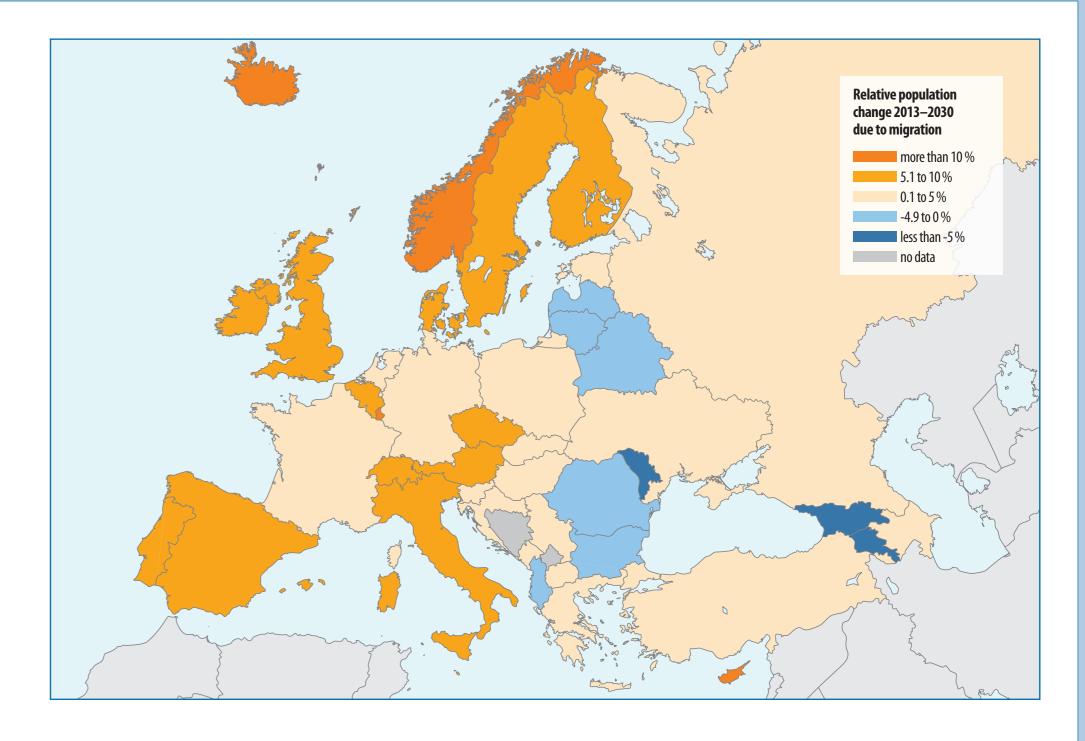






# European Demographic Data Sheet





# Migration makes the difference

## More information: www.populationeurope.org

Country	Popula- tion size on January 1st, 2013 (millions)	Projected population size, 2050 (millions)	Projected population size (zero migra- tion), 2050 (millions)	Number of live births, 2012 (thousands)		Net migration (estimates), 2012 (thou- sands)	Total fertility rate, 2012	Tempo and parity adjusted total fertility, 2010	Completed cohort fertility, women born 1972 (children per woman)	Mean age at first birth, 2012 (years)	Male life expect- ancy at birth, 2012 (years)	Female life expect- ancy at birth, 2012 (years)	Male life expect- ancy at age 65, 2012 (years)	expect- ancy at age 65,	of the	Proportion with a remaining life expect- ancy of 15 years or less, 2013 (%)	Projected propor- tion of the population aged 65+, 2050 (%)	Projected proportion with a remaining life expectancy of 15 years or less, 2050 (%)	Population median age, 2013 (years)	population median age, 2050	Old-age depend- ency ratio 65+/20–64, 2013 (%)	Prospective old-age depend-ency ratio (see box), 2013 (%)	Projected old-age depend- ency ratio 65+/20-64, 2050 (%)	prospective old-age depend-	Propo tertia educa aged i 2011 (	ry ited 30–34,	Gender gap in tertiary education, ratio F/M, 2011	Country
Albania	2.8	2.7	2.9	35.3	20.8	-5.5	1.69	1.63*	2.41	-	75.3	79.6	-	-	11.8	9.9	26.3	17.0	34.4	50.4	20.0	16.3	45.5	25.2	14.2	19.0	1.34	Albania
Andorra	0.1	-	-	0.7	0.3	-2.3	1.25	1.56*	-	-	-	-	-	-	12.6	-	-	-	39.9	-	18.8	-	-	-	-	-	-	Andorra
Armenia	3.0	2.8	3.1	42.5	27.6	-9.4	1.58	1.76*	1.76	24.1	70.9	77.5	13.9	16.8	10.6	10.2	24.3	16.4	33.4	46.6	16.6	16.0	43.9	26.0	26.9	†	1.07	Armenia
Austria Azerbaijan	8.5 9.4	9.3	7.8 10.9	79.0 174.5	79.4 55.0	44.2	1.44	1.69	1.65	28.7	78.4	83.6	18.1	21.3	18.1	11.9	31.7	17.4	42.6	50.4	29.2	17.5	61.8	26.6	23.1	24.5	1.06	Azorbajian
Belarus	9.4	11.5 8.0	8.0	115.9	126.5	9.3	2.00 1.62	1.63	2.05 1.58	24.2 25.0	71.3 66.6	76.6 77.6	13.7 12.3	16.3 17.3	5.8 13.8	5.8 14.8	17.5 26.7	13.9	29.7 39.2	40.5 47.8	9.1	9.1	28.8 48.5	21.6 30.3	<i>17.5 25.0</i>	<del>                                     </del>	0.76 1.35	Azerbaijan Belarus
Belgium	11.2	13.5	11.3	128.1	109.1	47.8	1.79	2.01*	1.84	28.0	77.8	83.1	17.7	21.3	17.6	12.1	26.3	14.5	41.1	44.5	29.4	18.5	50.0	22.5	37.1	48.1	1.30	Belgium
Bosnia & Herzegovina	3.8	-	-	32.1	35.7	-0.3	1.35	-	-	-	_	-	-	-	-	-	-	-	-	-	-	-	-	-	10.2	·	1.16	Bosnia & Herzegovina
Bulgaria	7.3	5.5	5.6	69.1	109.3	-2.5	1.50	1.74	1.67	25.6	70.9	77.9	13.9	17.3	19.2	18.2	30.4	22.0	42.9	50.5	30.6	28.6	57.9	36.1	20.9	34.2	1.64	Bulgaria
Croatia	4.3	3.8	3.6	41.8	51.7	-3.9	1.51	1.84	1.67	27.8	73.9	80.6	15.0	18.7	18.1	15.8	29.5	18.5	42.4	49.5	29.7	24.9	55.3	28.8	19.4	30.0	1.55	Croatia
Cyprus	0.9	1.3	0.9	10.2	5.7	-0.6	1.40	1.64	1.88	28.8	78.9	83.4	17.9	20.4	13.2	8.7	22.6	11.3	36.2	44.1	20.8	12.7	38.6	16.2	40.3	47.8	1.18	Cyprus
Czech Republic	10.5	11.4	9.5	108.6	108.2	10.3	1.45	1.77	1.83	27.9	75.1	81.2	15.7	19.2	16.8	12.6	29.0	15.9	40.4	47.0	26.5	18.5	55.3	24.4	20.5	26.7	1.31	Czech Republic
