	86.9	49.0	84.9	46.8
50-54	83.2	36.2	76.8	38.7	85.3	45.9	81.8	42.5
55-59	62.7	23.0	53.6	23.8	76.2	36.5	67.2	30.2
60-64	27.8	7.3	20.5	7.0	46.7	20.4	33.9	13.1
65-69	6.1	1.8	4.2	1.6	12.7	5.8	8.5	3.4
70+	2.5	0.6	0.7	0.2	2.7	1.6	1.9	0.8

Differences in the participation rate of men in full-time jobs between the EU countries are limited. The high score of Portugal is partly due to the relatively large size of the primary sector, a sector where part-time working is rare. But the gap between Portugal and countries with low rates such as Finland, Belgium and the Netherlands is just over 10 percentage points. These countries are characterised by early retirement. At young and middle age ranges the differences with other countries of the EU are limited.
According to the baseline scenario, national differences in activity curves will more or less remain in the future.

With respect to the participation of women in full-time jobs the differences between the countries are more impressive. The Scandinavian countries, Austria and Portugal are forerunners. The gap with the Netherlands, which has by far the lowest participation rate, is about 20 percentage points.
In the countries with high activity rates the female activity curve for full-time jobs is more or less similar to the male activity curve. In the rest of the EU the male and female activity curves hardly resemble each other, due to large differences in attitudes towards the combination of paid labour and child rearing. In the Scandinavian countries and several western countries, such as France, child rearing is not a reason for leaving the labour market or reducing working hours. Especially in the Netherlands having a child is a compelling reason for changing from a full-time to either a large or a small part-time job. This results in a steep fall in the activity rates for full-time jobs in the 25-34 age bracket, followed by a fairly stable activity rate up to the fifties. In several western and southern countries the activity curve has a left-handed peak, reflecting a gradual change from full-time jobs to large part-time jobs and at higher ages a retreat from the labour market.

Figure 4.3. Activity rates of persons working 32 or over hours per week, three selected countries, 1995 and 2020



According to the baseline scenario, the activity rates for full-timers in the northern and western part of the EU will only show a significant rise at the higher ages. This is mainly an expression of the general rise in participation at those ages. In the southern countries a rise in full-time participation is expected both at middle and older age groups. This is again due to the expected rise in female participation, although this time coupled with a lesser orientation toward part-time working than in the rest of the EU.
Under the baseline scenario the male participation rates for full-time jobs will show a slight decline in most countries in the coming decades. This is due to a slight move into the direction of working part-time. For women the situation is slightly different, since participation in full-time jobs is set to increase in most EU countries. Although working part-time is expected to become more popular in the future, the downward effect on full-time participation is more than the general rise in female participation can compensate.

Table 4.3. Average activity rates of persons working 32 or over hours per week (%), countries, 1995 and 2020

	Observed		Low scenario		High scenario		Baseline scenario	
	1995		2020		2020		2020	
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES
AUS	61.5	36.1	55.0	38.3	65.6	44.3	60.4	42.1
BEL	53.7	25.6	48.0	25.6	56.6	33.5	52.0	28.8
DEN	61.2	38.5	56.2	40.4	62.4	40.9	59.1	41.3
FIN	52.4	43.7	48.6	40.1	54.9	46.5	51.9	43.3
FRA	55.1	33.6	46.7	32.8	60.2	38.8	55.2	36.0
GER	61.0	32.7	57.3	34.9	62.4	37.5	60.6	35.8
GRE	61.5	30.3	54.5	31.2	63.5	38.3	58.8	33.3
IRE	61.7	25.8	53.7	23.5	63.2	34.1	59.8	28.3
ITA	55.8	25.5	50.0	25.4	63.6	35.5	56.1	29.9
LUX	57.2	24.1	51.8	23.5	61.8	32.6	57.1	28.2
NET	53.8	18.1	48.4	19.3	56.7	20.1	53.1	19.6
POR	64.3	40.9	55.3	42.0	65.1	49.6	59.4	45.3
SPA	60.0	29.1	53.9	28.5	61.1	36.1	57.2	32.0
SWE	58.4	38.2	50.9	33.0	56.3	38.1	53.7	35.2
UKI	61.5	29.0	54.8	28.4	61.6	29.5	57.5	29.2

Figure 4.4. Average activity rates of persons working 32 or over hours per week, countries, 1995 and baseline scenario 2020

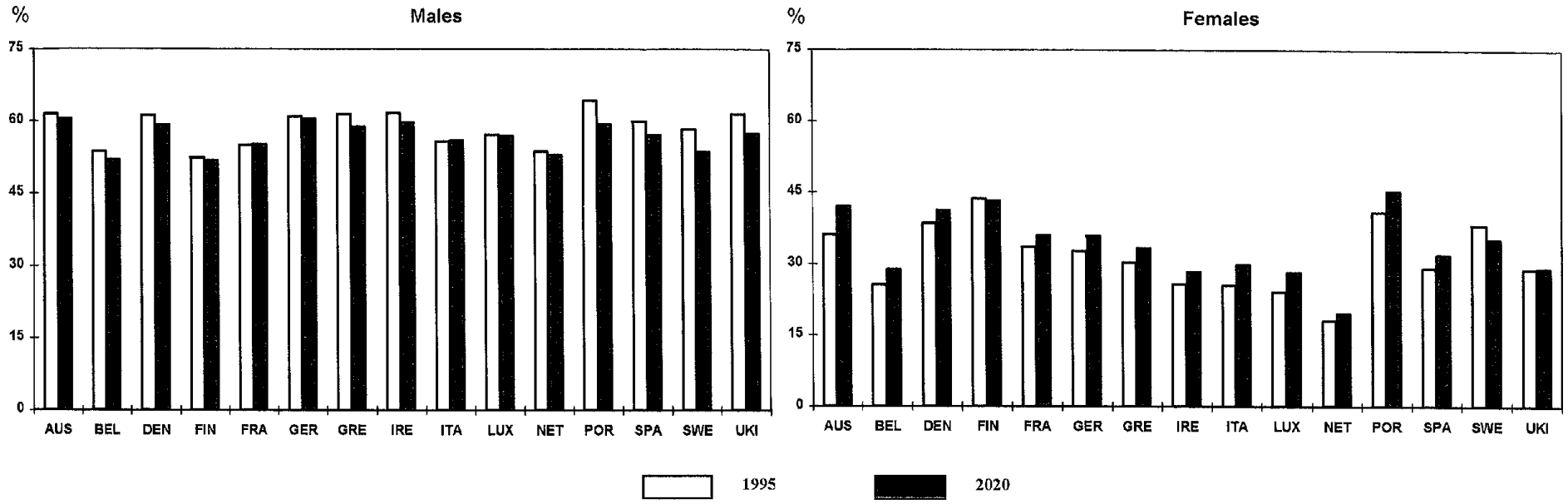
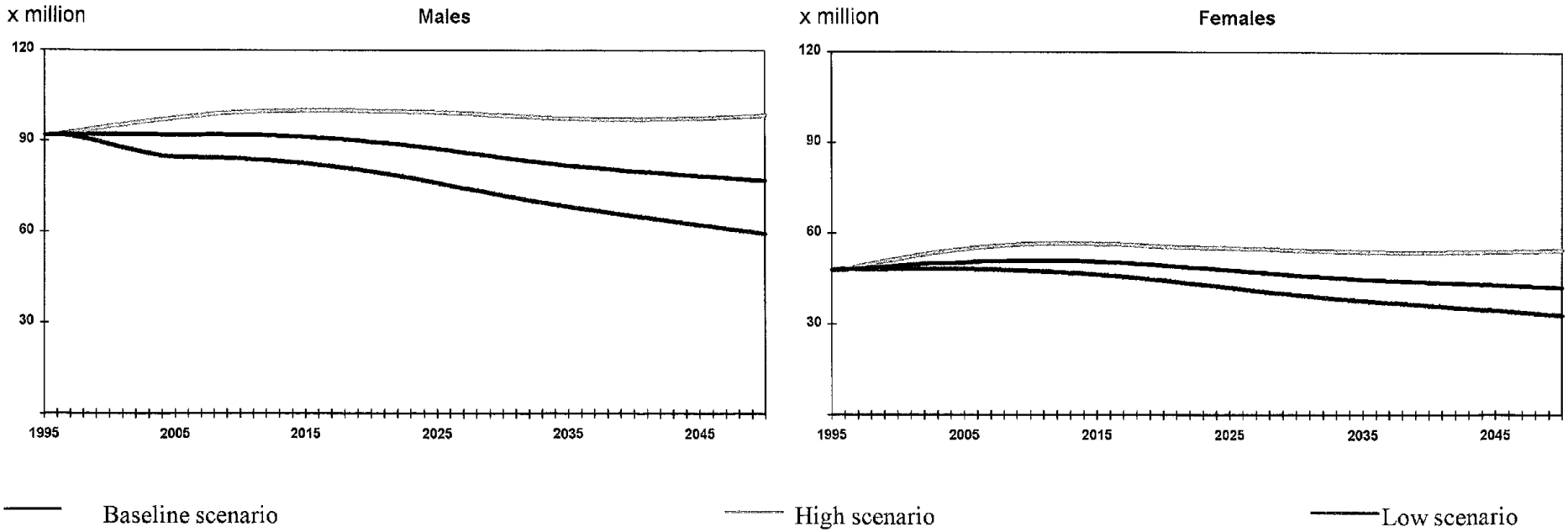


Figure 4.5. Labour force working 32 or over hours per week, EU-15, 1995-2050



The effect of the assumptions on the activity rates for full-time jobs according to the three scenarios can be judged by looking at the future trends in the EU labour force. In the low scenario the size of the male labour force working full-time is going to fall in the coming decades. In the baseline scenario the current size will be maintained up to about 2020, after which a decline is foreseen. The high scenario is the only one where a rise is expected in the near future, followed by a nearly constant size from 2020 on.
The expected trends for women are slightly different. In the low scenario the size of the full-time labour force will first remain constant for over ten years. Both the baseline and the high scenario expect a rise in the short run. After 2015 the female labour force will keep its attained size under the high scenario while under the baseline scenario a moderate fall is foreseen.
Due to the fact that part-time working is more popular among women plus the fact that more men are currently active, the full-time male labour force is nearly twice as large as the female labour force. Under the baseline scenario this ratio will be somewhat less biased in the future, as the decline in the male labour force working full-time will occur at a larger scale than in the female labour force.

