

2. Demographic projections

- 2.1 The population projections which are used as the basis for The 2018 Ageing Report are the ESSPOP2015 projections prepared by Eurostat and published on [] March 2017¹. Eurostat is independent of the political processes associated with the European Council of Ministers and the European Commission but produces these projections particularly for use by the Commission in preparing the Ageing Report. Some countries have been vocal in arguing that previous projections were not reasonable and Eurostat appears to have made a number of changes to methodology for the latest projections, which may be partly in response to discontent with the 2013 projections. It is important to note that the Eurostat projections for an individual country may differ materially from the population projections prepared by the country's own statistical authority. This means that some caution should be exercised in interpreting results based on the Eurostat projections, although a major virtue of them is that they aim to adopt consistent methodology across all countries, which would not be the case if individual countries' projections were used as the reference point.
- 2.2 The projections reflect some quite strong assumptions about how the population of the EU will develop in future, in particular the following:
- Fertility rates for all member states are assumed broadly to converge to similar (below replacement) levels in the very long term (2150). However, in the 2015-based projections some countries have been assumed to move quite quickly relative to the general trend and not all countries are converging to the same long-term level. Most countries are projected to have the same or slightly lower fertility in 2060 than in the previous EUROPOP2013 projections, although Spain and Slovakia have significantly higher projected fertility than before, bringing them now more into line with other countries.
 - Expectation of life for member states is projected to increase throughout the projection period, with differentials between countries, and between males and females, narrowing and converging in the very long term to the mortality of a 'leading group' of 12 countries. Most countries are projected to have slightly higher expectation of life at age 65 in 2060 than in the previous projections.
 - Migration is assumed to converge in the long-term to a position where there is no net migration between member states. Different approaches are used for modelling the short, medium and long term, with exogenous economic variables used to drive the short term projections through an econometric model, time series modelling for the medium term and use of expert opinion for the longer term. Net migration is a particularly uncertain and politically sensitive assumption, especially in the light of the quite large migratory movements in the last few years.
- 2.3 There are some quite large differences in the results produced by ESSPOP2015 compared to EUROPOP2013 on which The Ageing Report 2015 was based. We draw attention to some of the most significant of these in this report. The reality is that there is considerable uncertainty about the future evolution of the population and the magnitude of some of the forecast changes raises serious questions over whether the assumptions are sustainable.

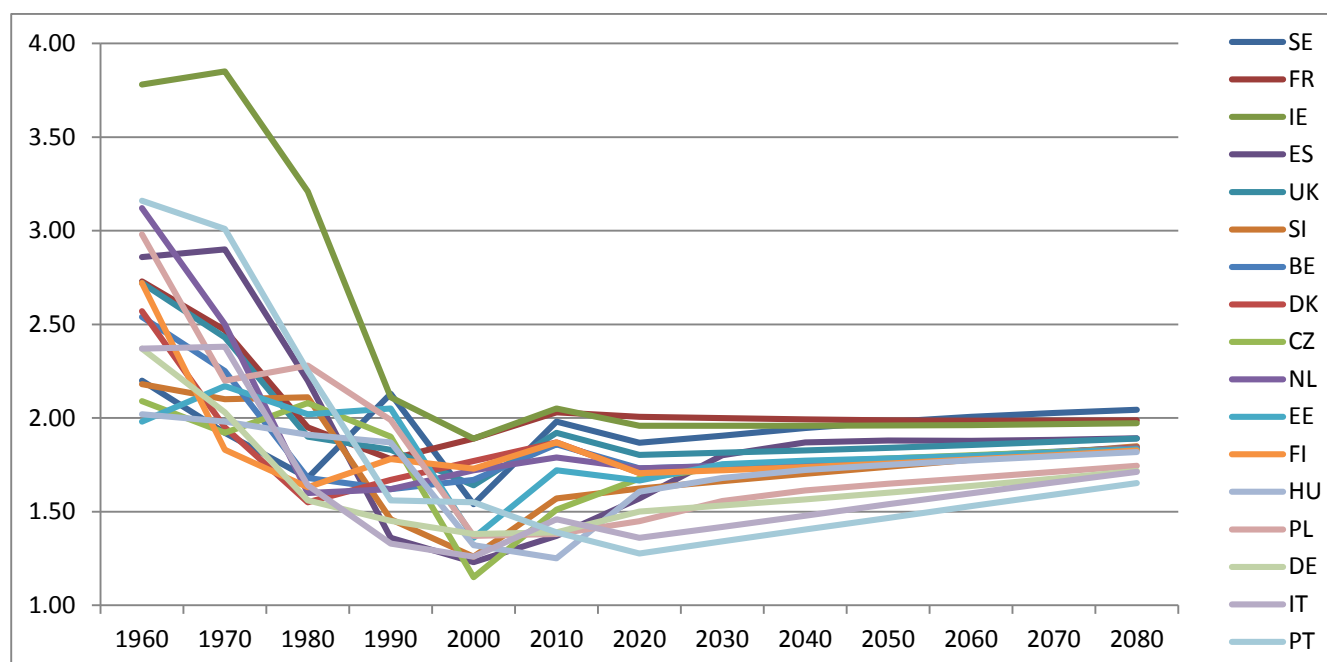
¹ more details of the projections are given in The 2018 Ageing Report: Underlying Assumptions and Projection Methodologies at [DN this is last time's reference and needs to be updated when new version is published]
http://ec.europa.eu/economy_finance/publications/european_economy/2017/pdf/ee8_en.pdf

Some feedback loops are already incorporated, such as an additional quota of immigrants being assumed in cases where the working age population is projected to be shrinking.

Fertility

- 2.4 Fertility is assumed to be converging over the very long term to a level of total fertility rate between 1.9 and 2.1. Member states are not all converging to exactly the same level. Spain, Romania, Poland, Hungary, Slovakia and Bulgaria are assumed to experience particularly strong increases in total fertility rate between 2015 and 2030, with the increase slowing down thereafter. It is not entirely clear what the rationale is for assuming that some countries which are at the same fertility level in 2015 will experience very different growth patterns of fertility in the future, but this may be an attempt to correct for what are seen as anomalously low fertility rates in 2010 and 2015, although the same 'correction' does not seem to have been applied to Greece, Italy and Portugal. By 2080 the total fertility rate in Sweden is assumed to have risen to 2.04, whilst that for Portugal has increased only to 1.65. Poland, which shows a very low TFR similar to Portugal in 2015, is expected, on the other hand, to increase to 1.74 and Greece, Croatia and Italy to around 1.70. Apart from Sweden, only France and Ireland are expected to have TFR over 1.90 in 2080. Figure 1 illustrates how this works out for 17 of the countries, which together account for about 90% of the total population of the EU at ages 15-64. A full table of the underlying figures for all EU countries is shown at Annex Table A.1.

Figure 1 Total fertility rates 1960-2080 for selection of EU member states



- 2.5 Although the assumption about convergence of the fertility levels of all member states is a strong one, there is probably a fair level of consensus that fertility levels will remain below the theoretical replacement level of 2.1 children per woman for the foreseeable future, although there would be different views on whether current differentials between countries will narrow as much as is projected. As a result these assumptions are probably relatively uncontroversial in broad terms and give a reasonable estimate of future births, although in

practice it is likely that fertility will vary a lot from year to year, as it has in the past, and differences will remain between countries, reflecting different social, economic and employment situations and different experience of inwards and outwards migration, which can materially affect fertility levels. This also assumes that member states do not adopt policies to encourage higher levels of fertility, such as higher family benefits.

- 2.6 Nevertheless, the assumption that all countries will have fertility below replacement level (2.1) for the next sixty years has a major impact on the ageing of the population. The combination of this assumption with the migration assumptions can be expected to have a dramatic effect on the future size and structure of the population in many countries.

Migration

- 2.7 The migration assumptions are more difficult. Convergence is assumed in the long term from current levels of migration but some quite complex assumptions are made for the intervening years. Separate methodologies are used for the short, medium and long term. Different assumptions are made for EU citizens and third country nationals and an attempt is made to analyse separately 'economic' migrants, refugees, family members, students and others. The forecast for the first few years (up to 2019) is based on econometric modelling driven by exogenous economic assumptions, such as the unemployment rate and GDP per capita, which are taken from the official EU forecasts. In the medium term use is made of time series modelling derived from past statistics since 2002. For the longer term the intention was to use 'expert opinion', including national views, but it is not clear to what extent Eurostat was able to implement this in time for producing the ESSPOP2015 projections. As mentioned in 2.3, one of the features is so-called 'replacement' immigration, whereby additional immigrants are assumed if the working population is projected to fall. This is designed as a compensatory mechanism to reflect the fact that countries will try to increase immigration if the economy is likely to suffer as a result of falling numbers of economically active people.
- 2.8 As we have seen recently, migration can vary a great deal, and is very sensitive to differences in economic conditions between member states (since there is free movement within the EU) and to external factors (such as the heavy migration into the EU in recent months from Africa and the Middle East as a result of wars and difficult economic conditions in the migrants' home countries). Following discussion with National Statistical Institutions, a number changes have been made to the Eurostat methodology for this round of projections to take more account, at least for the short term, of recent trends and current factors. Further changes are planned for future projections.
- 2.9 Table 1 below shows a selection of figures from the migration projections. A more complete table is given in Annex Table A.2. Thirteen countries are projected to experience cumulative immigration of more than 10% of the total 2020 population over a period of forty years, with Luxembourg somewhat off the scale with a 45% increase. At the other extreme, Lithuania is projected to lose 12.3% of its entire population through emigration, with Latvia and Romania also projected to lose a significant proportion of their population. Taking into account that the losses are mostly suffered to the working age population, and combining this migration effect with the impact of low fertility, a substantial majority of EU member states are projected to have quite significant reductions in the size of the working population, as we discuss further in 2.18. Whether or not these are realistic projections

only time will tell, but they do have a significant influence on the population projections and hence on the projections of expenditure.

