

# **Population Projections for Forty-Four European Countries: The Ongoing Population Ageing**

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## **Abstract**

In the current paper we present the population projections for forty-four European countries. The dynamics of migration might prevent some European countries from experiencing population decline in the near future, although fertility has been below replacement for some time. Similarly, the EU-27 population is projected to further increase. Our results confirm that population ageing is underway all around Europe, albeit with clear differences across countries. According to the traditional measures of population age structure, the countries with the oldest populations are expected to be found within the EU. However, these measures do not take into account the longevity change: a man of 65 living in a country with a higher life expectancy might be at a different stage of the life cycle in comparison to a man of 65 living in a country with lower life expectancy. Relying on three alternative measures of age which consider explicitly changes in the remaining life expectancy, we find evidence that ageing will continue, but 1) it might be more severe in some countries where population is shrinking towards older ages but life expectancy is still rather low; 2) it might not be as fast as it appears when not adjusting for the longevity change. As an example, the former Soviet Union states and some countries of the Balkan region show the highest proportion of population with a remaining life expectancy of 15 years or less; in Italy and Germany the prospective median age and the proportion of population with a remaining life expectancy of 15 years or less might increase at a slower pace than the corresponding conventional measures, i.e. the population median age and the proportion of people aged 65+.

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## **1 INTRODUCTION**

Despite some differences in the adopted projection assumptions all population projections over the last few decades have shown that the European population is getting older. The fertility decline below replacement level is the principal actor in the process of population ageing in Europe accompanied by an increasing life expectancy that allows more and more people living a longer and healthier life. Despite a generalised shrinkage of the base of the population pyramid all across Europe, European countries find themselves at quite different stages of the ageing process, due to the heterogeneity in the pace and intensity of fertility decline, gains in life expectancy, and migration dynamics.

In the present study we develop population projections for forty-four<sup>1</sup> European countries following the list of countries taken into account in demographic publications by the Council of Europe. On the basis of our projections, we try to get a unified picture of the ageing process around Europe relying on the projected dynamics of both conventional and alternative measures of population ageing. The latter take jointly into account changes in the population age composition and changes in life expectancy. Our paper is also intended as supporting material to the European Demographic Data Sheet 2008 (<http://www.oeaw.ac.at/vid/>).

Section 2 introduces the method and projections assumptions; Section 3 presents the results; concluding remarks are found in Section 4. More detailed projection assumptions and results are reported in Appendices A, B and C.

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<sup>1</sup> We consider separately France and France métropolitaine, the latter excluding the French overseas departments.

## **2 POPULATION PROJECTIONS: METHOD AND ASSUMPTIONS**

To project the population by age and sex from 2007 to 2050 we use the standard cohort-component model. The population data for the base year 2007 and the projection assumptions are mainly derived from Eurostat. The starting population by age and sex refers to 1 January 2007.<sup>2</sup> For the Russian Federation we obtained data from Rosstat.

Regarding the base-year fertility levels, the Total Fertility Rate (TFR) for 2007 relies mostly on the information derived from Eurostat for 2006, the last available year at the time of extraction. For Italy, Turkey and Montenegro the TFR is derived from the national statistical offices. For the Russian Federation the TFR is from Rosstat. For Albania and Belgium the last available TFR from Eurostat refers to 2005. For the fertility age schedule we rely on the last available age-specific fertility rates published by Eurostat, mainly referring to 2006 at the time of extraction. For Italy, Lithuania and Montenegro only the 2005 figures are available. For Belgium the last available information refers to 1999 and is derived from Direction générale Statistique et Information économique – Service Démographie. For Albania, Belarus, Moldova and Turkey we interpolate UN 2005-2010 data (UN 2007). For the Russian Federation data are from Rosstat. The fertility age distribution is kept constant throughout the projection period.

The life expectancy information for the base year is retrieved mostly from Eurostat referring to the year 2006. For Spain, UK, Iceland and Montenegro the last available year is 2005, while for Italy it is 2004. For Albania – 2002, Belarus – 2004, Moldova – 2004, the Russian Federation – 2004 and Turkey – 2003 data are from the Council of Europe (2006). For mortality information by age and sex we consider the probabilities of death and derive data mostly from Eurostat. The last available year at the time of extraction is 2006. For Albania, Belarus, Russia and Turkey we interpolate UN 2005-2010 data (UN 2007). For Moldova we obtained data from the

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<sup>2</sup> For Iceland and Montenegro we start with the population on 1 January 2006, which was the last available at the time of data extraction.

National Bureau of Statistics. For Italy the last available year is 2004, while for Spain, UK, Iceland and Montenegro it is 2005.

The total number of net migrants by sex is derived from Eurostat and relies on the information for 2006.<sup>3</sup> For Croatia, Serbia, Iceland and Montenegro, for which we do not have net migration scenarios from Eurostat 2004 projections and for which UN 2010 information (UN 2007) was not considered reliable, we preferred to use for the base year the Eurostat 2002-2006 average. For the 27 EU countries the net migration age distribution by sex for the starting projection year is taken from the Eurostat 2004 projections. For Bulgaria and Romania we rely on the elaborations on Eurostat 2004 projections by Dalkhat Ediev (unpublished, Vienna Institute of Demography 2007). The information for Russia was taken from Rosstat. For Switzerland, Norway, Macedonia FYR and Croatia we derive the one-year age distribution by sex from Eurostat information on in- and out-migration by five-year age groups for 2004. For the other countries, for which migration information is not provided by Eurostat 2004 projections, we apply an average age profile estimated from the EU countries. This is the case for France (including the overseas departments), Albania, Armenia, Azerbaijan, Belarus, Georgia, Iceland, Moldova, Montenegro, Serbia, Turkey and Ukraine. The migration age distribution is assumed then constant for the future years.

The basic projection assumptions are summarised in Table 1 (for details see Appendix A). For fertility we assume that the current Total Fertility Rate (TFR) converges in 2030 to the tempo-adjusted TFR.<sup>4</sup> From

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<sup>3</sup> For Bulgaria the available information was for the year 2007.

<sup>4</sup> The tempo-adjusted TFR is calculated on the basis of the Bongaarts-Feeney formula (Bongaarts and Feeney 1998), which uses fertility data by birth order. When available, the data on the adjusted TFR refer to the mean of the adjusted TFR for the three-year period of 2003-2005. For countries where no such data are available the adjusted TFR is estimated either with the most recent available data or on the basis of an estimated relation of the observed change in the overall mean age of childbearing to the size of the tempo effect. For a detailed description of methods

that year onwards, the TFR is kept constant. Life expectancy at birth is assumed to increase by two years per decade (Lutz et al. 1997 and 2001; Sanderson and Scherbov 2004), an assumption supported also by Oeppen and Vaupel (2002). The Brass relational model is used to adjust the age specific mortality schedule. The total net migration is assumed to converge in 2010 to the 2004 Eurostat or UN projection assumptions on net migration for 2010. Thereafter the net migration figures follow the 2004 Eurostat projection assumptions or the UN assumptions. For the net migration scenarios for Romania and Bulgaria we use the elaborations on Eurostat 2004 projections by Dalkhat Ediev (unpublished, Vienna Institute of Demography 2007). We use the UN projection assumptions for the non-EU countries. For Croatia, Iceland, Montenegro and Serbia, for which migration projection scenarios were not available or they appeared to be unreliable, we keep constant the 2002-2006 average net migration figures based on Eurostat data.

In the next section we present the results of our projections. First, we focus on the conventional measures of population age composition. Second, we apply three alternative indicators of age in order to get a different insight into the process of population ageing.

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and data see: [www.populationeurope.org](http://www.populationeurope.org). For Albania and Azerbaijan the information available did not allow to calculate the adjusted TFR. Therefore, the TFR for these two countries is kept constant throughout the whole projection horizon.

**Table 1** Total population size in 2007, fertility, mortality and migration figures for 2007 and 2030.

	<b>Total population (mio.)</b>	<b>TFR</b>		<b>Female e0 (years)</b>		<b>Male e0 (years)</b>		<b>Net migration (in thousands)</b>	
		<b>2007</b>	<b>2030<sup>a</sup></b>	<b>2007</b>	<b>2030</b>	<b>2007</b>	<b>2030</b>	<b>2007</b>	<b>2030</b>
Albania	3.2	1.78	1.78	79.6	84.2	73.1	77.7	-12.9	-10.0
Armenia	3.2	1.37	1.62	76.2	80.8	69.9	74.5	-5.3	-8.0
Austria	8.3	1.41	1.64	83.0	87.6	77.4	82.0	27.9	19.1
Azerbaijan	8.5	1.99	1.99	75.6	80.2	70.3	74.9	-2.8	-10.0
Belarus	9.7	1.29	1.47	76.6	81.2	63.8	68.4	3.7	-2.0
Belgium	10.6	1.73	1.86	82.5	87.1	76.8	81.4	44.9	18.5
Bulgaria	7.7	1.39	1.70	76.5	81.1	69.4	74.0	-33.8	2.1
Croatia	4.4	1.39	1.61	79.5	84.1	72.7	77.3	9.6	9.6
Cyprus	0.8	1.49	1.79	82.6	87.2	79.0	83.6	8.1	4.6
Czech Rep.	10.3	1.34	1.76	80.1	84.7	73.7	78.3	26.7	21.6
Denmark	5.4	1.84	2.00	80.9	85.5	76.3	80.9	9.4	6.6
Estonia	1.3	1.56	1.85	78.8	83.4	67.6	72.2	-0.4	1.8
Finland	5.3	1.84	1.91	83.3	87.9	76.1	80.7	9.5	6.0
France	63.4	2.01	2.10	84.6	89.2	77.5	82.1	83.0	58.9
France metropolitaine <sup>b</sup>	61.5	1.99	2.07	84.6	89.2	77.6	82.2	85.2	58.9
Georgia	4.4	1.43	1.85	78.6	83.2	69.9	74.5	-12.8	-10.0
Germany	82.3	1.33	1.59	82.6	87.2	77.4	82.0	70.1	181.0
Greece	11.2	1.40	1.52	82.1	86.7	77.4	82.0	39.9	34.8
Hungary	10.1	1.36	1.75	78.0	82.6	69.4	74.0	19.3	21.2
Iceland	0.3	2.09	2.22	83.9	88.5	80.0	84.6	1.8	1.8
Ireland	4.3	1.94	2.17	82.3	86.9	77.5	82.1	55.5	12.9
Italy	59.1	1.36	1.48	84.4	89.0	78.5	83.1	312.6	113.8
Latvia	2.3	1.36	1.59	76.5	81.1	65.6	70.2	-2.5	3.0
Lithuania	3.4	1.32	1.68	77.2	81.8	65.5	70.1	-5.1	4.6
Luxembourg	0.5	1.66	1.82	82.1	86.7	77.0	81.6	4.7	2.8

*Table continued on the next page*

Table 1 (continued)

	Total population (mio.)	TFR		Female e0 (years)		Male e0 (years)		Net migration (in thousands)	
		2007	2030 <sup>a</sup>	2007	2030	2007	2030	2007	2030
Macedonia, FYR	2.0	1.48	1.88	76.4	81.0	71.9	76.5	-0.9	-2.0
Malta	0.4	1.41	1.58	82.1	86.7	77.2	81.8	2.2	2.4
Moldova	3.6	1.20	1.36	73.0	77.6	65.2	69.8	-5.0	-10.0
Montenegro	0.6	1.63	1.97	77.4	82.0	71.8	76.4	-0.7	-0.7
Netherlands	16.4	1.71	1.82	82.2	86.8	77.9	82.5	-11.3	31.6
Norway	4.7	1.90	2.01	83.1	87.7	78.4	83.0	21.7	15.0
Poland	38.1	1.29	1.58	79.9	84.5	71.1	75.7	-36.0	35.9
Portugal	10.6	1.36	1.65	82.5	87.1	75.7	80.3	24.1	15.0
Romania	21.6	1.33	1.75	76.4	81.0	69.4	74.0	-8.5	4.7
Russian Fed.	142.2	1.30	1.52	72.9	77.5	59.5	64.1	128.4	50.0
Serbia	7.4	1.44	1.68	76.4	81.0	71.0	75.6	7.5	7.5
Slovakia	5.4	1.26	1.66	78.6	83.2	70.6	75.2	2.3	5.1
Slovenia	2.0	1.32	1.55	82.2	86.8	74.7	79.3	6.2	7.0
Spain	44.5	1.38	1.39	84.1	88.7	77.4	82.0	481.6	105.3
Sweden	9.1	1.86	1.96	83.3	87.9	79.0	83.6	44.1	21.8
Switzerland	7.5	1.46	2.19	84.4	89.0	79.4	84.0	32.4	20.0
Turkey	73.4	2.18	2.19	71.8	76.4	67.2	71.8	-0.7	-10.0
UK	60.9	1.84	1.98	81.5	86.1	77.5	82.1	189.4	99.2
Ukraine	46.5	1.31	1.43	74.0	78.6	62.5	67.1	5.7	-20.0

Notes: a) The TFR for 2030 is the adjusted TFR calculated on the basis of the last available TFR levels. See also footnote 4. b) Excluding the French overseas departments.



### **3 RESULTS**

#### **3.1 Population size and age structure characteristics**

Despite the below-replacement fertility all around Europe, our projections indicate that in the next forty years not all the European countries are expected to face the population shrinkage. There seems to be still space for population increase, possibly favoured by the population age structure and migration flows. On the one hand, we have countries which have been showing below-replacement fertility already for some time and for which a positive net migration plays the most important role, like for some EU countries (e.g. Greece, Spain). On the other hand, we find countries like Albania, Azerbaijan and Turkey, which until recently persisted in showing relatively high fertility. Finally, all the other countries are facing, or might face in the near future, a decline in total population though with a clear expansion of the elderly. The EU-27 is projected to face a positive population growth almost throughout the next forty years, mostly due to expected migration dynamics.

Considering the period up to 2030, out of forty-four considered European countries the total population is projected to rise in twenty-six of them and fall in eighteen. The strongest projected population growth rate is expected in Iceland (+1.30%), Ireland (+1.14%), Cyprus (+1.08%), Turkey (+0.98%) and Luxembourg (+0.93%), while Moldova (-0.56%), Latvia (-0.58%), the Russian Federation (-0.59%), Ukraine (-0.77%) and Bulgaria (-0.85%) could show the sharpest decline. For the EU-27, besides the three aforementioned countries, Malta (+0.63%) and Sweden (+0.49%) are projected to be on the top of the population growth ranking, while Estonia (-0.28%), Romania (-0.42%) and Lithuania (-0.44%) are accounted for at the bottom of the ranking. The overall EU-27 projected growth rate is +0.14%. Following our projection assumptions, the EU-27 total population<sup>5</sup> is projected to increase from 493.3 millions in 2007 to 509.1 millions in 2030.

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<sup>5</sup> Excluding the French overseas departements.

Such a result actually underestimates the most recent Eurostat population projections of 519.9 millions in 2030<sup>6</sup> which is based, however, on different projection assumptions especially regarding migration. In 2030 the countries with the largest populations within the EU-27 are expected to be Germany (81.6 millions), France métropolitaine (68.1 millions), the UK (67.3 millions), Italy (59.2 millions) and Spain (47.1 millions). In the same year, among all the considered European countries, the Russian Federation and Turkey could be leading with a total population of 124.2 million and 92.1 million inhabitants respectively.

Looking at the European regions,<sup>7</sup> in 2007 eastern Europe registers the highest population size (202.0 millions), followed by western and southern Europe (Table 2). The population size in 2030 and the projected annual rate of population change clearly distinguish between in- and out-migration regions. Southern, western and northern Europe are still expected to show a population increase by 2030, while the whole of eastern Europe might face a population decline. The Caucasian region is also projected to experience a population increase. Similarly, the EU-27 population might increase in the next 20-25 years. Here the distinction in the future population change is between the old (EU-15) and the new EU members (EU-12), the former being characterised by a positive rate of change, the latter by a negative one.

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<sup>6</sup> Eurostat projections EUROPOP 2008 – Convergence Scenario.