Table 4.4. Labour force working 32 or over hours per week, countries, 1995-2025

	Observed	Low Scenario			High Scenario			Baseline Scenario		
x mln	1995	2000	2005	2025	2000	2005	2025	2000	2005	2025
EU	139.8	137.1	133.0	118.2	146.4	152.5	154.7	141.7	142.5	135.3
of wich:										
males	91.9	88.9	84.7	76.1	94.8	97.7	99.5	92.3	92.1	87.5
females	47.9	48.2	48.3	42.0	51.6	54.9	55.2	49.4	50.4	47.9
AUS	3.4	3.3	3.3	2.9	3.5	3.7	4.0	3.4	3.5	3.4
BEL	3.4	3.4	3.2	2.8	3.6	3.7	3.8	3.5	3.5	3.2
DEN	2.2	2.2	2.2	2.0	2.3	2.4	2.4	2.3	2.2	2.2
FIN	2.1	2.0	1.9	1.7	2.2	2.2	2.1	2.1	2.1	1.9
FRA	21.3	21.0	20.0	18.3	22.8	24.1	24.8	22.1	22.5	21.7
GER	33.1	32.7	32.5	28.3	34.3	35.5	35.1	33.3	33.6	31.6
GRE	3.9	3.9	3.8	3.6	4.2	4.5	4.7	4.1	4.1	4.0
IRE	1.2	1.2	1.2	1.1	1.3	1.5	1.6	1.3	1.3	1.4
ITA	19.9	19.3	18.3	15.1	21.0	21.9	22.4	20.1	20.0	18.3
LUX	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
NET	5.0	4.9	4.7	4.2	5.2	5.4	5.5	5.1	5.0	4.9
POR	4.2	4.2	4.1	3.9	4.5	4.8	5.1	4.3	4.4	4.4
SPA	14.6	14.6	14.2	12.4	15.8	16.7	16.5	15.1	15.4	14.2
SWE	3.4	3.2	3.0	2.9	3.4	3.5	3.7	3.3	3.3	3.2
UKI	21.7	21.1	20.4	18.9	22.1	22.6	22.8	21.6	21.4	20.6

4.3. Large part-time jobs

Especially for women working in part-time jobs has gained importance in the EU. The growth of female employment has gone along with a rise in part-time working. The possibility to combine professional work with the raising of children has driven the demand for part-time jobs. Relatively more women than men are working in the service sector, where part-time jobs are more common than in agriculture or industry.

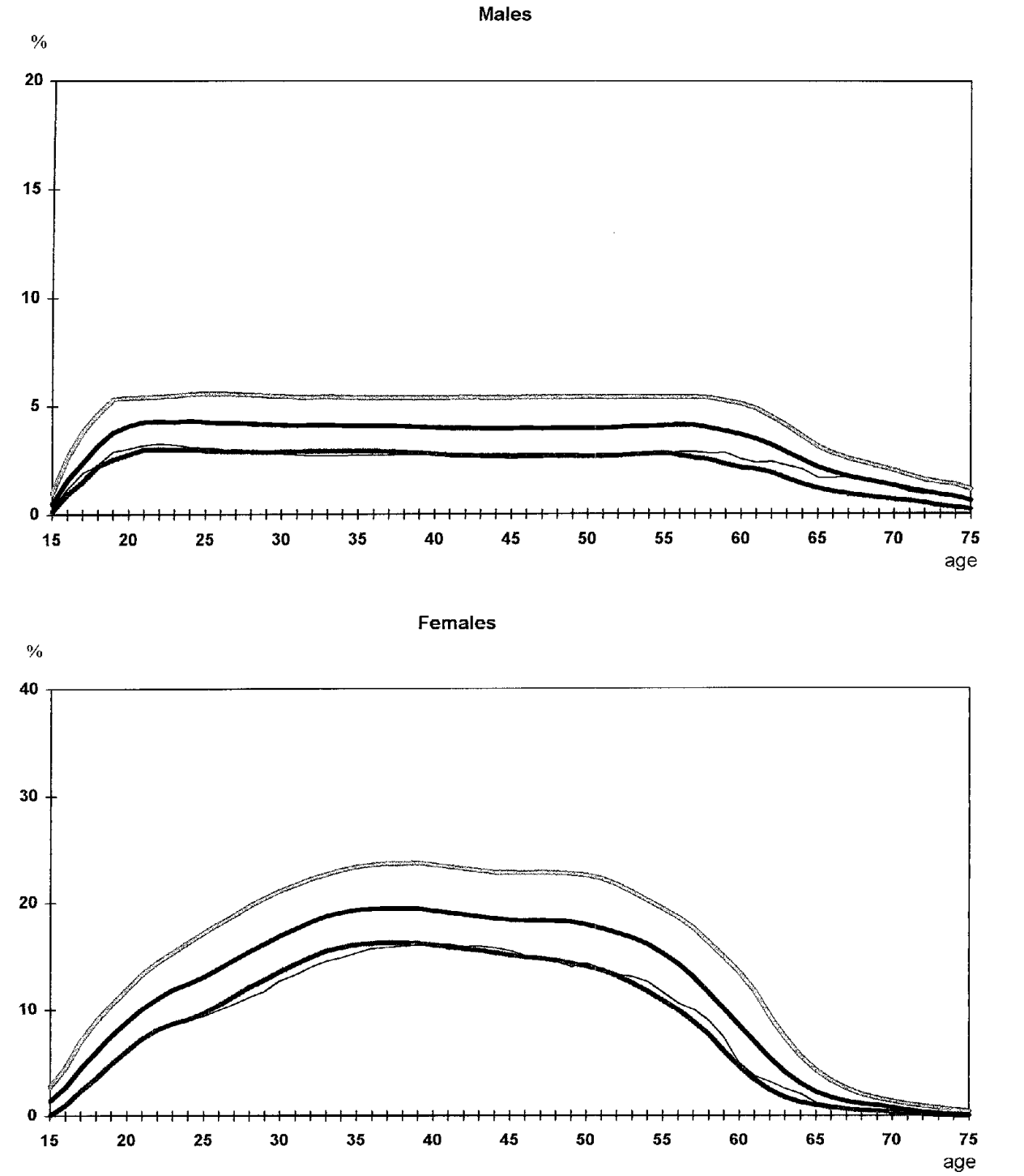
Part-time work is hardly popular among men. The rather flat age specific activity pattern of males, only some percentage points above zero, is in marked contrast with the bell shaped curve of females with a peak of about 15% around the age of 40 in 1995. The high rates for women stem from the combination of motherhood with work outdoors, and especially in the phase of the life cycle in which there are still young children around. When the children have passed the phase of childhood, a substitution of part-time jobs for full-time jobs might occur. However, the break in the labour career could prevent finding a full-time job again. This might be an explanation for relative high proportions of part-time working women in the age-group 50 and over.

According to the low scenario current activity rates for large part-time jobs will not rise in the future. The baseline scenario foresees a moderate rise, while a considerable rise is expected in the high scenario.

Table 4.5. Average activity rates of persons working 20-31 hours per week (%), EU-15, 1995 and 2020

	Observed		Low scenario		High scenario		Baseline scenario	
	1995		2020		2020		2020	
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES
15-19	1.7	2.4	1.5	2.4	3.5	6.8	2.3	4.4
20-24	3.2	7.9	3.0	7.9	5.5	14.2	4.3	10.9
25-29	3.0	10.6	2.9	11.3	5.6	18.8	4.2	14.6
30-34	2.7	13.8	2.9	14.8	5.4	22.1	4.1	18.0
35-39	2.8	15.7	2.9	16.2	5.4	23.6	4.1	19.4
40-44	2.7	15.9	2.7	15.6	5.4	23.1	4.0	18.8
45-49	2.6	14.7	2.7	14.7	5.4	22.7	4.0	18.3
50-54	2.7	13.4	2.7	13.0	5.4	21.5	4.0	17.0
55-59	2.8	9.7	2.6	8.7	5.4	17.3	4.0	12.8
60-64	2.3	3.3	1.8	2.7	4.4	9.4	3.1	5.6
65-69	1.6	0.8	1.0	0.7	2.6	2.7	1.8	1.5
70+	0.9	0.4	0.5	0.1	1.6	0.8	1.0	0.4

Figure 4.6. Activity rates of persons working 20-31 hours per week, EU-15, 1995 and 2020



