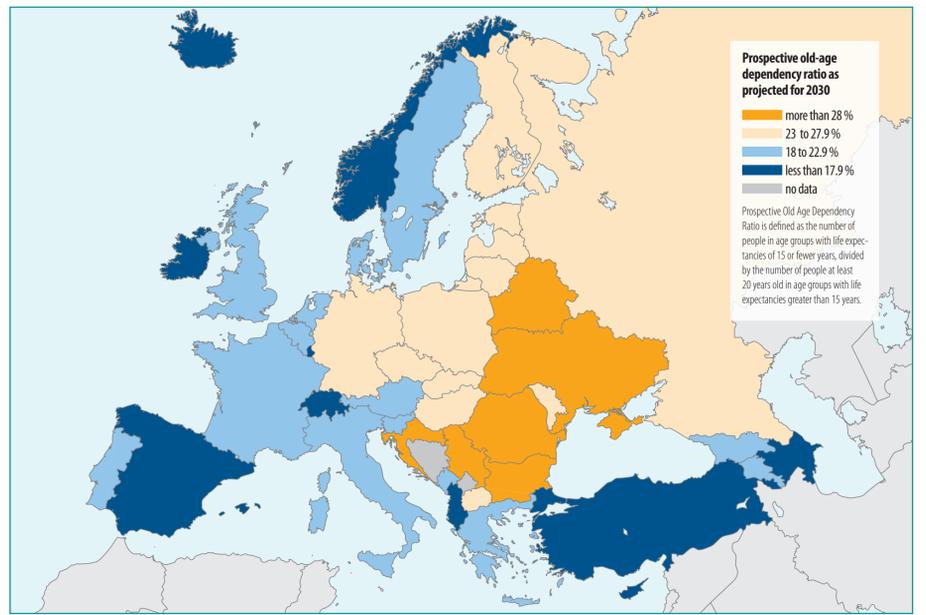


European Demographic Data Sheet 2012



Re-evaluating population ageing in European countries

More information: www.populationeurope.org

Country	Population size on January 1 st , 2011 (millions)	Projected population size, 2050 (millions)	Projected population size (zero migration), 2050 (millions)	Number of live births, 2010 (thousands)	Number of deaths, 2010 (thousands)	Average net migration, 2004-2008 (thousands)	Net migration (estimates), 2010 (thousands)	Total fertility rate, 2010	Tempo and parity adjusted total fertility, 2008	Completed cohort fertility, women born 1970 (children per woman)	Mean age at first birth, 2010 (years)	Male life expectancy at birth, 2010 (years)	Female life expectancy at birth, 2010 (years)	Male life expectancy at age 65, 2010 (years)	Female life expectancy at age 65, 2010 (years)	Proportion of the population aged 65+, 2011 (%)	Proportion with a remaining life expectancy of 15 years or less, 2011 (%)	Projected proportion of the population aged 65+, 2050 (%)	Projected proportion with a remaining life expectancy of 15 years or less, 2050 (%)	Population median age, 2011 (years)	Projected population median age, 2050 (years)	Old-age dependency ratio 65+/20-64, 2011 (%)	Prospective old-age dependency ratio (see box), 2011 (%)	Projected old-age dependency ratio 65+/20-64, 2050 (%)	Projected prospective old-age dependency ratio (see box), 2050 (%)	Labour force participation rate (55-64 years), 2011 (%)		Country		
																										F	M			
Albania	3.3	3.0	3.5	36.3	16.1	-7.7	-5.5	1.41	2.10*	2.6*	23.4*	72.9	77.8	-	-	11.3	9.7	28.3	16.4	31.0	52.1	19.4	16.2	50.4	24.2	30.6	65.5	Albania		
Andorra	0.1	-	-	0.8	0.2	1.9	0.3	1.22	1.57*	-	-	-	-	-	-	13.3	-	-	-	39.1	-	19.7	-	-	-	-	-	-	-	Andorra
Armenia	3.2	3.1	3.4	44.8	27.9	-6.9	-0.7	1.56	1.63*	-	24.1	70.5	76.7	13.3	16.0	10.1	10.2	25.3	16.8	32.6	49.4	16.1	16.4	45.2	26.1	54.3	79.7	Armenia		
Austria	8.4	9.7	7.8	78.7	77.2	39.4	27.4	1.44	1.67	1.62	28.2	77.9	83.5	17.9	21.4	17.6	11.5	30.2	16.6	42.0	48.3	28.5	17.0	58.1	25.4	33.7	52.6	Austria		
Azerbaijan	9.1	11.2	11.1	165.6	53.6	33.0	1.4	1.92	1.84*	-	24.4	71.2	76.0	14.1	16.0	5.8	5.9	21.1	13.8	29.1	43.7	9.3	9.5	36.2	21.0	56.3	62.3	Azerbaijan		
Belarus	9.5	7.3	7.8	108.1	137.1	4.5	10.3	1.49	1.68	1.66	24.6	64.6	76.5	11.7	16.7	13.8	15.9	27.6	20.8	39.0	49.4	21.2	25.2	50.4	33.9	29.7	54.4	Belarus		