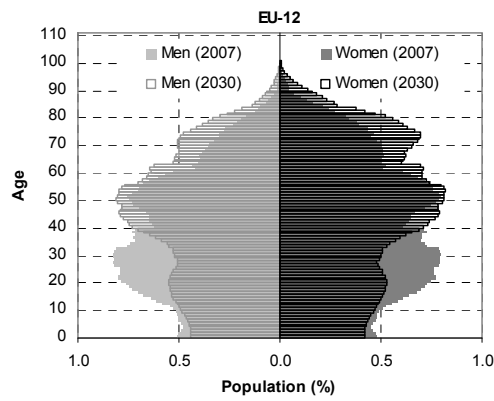
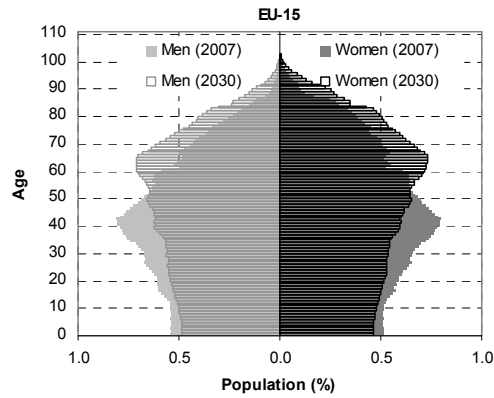
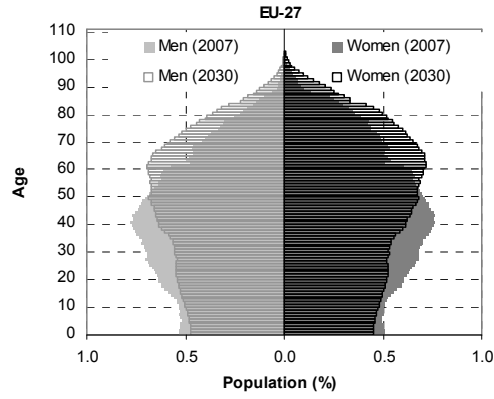
<sup>7</sup> Southern Europe (Italy, Spain, Portugal, Greece, Malta, Cyprus), western Europe (Ireland, UK, France métropolitaine, Belgium, Netherlands, Luxembourg), German-speaking countries (Austria, Switzerland, Germany), Nordic countries (Iceland, Norway, Sweden, Finland, Denmark), central-eastern Europe (Lithuania, Latvia, Estonia, Poland, Czech Rep., Slovak Rep., Hungary, Slovenia, Croatia), south-eastern Europe (Bulgaria, Romania, Serbia, Montenegro, Albania, Macedonia FYR), eastern Europe (Russian Federation, Ukraine, Moldova, Belarus), Caucasus (Azerbaijan, Armenia, Georgia), EU-27, EU-15, EU-12.

**Table 2** Population size and growth rate in European regions, 2007 and 2030.

	<b>Population size on 1 January 2007 (millions)</b>	<b>Projected population size, 2030 (millions)</b>	<b>Projected annual rate of population change, 2007-2030 (%)</b>
Southern Europe	126.6	130.0	0.12
Western Europe	154.1	170.8	0.45
German-speaking countries	98.1	98.9	0.04
Nordic countries	24.8	27.5	0.45
Central-eastern Europe	77.3	74.7	-0.15
South-eastern Europe	42.5	38.9	-0.38
Eastern Europe	202.0	175.0	-0.62
Caucasus	16.2	17.5	0.35
<b>EU-27</b>	<b>493.3</b>	<b>509.1</b>	<b>0.14</b>
EU-15	390.0	411.5	0.23
EU-12	103.3	97.7	-0.25

Considering the population age pyramid, Figure 1 indicates that the EU-27 population is projected to continue ageing in the next twenty years. The basis of the age pyramid could reduce further, but the advancement of the elderly population is what appears most clearly. Despite some differences, similar dynamics are projected to prevail in both old and new EU members.

**Figure 1** EU-27, EU-15, EU-12 population age pyramids (%), 2007 and 2030.



Focusing next on some more detailed age structure indicators, the ongoing ageing process all around Europe is confirmed. In all the European countries under study the population median age is projected to increase in the next forty years. In 2007, Turkey (27.5 years), Azerbaijan (28.2 years), Albania (28.9 years), Armenia (31.8 years) and Moldova (33.2 years) show the lowest median ages, while Bulgaria and Serbia (41.0 years), Finland (41.3 years), Italy (42.2 years) and Germany (42.8 years) are expected to experience the highest ones (Table 3). In 2030 the country ranking does not change substantially, but we now find only EU-27 countries on the top of the ranking with the highest median ages. On the contrary, the bottom of the ranking is again occupied by non-EU countries only. The population age structure in some of these countries, the result of a high fertility which blew up the basis of the pyramid, might thus still prevent them from ageing profoundly.

**Table 3** Population median age. Country ranking, 2007 and 2030.

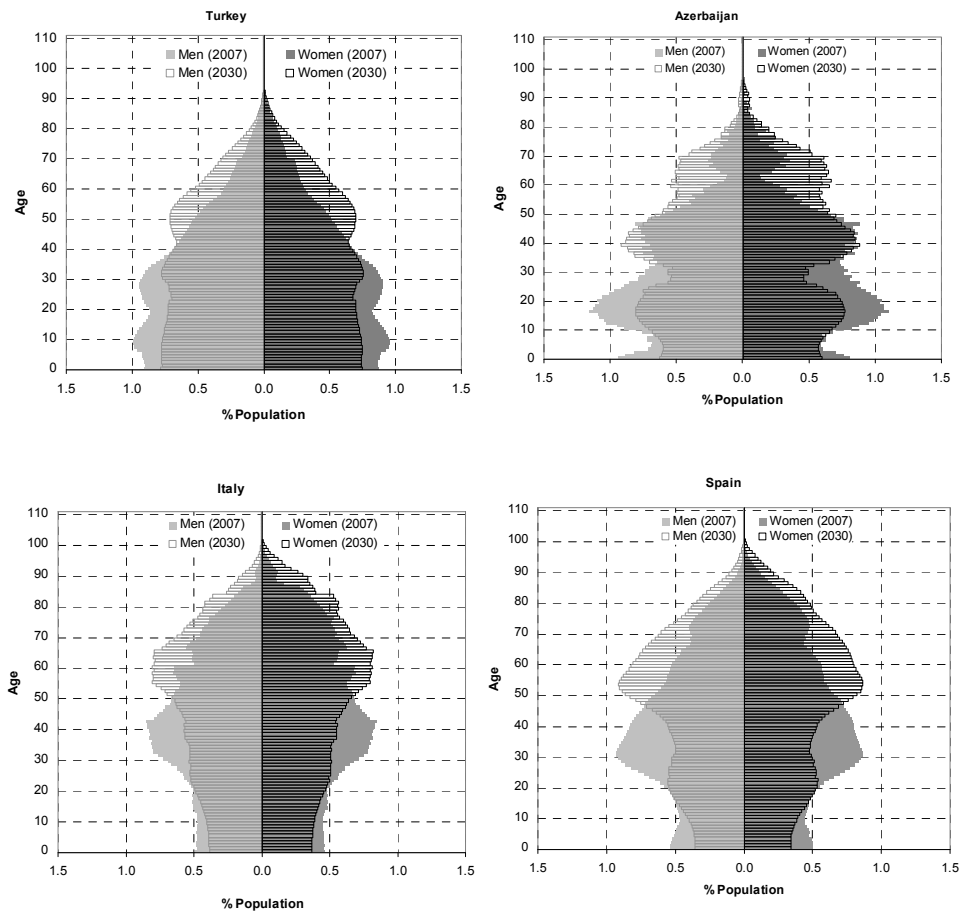
	2007		2030
1. Germany	42.8	Italy	50.8
2. Italy	42.2	Spain	49.7
3. Finland	41.3	Greece	49.3
4. Serbia	41.0	Germany	48.9
5. Bulgaria	41.0	Slovenia	48.8
40. Moldova	33.2	Norway	41.1
41. Armenia	31.8	Iceland	39.3
42. Albania	28.9	Albania	38.7
43. Azerbaijan	28.2	Azerbaijan	37.6
44. Turkey	27.5	Turkey	34.0

On the basis of this median age country ranking we show the population age pyramids for four European countries below: in 2030 Turkey and Azerbaijan are projected to have the lowest median ages, while Spain and Italy are expected to have the highest. In 2007 in particular the Turkish

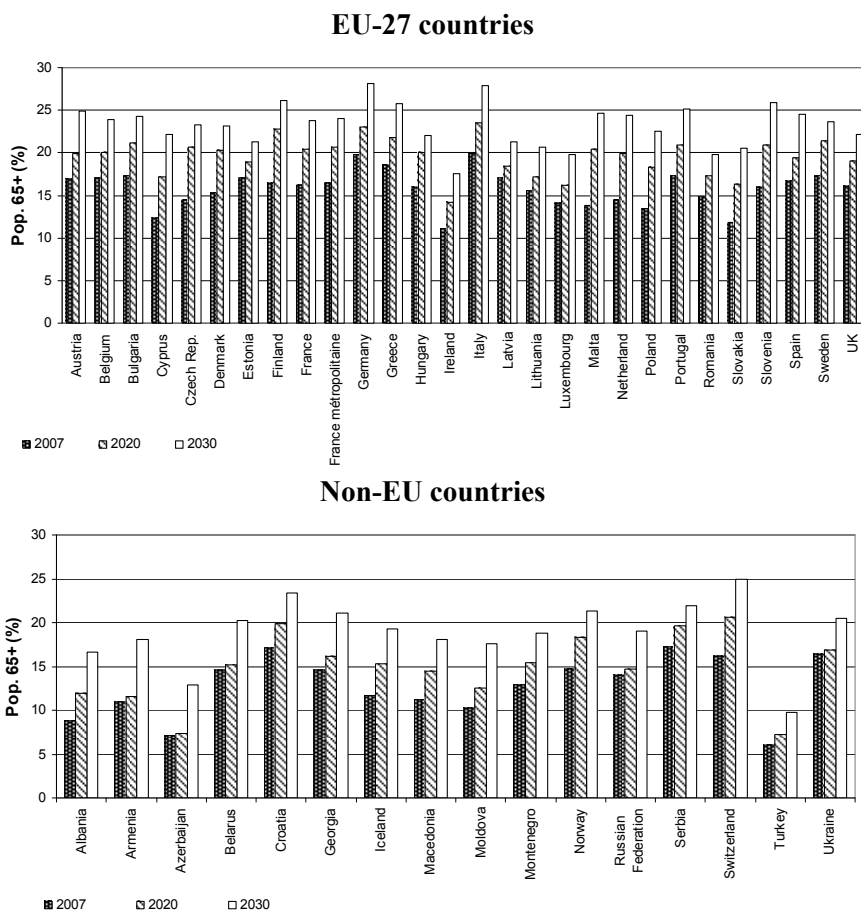
and to some extent the Azerbaijani population age structure figures still resemble a pure pyramid, with a larger population basis and limited proportion of people at older ages (Figure 2). Conversely, Italy and Spain show evidence of a population that has been characterised by the decline of the number of births for some time. This is clearly reflected in the reduced population at younger ages. By 2030 both Turkey and Azerbaijan are expected to start the advancement of the adult and older population, while the ageing process in Italy and Spain could determine almost a reversal of the classical pyramidal shape, with the predominance of the elderly population.

Other age structure indicators also highlight the population ageing. Let us first take a look at the elderly population and consider both the proportion of people aged 65+ and 80+. As shown in Figure 3, the proportion of people aged 65+ is projected to increase all over Europe, with the highest figures expected in the EU and the lowest ones in the non-EU countries. Already in 2007 the majority of the EU-27 countries shows between 15 and 20 per cent inhabitants aged over 65. For most of them the indicator is expected to be between 20 and 25 per cent by 2030, except for Finland, Germany, Greece and Italy where the levels for 2030 are higher than 25 per cent. In most of the non-EU countries the proportion of people aged 65+ might exceed the threshold of 15 per cent by 2030. In 2007 the EU figure is 17.0%. Italy (19.9%), Germany (19.8%), Greece (18.6%), Sweden (17.4%) and Serbia (17.3%) are the five European countries with the highest proportion of the population above age 65. In 2030 the picture does not change substantially with two countries being replaced. The ranking for the top five sees Germany first (28.2%), followed by Italy (27.9%), Finland (26.1%), Slovenia (25.9%) and Greece (25.8%). In the EU-27 as a whole almost one person out of four is projected to be more than 65 years old.

**Figure 2** Population age pyramid (%): Turkey, Azerbaijan, Spain and Italy, 2007 and 2030.



**Figure 3** Population aged 65+ (%), years 2007, 2020, 2030.



Similarly, the proportion of people aged 80+ might increase in all the considered European countries in the near future (Figure 4). Within the EU-27 the highest level in 2030 could be reached by Italy (9.4%), but also Finland, Germany and Sweden are expected to have figures above 8%. The projected level for the EU-27 is 7.3%. Conversely, in none of the non-EU countries do the projections indicate more than eight persons aged 80+ per

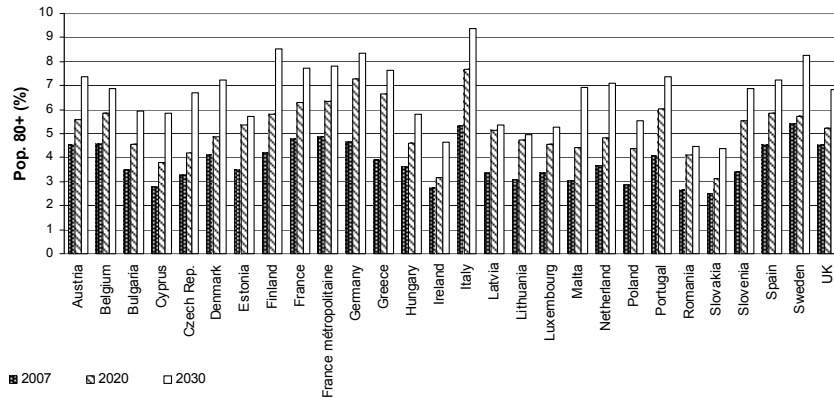


100 people, with Turkey and Azerbaijan showing the lowest levels around 1-1.5%. In Armenia, Azerbaijan, Belarus, Georgia, the Russian Federation and Ukraine the proportion of the elderly population might even decrease slightly between 2020 and 2030, which would be mostly due to the age composition dynamics in these countries, e.g. the advancement of the generations born during the war. This is also visible in their rather jagged age pyramids (see Appendix C).

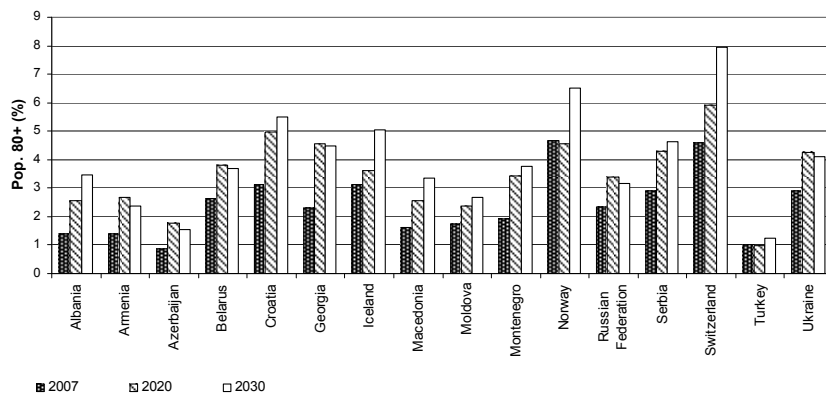
Considering the European regions (Table 4), in 2007 the German-speaking countries and southern Europe show the highest figures for the 65+ aged population, namely 19.3% and 18.4% respectively. The lowest level is found in the Caucasus (9.9%). The EU-15 countries also have a somewhat higher proportion of people over 65 years of age (17.6%) in comparison to the new Member States (14.5%). In 2030 the German-speaking countries and southern Europe are expected to reach 27.6% and 26.2%, respectively, while in the Caucasus countries the population aged 65+ might represent a mere 15.8% of the total. The German-speaking countries and southern Europe also show the highest proportion of persons aged 80+, who could cover about 8% of the total population in 2030. In the Caucasus and eastern Europe that percentage is projected to stay still rather low between 2% and 4%. In 2030 the difference between the old and new EU Member States is 2.4 percentage points, with the latter countries showing the lower value.