Denmark	5.6	6.7	5.7	57.9	52.3	16.5	1.73	1.94	1.99	29.0	78.1	82.1	17.5	20.2	17.8	11.7	23.3	14.0	41.0	42.4	30.6	18.1	43.5	22.4	34.7	48.0	1.38	Denmark
Estonia	1.3	1.2	1.1	14.1	15.5	-3.6	1.55	1.86	1.85	26.5	71.4	81.5	14.8	20.3	18.0	14.7	27.3	17.7	40.9	46.4	29.3	22.8	51.5	28.3	32.6	†····-	1.66	Estonia
Finland France	5.4 63.7	6.3 75.6	5.5 69.3	59.5 790.3	51.7 559.2	17.6 50.0	1.80 1.99	2.02	1.90 1.99	28.5 28.1	77.7 78.7	83.7 85.4	17.8 19.1	21.6	18.8 17.7	11.7	25.8 27.1	14.1	42.3 40.6	43.7	31.9 30.6	17.8 16.0	49.7 53.3	22.2	37.1 39.0	55.0 47.5	1.48	Finland France
Georgia	4.5	3.5	4.3	57.0	49.3	-21.5	1.67	2.14*	-	20.1	70.2	79.0	14.5	18.4	13.8	13.2	30.2	19.9	37.2	52.0	22.0	20.7	58.2	32.1	-	- 47.3	-	Georgia
Germany	82.0	79.6	69.8	673.5	869.6	391.9	1.38	1.60	1.53	29.1	78.6	83.3	18.2	21.2	20.7	14.8	32.9	19.7	45.3	51.3	33.9	22.1	65.7	31.1	29.9		1.06	Germany
Greece	11.1	11.3	10.0	100.4	116.7	-44.2	1.34	1.75	1.58	29.7	78.0	83.4	18.1	21.0	20.1	14.4	33.0	17.8	42.4	50.0	33.4	21.8	66.6	27.6	26.2	31.7	1.21	Greece
Hungary	9.9	8.7	7.9	90.3	129.4	16.0	1.34	1.69	1.78	27.7	71.6	78.7	14.3	18.1	17.2	15.3	28.3	19.2	41.1	49.0	27.4	23.7	52.0	30.1	23.2	33.4	1.44	Hungary
Iceland	0.3	0.5	0.4	4.5	2.0	-0.3	2.04	2.33	2.31	27.1	81.6	84.3	20.1	21.5	12.9	7.6	22.3	11.3	35.5	41.0	21.8	11.8	41.2	17.4	36.1	53.1	1.47	Iceland
Ireland	4.6	6.3	5.5	72.2	28.8	-35.0	2.01	2.16	2.08	29.3	78.7	83.2	18.0	21.1	12.2	7.9	24.2	12.5	35.5	41.2	20.5	12.2	46.4	19.6	38.7	52.4	1.35	Ireland
Italy	59.7	60.0	52.5	534.2	612.9	369.7	1.43	1.55	1.45	29.8	79.8	84.8	18.5	22.1	21.2	13.7	34.7	19.2	44.4	51.3	35.2	20.2	71.6	30.1	15.9	·	1.55	Italy
Kosovo	1.8	-	-	27.7	7.3	-3.5	2.46	-	2.92	-	74.1	79.4	-	-	-	-	-	-	-	-	-	-	-	-	2.6	3.0	1.14	Kosovo
Latvia	2.0	1.6	1.6	19.9	29.0	-11.9	1.44	1.64	1.74	26.0	68.9	78.9	13.6	18.5	18.8	17.3	30.0	20.1	42.1	50.8	30.3	27.2	56.2	31.8	23.6	<del>                                     </del>	1.89	Latvia
Liechtenstein Lithuania	0.04 3.0	2.3	2.6	30.5	0.2 40.9	-21.3	1.55 1.60	1.72	1.77	26.6	79.7 68.4	85.2 79.6	18.8 14.1	23.5 19.2	14.9 18.2	16.0	28.8	19.5	42.1 42.1	50.0	23.4 30.0	25.3	54.1	31.2	26.6	20.0 34.0	0.75 1.47	Liechtenstein Lithuania
Luxembourg	0.5	0.9	0.6	6.0	3.9	10.0	1.57	1.72	1.77	29.6	79.1	83.8	18.4	21.4	14.0	9.4	21.8	11.8	39.1	41.3	22.2	14.0	39.1	17.9	49.1	47.4	0.97	Luxembourg
Macedonia, FYR	2.1	2.1	2.0	23.6	20.1	-0.9	1.51	1.65	2.22	26.2	73.0	76.9	13.9	15.9	12.0	12.2	26.1	17.8	36.7	48.3	18.7	19.0	46.7	27.6	18.5	†····	1.21	Macedonia, FYR
Malta	0.4	0.4	0.4	4.1	3.4	3.1	1.43	1.83	1.67	28.1	78.6	83.0	17.6	21.0	17.2	10.9	28.9	15.7	40.5	49.5	27.6	15.9	54.0	23.5	20.9	†····	1.05	Malta
Moldova	3.6	2.4	3.1	39.4	39.6	0.1	1.26	1.40	1.86	24.3	67.2	75.0	13.0	15.7	9.9	11.5	29.6	22.7	34.8	55.2	14.9	17.6	53.2	36.4	22.9	28.0	1.22	Moldova
Monaco	0.04	-	-	0.2	0.2	-	1.9	-	-	30.5	82.3	87.2	21.2	25.0	-	-	-	-	-	-	-	-	-	-	-	-	-	Monaco
Montenegro	0.6	0.7	0.6	7.5	5.9	0.0	1.70	2.06*	1.95	-	74.3	78.4	15.2	17.3	13.2	11.9	24.9	15.4	37.1	46.1	21.6	19.1	44.6	23.6	-	-	-	Montenegro