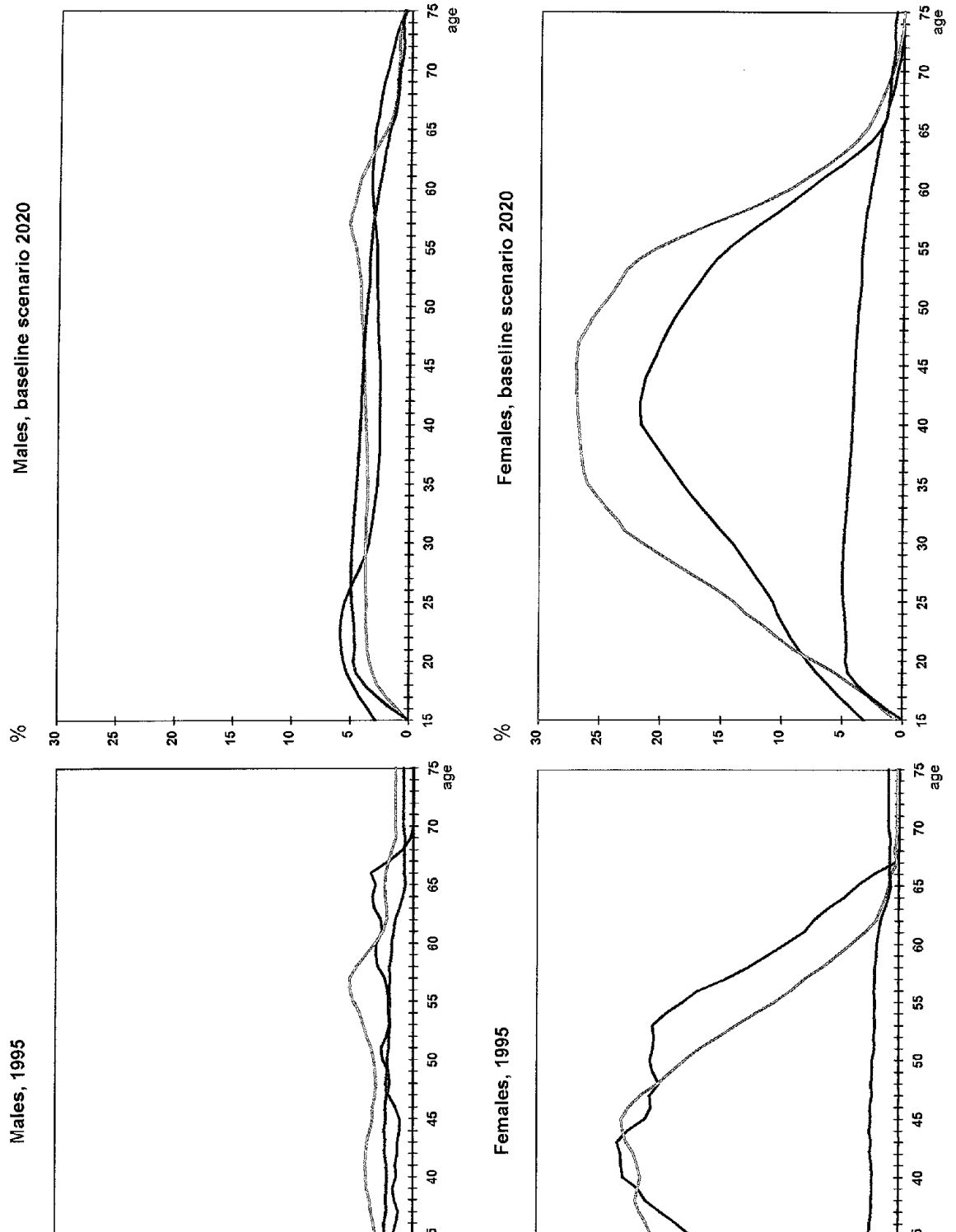
Part-time working is still a rare phenomenon among men. This observation holds for all countries of the EU. In every country activity rates are only some percentage points above zero at each age. Under the baseline scenario the age-specific activity rates belonging to large part-time jobs (20-31 working hours a week) will slowly rise and fluctuate around 4% in 2020.
Working in large part-time jobs is rather popular among women in several countries. This is especially the case in Sweden, but also Denmark, France, the Netherlands and the United Kingdom have rather high activity rates. These countries have a bell-shaped activity curve, with a top around the age of 45. The lowest activity rates for large part-time jobs can be found in the southern countries. The age pattern of the activity rates for women resembles that of men: rather flat and only some percentage points above zero.

Under the baseline scenario the female activity curve will rise somewhat in the Southern countries and continue to reflect the male age pattern. For Denmark and Sweden no important changes in the current activity curve are foreseen. Activity rates for large part-time jobs have fallen in Denmark over the last 10 years. It is assumed in the baseline scenario that a growing popularity for working in part-time jobs might prevent a further fall. In contrast, in most western countries and especially the Netherlands and France working in part-time jobs has recently become more common. In the future this trend will continue, resulting in higher activity rates for large part-time jobs. This also means that the further rise of female activity rates which will take place in most western and southern countries of the EU, will predominantly stem from a growing preference for working in large part-time jobs.

Table 4.6. Average activity rates of persons working 20-31 hours per week (%), countries, 1995 and 2020

	Observed		Low scenario		High scenario		Baseline scenario	
	1995		2020		2020		2020	
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES
AUS	1.6	9.5	1.6	9.0	3.1	17.0	2.2	12.7
BEL	2.6	9.1	2.2	9.9	4.0	15.0	3.0	12.2
DEN	2.5	11.9	2.4	8.5	4.1	14.4	3.2	11.3
FIN	3.5	7.0	3.7	7.1	5.3	11.1	4.6	8.9
FRA	2.9	10.0	2.7	10.4	5.2	17.3	4.1	13.7
GER	1.4	9.7	1.2	9.5	3.7	16.0	2.4	12.3
GRE	3.7	5.4	3.8	5.3	7.0	13.9	5.4	8.6
IRE	4.0	7.6	4.0	7.1	7.7	14.1	5.9	10.2
ITA	2.2	6.0	2.1	6.5	3.9	11.9	2.9	8.8
LUX	1.2	7.0	1.2	7.2	3.0	14.6	2.0	10.8
NET	3.0	11.0	2.3	12.4	4.0	18.2	3.3	14.9
POR	3.1	6.5	3.3	6.2	4.9	11.3	4.0	8.4
SPA	2.1	5.1	1.8	4.9	5.4	9.9	3.3	7.1
SWE	4.5	18.3	4.0	15.1	7.0	22.5	5.4	18.4
UKI	3.0	11.0	2.8	10.7	4.9	17.0	3.8	13.8

Figure 4.7. Activity rates of persons working 20-31 hours per week, three selected countries, 1995 and 2020



Under the baseline scenario male participation in large part-time jobs will exhibit a very modest rise in the future. In Greece, Ireland and Sweden the 5% level will be surpassed while in Austria, Germany and Luxembourg only 2% of all men in the working ages will have a large part-time job in 2020.
As far as women are concerned Sweden will continue to occupy the first place, with a participation rate of almost 20%. In the future Denmark has to give up its second place to the Netherlands, with almost 15% in 2020.

The size of the male labour force working in large part-time jobs is still modest in the EU, namely 4 million. Although the high scenario foresees a doubling of the current size, working in large part-time jobs continues to be a rather marginal phenomenon for men.
The prospects for females working in large part-time jobs are more impressive, especially in the high scenario. Only the low scenario foresees a slight fall, while both in the baseline and high scenario a notable grow is foreseen up to around 2020. As yet, nearly four times as many women than men are working in a large part-time job and this ratio will more or less remain in the future.

Table 4.7. Labour force working 20-31 hours per week, countries, 1995-2025

	Observed	Low Scenario			High Scenario			Baseline Scenario		
x mln	1995	2000	2005	2025	2000	2005	2025	2000	2005	2025
EU	17.3	17.6	17.6	15.7	21.0	24.5	30.6	19.7	21.8	22.2
of wich:										
males	3.6	3.5	3.4	3.2	4.3	5.1	7.3	4.1	4.7	5.1
females	13.8	14.1	14.2	12.5	16.7	19.4	23.3	15.6	17.1	17.1
AUS	0.4	0.4	0.4	0.3	0.5	0.5	0.7	0.4	0.5	0.5
BEL	0.5	0.5	0.5	0.5	0.6	0.7	0.8	0.6	0.6	0.6
DEN	0.3	0.3	0.2	0.2	0.3	0.4	0.4	0.3	0.3	0.3
FIN	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3
FRA	3.1	3.2	3.3	3.0	3.7	4.4	5.6	3.5	4.0	4.2
GER	3.9	3.9	3.8	3.3	4.8	5.5	6.7	4.4	4.8	4.8
GRE	0.4	0.4	0.4	0.4	0.5	0.7	0.9	0.5	0.6	0.6
IRE	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.2	0.2	0.2
ITA	2.0	2.1	2.1	1.7	2.4	2.9	3.5	2.3	2.5	2.4
LUX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NET	0.9	1.0	1.0	0.9	1.1	1.3	1.5	1.1	1.2	1.2
POR	0.4	0.4	0.4	0.4	0.4	0.5	0.7	0.4	0.5	0.5
SPA	1.2	1.2	1.2	1.0	1.6	1.9	2.5	1.4	1.6	1.6
SWE	0.8	0.7	0.7	0.6	0.8	0.9	1.1	0.8	0.8	0.8
UKI	3.2	3.2	3.3	3.1	3.8	4.3	5.4	3.6	3.9	4.1

Figure 4.8. Average activity rates of persons working 20-31 hours per week,countries, 1995 and baseline scenario 2020