**Figure 4** Population aged 80+ (%), years 2007, 2020, 2030.

**EU-27 countries**



**Non-EU countries**



**Table 4** Population aged 65+ and 80+ (%) in European regions, 2007 and 2030.

	<b>Proportion of the population above age 65, 2007 (%)</b>	<b>Projected proportion of the population above age 65, 2030 (%)</b>	<b>Proportion of the population above age 80, 2007 (%)</b>	<b>Projected proportion of the population above age 80, 2030 (%)</b>
Southern Europe	18.4	26.2	4.8	8.2
Western Europe	15.9	23.1	4.5	7.2
German-speaking countries	19.3	27.6	4.6	8.2
Nordic countries	16.1	23.5	4.7	7.7
Central-eastern Europe	14.3	22.5	3.0	5.6
South-eastern Europe	15.1	20.5	2.7	4.6
Eastern Europe	14.5	19.4	2.5	3.4
Caucasus	9.9	15.8	1.4	2.4
<b>EU-27</b>	<b>17.0</b>	<b>24.6</b>	<b>4.3</b>	<b>7.3</b>
EU-15	17.6	25.2	4.6	7.8
EU-12	14.5	22.0	3.0	5.4

Also with regard to the old-age dependency ratio, which measures the level of support of the elderly based on the working-age population, we find some differences between those countries where the ageing process has been under way since some time, and countries where the population has started advancing towards higher ages only more recently. In 2007, countries at the top of the ranking have old-age dependency ratios between 26% and 30% (Table 5). The indicator is projected to increase to a level between 42% and 48% in 2030. Turkey, Azerbaijan, Albania, Moldova and Armenia show in both years the lowest old-age dependency ratios, although they are considerably increasing over time. In 2007 there are between 9 and 16 persons aged 65+ for every 100 persons in working age in these countries,

while in 2030 we might already have one elderly for every four persons in working age in three of them.

**Table 5** Old-age dependency ratio (%). Country ranking, 2007 and 2030.

	<b>Old-age dependency ratio, 2007 (%)</b>		<b>Projected old- age dependency ratio, 2030 (%)</b>
1. Italy	30.2	Germany	47.8
2. Germany	29.9	Italy	46.3
3. Greece	27.6	Finland	45.4
4. Sweden	26.4	Switzerland	42.7
5. Belgium	25.9	Slovenia	42.0
40. Armenia	15.7	Armenia	27.0
41. Moldova	14.4	Moldova	25.6
42. Albania	13.3	Albania	25.6
43. Azerbaijan	10.2	Azerbaijan	19.1
44. Turkey	9.1	Turkey	14.5

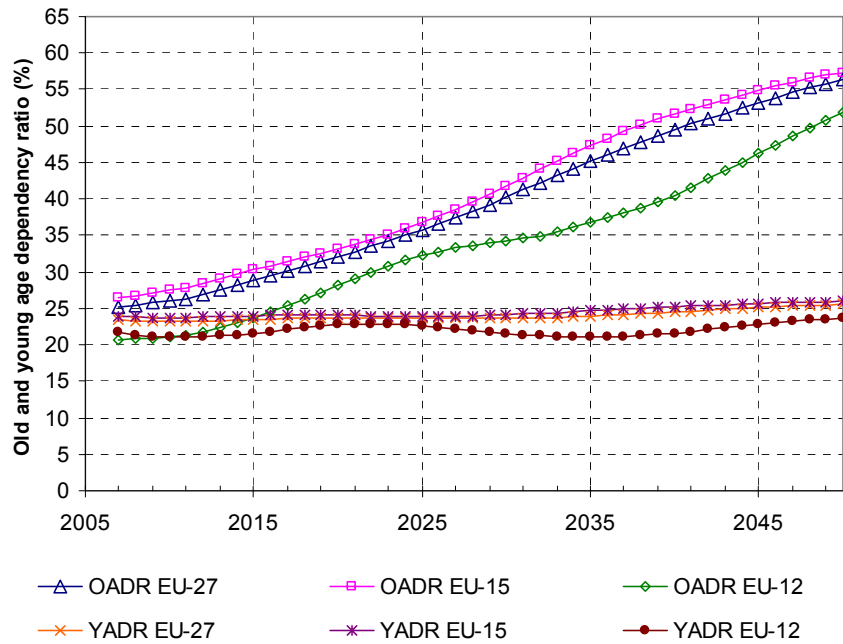
According to the regional figures shown in Table 6, in 2007 there is about one person aged above 65 to be supported by four persons of working age in western and southern Europe, in German-speaking and Nordic countries as well as in the EU-27. In the whole of eastern Europe five persons of working age have to support one person aged over 65. By 2030 the indicator could increase in all the regions, with the German-speaking countries and southern Europe showing the highest levels of 46.7% and 42.4%, respectively.

**Table 6** Old-age dependency ratio (%) in European regions, 2007 and 2030.

	<b>Old-age dependency ratio 65+/15-64, 2007 (%)</b>	<b>Projected old-age dependency ratio 65+/15-64, 2030 (%)</b>
Southern Europe	27.3	42.4
Western Europe	24.1	38.6
German-speaking countries	29.0	46.7
Nordic countries	24.5	39.7
Central-eastern Europe	20.4	35.3
South-eastern Europe	21.8	31.5
Eastern Europe	20.5	28.9
Caucasus	14.4	23.7
<b>EU-27</b>	<b>25.2</b>	<b>40.3</b>
EU-15	26.5	41.8
EU-12	20.7	34.3

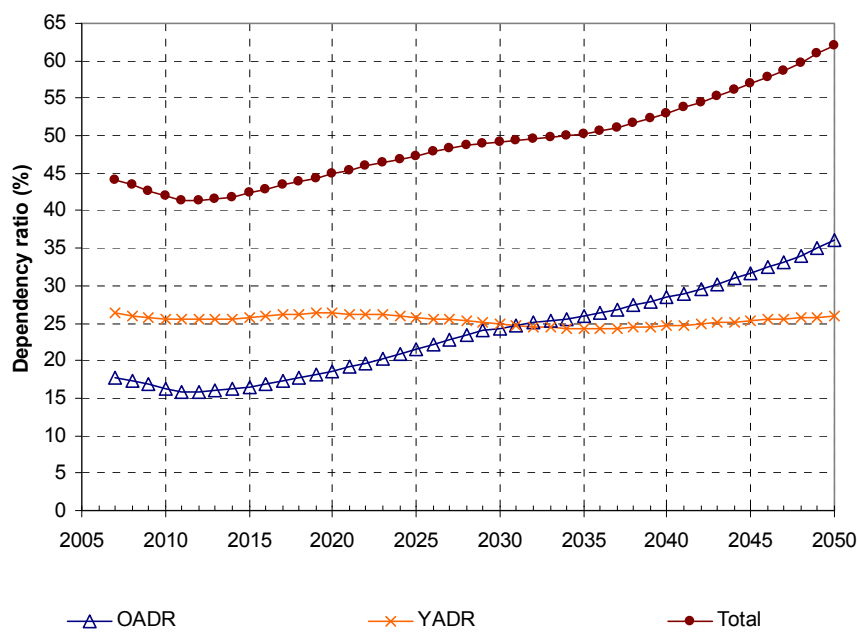
Considering the EU countries during the whole projection horizon, Figure 5 confirms the constantly increasing trend of the old-age dependency ratio for the EU-27, the EU-15 and the new Member States. The indicator might more than double during the period 2007-2050. It is likely to increase from 25.2% to 56.3% in the EU-27, and in particular from 26.5% to 57.3% in the EU-15 and from 20.7% to 52.0% in the EU-12. Conversely, the young-age dependency ratio is expected to show a rather stable trend between 20% and 25% during the whole period, basically because both the younger population and the working population are projected to shrink.

**Figure 5** Old- and young-age dependency ratio (%) in the EU, 2007-2050.



Also focusing on the non-EU countries, excluding Iceland, Norway and Switzerland, the dependency ratio, i.e. the sum of the old and young age dependency ratios, is expected to increase during the projection horizon (Figure 6). However, in the near future a slight decrease is envisaged for the indicator, basically driven by the old-age dependency ratio, that is by the increase of the working age population and a slight decrease of the elderly population in some of the non-EU countries, or in other words by structural changes.

**Figure 6** Dependency ratio (%) in non-EU countries, 2007-2050.



For further details, in Appendix B we report the country results for the age structure indicators for various years, while in Appendix C we include the population age pyramids for the years 2007 and 2030.

### **3.2 Changes in the population age structure and life expectancy: alternative indicators of age and ageing**

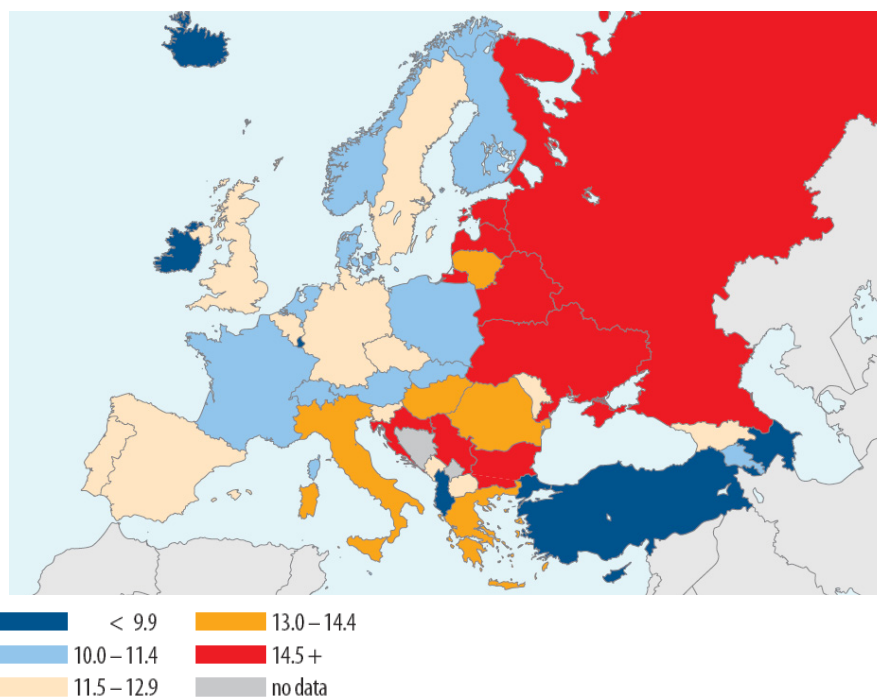
In the previous paragraph we have considered the conventional population age structure indicators to investigate the future population dynamics, focusing in particular on the process of population ageing. Traditional measures of population ageing are based on chronological age and give us actually little insight into the changing conditions of human lives in terms of both health and longevity. Therefore, relying on the papers by Sanderson and Scherbov (2005; 2006), Hersch (1944), Panusch and Peritz

(1996), Lutz et al. (2008), we included in the analysis some new indicators of population ageing in order to explicitly take into account the impact of the changes in life expectancy. We consider the following three measures: the proportion of the population in age groups that have a remaining life expectancy of 15 years or less (Prop. RLE 15-), the standardised or prospective median age (PMA) and the population average remaining years of life (PARYL). As Lutz et al. state (2008, p. 716), “if longevity increases, the minimum age of people included in Prop. RLE 15- increases”. The prospective median age in any particular year is the age of a person in the year 2007 (in our case 2007 is selected as a standard year) who has the same remaining life expectancy as a person at the population median age in a year under consideration. The PARYL is the weighted average of age-specific remaining life expectancies, where the weights are the proportions of the population at each age. “Unlike the other measures, PARYL goes down as a population ages” (Lutz et al. 2008, p. 716). These three measures are alternative to the conventional measures of the proportion of the population aged 65+ (or similar), the median age of the population and its average age.

Map 1 shows the geographic pattern regarding the proportion of population with a remaining life expectancy of 15 or less years in 2007. An East/West divide appears with the countries of the former Soviet Union and some Balkan countries showing by far the highest proportions of population with life expectancies of 15 or less years.



**Map 1** Proportion of the population that has a remaining life expectancy of 15 years or less (%), 2007.



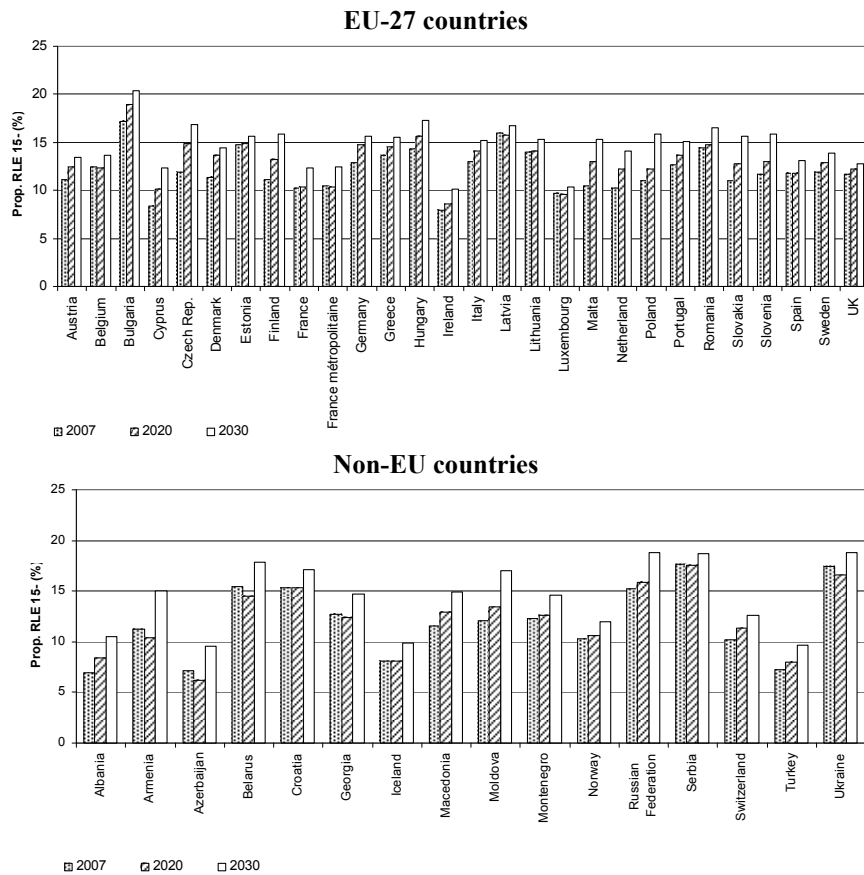
Source: European Demographic Data Sheet 2008, <http://www.oeaw.ac.at/vid/>.

Such a result reflects the effect of two demographic dimensions: the age structure of the population and the current period life expectancy. Namely, countries with a rather old population and a low life expectancy have the highest proportions and countries with young populations and high life expectancy the lowest ones. Combinations of these two dimensions produce intermediate cases, such as young age structures with lower life expectancy and older age structures with a higher one.

Looking at both EU and non-EU countries and comparing years 2007 and 2030 (Figure 7), the proportion of the population in the age groups with a remaining life expectancy of 15 years or less is projected to increase in all the considered European countries by 2030. As suggested from the previous map, some countries of the Balkan region and the former Soviet

Union republics show both in 2007 and 2030 the highest proportions of population with average remaining life expectancies of 15 or less years (Table 7). However, these countries, while experiencing an increasing proportion of the elderly population, do not show the highest proportions of the population aged 65+. Such a result suggests that it is a lower life expectancy which determines higher values of the indicator rather than the increasing impact of the elderly.

**Figure 7** Proportion of population that has a remaining life expectancy of 15 years or less (%), years 2007, 2020, 2030.



**Table 7** Country ranking of the proportion of the population that has a remaining life expectancy of 15 years or less (%) and the ranking with respect to the proportion aged 65+: 2007 and 2030.