Table 1 Projection of net migration flows, 2010 and 2020 to 2060

	Projection of net migration flows (000s)				Cumulative net migration 2020-2060*	Cumulative net migration as % of 2020 population
	2010	2020	2040	2060		
LT	-77.9	-23.8	-6.3	0.2	-337	-12.3%
LV	-35.6	-8.0	-1.5	0.0	-104	-5.4%
RO	-48.1	-65.1	-8.9	1.6	-840	-4.4%
BG	-17.7	-11.9	0.5	0.7	-104	-1.5%
PL	-2.1	0.0	16.2	11.6	494	1.3%
EL	-65.8	-16.8	7.9	10.5	139	1.3%
EE	-3.7	2.3	1.2	0.1	45	3.4%
HR	-4.3	-1.7	5.0	5.2	170	4.1%
SK	-4.9	5.9	6.8	3.8	231	4.2%
FR	37.6	77.0	77.3	62.2	3020	4.5%
PT	3.8	2.4	18.2	14.6	554	5.4%
CZ	14.3	21.5	20.5	8.8	672	6.3%
HU	11.5	19.9	20.8	13.8	692	7.1%
SI	-0.5	4.2	4.3	2.8	157	7.6%
FI	13.8	15.8	10.7	7.8	447	8.0%
IE	-25.8	9.9	11.4	12.2	436	9.0%
NL	32.5	66.9	43.7	28.6	1805	10.4%
UK	266.7	251.5	181.0	121.1	7215	10.7%
DE	130.2	327.3	206.0	175.0	9243	11.0%
ES	75.5	51.2	163.4	153.8	5562	11.9%
IT	200.1	161.2	217.7	176.7	7937	13.1%
DK	16.8	33.4	18.9	11.4	788	13.4%
BE	135.8	53.2	41.5	29.5	1640	14.2%
CY	15.9	1.7	3.9	4.4	147	16.9%
NO	42.2	27.3	23.7	18.1	926	17.1%
SE	49.7	67.9	44.7	27.4	1800	17.5%
MT	0.1	3.2	2.0	1.3	83	18.3%
AT	27.4	67.8	40.3	24.8	1683	18.7%
LU	7.7	10.2	7.0	4.5	280	44.6%
EU	753.0	976.3	1363.8	1036.7	55107	8.5%

*approximate calculation

Mortality

- 2.10 Expectations of life in all member states have increased significantly in recent years, some by rather more than others. However, there are still material differences between member states. For example, male expectation of life at birth in 2015 ranged from 68.8 in Lithuania to 80.3 in Sweden and female expectation of life at birth ranged from 77.9 in Bulgaria to 85.3 in Spain. Expectation of life may also differ considerably between local areas of individual countries and between populations with different characteristics.
- 2.11 Expectations of life are projected to continue to improve, with convergence towards the 'forerunner' countries, mortality for which is in turn projected to continue improving on the basis of a modified version of the Lee-Carter model. Most projections of mortality improvement in recent years, whether by actuaries or demographers, have proved too

conservative and expectations of life have continued to rise much faster than expected. Along with most national projections, the Eurostat projections assume there will be a slowing down of improvement in the future. To the extent that this proves to be a false assumption, the numbers in the older age groups could turn out to be higher, and perhaps significantly so, than the projections indicate. A few countries have recently seen a moderation in improvement for several years but it is unclear whether they will experience slower improvement in future or whether the previous relatively rapid rate of improvement will resume. It is important for decision-makers to be aware of the considerable uncertainty that there is with all such long-term projections. The published ESSPOP2015 projections include a lower mortality variant as well as the main projection.

- 2.12 Figure 2 shows projected period expectations of life at age 65 for males for a selection of member states and Figure 3 the same data for females. Although a projection of expectation of life at 65 as high as 28.2 for females in France in 2080 and 24.8 for males seems impressive, there is projected to be a range of expectations of life down to as low as 25.8 for females and 22.7 for males across the different EU member states. It is perhaps worth noting that current period expectations of life in Japan are about a year higher than in France.
- 2.13 These expectations of life are calculated based on the individual age mortality rates in the particular calendar years (known as a period expectation of life). They are a measure of mortality levels in that year but they do not provide an estimate of how long those attaining a particular age are expected to live. Cohort expectation of life, by contrast, includes an estimate of projected mortality improvement in the future years through which that generation will live, with the mortality rates assumed at each age in each future year incorporating an allowance for the anticipated reduction in mortality rates from the base year to the year for which an estimate of the mortality rate is required. Thus for someone aged 65 in year 1, the mortality rates used are those for age 65 in year 1, age 66 in year 2, age 67 in year 3 and so on, with the mortality rate in year 2 having one year's improvement, that for year 3 having two years' improvement and so on. The resulting mortality table for this example is a projection of the likely experience of a cohort of people aged 65 in the base year, following them through the rest of their lifespan. The resulting *cohort expectation of life* represents the average number of years which someone aged 65 in the base year can expect to live, allowing for the projected improvements in mortality over the rest of their lifetime.
- 2.14 For a male aged 65 in 2015 the most recent UK national population projections estimate 18.7 as the period expectation and 21.3 as the cohort expectation for those attaining age 65 in 2015. The equivalent figures for females are 21.0 as the period expectation of life and 23.6 as the cohort expectation of life. Cohort and period expectations of life at various ages in 2015 and 2060 (for the UK) are shown in Table 2. It is important to emphasize the considerable uncertainty implicit in cohort expectations for 2060, which take into account projected mortality up to 2110. Unfortunately the cohort expectations are not routinely published by Eurostat, even though they are more useful for determining the true expectation of life for a group of pensioners (see also paragraph 3.42 regarding the use of period instead of cohort expectations in the context of proposals to raise the eligibility age for social security pensions).