Netherlands	16.8	18.2	16.8	176.0	140.8	14.1	1.72	1.90	1.76	29.3	79.3	83.0	18.0	21.0	16.8	10.7	27.9	16.7	41.6	46.3	28.0	16.1	54.1	26.5	37.3	44.8	1.20	Netherlands
Norway	5.1	7.1	5.6	60.3	42.0	47.1	1.85	2.15	2.04	28.4	79.5	83.5	18.3	21.0	15.7	9.7	23.2	12.5	38.9	41.9	26.3	14.8	43.0	19.4	41.5		1.36	Norway
Poland	38.5 10.5	35.6 11.2	34.9 9.1	386.3 89.8	384.8 107.6	-6.6 -37.3	1.30	1.66	1.70	26.6	72.7	81.1	15.4	19.9	14.2	11.2	30.0	16.8	38.7	50.1	21.9	16.4	57.7	25.8	30.0	·}	1.44	Portugal
Portugal Romania	20.0	11.2 16.0	16.4	201.1	255.5	-37.3 15.9	1.28 1.52	1.66 1.62	1.64 1.65	28.6 25.7	77.3 71.0	83.6 78.1	17.6 14.5	21.3	19.4 16.4	13.6 14.9	30.3 32.4	17.2 21.8	42.6 41.1	48.1 52.3	32.0 25.9	20.5	58.9 62.5	26.6 35.0	19.7	35.1 21.0	1.61 1.07	Portugal Romania
Russia	143.3	132.8	120.1	1896.3	1898.8	294.9	1.69	1.66	1.57	24.9	64.6	75.9	12.8	17.7	12.9	13.8	23.0	17.2	38.3	43.7	19.6	21.2	40.5	27.5	28.9	ł	1.37	Russia
San Marino	0.03	-	-	0.3	0.2	0.2	1.15	1.61*	-	31.2	81.0	86.1	19.3	23.0	17.8	-	-	-	43.5	-	28.5	-	-	-	-	-	-	San Marino
Serbia	7.2	6.5	5.8	67.3	102.4	2.4	1.45	1.78	1.86	27.3	72.3	77.5	14.0	16.5	17.6	17.3	26.3	18.5	42.7	47.6	28.1	27.5	47.2	29.1	20.1	29.9	1.49	Serbia
Slovakia	5.4	5.4	5.0	55.5	52.4	3.4	1.34	1.82	1.88	26.9	72.5	79.9	14.6	18.5	13.1	11.3	28.6	17.6	38.2	48.8	20.0	16.8	53.6	27.4	22.9	30.8	1.35	Slovakia
Slovenia	2.1	2.1	1.8	21.9	19.3	0.6	1.58	1.77	1.70	28.5	77.1	83.3	17.1	21.1	17.1	12.3	31.0	17.8	42.2	48.4	26.9	18.0	61.3	27.9	29.4	47.3	1.61	Slovenia
Spain	46.7	50.7	43.3	453.3	401.1	-142.6	1.32	1.53	1.43	30.3	79.5	85.5	18.7	22.8	17.7	11.4	34.0	17.5	41.3	50.0	28.3	16.5	70.4	26.9	36.3	45.0	1.24	Spain
Sweden	9.6	12.5	10.1	113.2	91.9	51.8	1.91	1.99	1.97	29.1	79.9	83.6	18.5	21.1	19.1	11.9	23.4	12.8	40.9	41.7	32.9	18.2	43.8	20.0			1.32	Sweden
Switzerland	8.0	9.8	8.0	82.2	64.2	66.4	1.52	1.68	1.64	30.3	80.6	84.9	19.3	22.3	17.4	10.2	30.5	15.9	42.0	48.2	28.0	14.7	60.2	24.3	46.5	·	0.89	Switzerland
Turkey	75.6	92.5	92.2	1279.9	374.9	-1.9	2.09	2.39*	-	-	74.8	80.5	16.0	19.5	7.5	5.8	20.1	13.8	30.1	42.2	12.7	9.6	34.5	21.4	18.3	14.3	0.78	Turkey
Ukraine United Vinadom	45.4	37.9	36.2	520.7	663.1	61.8	1.53	1.58	1.51	24.5	66.0	75.9	12.6	16.5	15.2	16.2	23.8	19.2	39.7	44.5	23.5	25.4	41.9	31.2	- 42.0	40.6	1 12	Ukraine United Vinadom
United Kingdom <b>EU-28</b>	63.9 <b>505.2</b>	78.5 <b>536.3</b>	68.6	813.0 5100.6	569.0	156.8	1.92	2.19*	1.88	28.1	79.1	82.8	18.5	20.9	17.2	10.9	24.9	13.7	39.8	42.7	29.1	16.7	47.5	21.5 <b>26.1</b>	43.0	<del>                                     </del>	1.13	United Kingdom
			477.4	5199.6	4999.3	910.4	1.57	1.80	1.70	28.5	77.5	83.1	17.7	21.1	18.2	12.5	29.7	16.7	41.9	47.6	30.0	18.9	58.3			38.8	1.26	EU-28
United States  Japan	315.1 127.3	400.9 108.3	343.8 105.5	3952.8 1037.2	2513.2 1256.4	866.1 -5.8	1.88 1.41	2.24 1.49	2.19 1.42	26.4 29.3	76.2 79.9	81.0 86.4	17.7 18.9	20.3	14.0 25.1	7.7 12.1	21.4 36.5	11.5 16.1	37.5 46.0	40.6 53.4	23.3	11.7	39.5 78.4	17.8 23.9	43.9 35.9	†····	1.19 1.26	United States  Japan