	<b>Proportion of the population that has a remaining life expectancy of 15 years or less, 2007 (%)</b>		<b>Proportion of the population aged 65+, 2007 (%)</b>
1. Serbia	17.7	5.	17.3
2. Ukraine	17.4	16.	16.4
3. Bulgaria	17.2	7.	17.3
4. Latvia	15.9	9.	17.1
5. Belarus	15.5	26.	14.6
40. Iceland	8.0	37.	11.6
41. Ireland	8.0	39.	11.1
42. Turkey	7.2	44.	6.0
43. Azerbaijan	7.1	43.	7.1
44. Albania	6.9	42.	8.8
	<b>Projected proportion of the population that has a remaining life expectancy of 15 years or less, 2030 (%)</b>		<b>Projected proportion of the population aged 65+, 2030 (%)</b>
1. Bulgaria	20.4	12.	24.2
2. Ukraine	18.8	31.	20.5
3. Russian Fed.	18.8	36.	19.0
4. Serbia	18.6	24.	22.0
5. Belarus	17.9	32.	20.3
40. Luxembourg	10.4	33.	19.8
41. Ireland	10.1	41.	17.6
42. Iceland	9.9	35.	19.2
43. Turkey	9.6	44.	9.8
44. Azerbaijan	9.5	43.	12.9

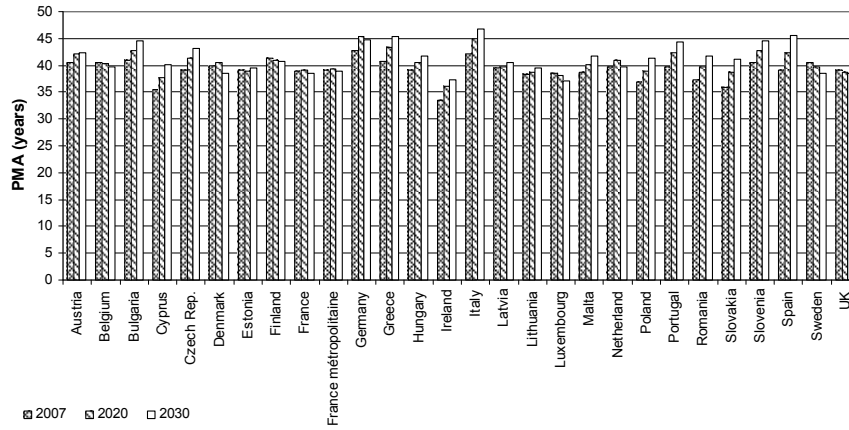
Looking further at the prospective median age, Figure 8 shows a generally increasing pattern of the indicator both in the EU and non-EU countries. In the period 2007-2020 the five countries with the largest increase are Albania (+10.4%), Armenia (+8.6%), Spain (+8.3%), Slovakia (+8.0%) and Azerbaijan (+7.9%). Conversely, some countries show only a

slight increase or even a decrease of the prospective median age, like the UK and Sweden, among others. Since the change in the prospective median age over some time period can be roughly considered as the change in the median age minus the change in life expectancy at the median age (Sanderson and Scherbov 2006), in these countries the increase in life expectancy at the median age drives the decline in the prospective median age, suggesting maybe a slowdown of the ageing process if we consider also the conditions of human survival. On the contrary, the prospective median age increases in countries where no or little change in the life expectancy at the median age counterbalances the effect of a population shift towards older ages: hence, countries with a stronger increase in the prospective median age are also countries which show a stronger increase in the conventional median age of the population with a moderate or no increase of life expectancy at the median age.

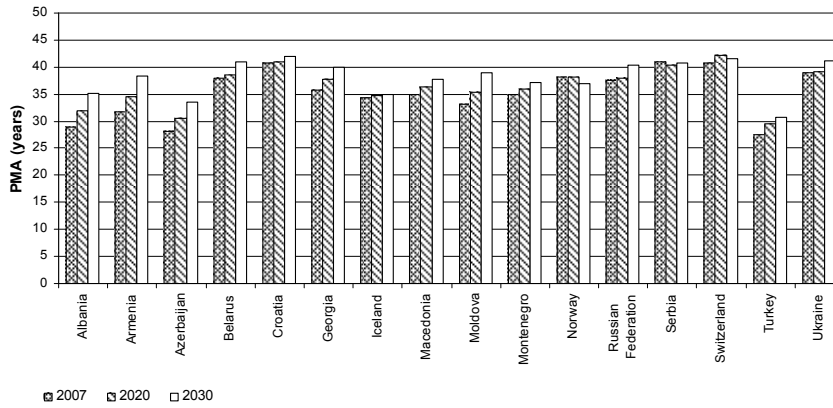
The last alternative measure of age introduced by Hersch and used by Lutz et al. (2008) is the population average remaining years of life (PARYL). Contrarily to the other two measures, in an ageing population this indicator declines over time, as the weight of the population who has less years left increases. Comparing the years 2007, 2020 and 2030 (Figure 9), in most of the considered European countries PARYL declines or remains relatively stable. The indicator partially reflects the results obtained for the prospective median age. In particular, it is worth noting that, among some other countries, Sweden and the UK show a slight increase of the PARYL.

**Figure 8** Prospective median age, years 2007, 2020, 2030.

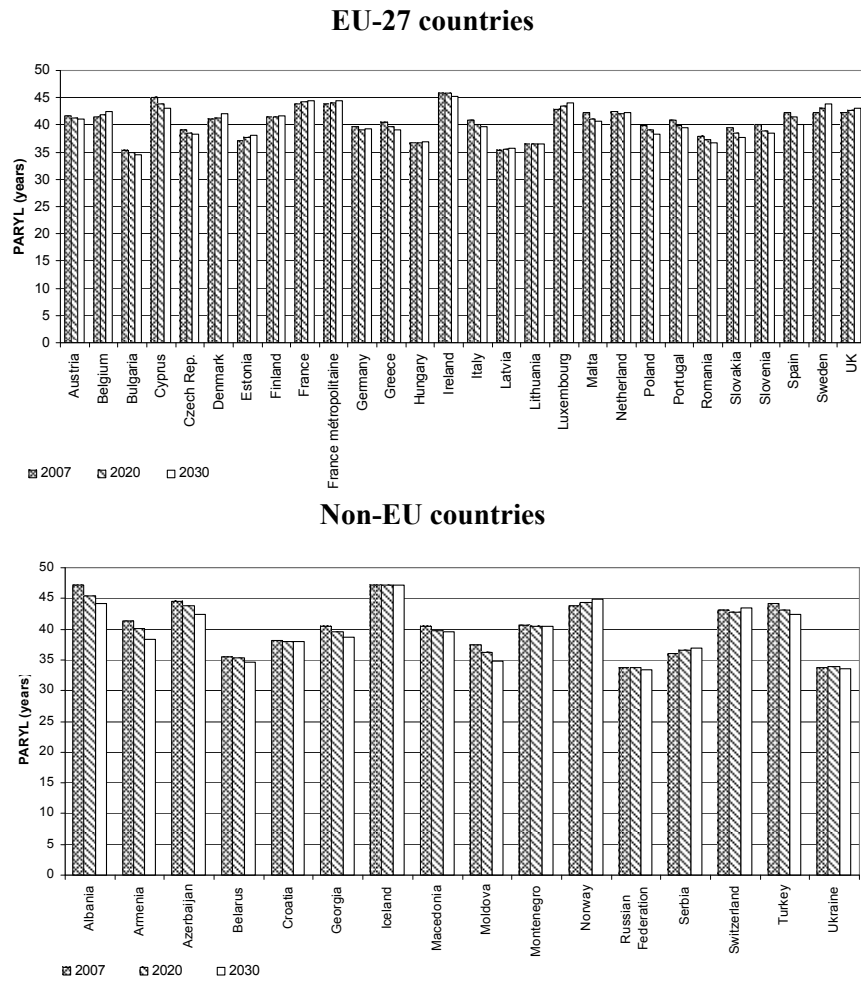
**EU-27 countries**



**Non-EU countries**



**Figure 9** Population average remaining years of life, years 2007, 2020, 2030.



#### **4 SUMMARY AND CONCLUDING REMARKS**

Our projection results confirm that ageing will continue to characterise the near future of the European population. The basis of the age pyramid is shrinking, while the elderly population increases. There are still differences between those European countries that have been facing below-replacement fertility for some time already and those countries where fertility has fallen only recently. Life expectancy levels are also not homogeneous around Europe. Moreover, the migration dynamics accelerate population losses in some countries while guaranteeing population gains in others and apparently helping to slow down the ageing process there.

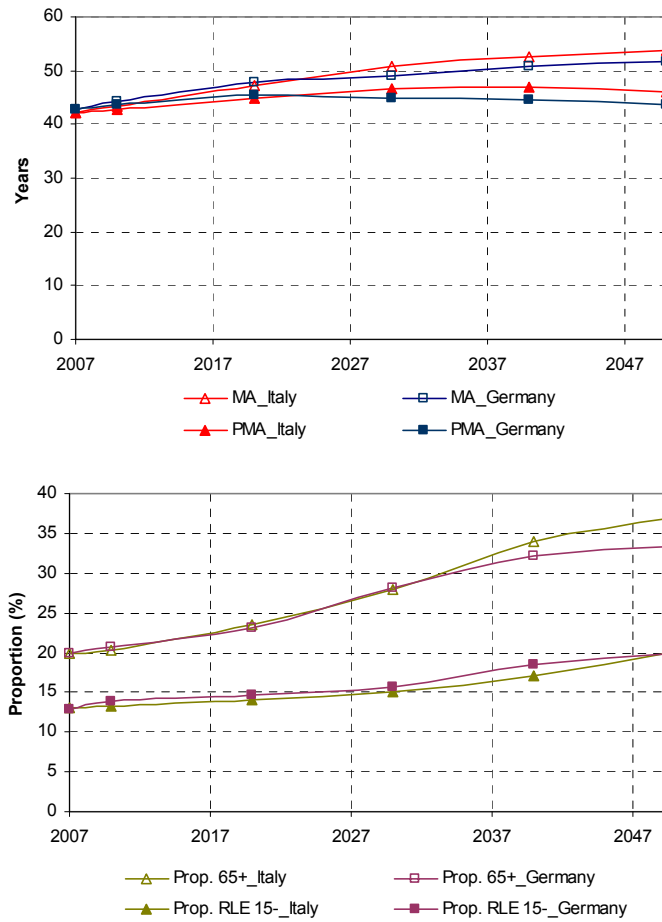
The EU population is expected to continue increasing in the near future, as well as the population in southern and western Europe, the German-speaking and the Nordic countries and the Caucasus. Conversely, eastern Europe as a whole might experience a population decline. In 2030 Germany is projected to have the largest population of EU countries, followed by France métropolitaine and the UK. Among all the considered European countries, the Russian Federation could be leading in terms of population size. Regarding the ageing process, there are noticeable differences between the EU countries, Norway, Switzerland and Iceland, and the non-EU countries, the former being apparently the forerunners. The projected old-age dependency ratio for 2030 indicates that in Germany and Italy there might be two persons of working age supporting one elderly person over the age of 65. Conversely, in Azerbaijan and Turkey each elderly could still count on about six persons of working age.

The traditional measures of population age structure, which give an idea of the stage of the ageing process across the European countries, suggest that ageing is more advanced in the EU countries (including Norway, Iceland and Switzerland) compared to the rest of Europe. However, as mentioned above, the traditional measures of age do not take into account the gains in terms of longevity. A 65 years old person today is at a different stage of his/her life cycle in comparison to person of 65 some decades ago:

he/she has a better health status and more years to live. Similarly, a 65 years old person living in a country which has experienced considerable gains in life expectancy might not be directly comparable to a person of the same age living in a country performing worse in terms of life expectancy. According to this different point of view that combines both the effects of the population age structure and life expectancy changes, our results show that the countries of the former Soviet Union and some Balkan countries might be touched more severely by the ageing process, showing already in 2007 the highest proportions of population with life expectancies of 15 or less years. Similarly, the other two measures, i.e. PMA and PARYL, suggest that the stage of the ageing process should depend not only on the changes in the population age composition, but also on changes in people's quality of life in terms of health and life expectancy. Such a perspective might be useful also for policy makers, as it gives an idea not only of the proportion of people entering into more advanced ages but also of the conditions in which these people might live, e.g. to what extent they are in poor health and need assistance or if they live a healthy life and possibly can even give support to younger generations. Moreover, when increases in life expectancy are taken into account, the adjusted measures show a slower pace of change which would suggest a less severe advancement of the ageing process. As an example, Figure 10 shows the results for Italy and Germany which in 2007 experience the highest median ages and the highest proportions of persons aged 65+.



**Figure 10** Conventional and alternative age structure indicators, Italy and Germany, 2007-2050.



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## Appendix A. Projection assumptions.

**Table A.1** Total fertility rate.

	2007	2020	2030 <sup>a</sup>	2040	2050
Albania	1.78	1.78	1.78	1.78	1.78
Armenia	1.37	1.51	1.62	1.62	1.62
Austria	1.41	1.54	1.64	1.64	1.64
Azerbaijan	1.99	1.99	1.99	1.99	1.99
Belarus	1.29	1.39	1.47	1.47	1.47
Belgium	1.73	1.80	1.86	1.86	1.86
Bulgaria	1.39	1.56	1.70	1.70	1.70
Croatia	1.39	1.51	1.61	1.61	1.61
Cyprus	1.49	1.66	1.79	1.79	1.79
Czech Rep.	1.34	1.58	1.76	1.76	1.76
Denmark	1.84	1.93	2.00	2.00	2.00
Estonia	1.56	1.73	1.85	1.85	1.85
Finland	1.84	1.88	1.91	1.91	1.91
France	2.01	2.06	2.10	2.10	2.10
France métropolitaine	1.99	2.04	2.07	2.07	2.07
Georgia	1.43	1.67	1.85	1.85	1.85
Germany	1.33	1.48	1.59	1.59	1.59
Greece	1.40	1.47	1.52	1.52	1.52
Hungary	1.36	1.58	1.75	1.75	1.75
Iceland	2.09	2.16	2.22	2.22	2.22
Ireland	1.94	2.07	2.17	2.17	2.17
Italy	1.36	1.43	1.48	1.48	1.48
Latvia	1.36	1.49	1.59	1.59	1.59
Lithuania	1.32	1.53	1.68	1.68	1.68
Luxembourg	1.66	1.75	1.82	1.82	1.82
Macedonia, FYR	1.48	1.70	1.88	1.88	1.88
Malta	1.41	1.51	1.58	1.58	1.58
Moldova	1.20	1.29	1.36	1.36	1.36
Montenegro	1.63	1.82	1.97	1.97	1.97
Netherlands	1.71	1.77	1.82	1.82	1.82
Norway	1.90	1.97	2.01	2.01	2.01
Poland	1.29	1.45	1.58	1.58	1.58

*Table continued on the next page*

Table A.1 (continued)

	2007	2020	2030 <sup>a</sup>	2040	2050
Portugal	1.36	1.52	1.65	1.65	1.65
Romania	1.33	1.57	1.75	1.75	1.75
Russian Fed.	1.30	1.42	1.52	1.52	1.52
Serbia	1.44	1.57	1.68	1.68	1.68
Slovakia	1.26	1.49	1.66	1.66	1.66
Slovenia	1.32	1.45	1.55	1.55	1.55
Spain	1.38	1.38	1.39	1.39	1.39
Sweden	1.86	1.91	1.96	1.96	1.96
Switzerland	1.46	1.87	2.19	2.19	2.19
Turkey	2.18	2.19	2.19	2.19	2.19
UK	1.84	1.92	1.98	1.98	1.98
Ukraine	1.31	1.38	1.43	1.43	1.43

Note: a) The Total fertility rate is kept constant from 2030 on.

Table A.2 Life expectancy at birth.