Figure 2 Male expectation of life at age 65 to 2080 for selected member states

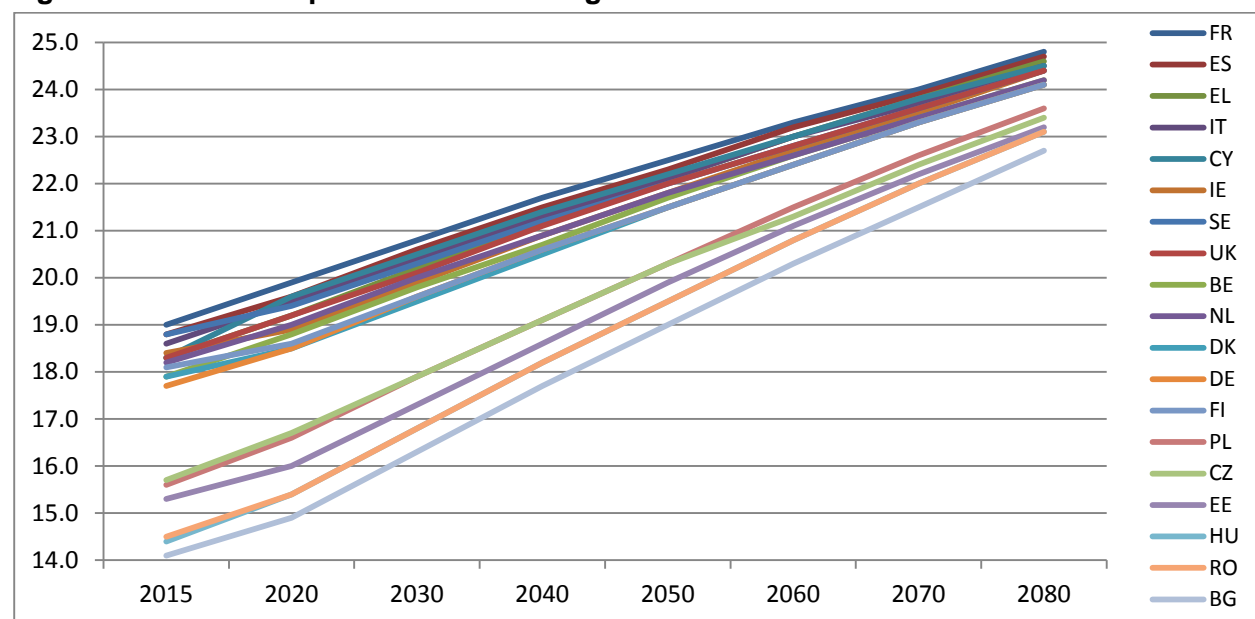


Figure 3 Female expectation of life at age 65 to 2080 for selected member states

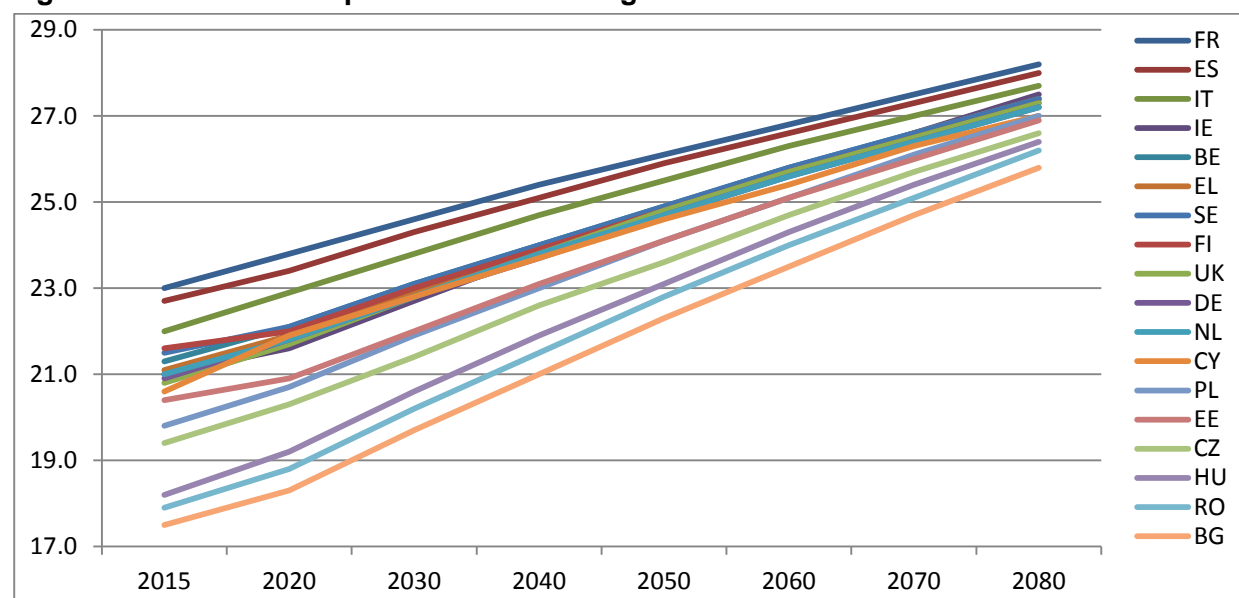


Table 2 Cohort and period expectations of life for 2015 and 2060 in the UK

Age	Males 2015		Males 2060		Females 2015		Females 2060	
	Cohort	Period	Cohort	Period	Cohort	Period	Cohort	Period
60	25.9	22.7	31.2	28.7	28.3	25.3	33.3	30.7
65	21.3	18.7	26.3	24.3	23.6	21.0	28.3	26.2
70	16.9	14.9	21.6	20.1	19.0	16.9	23.4	21.8
75	12.9	11.4	17.3	16.2	14.7	13.1	18.8	17.6
80	9.4	8.4	13.3	12.6	10.7	9.7	14.6	13.7

Source: Principal 2014-based population projections of the United Kingdom **DN Update in October 2017**

- 2.15 One useful measure of the ageing of the population from improving expectation of life (quite apart from the changing structure arising from low fertility and from migration) is given by the increase in the pension entitlement age which would be necessary to maintain a constant expectation of life after that age for successive cohorts or generations. Table 3 shows the way in which the pension entitlement age would change for the UK (for which the cohort expectations are readily available) in order to maintain expectations of life at the entitlement age of 23.6 for females and 21.3 for males.

Table 3 Evolution of pension entitlement age for the UK to maintain the cohort life expectancy at that age (21.3 for males and 23.6 for females)

Year	Pension entitlement age for males	Pension entitlement age for females
2015	65.0	65.0
2020	65.8	65.5
2025	66.3	66.1
2030	67.0	66.7
2035	67.5	67.2
2040	68.1	67.7
2045	68.7	68.2
2050	69.2	68.8
2055	69.8	69.3
2060	70.3	69.8

- 2.16 This is equivalent to an increase of the pension entitlement age of 1.1 years per decade for females and 1.2 years per decade for males. These estimates are based on the Principal 2014-based population projections for the UK. However, there is considerable uncertainty about future mortality improvement and the UK also publishes High Life Expectancy and Low Life Expectancy projections to give a range around the Principal projections.

Population

- 2.17 Overall the population of the current member states of the EU is projected to grow from 508 million in 2015 to 529 million in 2050 and then to fall back a little. Leaving out the UK reduces the total population of the EU in 2015 to 444 million, which is projected to rise to 451 million in 2050, falling thereafter to 436 million in 2080. A summary of the projections by member state is given at Annex Table A.3. About half of the member states are expected to grow in overall population size and half to reduce, with three countries (Bulgaria, Latvia and Lithuania) projected to experience a reduction of more than a third by 2080, whereas three countries (Ireland, Luxembourg and Sweden) are projected to grow by more than a third by 2080. The population of the largest seven countries in 2013 and 2060, accounting for about 75% of the total EU population, is projected to change as follows:

Table 4 Member states with the largest populations in 2015 and 2080

	<u>2015 (millions)</u>		<u>2080 (millions)</u>	<u>Increase 2015-2080</u>
Germany	81.2	France	78.7	+18.5%
France	66.4	Germany	77.8	-4.2%
UK	64.9	Italy	53.8	-11.5%
Italy	60.8	Spain	51.0	9.8%
Spain	46.4	Poland	29.0	-23.6%
Poland	38.0	Netherlands	19.7	16.7%
Romania	19.9	Romania	14.5	-26.9%
Total EU	508.4	Total EU	436.4	-14.2%

Working age population

- 2.18 The population of the EU between the ages of 15 and 65 is projected to fall by 17% between 2015 and 2080 (excluding the UK). A summary of the projections by member state is given at Annex Table A.5. 20 member states are projected to have a decline in the population aged from 15 to 64 by 2080, 12 of them by more than 25% and 8 by more than 35%. Only 7 member states are projected to have an increase in this age group, which characterises the potential working population, although in practice the younger part of this age group will have a significant proportion still in education and employment rates over age 55 are modest in some countries. Table 5 shows the projected change in 'working age' population by member state and for the EU as a whole.

Table 5 Projected change in population aged from 15 to 64, 2015 to 2080

	% Change 2015-2080		% Change 2015-2080		% Change 2015-2080
LT	-52.0	EE	-26.9	MT	-0.7
BG	-47.2	HU	-26.7	NL	0.3
EL	-45.7	CZ	-22.3	DK	4.8
LV	-45.5	SI	-22.2	FR	6.4
PT	-42.2	DE	-19.2	BE	11.0
PL	-41.2	EU*	-16.9	IE	17.8
RO	-39.7	FI	-11.7	SE	33.3
HR	-36.3	CY	-6.5	LU	55.2
SK	-32.8	ES	-5.8		
IT	-26.9	AT	-3.0	[UK	10.9]

*EU excluding UK in both 2015 and 2080

- 2.19 While such changes are not impossible, they would represent a major diminution of the size of the potential working population in many countries, which could be expected to provide a significant headwind to economic growth. In practice the projected decline could be offset by increased levels of net inwards migration or by a significant increase in the proportion employed at younger and older ages and, in particular, over the age of 65. Another possibility is that fertility rates may increase in response to declining population, perhaps encouraged by family friendly employment policies, including higher family benefits and better child care arrangements.

Younger population

- 2.20 The younger age population (defined as up to the age of 15) is also projected to decline for the EU as a whole (excluding the UK throughout), with a decrease of 3.1% between 2015 and 2080. A summary of the projections by member state is given at Annex Table A.4. 16 member states are projected to have a fall of more than one third in this section of the population and another 4 member states by more than one quarter. Whilst a fall in the younger population may result in cost savings on education, health care and financial support for dependants, the reduction in population at these ages does not bode well for the working population in years beyond the end of these projections.