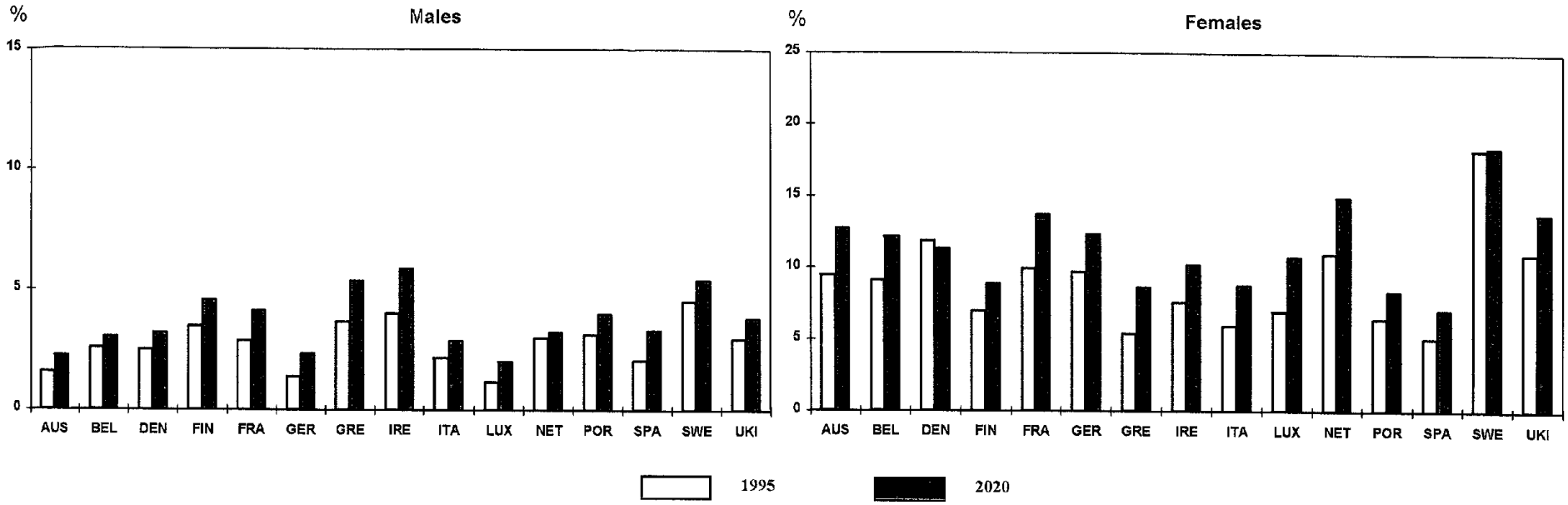
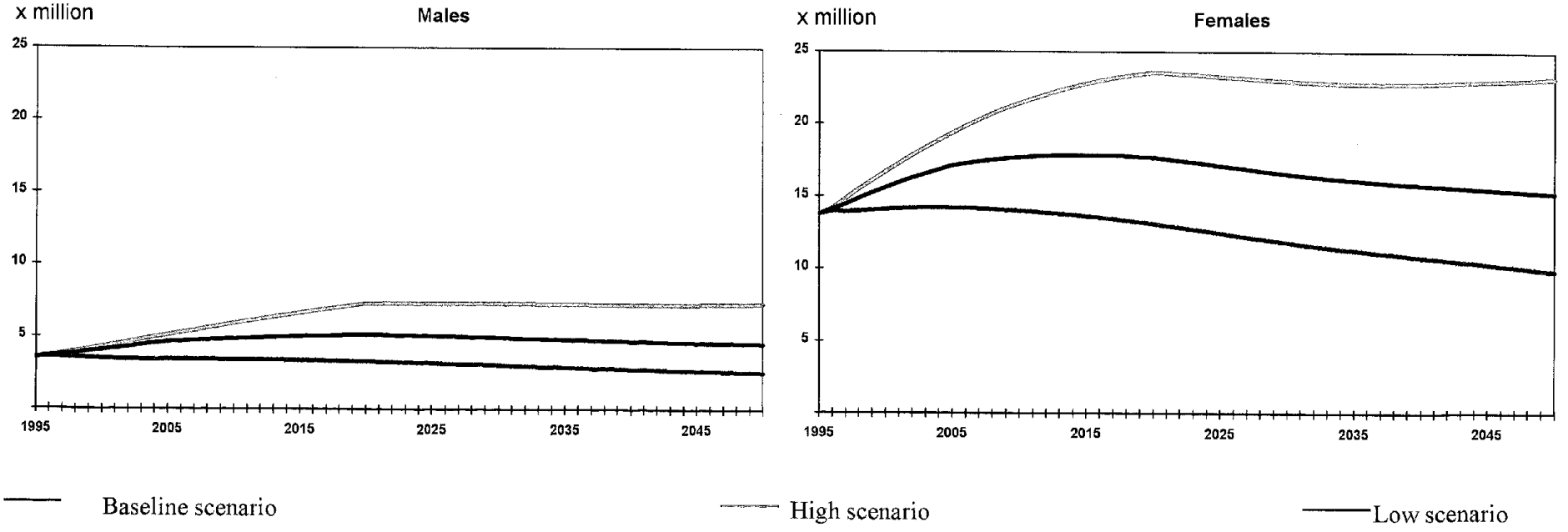


Figure 4.9. Labour force working 20-31 hours per week, EU-15, 1995-2050



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4.4. Small part-time jobs

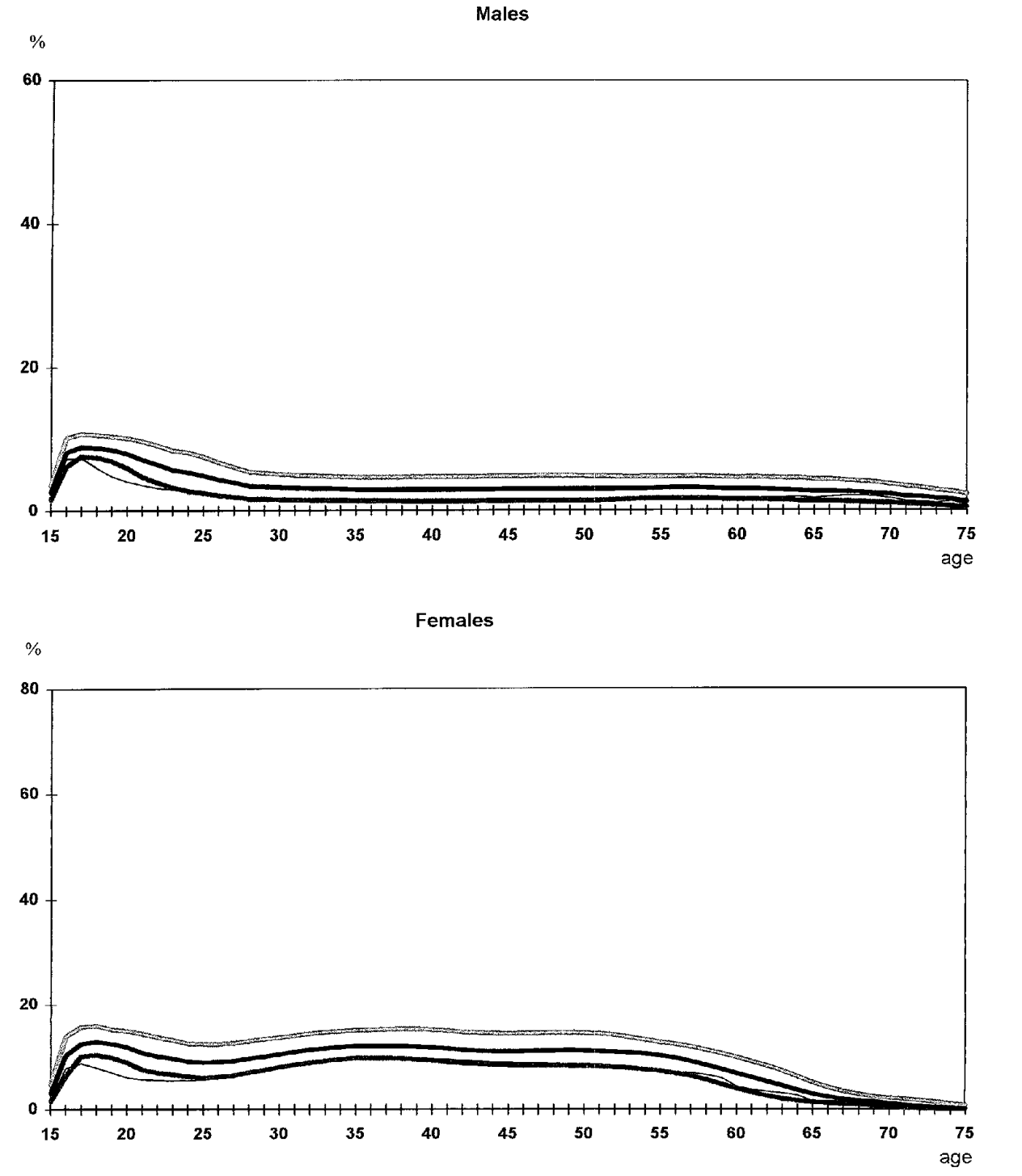
Among young people the combination of education with part-time working is growing in popularity. Age-specific activity rates for small part-time jobs (1-19 working hours per week) reach a peak around the age of 18 and then gradually decline. For men the rates stay just above zero from age 30 on. This age-pattern is different for women, where activity rates for small part-time jobs again start to increase above the age of 25 in order to reach a plateau at around 30 which ends around the age of 55. The high activity rate at young ages stems from people in education who supplement their limited means by a small job. For women it may also be attractive to have a small job, if she wants to reconcile family obligations with working outside the home.

In the low scenario a lack of small jobs will make it difficult for students to combine education with work and this might even mean they will have to stay in education longer. As a result future activity rates will stay at the current low level. In the high scenario on the contrary there will be a scarcity of workers and this has a positive effect on wages. This might especially tempt mothers and students to take up a small job. In the future activity rates for small part-time jobs will rise somewhat according to this scenario. In the baseline scenario part-time activity rates will also rise, although at a slower pace than in the high scenario.