	F	M	F	M	F	M	F	M	F	M
	2007	2007	2020	2020	2030	2030	2040	2040	2050	2050
Albania	79.6	73.1	82.2	75.7	84.2	77.7	86.2	79.7	88.2	81.7
Armenia	76.2	69.9	78.8	72.5	80.8	74.5	82.8	76.5	84.8	78.5
Austria	83.0	77.4	85.6	80.0	87.6	82.0	89.6	84.0	91.6	86.0
Azerbaijan	75.6	70.3	78.2	72.9	80.2	74.9	82.2	76.9	84.2	78.9
Belarus	76.6	63.8	79.2	66.4	81.2	68.4	83.2	70.4	85.2	72.4
Belgium	82.5	76.8	85.1	79.4	87.1	81.4	89.1	83.4	91.1	85.4
Bulgaria	76.5	69.4	79.1	72.0	81.1	74.0	83.1	76.0	85.1	78.0
Croatia	79.5	72.7	82.1	75.3	84.1	77.3	86.1	79.3	88.1	81.3
Cyprus	82.6	79.0	85.2	81.6	87.2	83.6	89.2	85.6	91.2	87.6
Czech Rep.	80.1	73.7	82.7	76.3	84.7	78.3	86.7	80.3	88.7	82.3
Denmark	80.9	76.3	83.5	78.9	85.5	80.9	87.5	82.9	89.5	84.9
Estonia	78.8	67.6	81.4	70.2	83.4	72.2	85.4	74.2	87.4	76.2
Finland	83.3	76.1	85.9	78.7	87.9	80.7	89.9	82.7	91.9	84.7
France	84.6	77.5	87.2	80.1	89.2	82.1	91.2	84.1	93.2	86.1
France me- tropolitaine	84.6	77.6	87.2	80.2	89.2	82.2	91.2	84.2	93.2	86.2
Georgia	78.6	69.9	81.2	72.5	83.2	74.5	85.2	76.5	87.2	78.5

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Table A.2 (continued)

	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>	<b>F</b>	<b>M</b>
	<b>2007</b>	<b>2007</b>	<b>2020</b>	<b>2020</b>	<b>2030</b>	<b>2030</b>	<b>2040</b>	<b>2040</b>	<b>2050</b>	<b>2050</b>
Germany	82.6	77.4	85.2	80.0	87.2	82.0	89.2	84.0	91.2	86.0
Greece	82.1	77.4	84.7	80.0	86.7	82.0	88.7	84.0	90.7	86.0
Hungary	78.0	69.4	80.6	72.0	82.6	74.0	84.6	76.0	86.6	78.0
Iceland	83.9	80.0	86.5	82.6	88.5	84.6	90.5	86.6	92.5	88.6
Ireland	82.3	77.5	84.9	80.1	86.9	82.1	88.9	84.1	90.9	86.1
Italy	84.4	78.5	87.0	81.1	89.0	83.1	91.0	85.1	93.0	87.1
Latvia	76.5	65.6	79.1	68.2	81.1	70.2	83.1	72.2	85.1	74.2
Lithuania	77.2	65.5	79.8	68.1	81.8	70.1	83.8	72.1	85.8	74.1
Luxembourg	82.1	77.0	84.7	79.6	86.7	81.6	88.7	83.6	90.7	85.6
Macedonia, FYR	76.4	71.9	79.0	74.5	81.0	76.5	83.0	78.5	85.0	80.5
Malta	82.1	77.2	84.7	79.8	86.7	81.8	88.7	83.8	90.7	85.8
Moldova	73.0	65.2	75.6	67.8	77.6	69.8	79.6	71.8	81.6	73.8
Montenegro	77.4	71.8	80.0	74.4	82.0	76.4	84.0	78.4	86.0	80.4
Netherlands	82.2	77.9	84.8	80.5	86.8	82.5	88.8	84.5	90.8	86.5
Norway	83.1	78.4	85.7	81.0	87.7	83.0	89.7	85.0	91.7	87.0
Poland	79.9	71.1	82.5	73.7	84.5	75.7	86.5	77.7	88.5	79.7
Portugal	82.5	75.7	85.1	78.3	87.1	80.3	89.1	82.3	91.1	84.3
Romania	76.4	69.4	79.0	72.0	81.0	74.0	83.0	76.0	85.0	78.0
Russian Fed.	72.9	59.5	75.5	62.1	77.5	64.1	79.5	66.1	81.5	68.1
Serbia	76.4	71.0	79.0	73.6	81.0	75.6	83.0	77.6	85.0	79.6
Slovakia	78.6	70.6	81.2	73.2	83.2	75.2	85.2	77.2	87.2	79.2
Slovenia	82.2	74.7	84.8	77.3	86.8	79.3	88.8	81.3	90.8	83.3
Spain	84.1	77.4	86.7	80.0	88.7	82.0	90.7	84.0	92.7	86.0
Sweden	83.3	79.0	85.9	81.6	87.9	83.6	89.9	85.6	91.9	87.6
Switzerland	84.4	79.4	87.0	82.0	89.0	84.0	91.0	86.0	93.0	88.0
Turkey	71.8	67.2	74.4	69.8	76.4	71.8	78.4	73.8	80.4	75.8
UK	81.5	77.5	84.1	80.1	86.1	82.1	88.1	84.1	90.1	86.1
Ukraine	74.0	62.5	76.6	65.1	78.6	67.1	80.6	69.1	82.6	71.1

**Table A.3** Net migration.

	2007	2020	2030	2040	2050
Albania	-12859	-10000	-10000	-10000	-10000
Armenia	-5289	-8000	-8000	-8000	-8000
Austria	27946	20632	19134	19677	20325
Azerbaijan	-2799	-10000	-10000	-10000	-10000
Belarus	3720	-2000	-2000	-2000	-2000
Belgium	44917	18908	18524	18524	18524
Bulgaria	-33772	-15130	2099	2049	842
Croatia	9640	9640	9640	9640	9640
Cyprus	8085	4548	4609	4762	4875
Czech Rep.	26695	9684	21644	20970	20010
Denmark	9375	6909	6642	6642	6575
Estonia	-386	-444	1774	1745	1689
Finland	9504	6115	6048	6048	6048
France	82990	60253	58860	58819	58718
France métropolitaine	85230	60253	58860	58819	58718
Georgia	-12848	-10000	-10000	-10000	-10000
Germany	70149	194329	180996	179296	179196
Greece	39909	38691	34833	34834	34901
Hungary	19308	13772	21235	20754	20058
Iceland	1833	1833	1833	1833	1833
Ireland	55467	14048	12944	12624	12388
Italy	312627	118133	113800	113867	113800
Latvia	-2499	-682	2984	2913	2809
Lithuania	-5133	-1193	4560	4492	4322
Luxembourg	4715	2809	2777	2777	2777
Macedonia, FYR	-896	-2000	-2000	-2000	-2000
Malta	2209	2275	2396	2474	2541
Moldova	-4955	-10000	-10000	-10000	-10000
Montenegro	-698	-698	-698	-698	-698
Netherlands	-11272	32531	31638	31479	31096
Norway	21717	15000	15000	15000	15000
Poland	-35950	-10562	35913	35369	33665
Portugal	24118	15564	14964	14913	14906
Romania	-8519	-42778	4722	9316	7643

*Table continued on the next page*

*Table A.3 (continued)*

	<b>2007</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Russian Fed.	128362	50000	50000	50000	50000
Serbia	7548	7548	7548	7548	7548
Slovakia	2283	1166	5132	5001	4738
Slovenia	6170	5298	6998	6878	6653
Spain	481628	110333	105333	104467	101600
Sweden	44095	22705	21810	21542	21343
Switzerland	32392	20000	20000	20000	20000
Turkey	-750	-10000	-10000	-10000	-10000
UK	189358	102776	99189	98661	98492
Ukraine	5684	-20000	-20000	-20000	-20000

## Appendix B. Projection results.

**Table B.1** Total population size (millions).

	2007	2010	2020	2030	2040	2050
Albania	3.2	3.2	3.4	3.5	3.5	3.4
Armenia	3.2	3.2	3.3	3.2	3.0	2.8
Austria	8.3	8.4	8.6	8.8	8.9	8.9
Azerbaijan	8.5	8.8	9.7	10.2	10.7	10.9
Belarus	9.7	9.6	9.2	8.6	8.1	7.4
Belgium	10.6	10.7	11.1	11.4	11.7	11.9
Bulgaria	7.7	7.5	6.9	6.3	5.9	5.5
Croatia	4.4	4.4	4.4	4.4	4.3	4.2
Cyprus	0.8	0.8	0.9	1.0	1.1	1.1
Czech Rep.	10.3	10.3	10.3	10.2	10.1	10.0
Denmark	5.4	5.5	5.6	5.8	5.9	6.0
Estonia	1.3	1.3	1.3	1.3	1.2	1.2
Finland	5.3	5.3	5.5	5.6	5.6	5.6
France	63.4	64.5	67.8	70.6	73.3	75.6
France métropolitaine	61.5	62.6	65.6	68.1	70.7	72.8
Georgia	4.4	4.4	4.3	4.1	3.9	3.7
Germany	82.3	82.2	82.3	81.6	80.4	78.6
Greece	11.2	11.3	11.5	11.5	11.5	11.3
Hungary	10.1	10.0	9.8	9.6	9.3	9.1
Iceland	0.3	0.3	0.4	0.4	0.5	0.5
Ireland	4.3	4.6	5.1	5.6	6.1	6.5
Italy	59.1	59.8	59.9	59.2	58.3	56.8
Latvia	2.3	2.2	2.1	2.0	1.9	1.8
Lithuania	3.4	3.3	3.2	3.1	3.0	2.9
Luxembourg	0.5	0.5	0.5	0.6	0.6	0.7
Macedonia, FYR	2.0	2.1	2.1	2.1	2.0	2.0
Malta	0.4	0.4	0.4	0.5	0.5	0.5
Moldova	3.6	3.5	3.4	3.1	2.8	2.5
Montenegro	0.6	0.6	0.6	0.6	0.6	0.6
Netherlands	16.4	16.5	17.2	17.8	18.3	18.5
Norway	4.7	4.8	5.1	5.5	5.9	6.2

*Table continued on the next page*



*Table B.1 (continued)*

	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Poland	38.1	38.1	37.5	36.8	35.9	34.5
Portugal	10.6	10.7	10.7	10.7	10.6	10.3
Romania	21.6	21.4	20.5	19.6	18.9	18.1
Russian Fed.	142.2	140.3	133.0	124.2	115.6	106.4
Serbia	7.4	7.3	7.1	6.9	6.6	6.4
Slovakia	5.4	5.4	5.4	5.3	5.2	5.1
Slovenia	2.0	2.0	2.0	2.0	2.0	2.0
Spain	44.5	45.8	47.0	47.1	47.0	46.2
Sweden	9.1	9.3	9.7	10.2	10.6	10.9
Switzerland	7.5	7.6	8.0	8.5	8.9	9.3
Turkey	73.4	75.9	84.2	92.1	98.5	103.9
UK	60.9	61.9	64.8	67.3	69.5	71.5
Ukraine	46.5	45.6	42.5	38.9	35.6	32.1

**Table B.2** Population median age.

	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Albania	28.9	29.9	33.9	38.7	43.2	46.3
Armenia	31.8	32.8	36.7	42.2	47.6	51.0
Austria	40.5	41.7	44.5	46.4	48.3	49.5
Azerbaijan	28.2	29.1	32.7	37.6	39.8	40.7
Belarus	38.0	38.5	40.8	44.9	49.0	50.3
Belgium	40.5	41.0	42.7	43.8	44.9	45.2
Bulgaria	41.0	41.7	45.0	48.5	50.6	49.8
Croatia	40.7	41.4	43.4	46.0	48.2	49.7
Cyprus	35.5	36.5	40.0	44.3	47.8	49.5
Czech Rep.	39.1	39.7	43.8	47.4	49.0	48.5
Denmark	40.0	40.7	42.9	42.7	43.3	44.0
Estonia	39.1	39.5	41.2	43.7	45.7	44.3
Finland	41.3	42.1	43.4	44.8	45.8	45.7
France	39.0	39.7	41.4	42.7	43.4	43.7
France métropolitaine	39.2	39.9	41.7	43.1	43.6	44.0
Georgia	35.8	36.8	40.0	43.8	48.0	49.9
Germany	42.8	44.2	47.7	48.9	50.7	51.7
Greece	40.6	41.8	45.6	49.3	52.1	53.3

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*Table B.2 (continued)*

	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Hungary	39.2	39.9	43.0	46.1	47.9	48.4
Iceland	34.5	35.2	37.3	39.3	41.3	42.4
Ireland	33.4	34.3	38.3	41.4	41.8	42.4
Italy	42.2	43.2	47.3	50.8	52.7	53.8
Latvia	39.5	40.1	42.0	44.7	47.9	47.3
Lithuania	38.3	39.2	41.1	43.6	46.7	47.1
Luxembourg	38.5	39.0	40.5	41.4	42.6	43.3
Macedonia, FYR	34.9	35.8	38.6	41.8	44.5	45.1
Malta	38.7	39.5	42.6	45.9	48.9	50.8
Moldova	33.2	34.1	37.7	43.1	48.7	53.2
Montenegro	35.0	35.8	38.3	41.4	43.5	44.4
Netherlands	39.6	40.8	43.4	44.0	44.8	45.8
Norway	38.2	38.9	40.4	41.1	42.3	42.9
Poland	37.0	37.8	41.3	45.5	49.0	50.6
Portugal	39.8	40.8	44.6	48.4	50.8	51.9
Romania	37.3	38.3	42.0	45.6	48.6	48.5
Russian Fed.	37.5	37.9	40.1	44.0	47.2	46.8
Serbia	41.0	41.3	42.7	44.9	46.6	47.2
Slovakia	35.9	36.9	41.1	45.3	48.7	50.1
Slovenia	40.6	41.8	45.1	48.8	51.4	52.0
Spain	39.1	40.1	44.6	49.7	53.3	54.6
Sweden	40.5	41.0	42.2	42.8	44.5	44.2
Switzerland	40.8	41.9	44.6	45.7	46.4	45.7
Turkey	27.5	28.6	31.4	34.0	36.3	37.4
UK	39.0	39.7	41.0	42.8	44.2	44.4
Ukraine	39.0	39.4	41.4	45.0	48.8	50.0

**Table B.3** Proportion of population aged 65+ (%).

	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Albania	8.8	9.6	11.9	16.6	19.9	23.7
Armenia	10.9	10.2	11.5	18.1	21.0	26.5
Austria	16.9	17.7	20.0	24.9	29.3	31.1
Azerbaijan	7.1	6.5	7.3	12.9	16.5	19.7
Belarus	14.6	13.8	15.1	20.3	23.2	28.0
Belgium	17.1	17.3	20.0	23.9	26.5	27.3
Bulgaria	17.3	17.8	21.2	24.2	27.0	31.1
Croatia	17.1	17.3	19.9	23.4	26.0	29.3
Cyprus	12.3	13.1	17.2	22.1	25.7	30.1
Czech Rep.	14.4	15.5	20.7	23.3	26.4	30.6
Denmark	15.3	16.5	20.4	23.2	25.6	25.7
Estonia	17.1	17.1	19.0	21.3	22.8	25.3
Finland	16.5	17.1	22.7	26.1	27.1	28.0
France	16.2	16.6	20.4	23.7	26.3	27.1
France métropolitaine	16.4	16.8	20.6	24.0	26.6	27.4
Georgia	14.6	14.1	16.1	21.1	24.7	28.7
Germany	19.8	20.7	23.0	28.2	32.1	33.4
Greece	18.6	19.0	21.8	25.8	31.3	35.9
Hungary	15.9	16.7	20.0	22.1	25.0	29.1
Iceland	11.7	12.2	15.3	19.2	21.8	23.9
Ireland	11.1	11.4	14.2	17.6	21.4	26.4
Italy	19.9	20.4	23.5	27.9	34.0	37.0
Latvia	17.1	17.4	18.4	21.2	23.5	26.7
Lithuania	15.6	16.0	17.2	20.7	23.3	25.4
Luxembourg	14.0	14.2	16.2	19.8	22.9	24.2
Macedonia, FYR	11.2	11.7	14.5	18.1	21.1	24.5
Malta	13.8	14.7	20.4	24.7	26.6	30.3
Moldova	10.3	10.2	12.6	17.6	20.4	26.8
Montenegro	12.9	13.0	15.4	18.8	21.0	24.2
Netherlands	14.5	15.4	19.9	24.3	27.5	27.5
Norway	14.6	15.2	18.3	21.3	24.1	24.7
Poland	13.4	13.6	18.3	22.6	24.8	30.0
Portugal	17.3	17.9	20.9	25.1	30.0	34.5