Note: Numbers in italics refer to years different form the one in the column heading. Asterisks indicate different calculation methods applied by the Wittgenstein Centre. EU-28 are computed as weighted averages. For further information about projection assumptions, data sources, country-specific definitions and notes see www.populationeurope.org.

# Re-measuring ageing in Europe

Most studies of population ageing focus on only one characteristic, people's chronological age, and in those studies "old age" is typically assumed to begin at 65. The implicit assumption is that all other characteristics relevant to population ageing do not change over time and place. For example, the conventional *old-age dependency ratio* (OADR) is defined as the ratio of the number of people 65 years or older to the number of people ages 20 through 64:

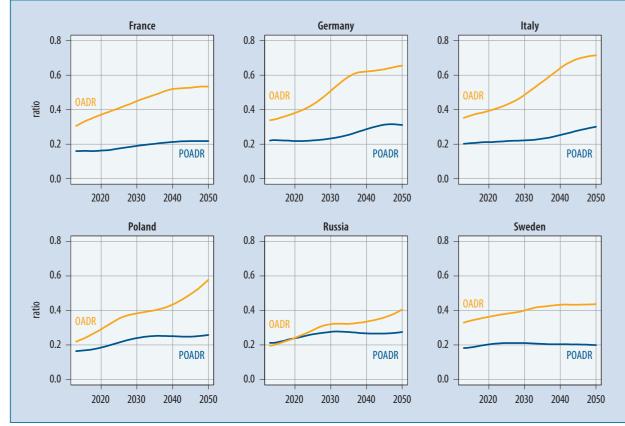
Number of people aged 65 years or older Number of people aged 20 to 64

Sometimes the proportion of people 60 or older is used in the numerator, sometimes 15 is used as the lower bound on the ages of people in the denominator, or sometimes the ratio is multiplied by 100 but whatever age is used as a threshold for being old, it is always considered fixed in time and space.

Using a fixed chronological age as an "old age" threshold is misleading. Indeed, many important characteristics of people vary with age, but age-specific characteristics also vary over time and differ from place to place. At any given chronological age, the remaining life expectancy, health and morbidity, disability rates, cognitive functioning and many other characteristics of people are very different today from what they were 50 years ago or from what they are going to be 50 years from now. At each chronological age these characteristics are different in different regions of the world.

Thus, using the OADR as an indicator of ageing for comparative purposes over a long time span creates a biased measure. By ignoring likely future gains in life expectancy and health, among other relevant dimensions of ageing, it produces a series that increases too rapidly.

One of the new measures of ageing introduced by scientists from IIASA and VID is based on remaining life expectancy. It is called the prospective old-age dependency ratio. The threshold of being old is no longer fixed here but changes with the change in life expectancy and is based on a constant remaining life expectancy. We assume here that people are old when the average remaining life expectancy in



their age group is less than 15 years (those ages are given for selected European countries on the reverse side of this data sheet):

Number of people older than the old-age threshold Number of people aged 20 to the old-age threshold

The figures in this box show the projected OADR and POADR for six European countries. Once the threshold of being old is based on remaining life expectancy, the picture of ageing looks very different and much less gloomy: by 2050, POADR is half the magnitude of the OADR in most of the cases. In addition, adjusting for life expectancy levels indicates that there is much less diversity between eastern and western Europe than as it appears without this adjustment. In general, ignoring

differences in the characteristics of people over space and time produces misleading measures of ageing that can lead to inappropriate policies.

Sanderson, W. and S. Scherbov 2005. Average Remaining Lifetimes Can Increase As Human Populations Age, *Nature* 435: 811–813.

Sanderson, W. and S. Scherbov 2010. Remeasuring aging. Science 329: 1287-

Sanderson, W. and S. Scherbov 2013. The characteristics approach to the measurement of population aging, *Population and Development Review*, 39(4):

New measures of population ageing could be found at: www.reaging.org/indicators

# Tempo effect and adjusted total fertility

The period level of fertility is commonly measured by the Total Fertility Rate (TFR), which is readily available for almost all European countries. However, the period TFR is sensitive to changes in the age at childbearing. In most European countries, women have been shifting births to higher ages for several decades. This postponement of childbearing lowers the number of births in a given period and thus depresses the TFR even if the number of children women have over their entire life course does not change. This *tempo effect* can also be envisaged as an expansion of the interval between generations that results in fewer births per calendar year. In addition, the TFR is also affected by changes in the parity composition (i.e. the number of children ever born) of women of reproductive ages.

Alternative indicators were proposed to obtain a better measure of the average number of children per woman in a period perspective. Ever since its first publication in 2006, the European Demographic Data Sheet has used the tempo-adjusted TFR (TFR\*), an indicator proposed by Bongaarts and Feeney (1998) that is based on birth order-specific total fertility rates and mean ages at birth . As of the previous (2012) edition the data sheet utilises tempo and parity-adjusted total fertility (TFRp\*), a more recent indicator first introduced by Bongaarts and Feeney (2006) and elaborated by Bongaarts and Sobotka (2012). The TFRp\* offers several improvements over the previous measure. It takes into account the parity composition of women of reproductive age and thus controls for an additional source of distortion in the conventional

Mean age at first birth (right y axis) 1980 1984 1988 1992 1996 2000 2004 2008 2012

Figure 1: Fertility trends in the Czech Republic, 1980–2012

TFR. Moreover, it yields considerably more stable results than the TFR\*, which is clearly illustrated in the three country graphs shown here. However, the limited availability of detailed data is an obstacle to its use. Wherever possible, we show the results for the TFRp\* for 2010, which were computed for 21 European countries, the United States and Japan. For the countries lacking the required data, the current data sheet features the TFR\* or its estimate, averaged over the 3-year period of 2009–2011 (indicated by asterisk).

Figures 1–3 illustrate trends in the conventional TFR and its alternatives in 1980-2012 in three European countries with different fertility patterns. The graphs also show differences between the two tempo-adjusted indicators, TFR\* and TFRp\*. The values are mostly similar, but the TFR\* clearly suffers from considerable year-to-year instability. The graphs also depict the longterm course of fertility postponement as measured by the rise in the mean age at first birth and, in the Czech Republic and Spain, reversals of the TFR trends after the onset of the economic recession in 2008.