Older population

- 2.21 On the other hand, the population aged 65 and over is projected to grow by more than 50% for the EU as a whole (excluding the UK), from 84.6 million to 128.1 million. A summary of the projections by member state is given at Annex Table A.6. The older population is projected to increase by more than 90% in 9 member states and by more than 150% in three countries (Ireland, Cyprus and Luxembourg). Clearly this represents a major increase in dependency at older ages, with the situation being exacerbated for

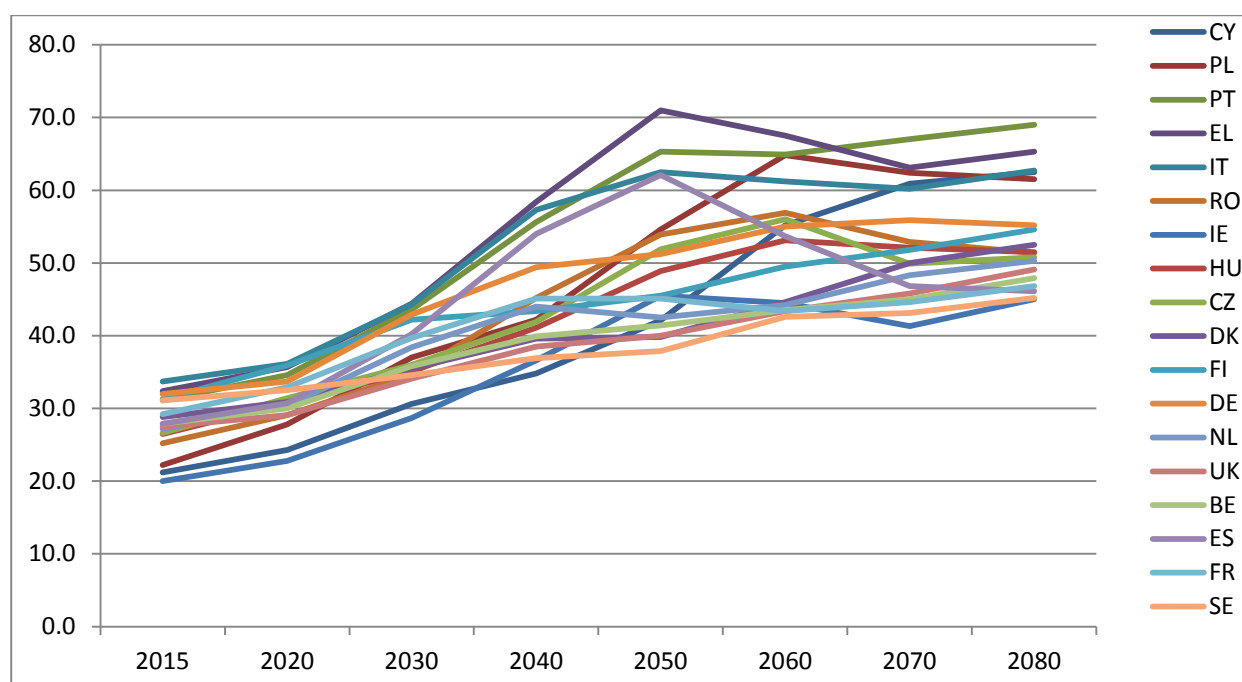
dependency ratios by the fall in the working population, as we will see in later paragraphs.

- 2.22 The rates of growth of the very elderly are significantly higher. For the EU as a whole (excluding the UK) the population aged 80 and over is projected to grow by 135%, from 23.8 million to 56.1 million. A summary of the projections by member state is given at Annex Table A.7. The projections show 13 member states with increases of more than 150% and 4 with more than 300% (Ireland, Cyprus, Luxembourg and Malta). The growth in the numbers of the very elderly has important implications for the costs of healthcare and long term care, for which utilisation rates typically rise quite steeply at ages 80 and above.
- 2.23 The population aged 90 and over is projected to grow even more dramatically. For the EU as a whole (excluding the UK) the population aged 90 and over is projected to grow by 388%, from 3.7 million to 18.0 million. A summary of the projections by member state is given at Annex Table A.8. The projections show 13 member states with increases of more than 500% and 6 with more than 750% (Cyprus, Luxembourg, Slovakia, Malta, Ireland and Poland).
- 2.24 At present there are relatively few centenarians in the EU, with 108,326 estimated in 2015 (excluding the UK). However, this number is projected to rise by 1262% over the 65 years to 2080, by which time the number is projected to be 1.48 million. A summary of the projections by member state is given at Annex Table A.9. For 5 countries the rise is projected to be more than 3000% (Luxembourg, Czech Republic, Slovakia, Malta and Bulgaria).

Old-age Dependency Ratios

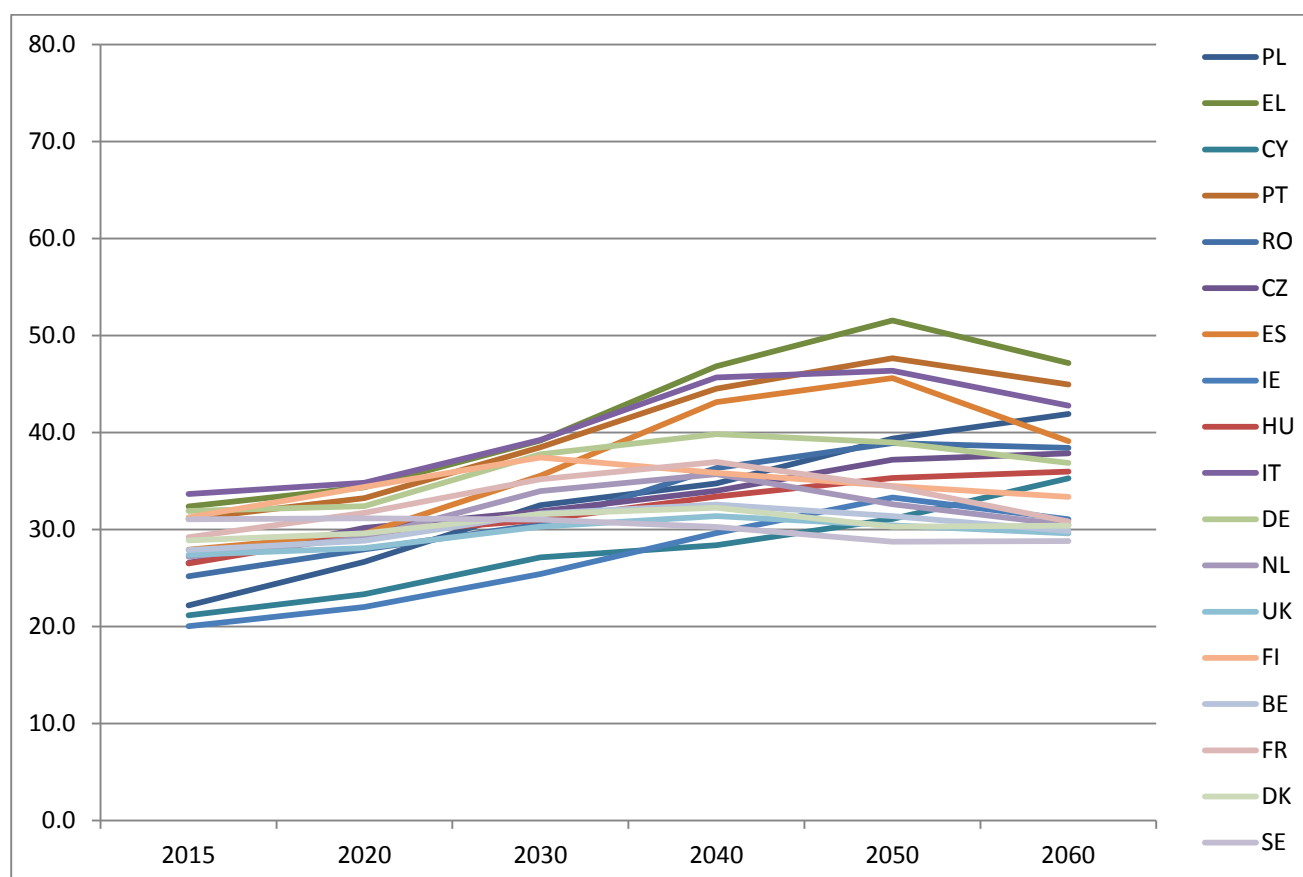
- 2.25 Of more significance perhaps than total population is the shape of the population pyramid and the relationship between numbers in the productive working ages and numbers over retirement age. This is measured using the old-age dependency ratio, which is classically defined as the numbers aged 65 and over as a proportion of the numbers aged from 15 to 64. Figure 4 shows the development of this ratio for a selection of member states. The data for all member states is given in Annex Table A.10.