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*Table B.3 (continued)*

	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Romania	14.9	14.9	17.3	19.8	24.3	28.8
Russian Fed.	14.0	12.8	14.7	19.0	20.6	24.9
Serbia	17.3	17.0	19.7	22.0	23.5	26.6
Slovakia	11.9	12.3	16.3	20.6	23.8	29.4
Slovenia	15.9	16.8	21.0	25.9	29.9	33.7
Spain	16.7	16.9	19.4	24.6	31.8	38.1
Sweden	17.4	18.3	21.5	23.6	25.8	26.4
Switzerland	16.2	17.2	20.6	25.0	28.3	29.0
Turkey	6.0	6.0	7.2	9.8	13.2	16.6
UK	16.0	16.5	19.1	22.2	25.1	26.4
Ukraine	16.4	15.7	16.9	20.5	22.9	27.6

**Table B.4** Proportion of population aged 80+ (%).

	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Albania	1.4	1.6	2.6	3.5	5.6	7.8
Armenia	1.4	1.9	2.7	2.4	5.3	7.0
Austria	4.5	4.9	5.6	7.4	9.5	13.5
Azerbaijan	0.9	1.0	1.8	1.5	3.4	5.6
Belarus	2.6	3.2	3.8	3.7	6.2	7.8
Belgium	4.6	5.0	5.9	6.9	9.2	11.4
Bulgaria	3.5	3.8	4.6	5.9	7.4	8.6
Croatia	3.1	3.6	5.0	5.5	7.9	9.5

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*Table B.4 (continued)*

	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Cyprus	2.8	2.8	3.8	5.9	8.6	10.9
Czech Rep.	3.3	3.6	4.2	6.7	8.4	9.3
Denmark	4.1	4.2	4.9	7.2	8.5	10.5
Estonia	3.5	4.1	5.4	5.7	7.2	8.0
Finland	4.2	4.7	5.8	8.5	10.8	11.9
France	4.8	5.3	6.3	7.7	10.2	11.9
France métropolitaine	4.9	5.4	6.3	7.8	10.3	12.0
Georgia	2.3	3.0	4.6	4.5	7.1	9.5
Germany	4.6	5.1	7.3	8.3	11.0	15.4
Greece	3.9	4.6	6.7	7.6	10.1	13.6
Hungary	3.6	3.9	4.6	5.8	7.8	8.4
Iceland	3.1	3.3	3.6	5.1	7.5	9.2
Ireland	2.7	2.7	3.2	4.6	6.3	8.2
Italy	5.3	5.9	7.7	9.4	11.6	16.2
Latria	3.4	4.0	5.2	5.4	6.7	8.1
Lithuania	3.1	3.7	4.7	5.0	6.5	8.3
Luxembourg	3.3	3.8	4.6	5.3	7.1	9.6
Macedonia, FYR	1.6	1.8	2.6	3.3	5.1	6.6
Malta	3.0	3.3	4.4	6.9	9.5	10.5
Moldova	1.8	2.0	2.4	2.7	5.1	6.3
Montenegro	1.9	2.3	3.4	3.8	5.8	6.9
Netherlands	3.7	4.0	4.8	7.1	9.4	11.9
Norway	4.7	4.7	4.6	6.5	8.3	10.1
Poland	2.9	3.3	4.4	5.5	8.9	9.2
Portugal	4.1	4.5	6.0	7.4	9.7	12.8
Romania	2.7	3.1	4.1	4.5	6.5	7.9
Russian Fed.	2.3	2.8	3.4	3.2	5.3	5.9
Serbia	2.9	3.4	4.3	4.6	6.6	7.2
Slovakia	2.5	2.7	3.1	4.4	6.9	8.0
Slovenia	3.4	4.0	5.5	6.9	10.2	12.7
Spain	4.5	4.9	5.9	7.2	10.0	14.5
Sweden	5.4	5.5	5.7	8.2	9.4	11.1
Switzerland	4.6	4.9	5.9	7.9	10.1	13.1
Turkey	1.0	1.0	1.0	1.2	2.0	3.0
UK	4.5	4.7	5.2	6.8	8.3	10.7
Ukraine	2.9	3.4	4.2	4.1	6.0	7.1

**Table B.5** Proportion of population aged 0-14 (%).

	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Albania	24.9	23.1	20.4	18.7	15.9	15.2
Armenia	19.7	18.1	17.5	14.7	13.2	12.9
Austria	15.6	14.9	14.3	14.2	13.6	13.3
Azerbaijan	23.8	22.3	23.8	19.6	18.4	18.4
Belarus	14.9	14.5	15.1	13.0	12.3	12.1
Belgium	17.0	16.8	16.6	16.2	15.9	15.8
Bulgaria	13.4	13.3	13.8	12.4	13.1	13.3
Croatia	15.6	15.1	14.4	13.9	13.2	12.9
Cyprus	17.9	16.6	16.4	15.4	13.7	13.7
Czech Rep.	14.4	14.1	14.9	13.6	13.7	14.3
Denmark	18.6	18.1	16.7	17.2	17.4	16.7
Estonia	14.9	15.1	17.3	15.8	15.4	16.2
Finland	17.1	16.6	16.6	16.3	15.8	15.8
France	18.6	18.6	18.3	17.6	17.4	17.4
France métropolitaine	18.4	18.5	18.1	17.4	17.3	17.3
Georgia	17.7	16.7	16.5	15.3	14.5	14.4
Germany	13.9	13.4	12.7	12.9	12.5	12.3
Greece	14.3	14.2	13.8	12.2	11.8	11.7
Hungary	15.2	14.8	14.9	14.3	14.0	14.1
Iceland	21.5	20.8	19.8	18.9	17.8	17.3
Ireland	20.3	20.8	21.4	18.8	18.0	18.7
Italy	14.1	14.0	13.0	11.8	11.7	11.4
Latvia	14.0	13.7	15.6	14.1	13.4	13.8
Lithuania	15.9	14.9	15.5	15.1	14.0	14.4
Luxembourg	18.3	17.9	16.9	17.0	16.8	16.3
Macedonia, FYR	18.9	17.8	17.1	16.8	15.8	15.9
Malta	16.7	15.5	14.7	14.1	12.9	12.7
Moldova	18.2	16.5	15.6	13.5	11.4	10.8
Montenegro	19.8	19.0	18.0	17.7	16.8	16.6
Netherlands	18.1	17.5	15.8	16.0	16.0	15.3
Norway	19.4	18.9	18.0	18.1	17.7	17.3
Poland	15.8	15.0	15.2	13.8	12.7	12.7
Portugal	15.5	15.3	14.1	13.0	12.9	12.5

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*Table B.5 (continued)*

	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Romania	15.4	15.2	15.2	14.0	13.9	14.0
Russian Fed.	14.7	14.8	15.7	13.8	13.5	13.4
Serbia	15.5	15.2	14.9	14.5	14.3	14.1
Slovakia	16.1	15.2	15.2	14.0	13.2	13.2
Slovenia	14.0	13.8	13.7	12.4	12.1	12.5
Spain	14.5	14.9	14.3	11.5	10.9	10.9
Sweden	17.0	16.5	17.3	17.2	16.4	16.5
Switzerland	15.8	15.2	15.3	16.5	16.6	16.7
Turkey	27.9	26.8	23.8	22.6	21.2	20.5
UK	17.6	17.3	17.6	17.0	16.4	16.4
Ukraine	14.2	14.0	15.0	12.9	12.2	12.1

**Table B.6** Proportion of population aged 15-64 (%).

	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Albania	66.3	67.3	67.7	64.7	64.2	61.1
Armenia	69.4	71.7	70.9	67.2	65.8	60.6
Austria	67.5	67.4	65.7	60.9	57.1	55.6
Azerbaijan	69.1	71.2	68.9	67.5	65.1	61.9
Belarus	70.5	71.7	69.8	66.7	64.5	59.9
Belgium	65.9	65.9	63.3	59.9	57.6	56.8
Bulgaria	69.3	68.9	65.1	63.3	59.9	55.6
Croatia	67.3	67.5	65.7	62.7	60.8	57.8
Cyprus	69.8	70.3	66.3	62.4	60.7	56.2
Czech Rep.	71.2	70.5	64.4	63.0	59.9	55.1
Denmark	66.1	65.4	62.9	59.7	56.9	57.6
Estonia	68.0	67.8	63.7	62.9	61.8	58.5
Finland	66.5	66.3	60.6	57.6	57.1	56.2
France	65.2	64.8	61.3	58.6	56.2	55.5
France métropolitaine	65.2	64.7	61.2	58.6	56.1	55.3
Georgia	67.7	69.2	67.3	63.6	60.8	56.9
Germany	66.3	65.9	64.2	58.9	55.4	54.3
Greece	67.1	66.8	64.4	62.0	56.9	52.4
Hungary	68.9	68.5	65.1	63.6	61.0	56.8

*Table continued on the next page*

*Table B.6 (continued)*

	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Iceland	66.7	67.1	64.9	61.9	60.4	58.8
Ireland	68.6	67.8	64.4	63.6	60.6	55.0
Italy	66.0	65.6	63.5	60.3	54.4	51.6
Latvia	68.9	68.9	66.0	64.7	63.2	59.5
Lithuania	68.5	69.1	67.3	64.2	62.6	60.2
Luxembourg	67.6	67.9	66.9	63.3	60.3	59.5
Macedonia, FYR	69.9	70.5	68.4	65.1	63.1	59.6
Malta	69.5	69.8	64.9	61.2	60.4	57.1
Moldova	71.5	73.2	71.8	68.9	68.2	62.4
Montenegro	67.4	68.0	66.6	63.5	62.1	59.2
Netherlands	67.4	67.1	64.2	59.7	56.5	57.3
Norway	66.0	65.9	63.6	60.6	58.1	58.0
Poland	70.8	71.3	66.4	63.7	62.5	57.2
Portugal	67.3	66.8	65.0	61.9	57.2	53.0
Romania	69.8	69.9	67.5	66.2	61.7	57.2
Russian Fed.	71.3	72.4	69.6	67.2	65.9	61.7
Serbia	67.2	67.8	65.4	63.5	62.2	59.4
Slovakia	72.0	72.5	68.5	65.4	63.0	57.4
Slovenia	70.1	69.4	65.3	61.7	58.0	53.9
Spain	68.8	68.2	66.2	63.9	57.3	50.9
Sweden	65.6	65.2	61.2	59.2	57.8	57.1
Switzerland	68.0	67.6	64.1	58.5	55.1	54.3
Turkey	66.1	67.2	68.9	67.6	65.6	62.9
UK	66.4	66.2	63.3	60.8	58.5	57.2
Ukraine	69.4	70.3	68.2	66.6	64.9	60.3



**Table B.7** Old-age dependency ratio.

	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Albania	13.3	14.3	17.6	25.6	31.0	38.8
Armenia	15.7	14.2	16.2	27.0	31.9	43.7
Austria	25.0	26.3	30.4	40.9	51.3	55.9
Azerbaijan	10.2	9.2	10.6	19.1	25.3	31.8
Belarus	20.7	19.3	21.7	30.4	36.0	46.7
Belgium	25.9	26.2	31.6	39.9	45.9	48.1
Bulgaria	24.9	25.8	32.6	38.3	45.2	55.9
Croatia	25.4	25.7	30.2	37.3	42.8	50.6
Cyprus	17.6	18.6	26.0	35.5	42.3	53.5
Czech Rep.	20.2	22.0	32.1	37.0	44.1	55.5
Denmark	23.2	25.3	32.3	38.9	45.0	44.6
Estonia	25.1	25.2	29.7	33.8	36.9	43.3
Finland	24.8	25.9	37.5	45.4	47.5	49.9
France	24.9	25.7	33.3	40.5	46.8	48.7
France métropolitaine	25.2	26.0	33.7	40.9	47.4	49.5
Georgia	21.6	20.4	23.9	33.2	40.7	50.5
Germany	29.9	31.4	35.9	47.8	58.0	61.4
Greece	27.6	28.4	33.9	41.5	55.0	68.4
Hungary	23.2	24.4	30.7	34.7	41.0	51.3
Iceland	17.5	18.1	23.5	31.1	36.1	40.5
Ireland	16.2	16.8	22.0	27.6	35.3	48.0
Italy	30.2	31.1	37.0	46.3	62.5	71.7
Latvia	24.8	25.3	27.9	32.8	37.1	44.8
Lithuania	22.7	23.2	25.5	32.2	37.3	42.2
Luxembourg	20.7	20.9	24.3	31.2	37.9	40.6
Macedonia, FYR	16.0	16.6	21.1	27.8	33.4	41.0
Malta	19.8	21.1	31.4	40.3	44.1	53.0
Moldova	14.4	13.9	17.5	25.6	29.9	43.0
Montenegro	19.1	19.1	23.1	29.6	33.8	41.0
Netherlands	21.5	23.0	31.0	40.8	48.6	48.0
Norway	22.2	23.0	28.8	35.1	41.5	42.6
Poland	19.0	19.1	27.6	35.5	39.6	52.4
Portugal	25.6	26.8	32.2	40.6	52.4	65.1

*Table continued on the next page*

*Table B.7 (continued)*

	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Romania	21.3	21.3	25.6	29.8	39.4	50.4
Russian Fed.	19.7	17.7	21.1	28.3	31.3	40.4
Serbia	25.7	25.1	30.1	34.6	37.7	44.7
Slovakia	16.5	17.0	23.8	31.4	37.8	51.1
Slovenia	22.7	24.1	32.1	42.0	51.5	62.5
Spain	24.2	24.8	29.4	38.4	55.6	74.8
Sweden	26.4	28.1	35.1	39.9	44.6	46.2
Switzerland	23.8	25.4	32.2	42.7	51.3	53.3
Turkey	9.1	9.0	10.5	14.5	20.1	26.4
UK	24.1	25.0	30.1	36.5	42.9	46.2
Ukraine	23.6	22.4	24.7	30.8	35.4	45.9

**Table B.8** Prospective median age.

	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Albania	28.9	29.5	31.9	35.2	38.2	39.7
Armenia	31.8	32.2	34.5	38.3	42.1	43.8
Austria	40.5	41.1	42.2	42.3	42.3	41.6
Azerbaijan	28.2	28.5	30.4	33.6	34.1	33.2
Belarus	38.0	38.0	38.6	40.9	43.4	43.0
Belgium	40.5	40.5	40.3	39.7	38.9	37.2
Bulgaria	41.0	41.2	42.8	44.6	45.0	42.4
Croatia	40.7	40.9	41.0	41.9	42.3	41.9
Cyprus	35.5	36.0	37.6	40.2	41.8	41.7
Czech Rep.	39.1	39.2	41.4	43.2	42.9	40.5
Denmark	40.0	40.2	40.5	38.4	37.2	35.9
Estonia	39.1	39.0	38.9	39.6	39.8	36.5
Finland	41.3	41.6	41.0	40.6	39.7	37.8
France	39.0	39.1	39.0	38.5	37.3	35.7
France métropolitaine	39.2	39.3	39.4	38.8	37.5	35.9
Georgia	35.8	36.3	37.8	40.0	42.6	42.8
Germany	42.8	43.6	45.4	44.7	44.6	43.8
Greece	40.6	41.3	43.3	45.3	46.3	45.6
Hungary	39.2	39.4	40.6	41.7	41.7	40.3

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*Table B.8 (continued)*

	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Iceland	34.3	34.4	34.7	34.9	35.0	34.1
Ireland	33.4	33.8	36.0	37.3	35.8	34.4
Italy	42.2	42.7	45.0	46.8	46.8	46.0
Latvia	39.5	39.5	39.6	40.6	42.0	39.5
Lithuania	38.3	38.7	38.7	39.5	40.9	39.4
Luxembourg	38.5	38.4	38.1	37.1	36.3	35.1
Macedonia, FYR	34.9	35.2	36.3	37.8	38.7	37.5
Malta	38.7	38.9	40.2	41.7	42.8	42.9
Moldova	33.2	33.5	35.4	39.0	43.0	45.9
Montenegro	34.9	35.1	35.9	37.1	37.5	36.6
Netherlands	39.6	40.3	41.0	39.7	38.7	37.8
Norway	38.2	38.3	38.1	36.9	36.3	34.9
Poland	37.0	37.3	38.9	41.3	43.0	42.8
Portugal	39.8	40.3	42.3	44.3	44.9	44.2
Romania	37.3	37.8	39.8	41.7	43.0	41.1
Russian Fed.	37.5	37.4	38.0	40.3	42.0	39.8
Serbia	41.0	40.8	40.4	40.8	40.6	39.4
Slovakia	35.9	36.4	38.8	41.2	42.7	42.4
Slovenia	40.6	41.2	42.7	44.6	45.4	44.1
Spain	39.1	39.5	42.3	45.6	47.4	46.9
Sweden	40.5	40.4	39.8	38.6	38.4	36.2
Switzerland	40.8	41.3	42.2	41.6	40.4	37.8
Turkey	27.5	28.1	29.6	30.7	31.5	31.1
UK	39.0	39.2	38.6	38.6	38.2	36.5
Ukraine	39.0	38.8	39.1	41.1	43.3	42.8