In the Czech Republic the intensive shift to later childbearing after 1990 resulted in a dramatic fall of the period TFR to 1.14 in 1999, followed by its subsequent recovery to 1.4-1.5. In contrast, the TFRp\* declined gradually, reaching levels around 1.8 since the late 1990s. This shows how much the TFR can be depressed when women postpone childbearing to later ages.

1984 1988 1992 1996 2000 2004 2008 2012

Tempo and parity

1.60 -

Mean age at first birth (right y axis)

Figure 2: Fertility trends in Austria, 1980–2012

In Austria, the postponement of childbearing started earlier but progressed more gradually. The TFR and the TFRp\* have shown relatively stable values since the mid-1980s, hovering around 1.4 and 1.6-1.7, respectively.

Spain shows yet another pattern: conventional and adjusted total fertility both fell in tandem in the 1980s and 1990s. The decline in the period TFR bottomed out at 1.15 in 1998 and modestly recovered until 2008, whereas the TFRp\* continued to decline until 2007 and briefly converged with the TFR level before rising sharply in the subsequent two years. Most recently, fertility trends have been affected by the economic recession, bringing an acceleration of the shift towards later first births and a renewed decline in the period TFR. Thereafter the TFRp\* shows a short-term upswing, which is even more pronounced in the trend of TFR\*. This increase is likely to be caused by a rapid change in the variance of fertility schedule in recent years, which can temporarily distort the adjusted measures of fertility, especially TFR\*.

References: Bongaarts, J. and G. Feeney 1998. On the quantum and tempo of fertility. *Population and* Development Review 24(2): 271-291.

Bongaarts, J. and T. Sobotka 2012. A demographic explanation for the recent rise in European fertility. *Population and Development Review* 38(1): 83–120. Bongaarts, J. and G. Feeney 2006. The quantum and tempo of life cycle events. Vienna Yearbook of Population Research 2006: 115-151.

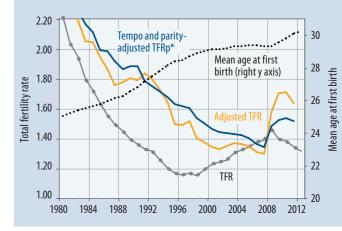


Figure 3: Fertility trends in Spain, 1980-2012

# **Regional overview**

#### **POPULATION CHANGE**

Region	Population size on January 1st, 2013 (millions)	Projected population size, 2050 (millions)	Annual rate of population change, 2009-2013 (per 1000)	Projected annual rate of population change, 2013-2050 (per 1000)
Southern Europe	129.3	135.1	2.0	1.2
Western Europe	160.6	193.1	6.1	5.0
German-speaking countries	98.5	98.8	1.1	0.1
Nordic countries	26.0	33.1	7.3	6.6
Central-Eastern Europe	77.0	72.1	0.0	-1.8
South-Eastern Europe	40.0	33.4	-7.1	-4.9
Eastern Europe	201.7	180.9	0.8	-2.9
Caucasus	16.9	17.8	5.2	1.4
EU-28	505.2	536.3	2.4	1.6
EU-15	399.6	440.9	3.4	2.7
EU-13 (new members)	105.6	95.4	-1.2	-2.7

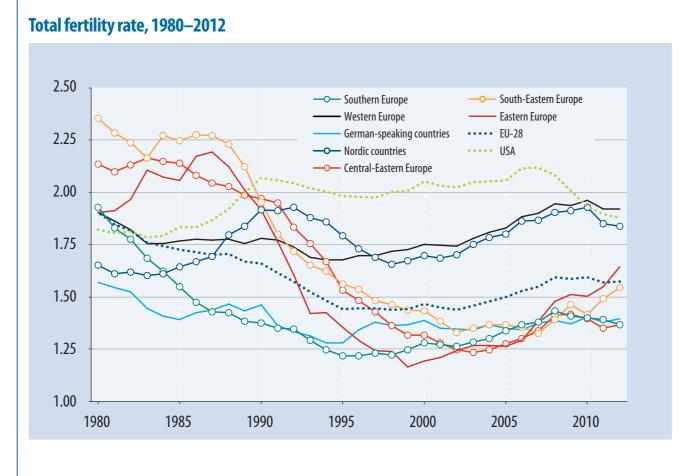
#### **POPULATION AGEING**

Region	Proportion of the population aged 65+, 2013 (%)	Projected proportion of the population aged 65+, 2050 (%)	Old-age dependency ratio 65+/20-64, 2013 (%)	Projected old-age dependency ratio 65+/20-64, 2050 (%)
Southern Europe	19.6	33.8	32.1	69.2
Western Europe	17.2	26.1	29.3	50.4
German-speaking countries	20.2	32.6	33.0	64.8
Nordic countries	18.0	23.8	30.8	44.6
Central-Eastern Europe	15.5	29.4	24.3	56.0
South-Eastern Europe	16.5	29.9	26.3	55.8
Eastern Europe	13.4	23.4	20.4	41.3
Caucasus	8.8	21.0	13.9	36.3
EU-28	18.2	29.7	30.0	58.3
EU-15	18.8	29.7	31.3	58.7
EU-13 (new members)	15.9	29.9	25.0	56.9

#### **FERTILITY INDICATORS**

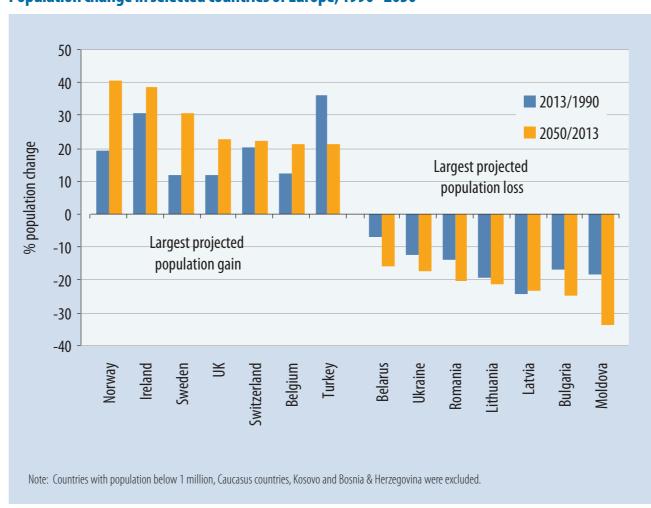
Region	Total fertility rate, 2012	Tempo-parity adjusted TFR, 2010	Completed cohort fertility rate, birth cohort 1972	Mean age at first birth, 2012
Southern Europe	1.37	1.57	1.47	29.9
Western Europe	1.92	2.12	1.91	28.3
German-speaking countries	1.40	1.62	1.55	29.1
Nordic countries	1.84	2.02	1.98	28.8
Central-Eastern Europe	1.37	1.71	1.75	27.0
South-Eastern Europe	1.54	1.68	1.83	26.0
Eastern Europe	1.64	1.64	1.56	24.8
Caucasus	1.84	1.97	1.98	24.2
EU-28	1.57	1.80	1.70	28.5
EU-15	1.62	1.82	1.69	29.0
FII-13 (new memhers)	1 41	1 69	1 72	26.7