Table 4.8. Average activity rates of persons working 1-19 hours per week (%), EU-15, 1995 and 2020

	Observed		Low scenario		High scenario		Baseline scenario	
	1995		2020		2020		2020	
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES
15-19	5.5	6.7	6.0	7.7	9.1	13.1	7.4	10.3
20-24	3.3	5.7	4.1	7.3	9.1	13.7	6.5	10.3
25-29	2.0	6.4	2.0	6.6	6.2	12.8	4.0	9.4
30-34	1.3	8.6	1.5	8.8	4.9	14.3	3.1	11.3
35-39	1.1	9.7	1.4	9.7	4.7	15.2	3.0	12.1
40-44	1.1	9.3	1.3	8.9	4.8	14.8	3.0	11.4
45-49	1.2	8.7	1.4	8.4	4.9	14.5	3.0	11.1
50-54	1.3	8.0	1.5	8.0	4.8	14.0	3.1	10.9
55-59	1.7	6.8	1.7	6.2	4.8	11.8	3.2	9.0
60-64	1.8	3.5	1.5	2.7	4.6	8.1	2.9	5.3
65-69	2.0	1.4	1.2	1.1	4.2	3.6	2.6	2.1
70+	1.2	0.7	0.7	0.2	3.0	1.5	1.8	0.6

Figure 4.10. Activity rates of persons working 1-19 hours per week, EU-15, 1995 and 2020



Within the EU large differences in the participation rates in small part-time jobs can be detected. The three Scandinavian countries, the Netherlands and the United Kingdom have high activity rates for small part-time jobs (1-19 working hours a week) at ages up to 20. This is true for both men and women. Then the activity rates go into a steep decline in the early twenties followed by a slow decline in the late twenties. In the Scandinavian countries the activity rates of the two sexes no longer go hand in hand above the age of thirty as the of female participation rates become notable higher. In the Netherlands and the United Kingdom the female pattern no longer resembles that of Denmark when age progresses: The bell curve peaks around the age of 40.

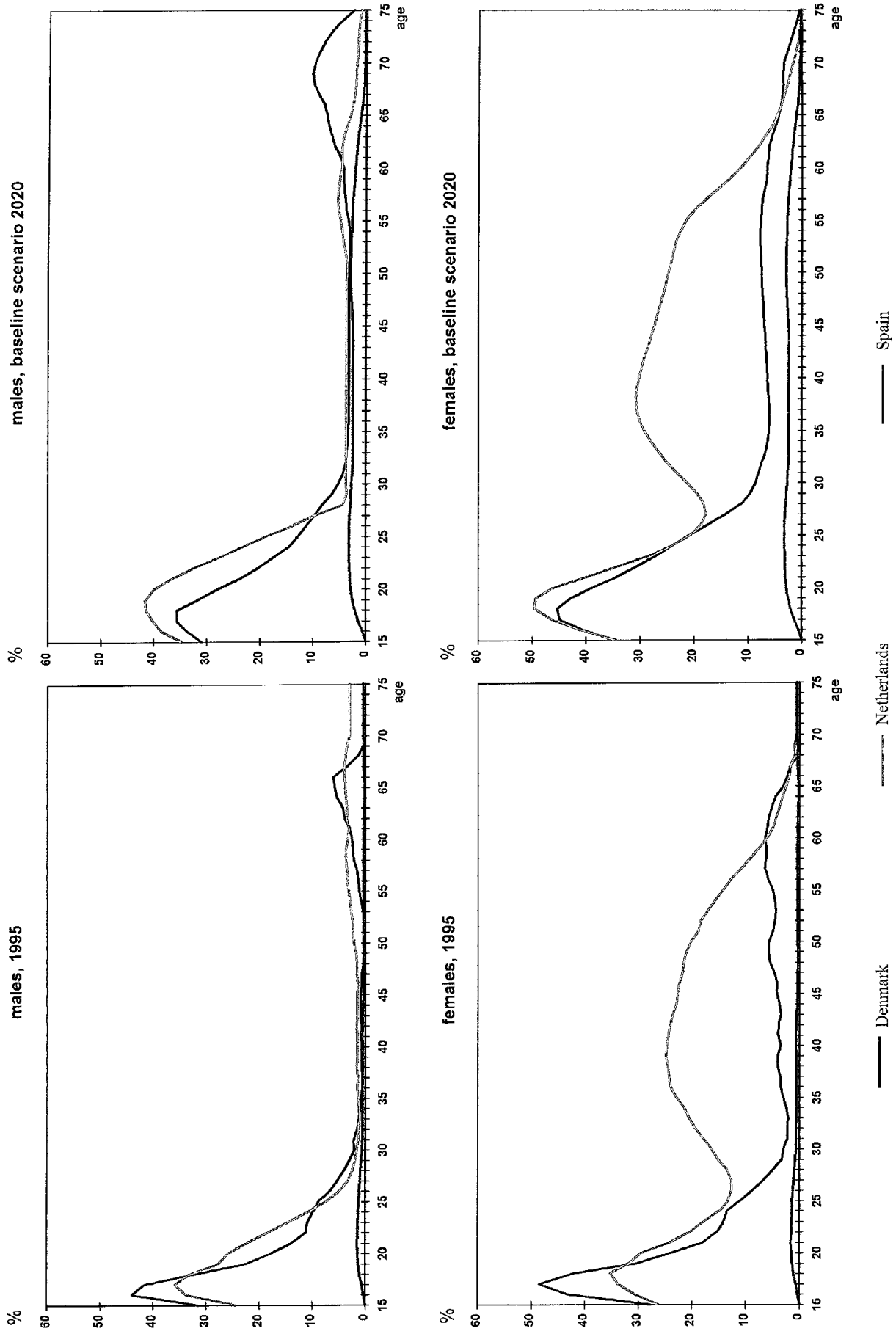
In the Scandinavian countries most mothers hold large part-time jobs or continue to work full-time in order to combine parenthood with paid work. In the Netherlands and the United Kingdom the strategy is slightly different: most mothers change from a full-time job to either a large or a small part-time job after childbirth. In the southern countries hardly any man or woman has part-time jobs.

Under the baseline scenario it is assumed that in line with current developments, activity rates of people in their twenties will significantly rise in the Scandinavian countries. This will happen to an even greater extent in the Netherlands and the United Kingdom. Above that age a limited rise in activity rates is foreseen in all countries of the EU.

Table 4.9. Average activity rates of persons working hours working 1-19 hours per week (%), countries, 1995 and 2020

	Observed		Low scenario		High scenario		Baseline scenario	
	1995		2020		2020		2020	
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES
AUS	1.1	3.1	1.3	2.5	4.3	6.0	2.7	4.1
BEL	0.8	5.2	0.8	6.0	3.6	9.6	2.1	7.6
DEN	5.7	7.9	5.8	8.2	11.8	15.7	8.8	11.5
FIN	3.6	4.3	3.4	4.0	7.4	9.0	5.4	6.2
FRA	1.2	4.1	1.0	4.0	3.7	8.5	2.3	6.1
GER	1.4	6.7	1.0	6.3	3.9	11.2	2.4	8.4
GRE	0.8	1.4	0.9	1.4	3.0	3.4	1.9	2.2
IRE	1.3	4.2	1.2	3.9	3.9	8.7	2.5	6.0
ITA	1.5	2.6	1.4	2.5	4.1	5.6	2.6	3.8
LUX	0.6	2.9	0.3	2.9	2.8	5.3	1.4	4.1
NET	6.2	15.7	6.4	17.0	12.3	26.6	9.4	21.5
POR	1.1	3.0	1.2	2.8	4.8	5.6	2.8	4.0
SPA	0.6	2.5	0.5	2.4	4.2	6.6	2.1	4.2
SWE	3.7	5.8	3.2	5.0	8.0	9.8	5.3	7.3
UKI	4.0	13.6	4.6	13.5	8.9	22.2	6.6	17.8

Figure 4.11. Activity rates of persons working 1-19 hours per week, three selected countries, 1995 and 2020



With respect to working in small part-time jobs the Netherlands is the champion, although it has also gained an important place in the United Kingdom. If it comes to men the differences between these two countries and Denmark and Sweden are small, while in case of women the gap is considerable. Under the baseline scenario a growing popularity of small part-time jobs is assumed. However, only in the four mentioned countries this will have a firm effect on current participation in small jobs. In the Netherlands nearly 20% of all women will have a small part-time job in 2020, against over 15% of the men. In the southern countries those respective figures will not surpass the 5%.

Nearly 3 million men work in small part-time jobs in the EU. In the high scenario this figures will triple in the future while no growth will take place in the Low Scenario.
The number of women working in small part-time jobs is three times as high as that of men. The high scenario but also the baseline scenario foresees a significant growth in the future. The low scenario on the other hand foresees a moderate decline.

Table 4.10. Labour force working 1-19 hours per week, countries, 1995-2025

	Observed	Low scenario			High scenario			Baseline scenario		
x mln	1995	2000	2005	2025	2000	2005	2025	2000	2005	2025
EU	12.2	12.3	12.4	11.2	15.5	18.8	25.9	14.3	16.5	17.6
of wich:										
males	2.8	2.8	2.8	2.6	3.8	5.0	8.5	3.5	4.4	5.2
females	9.4	9.6	9.6	8.5	11.7	13.8	17.5	10.8	12.0	12.4
AUS	0.1	0.1	0.1	0.1	0.2	0.1	0.4	0.2	0.2	0.2
BEL	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.4	0.4
DEN	0.3	0.3	0.3	0.2	0.3	0.3	0.6	0.3	0.3	0.4
FIN	0.2	0.1	0.1	0.1	0.2	0.1	0.3	0.2	0.2	0.2
FRA	1.2	1.2	1.2	1.1	1.6	1.2	3.0	1.5	1.8	2.0
GER	2.8	2.7	2.6	2.2	3.5	2.6	5.2	3.1	3.4	3.5
GRE	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.2	0.2
IRE	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
ITA	1.0	1.0	1.0	0.8	1.3	1.0	2.2	1.2	1.3	1.4
LUX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NET	1.4	1.4	1.5	1.3	1.7	1.5	2.7	1.6	1.8	2.0
POR	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.2	0.2	0.3
SPA	0.5	0.5	0.5	0.4	0.8	0.5	1.8	0.7	0.9	1.0
SWE	0.3	0.3	0.3	0.3	0.4	0.3	0.7	0.3	0.4	0.4
UKI	3.9	4.1	4.2	3.9	4.7	4.2	7.6	4.5	5.2	5.6

Figure 4.12. Average activity rates of persons working 1-19 hours per week, countries, 1995 and baseline scenario 2020