Figure 4 Ratio of projected population aged 65 and over to projected population aged 15 to 64 from 2015 to 2080 for selected member states



- 2.26 For the EU as a whole the old-age dependency ratio defined in this way is projected to increase rapidly from 28.8% in 2015 to 50.3% in 2050 and then much more slowly to 52.3% in 2080. In other words the population structure will go from three working age people per person over 65 to only two. This phenomenon, which is often described as the ageing of the population, is the combined result of four factors: increased expectation of life over age 65, low fertility leading to slow growth of the population from natural increase, the current age structure of the population (reflecting past peaks and troughs in births and migration) and future net migration, for most countries principally affecting working ages.
- 2.27 Both the increased expectation of life at older ages and the projected evolution of the size of the work-force point in the direction of increasing the eligibility age for pensions and social security benefits, probably by at least five years over the period to 2060. If we rework the old-age dependency ratios to reflect the ratio of those aged 70 or more to those aged from 15 to 69 in 2060, with a gradual transition from the definition based on age 65 in 2013, the rises illustrated in Figure 5 are much more modest than shown in Figure 4, although still quite significant for some countries. Figures for the evolution of the dependency ratios on this basis are shown for all countries in Annex Table A.11.
- 2.28 Some member states would need to increase the eligibility age faster to offset the rising old-age dependency ratio, but then might be able to level off by the 2040s. For others this would not be an adequate policy instrument to stem the decline in working age population. It should be emphasized also that true financial dependency will depend on how many people stay in work to older ages in the light of rising eligibility ages.

Figure 5 Ratio of projected population aged X and over to projected population aged 15 to X from 2015 to 2060, where X increases linearly from 65 to 70 by 2060



Demographic Projections – Summary

- 2.29 In this section we have examined some key aspects of the Eurostat population projections which are used as the basis for the projections of future public expenditure in The Ageing Report 2018. It is important to remember that these are projections based on a set of plausible assumptions, rather than forecasts. In order to be consistent between member states, some of the assumptions are rather formulaic and may not be entirely realistic. In practice the future is likely to differ, possibly materially, from the assumptions made. Particularly significant in terms of the conclusions to be drawn would be continuing faster growth in life expectancy at older ages and changing patterns of net migration at working ages. One of the challenges of achieving sustainability of pension costs is to find ways of reducing the impact of uncertainty about future mortality improvement through design features. The AAE would emphasize the importance of looking at the sensitivity of the projections to key assumptions in order to understand better the resilience of pension systems to a wide range of possible future outcomes.

Annex Table A.1 Fertility rates, 1960-2080

	Births per woman													
	1960	1970	1980	1990	2000	2010	2015	2020	2030	2040	2050	2060	2070	2080
BE	2.54	2.25	1.68	1.62	1.67	1.86	1.70	1.73	1.75	1.76	1.78	1.80	1.82	1.84
BG	2.31	2.17	2.05	1.82	1.26	1.57	1.52	1.62	1.69	1.73	1.76	1.78	1.80	1.82
CZ	2.09	1.92	2.08	1.90	1.15	1.51	1.57	1.68	1.74	1.76	1.78	1.80	1.82	1.84
DK	2.57	1.95	1.55	1.67	1.77	1.87	1.71	1.71	1.73	1.75	1.77	1.79	1.82	1.84
DE	2.37	2.03	1.56	1.45	1.38	1.39	1.49	1.50	1.53	1.57	1.60	1.64	1.68	1.72
EE	1.98	2.17	2.02	2.05	1.36	1.72	1.59	1.67	1.75	1.77	1.78	1.80	1.81	1.83
IE	3.78	3.85	3.21	2.11	1.89	2.05	1.92	1.96	1.96	1.96	1.96	1.96	1.97	1.97
EL	2.23	2.40	2.23	1.40	1.27	1.51	1.33	1.33	1.40	1.46	1.52	1.58	1.64	1.70
ES	2.86	2.90	2.20	1.36	1.23	1.37	1.33	1.57	1.80	1.87	1.88	1.88	1.88	1.89
FR	2.73	2.47	1.95	1.78	1.89	2.03	1.96	2.01	2.00	1.99	1.99	1.99	1.99	1.99
HR						1.55	1.40	1.47	1.51	1.54	1.58	1.61	1.65	1.70
IT	2.37	2.38	1.64	1.33	1.26	1.46	1.34	1.36	1.42	1.48	1.54	1.60	1.66	1.71
CY	3.51	2.54	2.47	2.41	1.64	1.44	1.30	1.35	1.40	1.45	1.51	1.56	1.62	1.67
LV		2.00	1.88	2.01	1.25	1.36	1.70	1.83	1.85	1.85	1.85	1.86	1.87	1.88
LT	2.60	2.40	1.99	2.03	1.39	1.50	1.70	1.71	1.76	1.79	1.81	1.82	1.84	1.85
LU	2.29	1.97	1.50	1.60	1.76	1.63	1.47	1.54	1.57	1.60	1.63	1.66	1.69	1.73
HU	2.02	1.98	1.91	1.87	1.32	1.25	1.45	1.61	1.68	1.72	1.75	1.77	1.80	1.82
MT	3.62	2.02	1.99	2.04	1.70	1.36	1.45	1.54	1.62	1.67	1.70	1.72	1.75	1.77
NL	3.12	2.50	1.60	1.62	1.72	1.79	1.65	1.73	1.74	1.76	1.77	1.79	1.81	1.84
AT	2.69	2.29	1.65	1.46	1.36	1.44	1.49	1.49	1.53	1.56	1.59	1.62	1.66	1.70
PL	2.98	2.20	2.28	1.99	1.37	1.38	1.32	1.45	1.56	1.61	1.65	1.68	1.71	1.74
PT	3.16	3.01	2.25	1.56	1.55	1.39	1.31	1.28	1.34	1.40	1.47	1.53	1.59	1.65
RO			2.43	1.83	1.31	1.54	1.47	1.72	1.81	1.85	1.87	1.88	1.89	1.90
SI	2.18	2.10	2.11	1.46	1.26	1.57	1.57	1.62	1.66	1.70	1.74	1.78	1.81	1.85
SK	3.04	2.41	2.32	2.09	1.30	1.43	1.40	1.47	1.60	1.68	1.74	1.79	1.82	1.85
FI	2.72	1.83	1.63	1.78	1.73	1.87	1.65	1.71	1.72	1.74	1.76	1.78	1.80	1.83
SE	2.20	1.92	1.68	2.13	1.54	1.98	1.85	1.87	1.91	1.95	1.98	2.01	2.03	2.04
UK	2.72	2.43	1.90	1.83	1.64	1.92	1.80	1.80	1.81	1.83	1.84	1.86	1.87	1.89
NO	2.90	2.50	1.72	1.93	1.85	1.95	1.73	1.74	1.76	1.77	1.79	1.81	1.83	1.85

Annex Table A.2 Projection of net migration flows, 1980-2060

	Net migration flows (000s)				Projection of net migration flows (000s)					Cumulative net migration 2020-2060	2020 popn (millions)	Cumulative net mign as % of 2020 popn
	1980	1990	2000	2010	2020	2030	2040	2050	2060			
LT	2.1	-8.8	-20.3	-77.9	-23.8	-17.0	-6.3	1.3	0.2	-337.0	2.7	-12.3%
LV	2.4	-13.1	-16.4	-35.6	-8.0	-6.1	-1.5	1.2	0.0	-104.2	1.9	-5.4%
RO	52.9	-86.8	-3.7	-48.1	-65.1	-51.1	-8.9	7.7	1.6	-840.5	19.3	-4.4%
BG	0.0	-94.6	0.0	-17.7	-11.9	-9.1	0.5	3.9	0.7	-103.6	7.0	-1.5%
PL	-24.1	-12.6	-19.7	-2.1	0.0	-2.4	16.2	29.7	11.6	494.3	37.9	1.3%
EL	55.8	63.9	29.4	-65.8	-16.8	-4.1	7.9	13.3	10.5	139.4	10.6	1.3%
EE	6.1	-5.6	-3.2	-3.7	2.3	1.4	1.2	0.7	0.1	45.2	1.3	3.4%
HR	-14.7	6.4	-52.4	-4.3	-1.7	4.2	5.0	6.0	5.2	169.8	4.1	4.1%
SK	-11.5	-2.3	22.3	-4.9	5.9	5.0	6.8	6.5	3.8	230.8	5.5	4.2%
FR			166.8	37.6	77.0	85.9	77.3	69.2	62.2	3020.2	67.8	4.5%
PT	42.0	-39.1	67.1	3.8	2.4	12.8	18.2	15.8	14.6	553.6	10.2	5.4%
CZ	-41.2	-58.9	-28.0	14.3	21.5	17.5	20.5	14.0	8.8	672.1	10.7	6.3%
HU	0.0	18.3	16.7	11.5	19.9	16.2	20.8	15.3	13.8	692.5	9.8	7.1%
SI	5.4	-0.2	2.7	-0.5	4.2	4.1	4.3	3.8	2.8	156.9	2.1	7.6%
FI	-2.2	8.6	2.4	13.8	15.8	13.7	10.7	8.5	7.8	447.3	5.6	8.0%
IE	-0.6	-7.7	31.2	-25.8	9.9	7.5	11.4	13.7	12.2	436.1	4.9	9.0%
NL	50.6	48.7	57.0	32.5	66.9	59.5	43.7	29.6	28.6	1805.0	17.4	10.4%
UK	-33.5	24.7	143.9	266.7	251.5	220.1	181.0	134.2	121.1	7215.2	67.2	10.7%
DE	304.4	656.2	167.9	130.2	327.3	268.1	206.0	199.0	175.0	9243.0	83.8	11.0%
ES	112.7	-20.0	389.8	75.5	51.2	119.4	163.4	170.9	153.8	5562.5	46.6	11.9%
IT	4.9	22.3	49.5	200.1	161.2	209.7	217.7	197.4	176.7	7937.0	60.7	13.1%
DK	0.6	8.6	10.1	16.8	33.4	26.8	18.9	10.7	11.4	787.8	5.9	13.4%
BE	-2.4	19.5	12.8	135.8	53.2	48.3	41.5	32.8	29.5	1640.1	11.6	14.2%
CY	0.8	8.7	4.0	15.9	1.7	2.9	3.9	4.9	4.4	147.1	0.9	16.9%
NO	3.7	1.8	9.7	42.2	27.3	26.0	23.7	20.2	18.1	926.0	5.4	17.1%
SE	9.6	34.8	24.4	49.7	67.9	57.2	44.7	30.5	27.4	1799.9	10.3	17.5%
MT	0.4	0.9	0.9	0.1	3.2	2.6	2.0	1.4	1.3	82.7	0.5	18.3%
AT	9.4	58.6	17.3	27.4	67.8	55.4	40.3	26.3	24.8	1683.1	9.0	18.7%
LU	1.3	3.9	3.4	7.7	10.2	8.7	7.0	5.0	4.5	280.2	0.6	44.6%
EU	575.1	661.7	1031.9	753.0	976.3	1244.1	1363.8	1188.3	1036.7	55107.0	515.6	8.5%