# **Total fertility rate in selected regions** of Europe and in the USA



# Population change in selected countries of Europe

Population change in selected countries of Europe, 1990–2050



# **Country rankings**

#### **POPULATION SIZE**

Rank	Population size on January 1st, 2013	3 (millions)	Projected population size, 2050 (millions)				
	EU-28	505.2	EU-28	536.3			
	USA	315.1	USA	400.9			
1	Russia	143.3	Russia	132.8	1		
	Japan	127.3	Japan	108.3			
2	Germany	82.0	Turkey	92.5	2		
3	Turkey	75.6	Germany	79.6	3		
4	United Kingdom	63.9	United Kingdom	78.5	4		
5	France	63.7	France	75.6	5		
6	Italy	59.7	Italy	60.0	6		
7	Spain	46.7	Spain	50.7	7		
8	Ukraine	45.4	Ukraine	37.9	8		
9	Poland	38.5	Poland	35.6	9		
10	Romania	20.0	Netherlands	18.2	10		

#### **PERIOD TOTAL FERTILITY**

ſΕ	E								
ık	Total fertility ra 2012	ate,	Adjusted TFRp*, 2010						
	Turkey	2.09	2.39						
	Ireland	2.01	2.16						
	France	1.99	2.14						
	United Kingdom	1.92	2.19						
	Sweden	1.91	1.99						
	EU-28	1.57	1.80						
-	Hungary	1.34	1.69						
	Spain	1.32	1.53						
)	Poland	1.30	1.66						

1.28 1.66

1.26 1.40

#### **MEAN AGE OF MOTHER AT** FIRST BIRT

IDCT	DIDTU				
ICAL	BIRTH		Rank	Net migration, 201	2
Rank	Mean age of mother	at		(thousands)	
	first birth, 2012 (year	rs)		EU-28	910.
1-2	Spain	30.3		USA	866.
1-2	Switzerland	30.3	1	Germany	391.
3	Italy	29.8	2	Italy	369.
4	Greece	29.7	3	Russia	294.
5	Luxembourg	29.6	4	United Kingdom	156.
	EU-28	28.5	5	Switzerland	66.
31	Bulgaria	25.6	34	Lithuania	-21.
32	Belarus	25.0	35	Ireland	-35.
33	Russia	24.9	36	Portugal	-37.
34	Ukraine	24.5	37	Greece	-44.
35	Moldova	24.3	38	Spain	-142.

**NET MIGRATION** 

## LIFE EXPECTANCY AT BIRTH,

37 Portugal

38 Moldova

MEN							
Rank	Male life expectancy birth, 2012 (years)	at					
1	Switzerland	80.6					
2	Sweden	79.9					
	Japan	79.9					
3	Italy	79.8					
4-5	Norway	79.5					
4-5	Spain	79.5					
	EU-28	77.5					
34	Lithuania	68.4					
35	Moldova	67.2					
36	Belarus	66.6					
37	Ukraine	66.0					

# LIFE EXPECTANCY AT BIRTH,

lE	N		FEMAL	E LIFE EX
	Female life expecta birth, 2012 (years)	ncy at	Rank	Difference female life
	Japan	86.4		birth, 2012
	Spain	85.5	1	Russia
	France	85.4	2	Lithuania
	Switzerland	84.9	3	Belarus
	Italy	84.8	4	Estonia
	Luxembourg	83.8	5	Latvia
	EU-28	83.1		EU-28
	Serbia	77.5	34	Norway
	Macedonia, FYR	76.9	35	Macedonia
7	Ukraine	75.9	36-38	Netherland
7	Russia	75.9	36-38	United King
	Moldova	75.0	36-38	Sweden

icy at			Rank	Female life exp birth, 2012 (year								
	80.6			Japan								
	79.9		1	Spain								
	79.9		2	France								
	79.8		3	Switzerland								
	79.5		4	Italy								
	79.5		5	Luxembourg								
	77.5			EU-28								
	68.4		34	Serbia								
	67.2		35	Macedonia, FYR								
	66.6		36-37	Ukraine								
	66.0		36-37	Russia								
	64.6		38	Moldova								

	female life expecta birth, 2012 (years)	ncy at
1	Russia	11.3
2	Lithuania	11.2
3	Belarus	11.0
4	Estonia	10.1
5	Latvia	10.0
	EU-28	5.6
34	Norway	4.0
35	Macedonia, FYR	3.9
36-38	Netherlands	3.7
36-38	United Kingdom	3.7
36-38	Sweden	3.7

in male and

# Female advantage and the reversed gender gap in tertiary education in Europe



Young generations of Europeans are much better educated than their predecessors, with more than 30% attaining tertiary degrees. A remarkable feature of this educational expansion is the emerging female educational advantage: highly educated women now outnumber men in most countries. Women dominate among the students enrolled in tertiary education (EUROSTAT 2013) and this is also true for the young cohorts entering the labour force. Among 30–34 year olds, the proportion of tertiary educated women is higher than the proportion of tertiary educated men in all but three European countries — Luxembourg, Switzerland and Turkey (see the map). Only in Switzerland, Turkey and Cyprus more male than female students are enrolled in tertiary education (EUROSTAT 2013) so the gap is expected to persist in the coming years. The map shows the (im)balance in the proportion of tertiary educated