Belgium	11.0	13.5	10.9	127.0	104.5	51.5	89.3	1.84	1.93*	1.82	27.8	77.6	83.0	17.6	21.3	17.2	12.2	27.3	14.8	41.0	45.5	28.7	18.9	52.2	22.8	33.0	47.8	Belgium		
Bosnia & Herzegovina	3.8	-	-	33.5	35.1	0.9	0.7	-	-	-	25.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Bosnia & Herzegovina	
Bulgaria	7.5	5.7	5.9	75.5	110.2	-1.1	-24.2	1.48	1.64	1.68	25.6	70.3	77.4	13.6	17.0	17.7	17.4	29.9	21.7	41.6	49.2	28.0	27.4	57.1	35.9	42.4	55.3	Bulgaria		
Croatia	4.4	3.5	3.8	43.4	52.1	8.0	-4.9	1.47	1.75*	-	27.5	73.5	79.9	14.6	18.2	17.2	15.4	33.4	21.1	41.5	53.0	27.7	24.2	65.9	33.5	29.2	53.3	Croatia		
Cyprus	0.8	1.2	0.9	10.0	5.4	10.0	-3.3	1.51	1.73*	2.24	28.5	78.6	83.6	18.1	20.9	13.4	8.6	23.6	12.4	36.8	40.1	21.2	12.7	44.2	19.2	43.1	73.6	Cyprus		
Czech Republic	10.5	10.9	9.5	117.2	106.8	49.1	15.6	1.49	1.81	1.88	27.6	74.5	80.9	15.5	19.0	15.5	12.3	29.5	17.3	39.6	47.8	24.1	18.1	57.0	27.1	39.4	62.6	Czech Republic		
Denmark	5.6	6.5	5.9	63.4	54.4	13.5	16.8	1.87	1.98*	1.97	-	77.2	81.4	17.0	19.7	16.8	11.5	26.5	14.4	40.6	44.6	28.5	17.9	51.3	22.6	58.0	68.3	Denmark		
Estonia	1.3	1.3	1.3	15.8	15.8	0.1	0.0	1.63	1.93	1.87	26.3	70.6	80.8	14.2	19.4	17.0	14.4	29.0	16.7	39.7	48.2	27.4	22.3	55.4	25.9	62.9	67.1	Estonia		
Finland	5.4	6.1	5.5	61.0	50.9	11.1	13.8	1.87	1.91	1.88	28.3	76.9	83.5	17.5	21.5	17.5	11.7	27.7	14.9	42.1	45.2	29.3	17.8	54.5	23.5	60.4	61.4	Finland		
France	63.1	73.4	69.3	797.0	535.0	129.1	75.0	2.00	2.12*	2.00	28.0*	78.3	85.3	18.9	23.4	16.9	10.8	28.6	14.5	40.2	45.9	28.8	16.6	56.5	22.6	41.8	47.1	France		
Georgia	4.5	4.5	4.5	62.6	47.9	7.7	18.1	1.87	1.89*	-	24.5	70.0	78.8	14.5	18.3	13.8	13.0	25.4	16.1	36.7	46.0	22.2	20.7	46.3	25.1	66.8	84.1	Georgia		
Germany	81.8	77.4	70.0	677.9	858.8	36.2	130.2	1.39	1.68*	1.50	28.8	78.0	83.0	17.8	20.9	20.6	14.5	33.5	19.8	46.6	51.4	33.8	21.6	67.7	31.3	56.7	71.7	Germany		
Greece	11.3	12.1	10.2	114.8	109.1	39.5	-0.9	1.50	1.66*	1.60	28.9	78.4	82.8	18.5	20.4	19.3	13.9	33.0	16.8	42.2	50.4	31.4	20.8	67.3	25.8	29.7	57.3	Greece		
Hungary	10.0	9.3	8.2	90.3	130.5	17.6	11.5	1.25	1.66	1.86	27.7	70.7	78.6	14.1	18.2	16.7	15.0	29.8	18.5	40.1	50.2	26.6	23.2	55.9	28.6	35.2	44.0	Hungary		
Iceland	0.3	0.4	0.4	4.9	2.0	3.2	-2.1	1.20	2.41*	2.29	26.9	79.8	84.1	18.3	21.5	12.3	7.8	24.9	12.4	35.0	43.3	20.7	12.2	47.3	19.2	79.1	88.3	Iceland		