Annex Table A.3 Projection of total population, 2015-2080, millions

	2015	2020	2030	2040	2050	2060	2070	2080	% Change 2015-2060	% Change 2015-2080
BE	11.2	11.6	12.3	12.8	13.3	13.6	13.9	14.2	21.2	26.6
BG	7.2	7.0	6.4	5.9	5.6	5.2	4.9	4.6	-27.4	-36.2
CZ	10.5	10.7	10.7	10.6	10.5	10.3	10.0	9.8	-2.2	-7.2
DK	5.7	5.9	6.3	6.6	6.7	6.8	6.8	6.9	19.4	21.2
DE	81.2	83.8	84.6	84.1	82.7	80.8	79.3	77.8	-0.5	-4.2
EE	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.1	-7.0	-13.2
IE	4.6	4.9	5.1	5.4	5.7	5.9	6.0	6.2	27.4	34.4
EL	10.9	10.6	9.9	9.4	8.9	8.3	7.7	7.3	-23.6	-33.1
ES	46.4	46.6	47.1	48.2	49.3	49.6	49.8	51.0	6.7	9.8
FR	66.4	67.8	70.5	72.9	74.4	75.5	76.9	78.7	13.7	18.5
HR	4.2	4.1	4.0	3.8	3.7	3.5	3.4	3.3	-16.4	-22.5
IT	60.8	60.7	60.4	60.0	59.0	56.9	54.9	53.8	-6.3	-11.5
CY	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.0	19.5	18.6
LV	2.0	1.9	1.7	1.6	1.5	1.4	1.3	1.3	-28.2	-35.3
LT	2.9	2.7	2.4	2.1	2.0	1.8	1.7	1.7	-37.1	-43.2
LU	0.6	0.6	0.8	0.9	0.9	1.0	1.0	1.1	76.4	89.4
HU	9.9	9.8	9.7	9.5	9.3	9.1	8.9	8.7	-7.5	-11.8
MT	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	20.9	20.5
NL	16.9	17.4	18.4	19.0	19.2	19.3	19.5	19.7	14.3	16.7
AT	8.6	9.0	9.7	10.1	10.2	10.2	10.2	10.1	19.3	17.4
PL	38.0	37.9	37.2	35.8	34.4	32.8	31.0	29.0	-13.6	-23.6
PT	10.4	10.2	9.9	9.6	9.1	8.6	8.0	7.6	-17.6	-26.9
RO	19.9	19.3	18.0	17.1	16.3	15.7	15.0	14.5	-21.0	-26.9
SI	2.1	2.1	2.1	2.1	2.0	2.0	2.0	1.9	-3.0	-6.0
SK	5.4	5.5	5.5	5.4	5.3	5.1	4.9	4.7	-5.7	-13.0
FI	5.5	5.6	5.7	5.7	5.7	5.7	5.6	5.6	3.3	1.9
SE	9.7	10.3	11.2	12.0	12.7	13.3	13.8	14.4	36.3	47.6
UK	64.9	67.2	71.6	75.0	77.6	79.3	81.0	82.4	22.3	27.1
NO	5.2	5.4	5.9	6.3	6.6	6.8	7.0	7.2	31.8	38.7
EU	508.4	515.6	523.8	528.4	528.6	524.6	520.4	518.8	3.2	2.0
EU ex UK	443.5	448.4	452.3	453.4	451.0	445.3	439.4	436.4	0.4	-1.6

Annex Table A.4 Projection of population aged 0-14, 2015-2080, millions

	2015	2020	2030	2040	2050	2060	2070	2080	% Change 2015-2080
BE	1.9	2.0	2.0	2.1	2.2	2.2	2.2	2.3	18.4
BG	1.0	1.0	0.9	0.8	0.8	0.7	0.7	0.7	-33.5
CZ	1.6	1.7	1.6	1.5	1.6	1.6	1.5	1.5	-6.0
DK	1.0	1.0	1.0	1.1	1.0	1.0	1.1	1.0	7.6
DE	10.7	11.2	11.8	11.2	10.8	11.2	11.0	10.7	0.2
EE	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-18.1
IE	1.0	1.1	1.0	0.9	1.0	1.1	1.0	1.1	7.0
EL	1.6	1.5	1.2	1.1	1.1	1.0	0.9	1.0	-38.6
ES	7.1	6.9	6.5	7.0	7.7	7.8	8.1	8.6	22.0
FR	12.4	12.3	12.4	12.8	13.0	12.9	13.2	13.3	7.7
HR	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	-29.3
IT	8.4	8.0	7.0	7.1	7.1	6.9	6.9	7.1	-15.4
CY	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-16.8
LV	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	-30.6
LT	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	-40.5
LU	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	67.9
HU	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3	-9.4
MT	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	23.0
NL	2.8	2.8	2.9	3.1	3.0	3.0	3.1	3.0	7.6
AT	1.2	1.3	1.4	1.4	1.4	1.4	1.4	1.4	12.5
PL	5.7	5.8	5.2	4.6	4.5	4.4	4.1	4.0	-30.2
PT	1.5	1.3	1.1	1.1	1.1	1.0	0.9	0.9	-36.6
RO	3.1	2.9	2.7	2.5	2.4	2.4	2.3	2.3	-25.5
SI	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	-0.3
SK	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	-17.0
FI	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	-8.6
SE	1.7	1.8	2.0	2.1	2.2	2.3	2.4	2.5	47.6
UK	11.5	11.9	12.2	12.5	12.7	12.9	13.0	13.1	14.1
NO	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.1	19.4
EU	79.3	79.9	78.1	77.7	78.2	78.2	78.1	78.9	-0.6
EU ex UK	67.8	68.0	65.9	65.1	65.5	65.3	65.1	65.8	-3.1

Annex Table A.5 Projection of population aged 15-64, 2015-2080, millions

	2015	2020	2030	2040	2050	2060	2070	2080	% Change 2015-2080
BE	7.3	7.4	7.5	7.7	7.9	7.9	8.1	8.1	11.0
BG	4.8	4.4	3.9	3.5	3.0	2.8	2.7	2.5	-47.2
CZ	7.1	6.8	6.7	6.4	5.9	5.6	5.7	5.5	-22.3
DK	3.6	3.8	3.9	3.9	4.0	4.0	3.8	3.8	4.8
DE	53.4	54.3	50.9	48.8	47.5	44.9	43.8	43.2	-19.2
EE	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.6	-26.9
IE	3.0	3.1	3.2	3.3	3.2	3.4	3.5	3.5	17.8
EL	7.0	6.7	6.1	5.3	4.6	4.4	4.1	3.8	-45.7
ES	30.8	30.4	29.0	26.7	25.6	27.2	28.4	29.0	-5.8
FR	41.8	41.8	41.6	41.4	42.3	43.7	44.1	44.5	6.4
HR	2.8	2.6	2.4	2.3	2.1	2.0	1.9	1.8	-36.3
IT	39.2	38.8	36.9	33.6	31.9	31.0	30.0	28.7	-26.9
CY	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	-6.5
LV	1.3	1.2	1.0	0.9	0.8	0.7	0.7	0.7	-45.5
LT	1.9	1.8	1.4	1.2	1.1	0.9	1.0	0.9	-52.0
LU	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.6	55.2
HU	6.7	6.4	6.1	5.7	5.3	5.1	5.0	4.9	-26.7
MT	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	-0.7
NL	11.1	11.2	11.2	11.1	11.4	11.3	11.1	11.1	0.3
AT	5.8	6.0	6.1	6.1	6.1	5.8	5.7	5.6	-3.0
PL	26.4	25.1	23.3	22.0	19.3	17.3	16.6	15.5	-41.2
PT	6.8	6.6	6.1	5.4	4.9	4.6	4.2	3.9	-42.2
RO	13.4	12.7	11.4	10.1	9.0	8.5	8.3	8.1	-39.7
SI	1.4	1.3	1.3	1.2	1.1	1.1	1.1	1.1	-22.2
SK	3.8	3.7	3.5	3.3	3.0	2.8	2.7	2.6	-32.8
FI	3.5	3.4	3.4	3.4	3.3	3.2	3.2	3.1	-11.7
SE	6.2	6.4	6.9	7.2	7.6	7.7	8.0	8.2	33.3
UK	41.9	42.8	44.3	45.2	46.3	46.4	46.6	46.5	10.9
NO	3.4	3.5	3.7	3.8	4.0	4.0	4.0	4.0	19.1
EU	333.0	331.0	320.6	308.0	299.7	294.3	292.5	288.5	-13.4
EU ex UK	291.1	288.2	276.3	262.9	253.4	247.9	245.8	242.0	-16.9