women in 2011, as expressed by the female/male ratio in the share of tertiary educated. The ratio equal to 1 means gender balance; when it falls below 1 it indicates male advantage and when it climbs above 1 it signals female advantage. Value equal to 2 signals that the proportion of tertiary educated women is double the proportion of men. Latvia is a clear outlier with the ratio of 1.88. A pronounced gender gap is typical for a string of countries spanning from the North to the South, including the Baltic countries, Poland, Hungary, Italy, and, further away, Portugal. Balanced ratio is achieved in only a handful of countries, such as Germany and Austria. Female advantage is clearly linked to the field of studies, with women taking the lead in teaching, health, humanities and social sciences (including law and economics) while men make up the majority among those holding degrees in maths, science or engineering (EUROSTAT 2013). The proportion of female students has not been increasing in the latter three fields. This suggests that gender

balance might be expected in economies with a strong orientation on hard sciences, especially dealing with new technologies and engineering, such as Austria and Germany. Cultural norms certainly play a role, too. In Turkey, the male advantage in tertiary education persists and the proportion of tertiary educated women remains low (see figure below). In Kosovo and Bosnia and Herzegovina, the proportions of tertiary educated women are even lower.

Gender gap in tertiary education at age 30-34,

> more than 1.6 1.4 to 1.59 1.2 to 1.39 1 to 1.19 less than 1

Gains in the proportion of tertiary educated women are remarkable and become obvious when comparing women aged 55–64 and 30–34, i.e. roughly the generations of mothers and their daughters. Women have benefited most from the expansion of tertiary education and, as a result, the gender gap in tertiary education has closed and even reversed in most countries. Among the 55–64 year olds, the male advantage was pronounced (female to male ratio lower than 0.9) in 24 out of 40 countries whereas tertiary-educated women clearly outnumbered men in only eight countries (ratios above 1.1, mostly Baltic and Nordic countries as well as some former state-socialist countries). The situation is completely reversed for the 30–34 year olds, with only seven countries having a balanced ratio or male advantage and 29 countries with women clearly leading in tertiary education (ratios of 1.2 and higher).

The structure of education systems, political targets, such as the EU-wide target of at least 40% tertiary educated in 2020 among the 30—34 age group (EUROSTAT 2013), and service-oriented economies certainly contribute to

EUROSTAT 2013. European social statistics 2013 edition. Luxembourg: Publication

## **POPULATION MEDIAN AGE**

38 Russia

Rank	Population median age, 2013 (years)		Rank	Projected population median age, 2050 (year	ırs)
	Japan	46.0		Japan	53.4
1	Germany	45.3	1	Moldova	55.2
2	Italy	44.4	2	Romania	52.3
3	Bulgaria	42.9	3-4	Germany	51.3
4	Serbia	42.7	3-4	Italy	51.3
5	Austria	42.6	5	Latvia	50.8
	EU-28	41.9		EU-28	47.6
34	Cyprus	36.2	34	Turkey	42.2
35	Ireland	35.5	35	Norway	41.9
36	Moldova	34.8	36	Sweden	41.7
37	Albania	34.4	37	Luxembourg	41.3
38	Turkey	30.1	38	Ireland	41.2
				USA	40.6

# **OLD-AGE DEPENDENCY RATIO (65+/20-64)**

Rank	Old-age dependecy ratio, 2013 (%)		Rank	Projected old-age dependecy ratio, 2050 (%						
	Japan	43.7		Japan	78.					
1	Italy	35.2	1	Italy	71.					
2	Germany	33.9	2	Spain	70.					
3	Greece	33.4	3	Greece	66.					
4	Sweden	32.9	4	Germany	65.					
5	Portugal	32.0	5	Romania	62.					
	EU-28	30.0		EU-28	58.					
34-33	Slovakia & Albania	20.0	34	Ukraine	41.					
35	Russia	19.6	35	Russia	40.					
36	Macedonia, FYR	18.7		USA	39					
37	Moldova	14.9	36	Luxembourg	39.					
38	Turkey	12.7	37	Cyprus	38.					
			38	Turkey	34					

# **PROSPECTIVE OLD-AGE DEPENDENCY RATIO** (SEE BOX ON THE FRONT SIDE)

Rank	Prospective old-age dependecy ratio, 2013	(%)	Rank	Projected prospective old-age dependecy ratio, 2050 (%)				
1	Bulgaria	28.6	1	Moldova	36.4			
2	Serbia	27.5	2	Bulgaria	36.1			
3	Latvia	27.2	3	Romania	35.0			
4	Ukraine	25.4	4	Latvia	31.8			
5	Lithuania	25.3	5	Ukraine	31.2			
	EU-28	18.9		EU-28	26.1			
34	Switzerland	14.7	34	Sweden	20.0			
35	Luxembourg	14.0	35	Ireland	19.6			
36	Cyprus	12.7	36	Norway	19.4			
37	Ireland	12.2	37	Luxembourg	17.9			
	USA	11.7		USA	17.8			
38	Turkey	9.6	38	Cyprus	16.2			

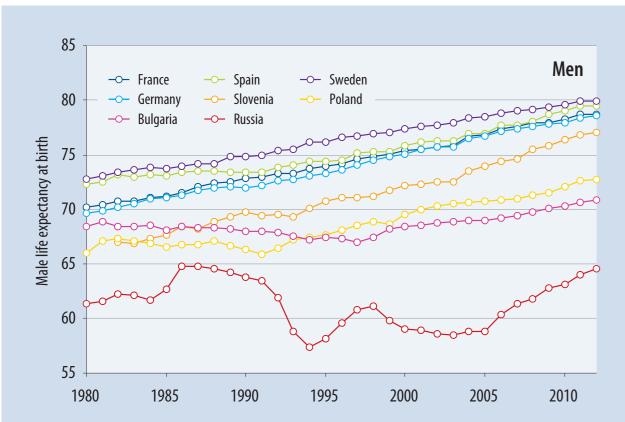
# PROPORTION OF THE POPULATION THAT HAS A REMAINING LIFE EXPECTANCY OF 15 YEARS OR LESS