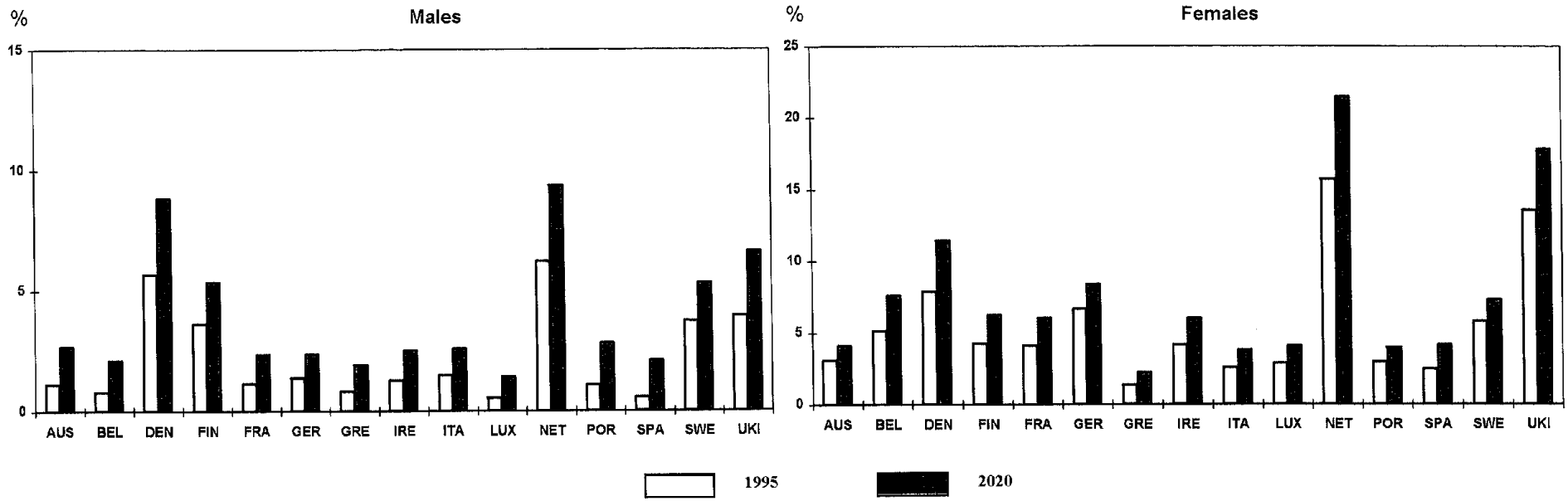
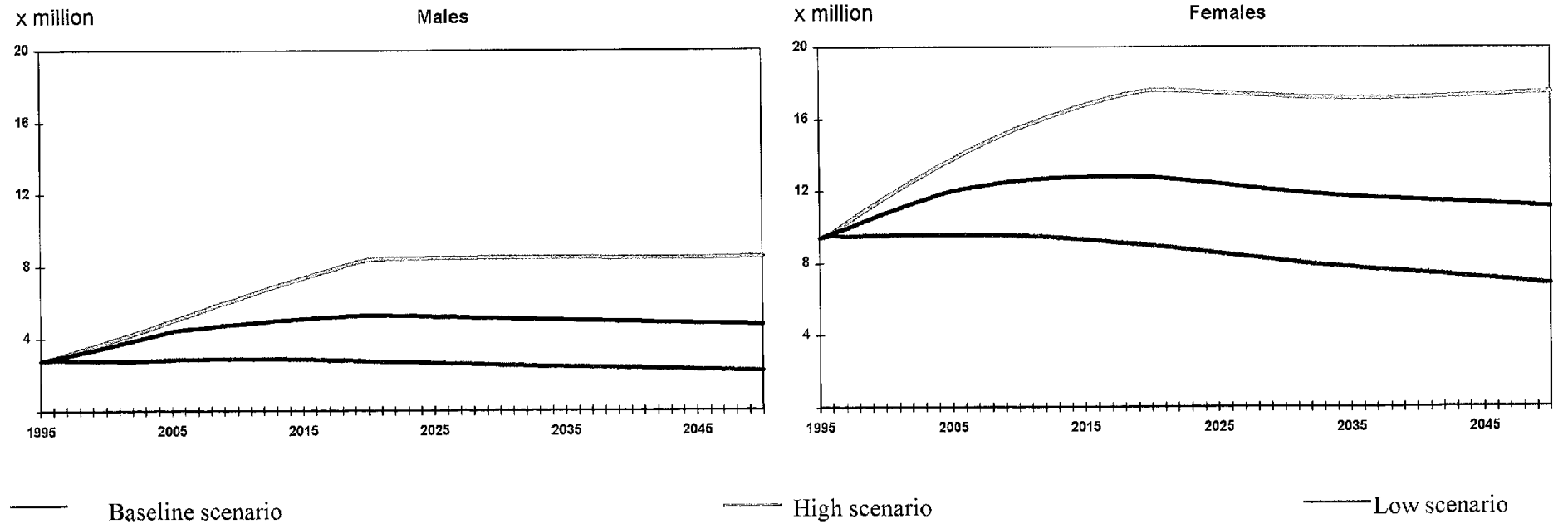


Figure 4.13. Labour force working, 1-19 hours per week, EU-15, 1995-2050



5. Special topics

5.1. Main and secondary labour force scenarios

Three main labour force scenarios have resulted from the multiplication of the low, baseline and high population scenarios with the low, baseline and high scenarios on activity rates. The low and high labour force scenarios as such provide insight into what might happen in the future given quite extreme assumptions, while the baseline scenario intends to show what will happen if recent trends continue in the coming decades.

It might appear somewhat of a contradiction to combine the high population scenario, which assumes a considerable fertility increase, with the high (female) labour force participation scenario, given the apparent problems of reconciling family obligations with working outdoors. So, it might be useful to develop an alternative scenario which quantifies, the consequences of the combination of low fertility with high participation rates. On the other hand, high fertility might imply low participation rates. For this reason, two 'secondary' scenarios have been compiled.

The first of these two secondary scenarios entails the combination of participation rates according to the low participation scenario with a specific population scenario, namely the young variant. This population scenario combines high fertility, high net migration with high mortality. Another population scenario, called the old scenario is its opposite in these respects. This population scenario in turn is combined with the high participation scenario.

The young population scenario is characterised by a relative large population in the prime working ages. The assumed high fertility means that both men and women would be more involved in parenting and participate less in the labour market. In this scenario a relative small segment of older persons poses a relatively small financial burden for the active population, which makes it probable that many persons will leave the labour market at a relatively young age.

The other secondary scenario (the old population & high participation scenario) is quite the opposite: a relatively small active population will bear the brunt of a rapidly ageing population. Leaving the labour market at a relatively young age is almost impossible, and the very fact that families are small due to low fertility makes it opportune for both men and women to participate in the labour market.

The implications of these scenarios in terms of the labour force are as follows. Up to about 2010 the differences of these two secondary scenarios with the main high and low scenario are marginal. However, thereafter the two secondary scenarios start to level off to the baseline scenario. Around 2050 the convergence between these three scenarios is almost complete. According to the old population & high participation scenario both the male and female labour force will grow up to 2015, and then decrease. So the combination of high participation with negative population growth in young and middle age ranges will in due time lead to a reduction of the labour force. The labour force according to the young population & low participation scenario follows a nearly stable course, although for men a slight decline will occur between 1995 and 2005. This means that a sustained population growth is capable of compensating the effect of falling participation rates at the young and prime ages.