**Table B.9** Proportion of persons that have a remaining life expectancy of 15 years or less (%).

	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Albania	6.9	7.4	8.4	10.5	13.0	13.9
Armenia	11.3	10.2	10.4	15.1	16.9	17.9
Austria	11.1	11.1	12.4	13.4	16.1	17.9
Azerbaijan	7.1	6.4	6.2	9.5	12.4	12.9
Belarus	15.5	14.2	14.5	17.9	19.1	20.3
Belgium	12.4	12.5	12.4	13.7	15.4	15.7
Bulgaria	17.2	17.3	19.0	20.4	20.6	22.5
Croatia	15.3	15.4	15.3	17.1	18.1	18.2
Cyprus	8.4	8.6	10.1	12.3	14.5	15.0
Czech Rep.	11.9	12.1	14.9	16.8	16.5	18.2
Denmark	11.4	11.5	13.6	14.5	15.2	15.4
Estonia	14.7	15.1	14.8	15.6	15.7	15.8
Finland	11.1	11.4	13.2	15.9	16.6	15.4
France	10.3	10.5	10.3	12.3	13.6	14.0
France métropolitaine	10.4	10.6	10.4	12.4	13.7	14.1
Georgia	12.7	13.1	12.4	14.7	17.4	18.5
Germany	12.9	13.9	14.7	15.7	18.5	19.9
Greece	13.6	14.1	14.5	15.5	17.5	19.9
Hungary	14.3	14.5	15.6	17.3	17.0	19.1
Iceland	8.0	7.8	8.1	9.9	11.6	11.8
Ireland	8.0	7.8	8.6	10.1	11.4	12.6
Italy	13.0	13.3	14.1	15.2	17.1	20.1
Latvia	15.9	16.2	15.8	16.8	17.4	18.0
Lithuania	14.0	14.3	14.1	15.3	17.0	17.1
Luxembourg	9.7	9.7	9.6	10.4	12.1	13.0
Macedonia, FYR	11.5	11.7	12.9	14.9	16.2	17.0
Malta	10.5	10.7	13.0	15.4	16.3	15.7
Moldova	12.0	11.5	13.5	17.0	18.0	20.8
Montenegro	12.3	12.2	12.6	14.6	15.4	15.7
Netherlands	10.3	10.5	12.2	14.1	15.8	16.5
Norway	10.3	10.0	10.6	12.0	12.8	13.5
Poland	11.0	11.2	12.3	15.8	16.3	16.7

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*Table B.9 (continued)*

	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Portugal	12.7	13.0	13.7	15.1	17.2	19.2
Romania	14.4	14.1	14.8	16.5	17.8	20.2
Russian Fed.	15.2	14.3	15.9	18.8	18.9	20.4
Serbia	17.7	17.0	17.6	18.6	18.1	18.5
Slovakia	11.0	11.1	12.8	15.6	16.5	18.4
Slovenia	11.7	12.1	13.0	15.8	17.9	18.6
Spain	11.8	11.6	11.8	13.1	15.9	19.5
Sweden	11.9	11.7	12.9	13.8	13.9	14.2
Switzerland	10.2	10.3	11.4	12.7	14.3	15.5
Turkey	7.2	7.1	7.9	9.6	11.7	13.8
UK	11.6	11.6	12.2	12.8	14.1	14.8
Ukraine	17.4	16.3	16.6	18.8	19.5	21.2

**Table B.10** Population average remaining years of life.

	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Albania	47.1	46.6	45.4	44.1	42.8	42.0
Armenia	41.4	41.0	40.1	38.4	37.2	36.5
Austria	41.6	41.5	41.2	41.2	41.3	41.9
Azerbaijan	44.5	44.4	43.9	42.5	42.0	42.0
Belarus	35.6	35.6	35.4	34.7	34.3	34.4
Belgium	41.5	41.6	41.9	42.4	43.0	44.1
Bulgaria	35.4	35.2	34.9	34.6	35.3	36.1
Croatia	38.1	38.0	38.0	38.1	38.2	38.8
Cyprus	45.1	44.8	43.9	43.0	42.5	42.7
Czech Rep.	39.1	39.0	38.5	38.2	38.9	39.9
Denmark	41.1	41.1	41.2	42.0	43.1	44.3
Estonia	37.0	37.1	37.7	38.0	38.8	39.8
Finland	41.4	41.3	41.4	41.7	42.5	43.9
France	43.9	43.9	44.2	44.5	45.2	46.3
France métropolitaine	43.8	43.9	44.1	44.4	45.1	46.3
Georgia	40.5	40.2	39.5	38.8	38.3	38.4
Germany	39.7	39.4	39.1	39.2	39.5	40.2
Greece	40.5	40.3	39.7	39.2	38.9	39.0

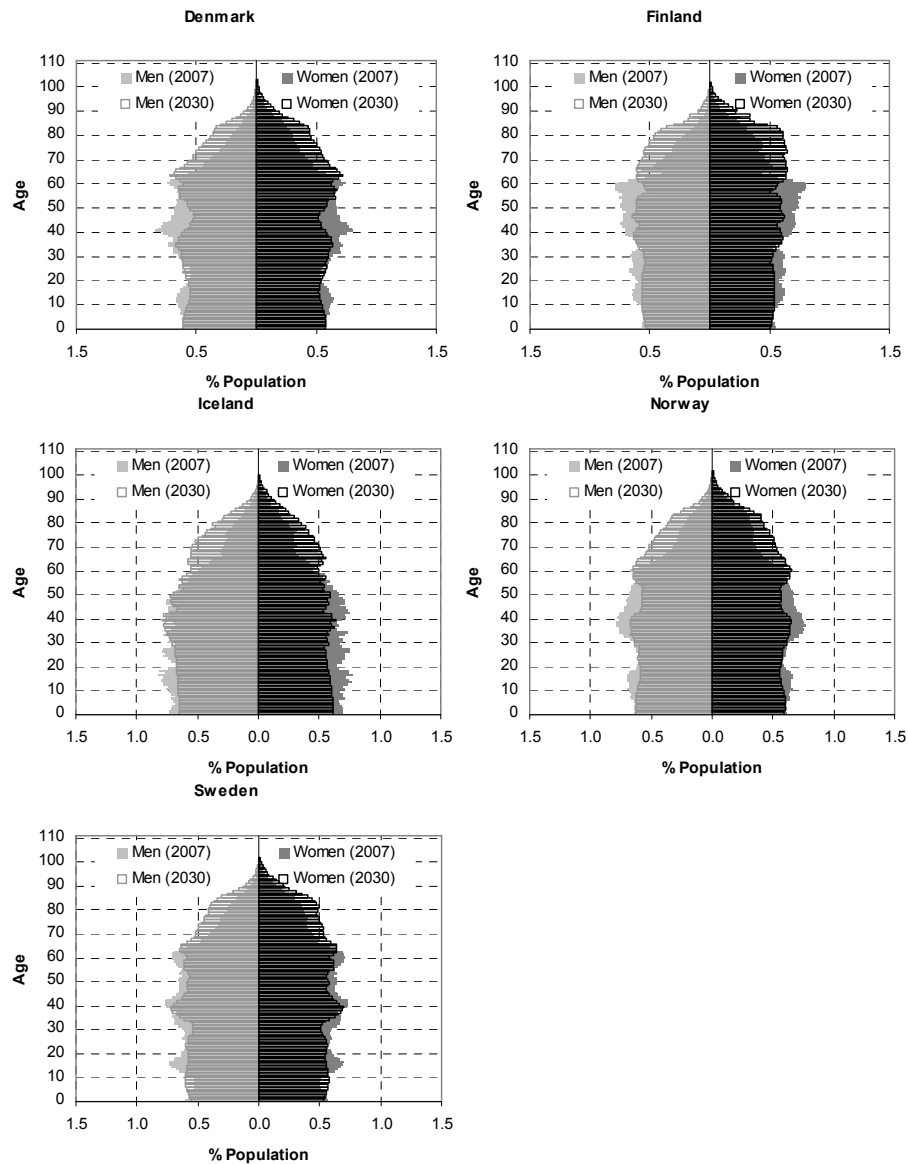
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*Table B.10 (continued)*

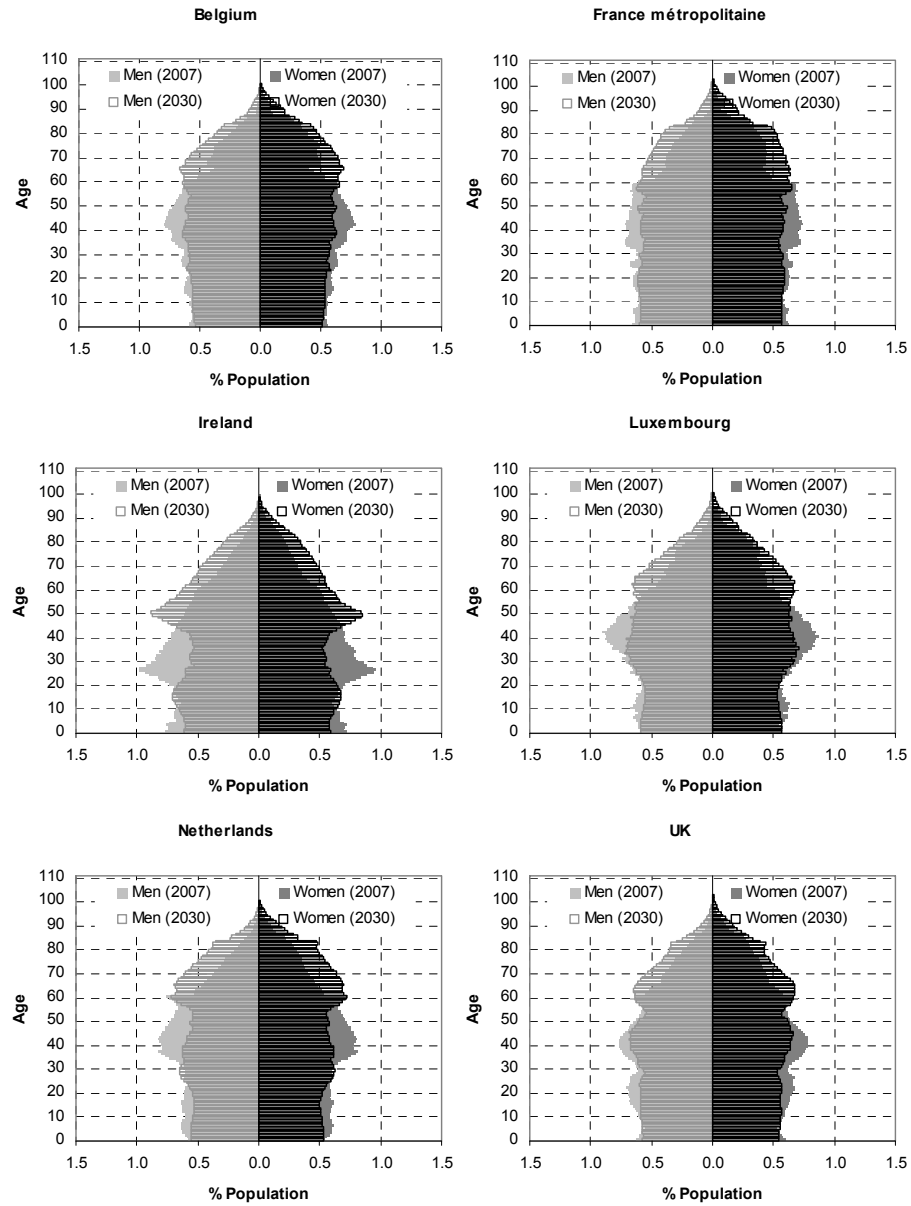
	<b>2007</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Hungary	36.7	36.7	36.7	36.8	37.2	38.0
Iceland	47.1	47.1	47.2	47.1	47.2	47.9
Ireland	45.9	46.0	45.9	45.3	45.4	46.1
Italy	40.9	40.8	40.1	39.7	39.6	39.8
Latvia	35.3	35.3	35.6	35.7	36.0	36.6
Lithuania	36.6	36.4	36.5	36.6	36.8	37.4
Luxembourg	42.9	43.1	43.4	44.0	44.6	45.5
Macedonia, FYR	40.4	40.1	39.8	39.5	39.5	40.1
Malta	42.2	41.8	41.1	40.6	40.5	41.0
Moldova	37.4	37.1	36.2	34.9	33.6	32.5
Montenegro	40.7	40.5	40.4	40.4	40.5	41.1
Netherlands	42.6	42.3	42.0	42.3	43.0	44.0
Norway	43.8	44.0	44.3	44.9	45.6	46.6
Poland	39.9	39.6	39.0	38.3	38.0	38.3
Portugal	40.8	40.6	40.0	39.5	39.3	39.5
Romania	37.8	37.7	37.2	36.7	36.8	37.3
Russian F.	33.8	33.8	33.8	33.3	33.4	33.8
Serbia	36.1	36.1	36.6	36.9	37.5	38.3
Slovakia	39.6	39.3	38.5	37.7	37.5	37.7
Slovenia	40.0	39.7	39.0	38.4	38.4	39.1
Spain	42.2	42.2	41.4	40.1	39.2	38.8
Sweden	42.3	42.5	43.1	43.8	44.7	45.9
Switzerland	43.1	42.9	42.8	43.4	44.3	45.8
Turkey	44.1	43.9	43.1	42.4	42.0	42.2
UK	42.2	42.3	42.7	43.1	43.6	44.5
Ukraine	33.8	33.8	34.0	33.5	33.3	33.4

**Appendix C. Projection results. Population age pyramids, years 2007 and 2030.**

**Figure C.1** Population age pyramids: Nordic countries (2007, 2030).



**Figure C.2** Population age pyramids: Western Europe (2007, 2030).





**Figure C.3** Population age pyramids: German-speaking countries (2007, 2030).

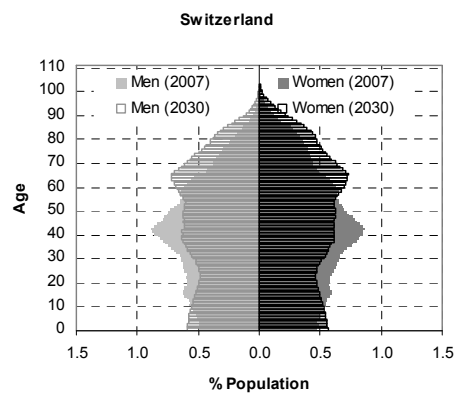
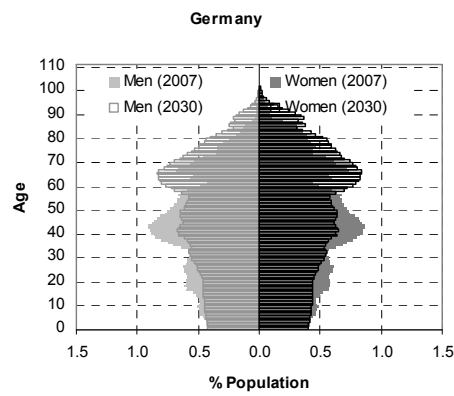
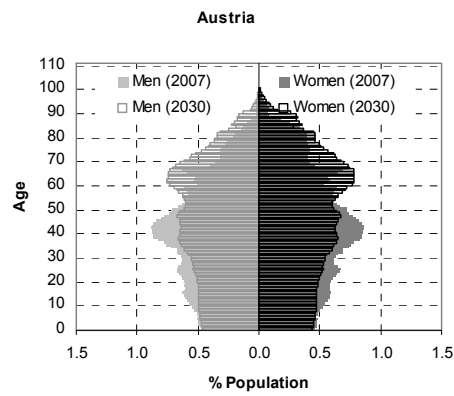


Figure C.4 Population age pyramids: Southern Europe (2007, 2030).