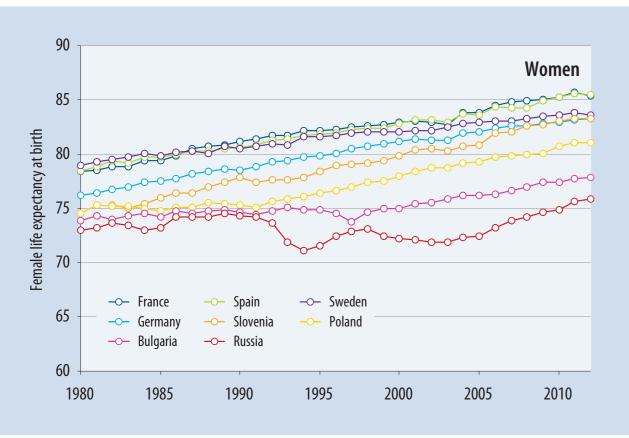
Rank	Proportion of the popul a remaining life expects years or less, 2013 (%)*	Population 65+, 2013 (%)	Rank	Projected proportion of tion with a remaining litancy of 15 years or less	Projected population 65+, 2050 (%)		
1	Bulgaria	18.2	19.2	1	Moldova	22.7	29.6
2	Latvia	17.3	18.8	2	Bulgaria	22.0	30.4
3	Serbia	17.3	17.6	3	Romania	21.8	32.4
4	Ukraine	16.2	15.2	4	Latvia	20.1	30.0
5	Lithuania	16.0	18.2	5	Germany	19.7	32.9
34	Norway	9.7	15.7	34	Sweden	12.8	23.4
35	Luxembourg	9.4	14.0	35-36	Norway	12.5	23.2
36	Cyprus	8.7	13.2	35-36	Ireland	12.5	24.2
37	Ireland	7.9	12.2	37	Luxembourg	11.8	21.8
38	Turkey	5.8	7.5	38	Cyprus	11.3	22.6

Data for the USA and Japan are shown in italics and displayed only when their values fall between top five or bottom five European countries. Caucasus countries, countries with total population below 500 000 (Andorra, Iceland, Liechtenstein, Malta, Monaco and San Marino), Bosnia and Herzegovina and Kosovo are not ranked. The proportion of the population that has a remaining life expectancy of 15 years or less is calculated as follows: from a period life table we select all single-year age groups that have a remaining life expectancy of 15 or less years and calculate what proportion of the total population has ages that fall into this category.

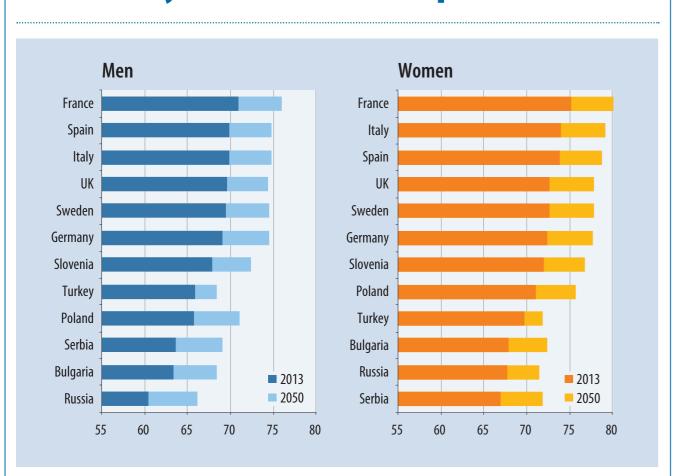
# selected European countries

Life expectancy at birth,





# Age when remaining life expectancy is below 15 years, selected European countries



# Women to men ratio and the % of tertiary educated women by age in 2011, selected countries

auta 1.50 -	•		<b>♦</b>			<b>*</b>	<b>♦</b>	<b>*</b>		<b>♦</b>	<b>♦</b>			<b>♦</b>	
Female advantage - 57.1 Female	L				<b>*</b>			•	<b>*</b>		•	•	<b>♦</b>		
E 1.25 -		L			•				•	•		•	_	•	<ul><li> </li><li> </li></ul>
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Male advantage - 050 -		F/M rat										_			1
advaı		F/M rat			20.24										
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	Estonia	Finland	Poland	Sweden	Hungary	Russia	France		Czech Rep.	Spain	Netherlands	Romania	Germany	Switzerland	Turkey
	ш								Ö		let			Š	
	ш										_			0,	

Notes: EU-15 refers to the EU member states prior to 2004; EU-13 (new members) covers 13 countries are not included in regional overview tables. Countries with total population below 500 000, Bosnia and Herzegovina, Kosovo and Turkey are not included in regional overview tables. Data for France exclude overseas departments. Data for Cyprus, Moldova and Georgia refer to the government controlled area only. Definition of regions in the regional overview take into account geo-political criteria as well as similarity in demographic trends in countries (Austria, Germany, Switzerland); Nordic countries (Denmark, Finland, Iceland, Norway, Sweden); Central-Eastern Europe (Cyoatia, the Czech Republic, Estonia, Hungary, Latvia, Portugal, Spain); Western Europe (Belgium, France, Ireland, Norway, Sweden); Central-Eastern Europe (Cyoatia, the Czech Republic, Estonia, Hungary, Latvia, Portugal, Spain); Western Europe (Belgium, France, Ireland, Norway, Sweden); Central-Eastern Europe (Cyoatia, the Czech Republic, Estonia, Hungary, Latvia, Portugal, Spain); Western Europe (Belgium, France, Ireland, Norway, Sweden); Central-Eastern Europe (Cyoatia, the Czech Republic, Estonia, Hungary, Latvia, Portugal, Spain); Western Europe (Belgium, France, Ireland, Norway, Sweden); Central-Eastern Europe (Cyoatia, the Czech Republic, Estonia, Hungary, Latvia, Portugal, Spain); Western Europe (Cyoatia, the Czech Republic, Estonia, Hungary, Latvia, Portugal, Spain); Western Europe (Cyoatia, the Czech Republic, Estonia, Hungary, Latvia, Portugal, Spain); Western Europe (Cyoatia, the Czech Republic, Estonia, Hungary, Latvia, Portugal, Spain); Western Europe (Cyoatia, the Czech Republic, Estonia, Hungary, Spain); Western Europe (Cyoatia, Hungary, Estonia, Hu Lithuania, Poland, Slovakia, Slovenia); South-Eastern Europe (Albania, Bulgaria, FYR Macedonia, Montenegro, Romania, Serbia); Eastern Europe (Belarus, Moldova, Russia, Ukraine); Caucasus (Armenia, Azerbaijan, Georgia).