Figure 5.1. Labour force by sex, EU-15, main and secondary scenarios 1985-2050

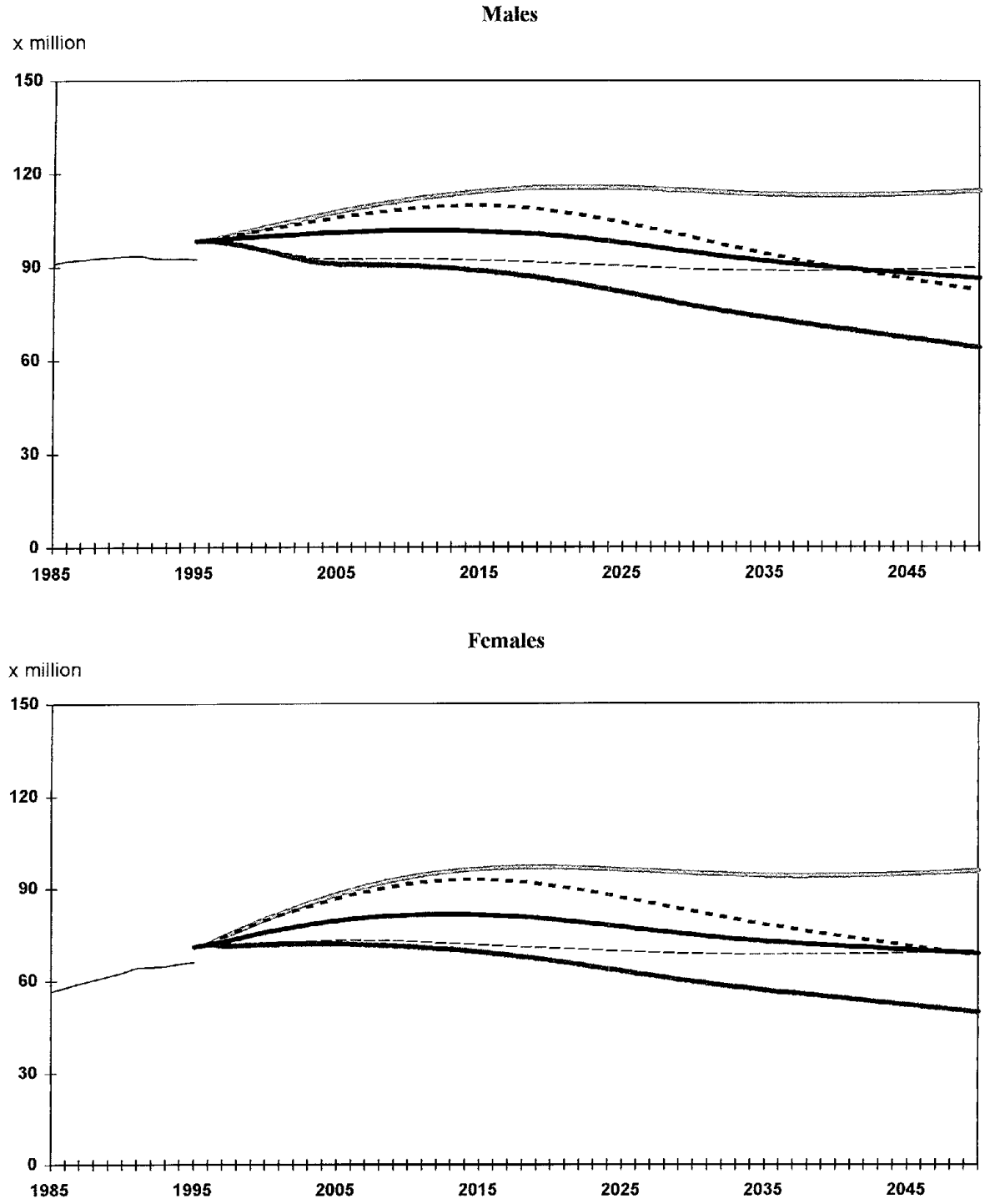


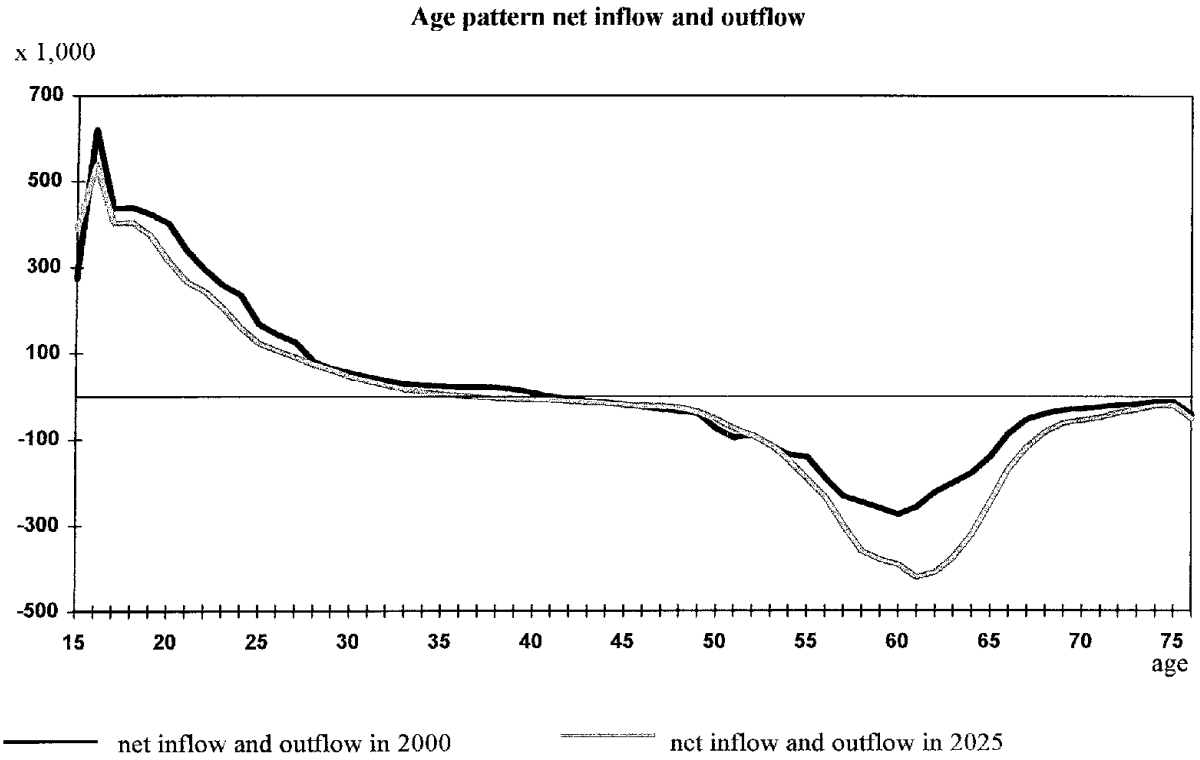
Table 5.1. Labour force by sex, EU-15, baseline and secondary scenarios, 1995-2050

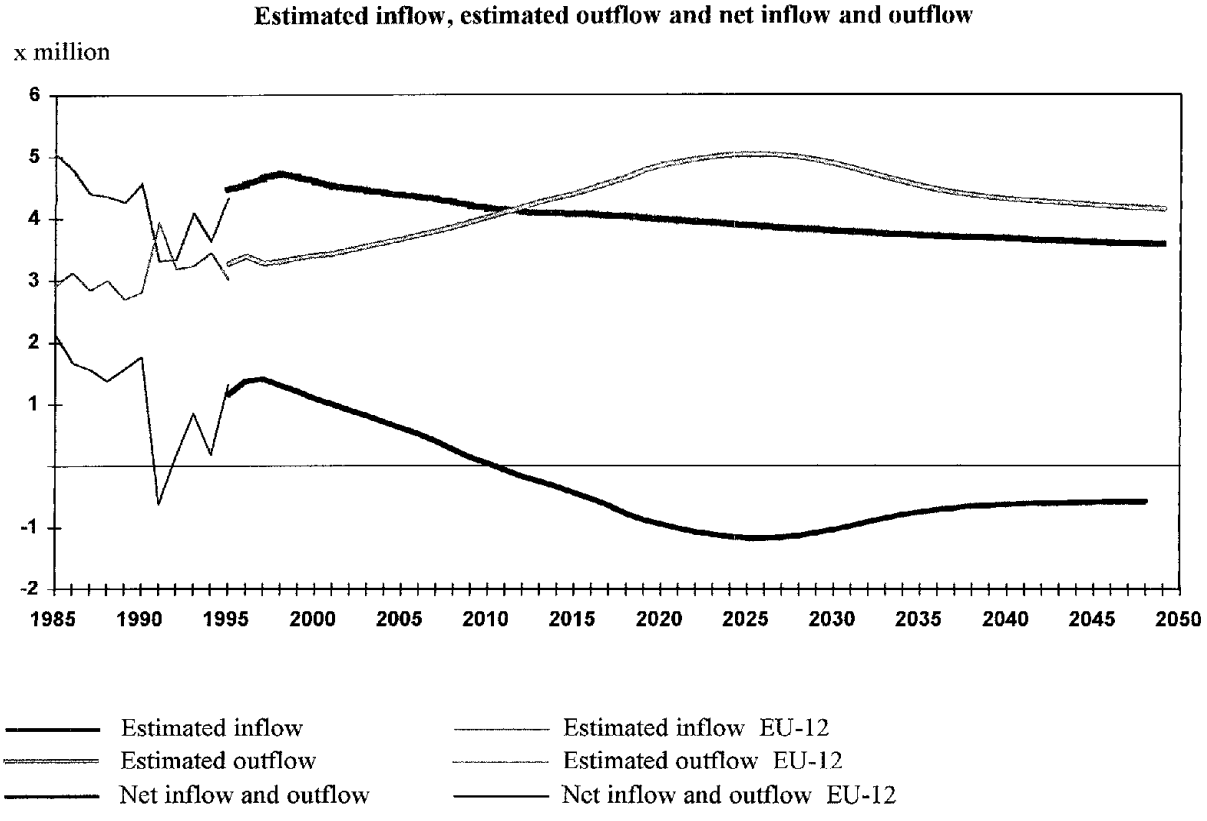
		young population & low participation			old population & high participation			baseline scenario		
	1995	2000	2020	2050	2000	2020	2050	2000	2020	2050
	x million									
Males	98	96	92	90	102	108	83	100	100	86
Females	71	72	71	70	80	91	68	76	80	69

5.2. Net inflow or outflow of the labour force

As from the age of 15, young people may enter the labour force. Most young people take a job after having completed secondary or higher education, however it is also possible for them to combine education with paid work, mostly a small part-time job.
When people get older, the outflow from the labour force becomes more important as more and more persons retire. From the available data it is possible to compute the net inflow or outflow at each age by subtracting the number of persons in the labour force at age x – 1 in year y – 1 from the number of persons in the labour force at age x in year y (situation at 1 January). This computation shows the net flow of persons of cohort c (= y – x) moving into or out of the labour force within calendar year y - 1.
According to the baseline scenario for the calendar year 2000 the inflow exceeds the outflow up to around the age of 45, leading to an increasing number of active people until 45. Therafter, the opposite situation applies. Around the age of 60 net outflow reaches its maximum: 'the retirement-peak'. In 2025 the age specific pattern of net inflow or outflow is almost the same, although the positive figures are somewhat smaller while the negative figures are considerable larger, due to the ageing of the labour force in the long run.
Given the fact that inflow in the labour force is dominant when people are young while outflow is dominant when people are fairly old, it is possible to arrive at estimated flows of inflow and outflow by seperately sum the positive and negative figures for net inflow and outflow. Although this way of computing gives a lower bound for the actual amount of inflow and outflow, it nevertheless gives an impression of future trends.
During the late 1980s the estimated inflow surpassed the estimated outflow in the EUR12. In the early 1990s both flows were about equal, probably as a result of the economic recession which had a stimulating effect on outflow (older persons being pressured to leave the labour market to make place for youngsters) and a depressing effect on inflow (youngsters having fewer job opportunities). As the economy gathered strength around the mid 1990s, the estimated inflow was rising again while estimated outflow was falling. The baseline scenario foresees that estimated inflow will continue to rise up to the turn of the century. After this the estimated inflow will slowly fall, mainly because of the number of young people in the population will fall as well. In contrast, the estimated outflow will show a rather rapid rise up to around 2025 as the ageing of the labour force will gain momentum. Up to around 2010 the net inflow and outflow will be positive. So labour demand will increase due to positive economic growth, and might be filled by this surplus. However, after 2010 a continued demand

Figure 5.2. Net inflow and outflow and estimated inflow and outflow in the labour force, EU-15, baseline scenario 1985-2050





for workers can not be met by a growing labour force, as the estimated outflow will exceed inflow. In view of the fact that total population of the EU will continue to grow up to at least 2020, this implies that unemployment might become an obsolete phenomenon in the course of the 21st century and that economic growth has to go hand in hand with higher labour productivity.