Annex Table A.6 Projection of population aged 65 and over, 2015-2080, millions

	2015	2020	2030	2040	2050	2060	2070	2080	% Change 2015-2080
BE	2.0	2.2	2.7	3.1	3.3	3.4	3.6	3.9	90.2
BG	1.4	1.5	1.6	1.7	1.8	1.7	1.5	1.4	-1.5
CZ	1.9	2.1	2.4	2.7	3.0	3.1	2.8	2.8	48.6
DK	1.1	1.2	1.4	1.6	1.6	1.8	1.9	2.0	90.2
DE	17.1	18.3	21.8	24.1	24.3	24.7	24.5	23.9	40.1
EE	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.3	38.1
IE	0.6	0.7	0.9	1.2	1.5	1.5	1.5	1.6	164.6
EL	2.3	2.4	2.7	3.1	3.3	2.9	2.6	2.5	9.5
ES	8.6	9.3	11.6	14.4	15.9	14.6	13.3	13.4	55.5
FR	12.2	13.8	16.5	18.7	19.0	19.0	19.7	20.9	70.6
HR	0.8	0.9	1.0	1.0	1.1	1.1	1.1	1.0	32.0
IT	13.2	14.0	16.4	19.3	19.9	19.0	18.0	18.0	36.2
CY	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	176.3
LV	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	-4.7
LT	0.5	0.6	0.6	0.7	0.6	0.6	0.5	0.5	-14.1
LU	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	280.2
HU	1.8	2.0	2.1	2.4	2.6	2.7	2.6	2.5	42.4
MT	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	95.4
NL	3.0	3.4	4.3	4.9	4.8	5.0	5.4	5.6	85.6
AT	1.6	1.7	2.2	2.6	2.8	3.0	3.1	3.1	94.9
PL	5.9	7.0	8.6	9.3	10.5	11.2	10.3	9.6	63.3
PT	2.1	2.3	2.7	3.0	3.2	3.0	2.8	2.7	28.5
RO	3.4	3.7	3.9	4.5	4.9	4.8	4.4	4.2	23.0
SI	0.4	0.4	0.5	0.6	0.6	0.6	0.6	0.6	50.1
SK	0.8	0.9	1.1	1.3	1.5	1.6	1.5	1.5	91.3
FI	1.1	1.2	1.4	1.5	1.5	1.6	1.6	1.7	54.2
SE	1.9	2.1	2.4	2.7	2.9	3.3	3.4	3.7	94.3
UK	11.5	12.5	15.1	17.4	18.5	20.2	21.4	22.8	98.8
NO	0.8	0.9	1.2	1.4	1.6	1.7	1.9	2.0	141.2
EU	96.1	105.2	125.2	142.7	150.6	152.1	149.9	151.0	57.1
EU ex UK	84.6	92.7	110.1	125.3	132.1	132.0	128.5	128.1	51.5

Annex Table A.7 Projection of population aged 80 and over, 2015-2080, millions

	2015	2020	2030	2040	2050	2060	2070	2080	% Change 2015-2080
BE	0.6	0.7	0.8	1.0	1.3	1.3	1.5	1.6	164.7
BG	0.3	0.3	0.4	0.5	0.6	0.7	0.7	0.6	83.0
CZ	0.4	0.4	0.7	0.9	0.9	1.3	1.3	1.2	178.3
DK	0.2	0.3	0.4	0.5	0.6	0.7	0.7	0.9	272.2
DE	4.5	5.8	6.3	7.9	10.4	9.6	10.5	11.1	144.7
EE	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	127.5
IE	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.6	329.2
EL	0.7	0.8	0.9	1.0	1.3	1.4	1.3	1.1	60.4
ES	2.7	2.9	3.6	4.6	6.2	7.3	6.4	5.5	100.9
FR	3.9	4.1	5.3	6.9	8.0	8.3	8.3	8.8	128.8
HR	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.5	129.3
IT	4.0	4.5	5.4	6.3	8.1	8.8	8.0	7.9	98.7
CY	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	485.8
LV	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	68.9
LT	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2	52.5
LU	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	491.9
HU	0.4	0.5	0.6	0.8	0.8	1.1	1.1	1.1	166.7
MT	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	336.7
NL	0.7	0.8	1.3	1.6	2.0	2.0	2.1	2.4	231.2
AT	0.4	0.5	0.6	0.8	1.1	1.1	1.3	1.4	231.2
PL	1.5	1.7	2.2	3.4	3.5	4.1	5.0	4.5	198.0
PT	0.6	0.7	0.8	1.0	1.2	1.4	1.3	1.2	103.8
RO	0.8	0.9	1.0	1.4	1.6	2.0	2.0	1.8	119.4
SI	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.2	138.8
SK	0.2	0.2	0.3	0.4	0.5	0.6	0.7	0.7	292.8
FI	0.3	0.3	0.5	0.6	0.6	0.6	0.7	0.7	163.8
SE	0.5	0.5	0.8	0.9	1.1	1.2	1.4	1.6	215.5
UK	3.1	3.4	4.7	5.7	7.2	7.6	8.6	9.8	215.0
NO	0.2	0.2	0.4	0.5	0.6	0.7	0.7	0.9	287.1
EU	26.9	30.4	37.7	48.1	58.7	63.5	65.0	65.9	144.5
EU ex UK	23.8	27.0	33.1	42.4	51.5	55.9	56.5	56.1	135.3

Annex Table A.8 Projection of population aged 90 and over, 2015-2080, millions

	2015	2020	2030	2040	2050	2060	2070	2080	% Change 2015-2080
BE	0.10	0.12	0.16	0.21	0.30	0.37	0.40	0.48	406.2
BG	0.03	0.04	0.05	0.08	0.11	0.13	0.18	0.20	568.8
CZ	0.05	0.07	0.09	0.17	0.20	0.25	0.38	0.39	660.2
DK	0.04	0.05	0.07	0.12	0.14	0.18	0.20	0.24	451.5
DE	0.69	0.86	1.40	1.49	2.20	3.01	2.70	3.43	396.9
EE	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.05	571.3
IE	0.02	0.03	0.04	0.07	0.10	0.15	0.20	0.22	823.0
EL	0.09	0.13	0.19	0.23	0.30	0.39	0.45	0.39	331.2
ES	0.45	0.59	0.74	1.04	1.44	2.00	2.41	1.96	334.1
FR	0.72	0.91	1.13	1.66	2.15	2.52	2.63	2.79	288.5
HR	0.02	0.03	0.04	0.05	0.08	0.09	0.11	0.13	586.7
IT	0.67	0.83	1.15	1.46	1.83	2.56	2.69	2.51	276.4
CY	0.00	0.00	0.01	0.01	0.02	0.02	0.03	0.05	1281.9
LV	0.01	0.02	0.02	0.03	0.04	0.05	0.05	0.06	474.9
LT	0.02	0.02	0.03	0.04	0.06	0.07	0.06	0.07	330.6
LU	0.00	0.00	0.01	0.01	0.02	0.02	0.03	0.04	1189.4
HU	0.05	0.07	0.09	0.14	0.19	0.22	0.33	0.33	505.3
MT	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	918.6
NL	0.12	0.14	0.20	0.34	0.45	0.58	0.56	0.66	469.0
AT	0.07	0.09	0.11	0.16	0.23	0.33	0.32	0.41	465.6
PL	0.19	0.27	0.39	0.59	0.97	0.95	1.34	1.62	757.6
PT	0.08	0.10	0.16	0.21	0.28	0.35	0.42	0.38	357.4
RO	0.09	0.12	0.18	0.23	0.35	0.45	0.57	0.61	615.8
SI	0.01	0.02	0.03	0.04	0.05	0.07	0.08	0.08	551.3
SK	0.02	0.03	0.04	0.07	0.11	0.13	0.19	0.22	971.7
FI	0.04	0.05	0.07	0.12	0.15	0.17	0.18	0.22	410.3
SE	0.09	0.10	0.13	0.22	0.24	0.32	0.36	0.46	386.2
UK	0.55	0.63	0.84	1.30	1.61	2.21	2.31	2.88	419.9
NO	0.04	0.05	0.05	0.10	0.13	0.17	0.20	0.25	468.1
EU	4.25	5.30	7.35	10.10	13.66	17.63	19.29	20.90	392.1
EU ex UK	4.13	5.17	7.16	9.76	13.21	17.05	18.72	20.24	389.9