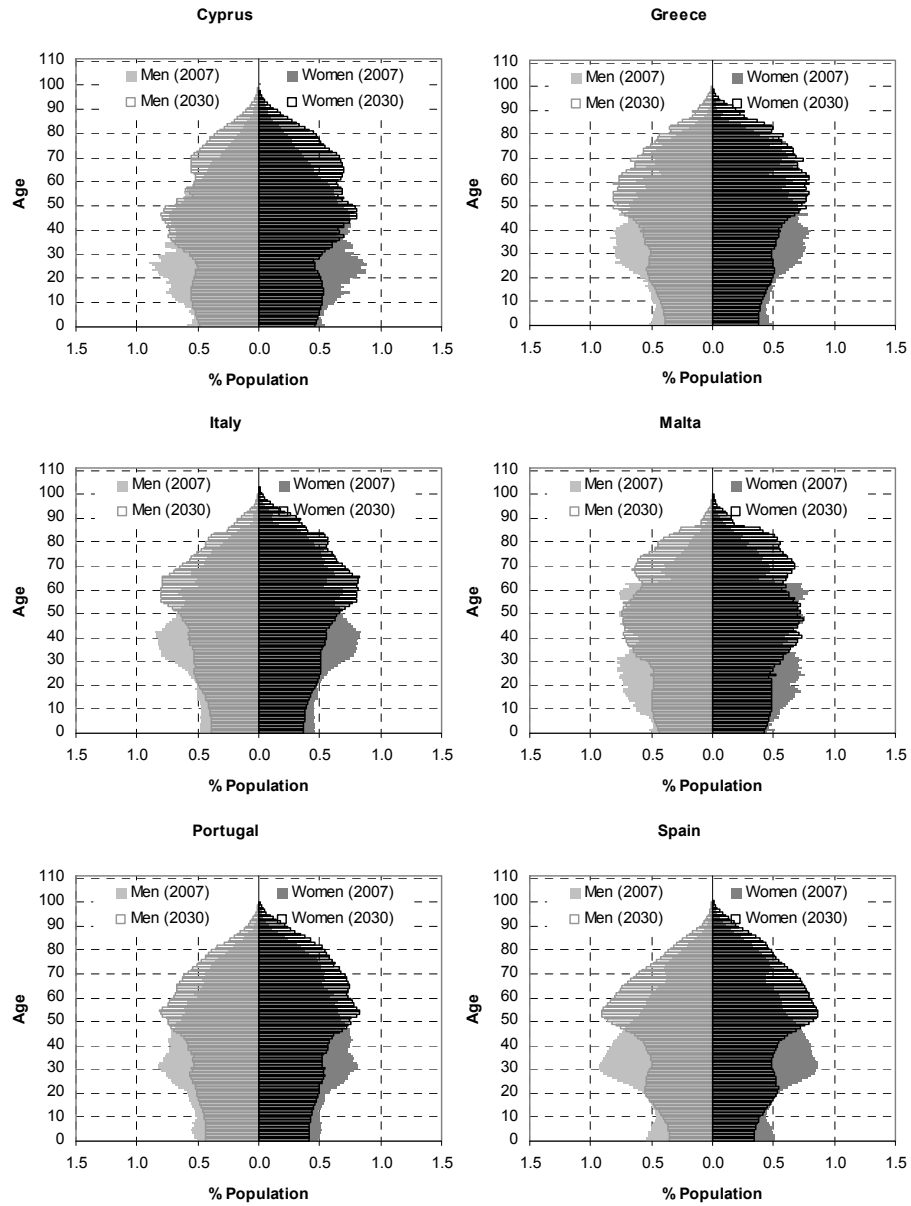


Figure C.5 Population age pyramids: Central-eastern Europe (2007, 2030).

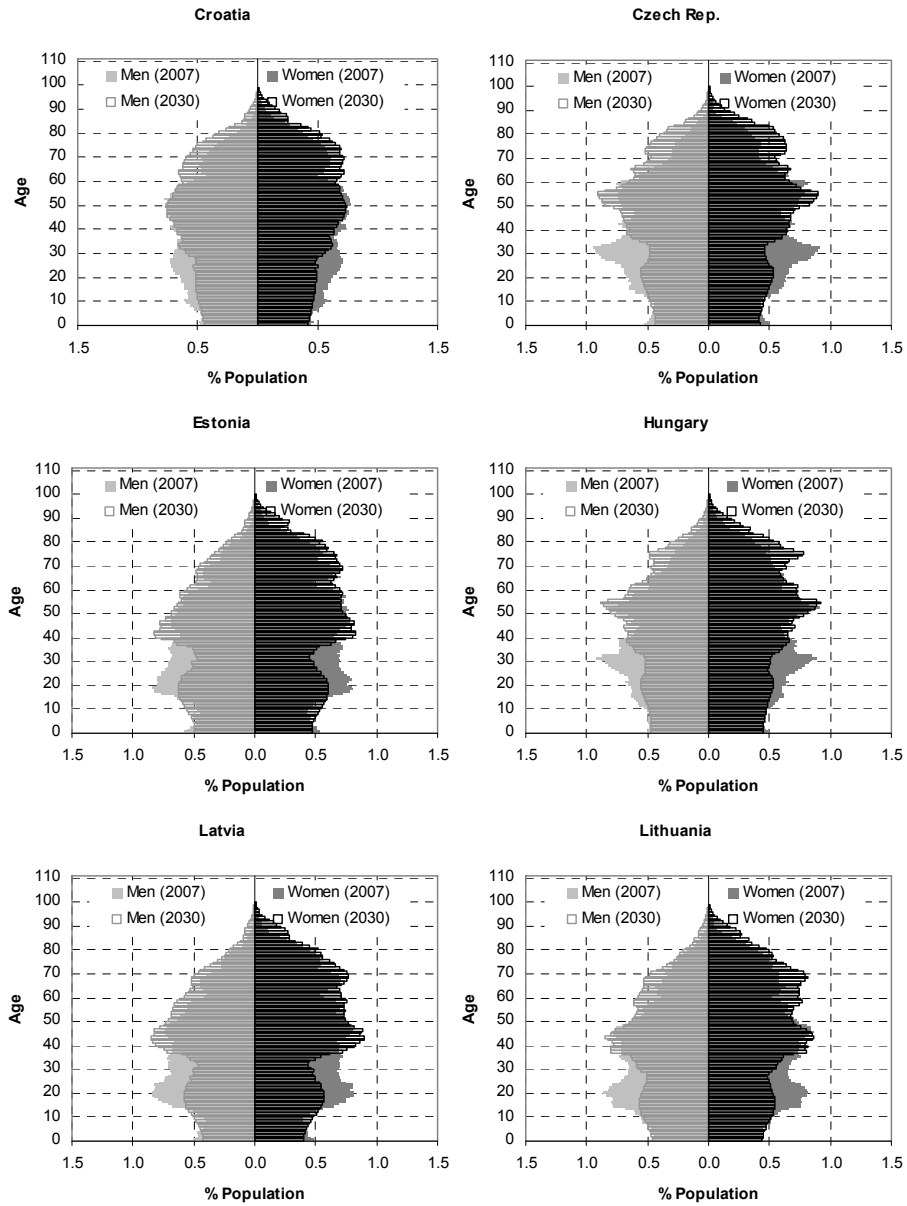


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Figure C.5 (continued)

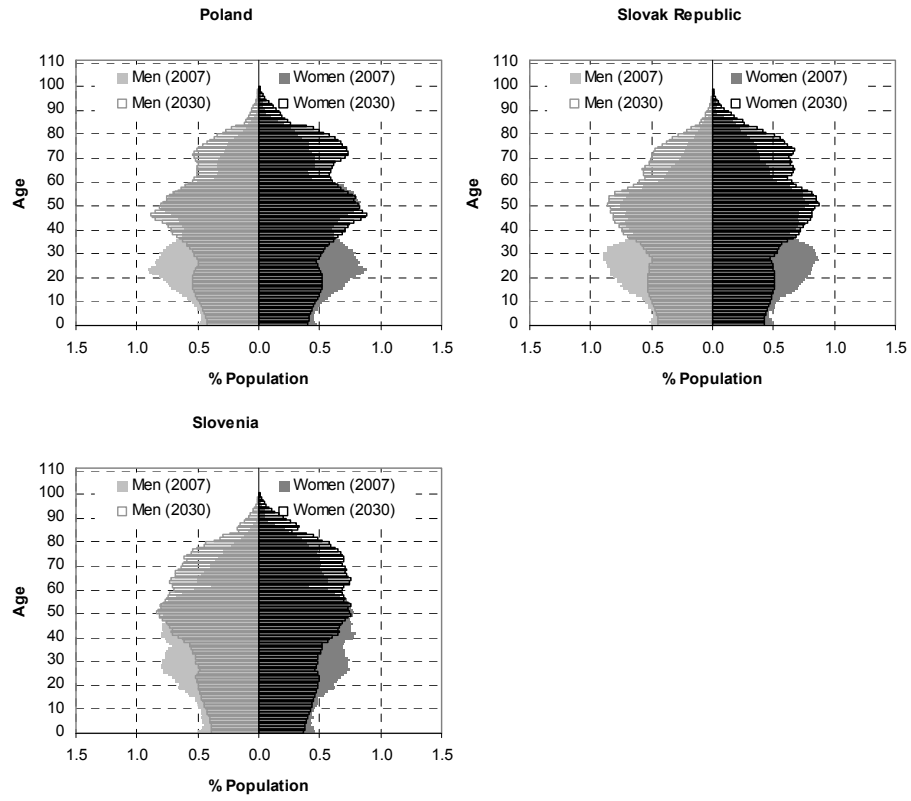
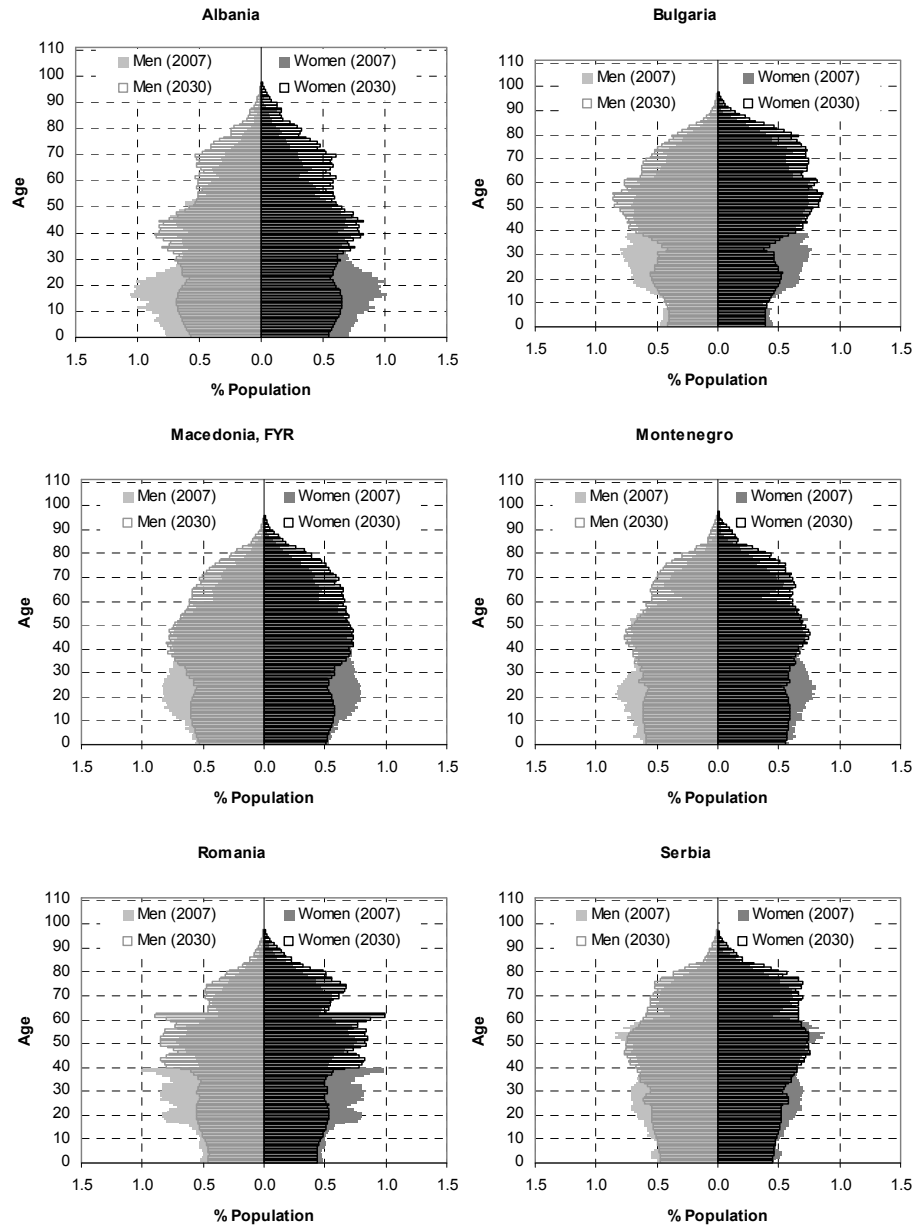


Figure C.6 Population age pyramids: South-eastern Europe (2007, 2030).



**Figure C.7** Population age pyramids: Eastern Europe (2007, 2030).

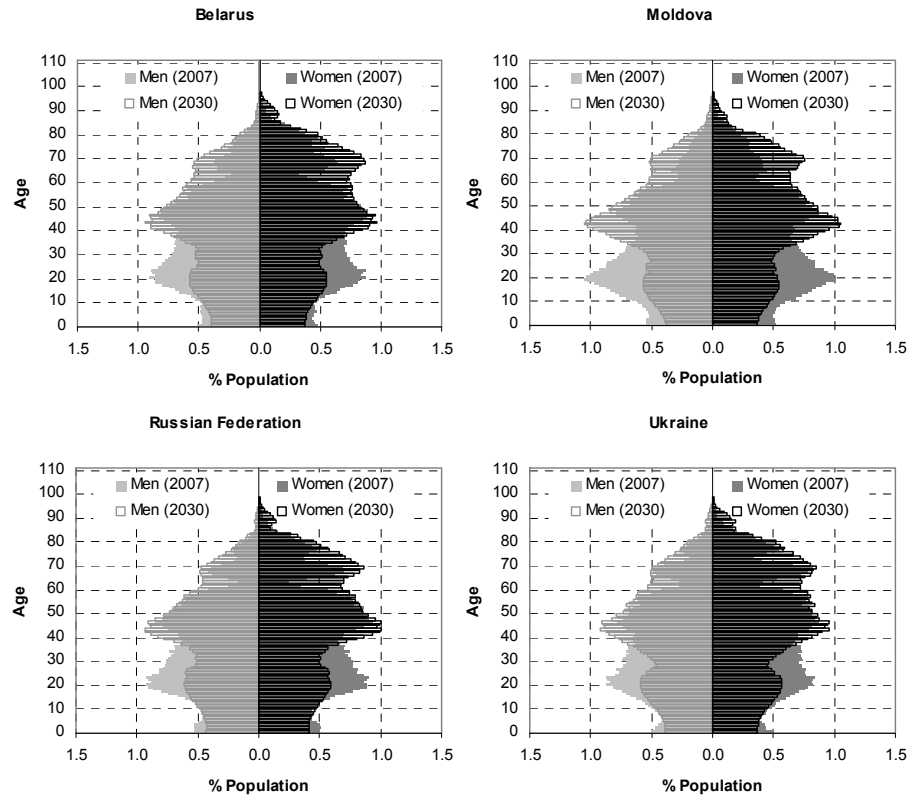


Figure C.8 Population age pyramids: Caucasus (2007, 2030).