Table 5.2. Net and estimated inflow and outflow in the labour force, 1985-2050, EU-15

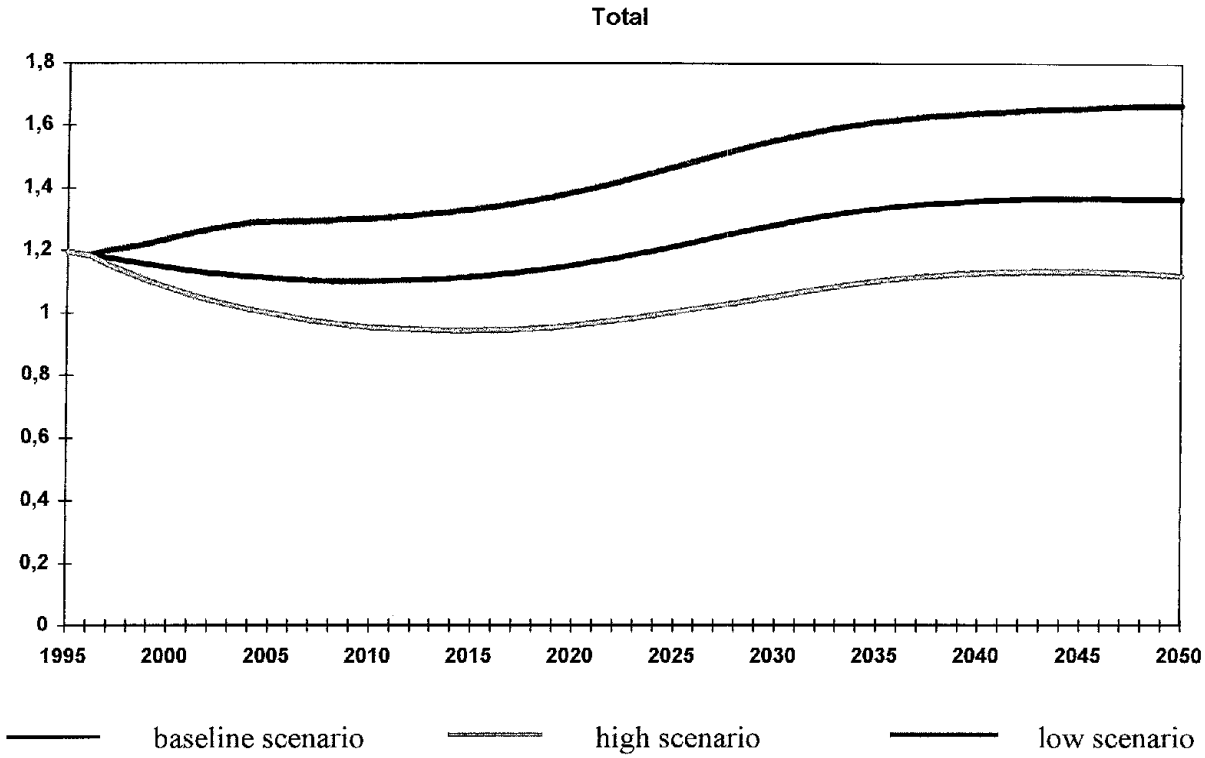
	observed		low scenario			high scenario			baseline scenario		
x mln	985[1]	1995[1]	2000	2025	2049	2000	2025	2049	2000	2025	2049
Net flow	1.7	1.3	-1.1	-1.6	-1.1	2.8	-0.4	0.5	1.2	-1.1	-0.6
Estimated inflow	4.8	4.3	3.4	3.2	2.6	5.6	5.0	5.1	4.6	3.9	3.6
Estimated outflow	3.1	3.0	4.5	4.8	3.7	2.7	5.4	4.6	3.4	5.0	4.1

[1] EU-12

5.3. Dependency ratio

The dependency ratio gives an indication of the pressure on the labour force brought to bear by providing for the non-working population. A further distinction has been made between the green pressure (by young people under 20), grey pressure (by people over 60) and the pressure exercised by non-working people at prime working ages.
According to the baseline scenario the dependency ratio is expected to decline up to 2010. However, then the decline will be reversed and rise until it is stabilised around 2040. In the low scenario the dependency ratio will already rise from 1995. This rise will continue for over 10 years and then a stable dependency ratio will apply up to around 2020 when a second period of rise will start. Compared to the baseline scenario the dependency ratio is considerable higher due to lower participation on the one hand and fewer people in their prime working ages on the other hand (while the grey segment of the population is only slightly smaller). The fall in the dependency ratio between 1995 and 2010 is more rapid in the high scenario than in the baseline scenario. This is due to the combination of higher labour force participation in the high scenario and substantially more people in their prime working ages.
According to the baseline scenario the green pressure exceeds the grey pressure up to around 2005. Due to a falling fertility rate in most EU countries the green pressure will slowly diminish up to 2025. In contrast, the grey pressure is expected to gain momentum and especially after 2010 as ageing of the post-war baby boom causes a sharply increased flow of people leaving the labour market. At the middle of the 21st century the grey pressure will be nearly twice as large as the green pressure. The prime-age pressure will be the smallest of the three components of age dependency and after a short period of fall remain nearly stable from 2010 on. The size of the prime age pressure will be about half that of the green pressure.

Figure 5.3. Dependency ratio, EU-15, 1995-2050



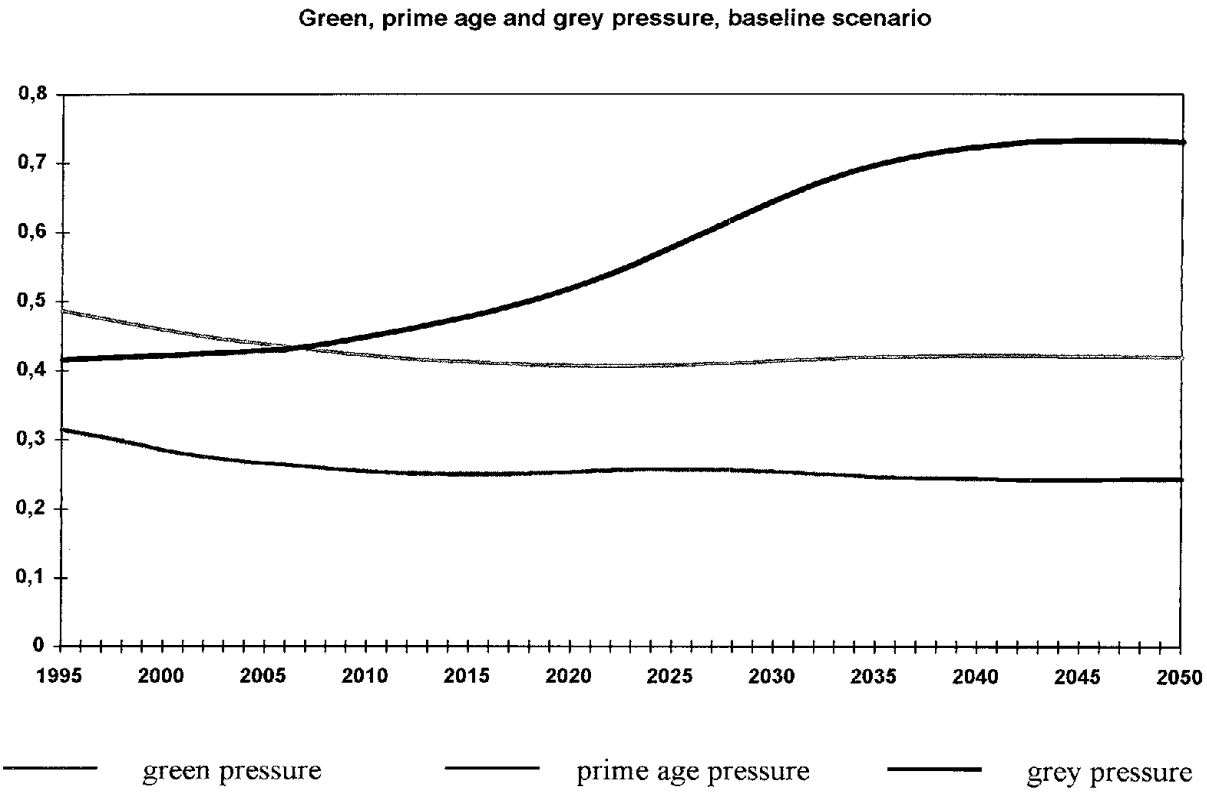


Table 5.3. Dependency ratio, EU-15, 1995-2050

	Observed	Low scenario			High scenario			Baseline scenario		
	1995	2000	2020	2050	2000	2020	2050	2000	2020	2050
Total [1]	1.2	1.2	1.4	1.7	1.1	1.0	1.1	1.1	1.2	1.4
Green pressure [2]	0.5	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4
Prime age pressure [3]	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.3	0.1	0.1
Grey pressure [4]	0.4	0.4	0.6	0.9	0.4	0.5	0.7	0.4	0.4	0.6

[1] Non-active population related to active population

[2] Population aged 19 and below related to active population

[3] Population aged 20-59 related to active population

[4] Population aged 60 and over related to active population