Annex Table A.9 Projection of population aged 100 and over, 2015-2080

	2015	2020	2030	2040	2050	2060	2070	2080	% Change 2015-2080
BE	2001	1957	5071	7394	11883	18673	25409	31321	1465
BG	358	339	907	1550	3277	4855	7353	11483	3108
CZ	798	668	2112	3320	8023	10562	15177	27250	3315
DK	1022	1318	2016	3327	6532	8641	12772	15488	1415
DE	17474	15025	35119	68188	80284	137541	204829	207043	1085
EE	136	141	431	750	1068	1640	2086	2859	2002
IE	964	1621	2420	3823	7055	11106	16795	24253	2416
EL	6130	6137	11369	17540	22836	31907	43745	51730	744
ES	15479	21492	45421	57842	92355	137084	199635	250123	1516
FR	24458	20856	54218	71579	123939	166200	210321	234742	860
HR	314	225	699	1353	2183	3845	5158	7280	2218
IT	19095	17586	43077	66360	94021	130468	200072	221839	1062
CY	76	60	111	241	516	836	1243	2023	2562
LV	194	176	527	945	1288	2144	2783	3515	1712
LT	368	249	748	1260	1749	3153	4078	4335	1078
LU	67	84	290	437	689	1210	1997	2702	3933
HU	1448	1497	3558	5462	9604	14536	19288	30722	2022
MT	57	92	227	451	935	1225	1308	1851	3147
NL	2170	2460	4772	8017	16455	24520	36190	38617	1680
AT	1404	1192	2932	4953	7638	12725	20462	22579	1508
PL	5118	5467	16710	25790	45653	78674	81735	129374	2428
PT	4066	3769	6837	11317	16620	24187	32941	42142	936
RO	1558	1827	5094	8962	13889	22587	35122	46532	2887
SI	236	224	713	1198	1944	3271	4358	5905	2402
SK	641	805	2153	3337	6332	10993	13617	21773	3297
FI	741	912	1879	2949	6087	7840	10028	12846	1634
SE	1953	2273	3509	5304	10414	13229	19951	25482	1205
UK	14504	17051	30456	45859	81399	112002	167845	191798	1222
NO	887	1159	1731	2424	5105	7519	11595	14516	1537
EU	122830	125503	283376	429508	674668	995654	1396298	1667607	1258
EU ex UK	108326	108452	252920	383649	593269	883652	1228453	1475809	1262

Annex Table A.10 Projection of old-age dependency ratios based on ratio of those over 65 to those aged 15-64, 2015-2080

	Population aged 65+/Population 15-64								
	2015	2020	2030	2040	2050	2060	2070	2080	Change 2015-2080
CY	21.2	24.3	30.6	34.8	42.1	55.2	60.9	62.5	41.3
PL	22.2	27.8	37.0	42.2	54.6	64.8	62.4	61.5	39.3
PT	31.1	34.6	43.6	55.6	65.3	64.9	67.0	69.0	37.9
SK	19.7	24.4	32.6	39.1	50.9	59.4	57.0	56.4	36.7
EL	32.4	35.7	44.4	58.4	71.0	67.5	63.1	65.3	32.9
HR	28.3	32.3	39.9	44.8	50.1	53.5	56.1	58.6	30.3
LU	20.5	21.5	26.6	32.7	38.2	44.3	48.7	50.2	29.7
IT	33.7	36.1	44.3	57.3	62.5	61.2	60.2	62.7	29.0
AT	27.5	28.4	35.7	42.2	45.3	51.0	54.4	55.3	27.8
MT	27.6	32.5	40.3	41.2	45.7	53.6	55.9	54.2	26.6
BG	30.2	34.0	40.1	47.5	57.7	63.3	56.4	56.4	26.2
RO	25.2	29.1	34.7	45.2	53.9	56.9	52.9	51.4	26.2
EE	28.7	31.8	37.6	42.3	48.8	55.8	52.7	54.3	25.6
NO	24.5	26.8	31.8	37.1	39.5	43.9	47.1	49.6	25.1
IE	20.0	22.8	28.7	36.6	45.5	44.5	41.3	45.0	25.0
HU	26.5	30.7	35.1	41.1	48.9	53.1	52.1	51.5	25.0
SI	26.6	31.8	40.8	48.2	55.7	55.3	50.4	51.3	24.7
CZ	26.6	31.4	36.0	41.9	51.9	56.0	49.9	50.8	24.2
DK	28.8	30.9	35.5	39.6	39.8	44.6	50.0	52.5	23.7
FI	31.3	35.9	42.2	43.4	45.5	49.5	51.8	54.6	23.3
DE	32.0	33.7	42.9	49.4	51.2	55.0	55.9	55.2	23.2
NL	27.2	30.4	38.4	44.0	42.5	44.2	48.3	50.3	23.1
LV	29.5	32.7	43.2	51.0	59.3	65.7	54.1	51.7	22.2
LT	28.1	31.5	45.8	56.9	60.1	64.2	53.6	50.3	22.2
UK	27.5	29.1	34.1	38.5	40.0	43.4	45.8	49.1	21.6
BE	27.9	30.0	35.8	39.9	41.4	43.5	45.0	47.9	20.0
ES	27.9	30.7	40.2	54.0	62.1	53.7	46.8	46.1	18.2
FR	29.2	32.9	39.7	45.1	45.1	43.4	44.6	46.8	17.6
SE	31.1	32.5	34.6	36.9	37.9	42.6	43.1	45.2	14.1
EU	28.8	31.7	39.1	46.4	50.3	51.6	51.2	52.3	23.5

Annex Table A.11 Projection of old-age dependency ratios based on ratio of those over 65 to those aged 15-64 in 2015, transitioning to the ratio of those over 70 to those aged 15-69 in 2060

	2015	2020	2030	2040	2050	2060	Change 2015-2060
BE	27.9	28.8	31.7	32.6	31.4	29.8	1.9
BG	30.3	32.6	35.3	38.1	41.1	41.6	11.3
CZ	26.6	30.1	31.9	34.0	37.2	37.9	11.3
DK	28.9	29.6	31.6	32.2	30.3	30.4	1.5
DE	31.9	32.4	37.8	39.8	39.0	36.8	4.9
EE	28.8	30.7	33.2	34.5	35.9	36.8	8.0
IE	20.0	22.0	25.4	29.6	33.3	31.0	11.0
EL	32.4	34.3	39.2	46.8	51.5	47.1	14.8
ES	27.9	29.6	35.5	43.1	45.6	39.1	11.2
FR	29.2	31.7	35.2	36.9	34.4	30.8	1.6
HR	28.3	31.1	35.0	36.2	36.9	35.6	7.4
IT	33.6	34.8	39.2	45.7	46.4	42.8	9.1
CY	21.2	23.3	27.1	28.4	31.1	35.3	14.1
LV	29.6	31.6	38.0	41.0	43.2	42.7	13.2
LT	28.0	30.3	40.1	45.4	44.9	42.6	14.5
LU	20.5	20.7	23.6	26.5	28.5	29.8	9.3
HU	26.5	29.5	31.0	33.4	35.3	36.0	9.5
MT	27.5	31.2	35.8	34.2	34.1	35.5	8.0
NL	27.2	29.1	33.9	35.7	32.6	30.5	3.3
AT	27.5	27.3	31.6	34.1	34.3	34.2	6.6
PL	22.2	26.7	32.5	34.7	39.4	41.9	19.7
PT	31.1	33.2	38.5	44.5	47.6	45.0	13.9
RO	25.2	27.9	30.5	36.3	38.9	38.4	13.2
SI	26.6	30.5	35.8	39.0	41.1	37.8	11.2
SK	19.8	23.5	28.6	31.7	36.5	38.9	19.1
FI	31.2	34.4	37.4	35.8	34.5	33.4	2.1
SE	31.1	31.1	31.0	30.2	28.8	28.8	-2.2
UK	27.4	28.1	30.3	31.4	30.4	29.6	2.2
NO	24.5	25.7	28.2	30.2	29.7	29.8	5.3
EU	28.9	30.6	34.5	37.5	37.6	35.6	6.7