Ireland	4.5	6.6	5.7	73.7	27.1	45.4	-33.6	2.07	2.10	2.11	28.9	78.7	83.2	18.1	21.1	11.6	7.4	26.5	11.3	34.7	43.2	19.2	11.5	51.8	17.1	45.6	65.0	Ireland		
Italy	60.6	69.3	53.4	561.9	587.5	432.5	311.7	1.40	1.51*	1.46	-	79.4	84.6	18.3	22.7	20.3	13.9	33.7	17.9	43.5	51.3	33.3	20.6	67.9	27.4	28.9	50.7	Italy		
Kosovo	2.2	-	-	34.5	7.0	5.1	-	2.0*	-	3.0*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Kosovo	
Latvia	2.2	1.8	1.8	19.2	30.0	-1.5	-7.9	1.17	1.70	1.73	26.0	68.6	78.4	13.3	18.2	17.4	16.2	30.2	19.7	40.4	52.0	27.5	25.3	56.2	30.7	57.2	63.0	Latvia		
Liechtenstein	0.04	-	-	0.3	0.2	0.1	0.2	1.40	1.57*	-	-	79.5	84.3	19.6	21.8	13.9	-	-	-	40.2	-	21.6	-	-	-	-	-	-	Liechtenstein	
Lithuania	3.2	2.7	2.8	35.6	42.1	-7.2	-77.9	1.55	1.84	1.74	26.6	68.0	78.9	13.5	18.4	16.5	14.9	25.3	18.3	40.0	46.4	26.8	23.6	45.8	29.4	53.4	64.8	Lithuania		
Luxembourg	0.5	0.8	0.5	5.9	3.8	5.9	7.7	1.63	2.05*	1.87	-	77.9	83.5	17.3	21.6	13.9	9.7	27.0	14.0	39.0	46.0	22.2	14.5	51.3	21.3	32.1	48.4	Luxembourg		
Macedonia, FYR	2.1	2.0	2.0	24.3	19.1	-0.4	-0.6	1.55	1.72*	2.23	26.0	72.9	77.2	13.9	16.0	11.7	11.8	27.5	18.7	36.1	49.3	18.5	18.5	50.1	29.4	31.7	67.7	Macedonia, FYR		
Malta	0.4	0.4	0.4	4.0	3.0	2.0	2.2	1.38	1.60*	-	27.4	79.2	83.6	18.4	21.1	15.5	9.7	35.9	14.7	39.5	55.3	24.7	14.1	73.0	25.9	14.1	51.5	Malta		
Moldova	3.6	2.9	3.1	40.5	43.6	-3.2	-0.1	1.30	1.49*	-	24.1	64.9	73.5	11.9	14.8	10.0	12.3	24.0	19.3	34.2	49.5	15.2	19.4	40.7	30.3	35.1	53.7	Moldova		
Monaco	0.04	-	-	1.0	0.5	-0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Monaco	
Montenegro	0.6	0.6	0.6	7.4	5.6	-0.1	0.0	1.69	1.78*	-	26.3	73.5	78.4	15.0	17.1	12.7	11.5	26.5	16.5	36.5	47.6	20.7	18.5	48.2	25.3	-	-	Montenegro		
Netherlands	16.7	17.8	17.0	184.4	136.1	-5.7	32.5	1.79	1.83	1.75	29.2	78.9	83.0	17.7	21.0	15.6	10.3	29.9	17.1	41.0	48.0	25.6	15.6	59.0	27.0	48.4	68.6	Netherlands		
Norway	4.9	6.6	5.6	61.4	41.5	27.6	42.2	1.95	2.08*	2.07	28.0	79.8	83.3	18.0	21.2	15.1	9.8	26.3	13.3	38.7	44.3	25.3	15.1	50.8	20.7	66.9	73.9	Norway		
Poland	38.2	34.8	34.1	413.3	378.5	-18.7	-2.1	1.38	1.60*	1.81	26.4	72.1	80.7	15.1	19.5	13.6	11.2	31.0	17.5	38.0	51.7	20.9	16.6	58.6	26.5	29.1	51.6	Poland		
Portugal	10.6	11.3	9.6	101.4	106.0	28.1	3.8	1.36	1.61	1.67	28.1	76.7	82.8	17.1	20.6	18.2	13.2	33.2	17.4	41.1	50.8	29.5	19.8	66.7	26.5	46.5	61.6	Portugal		
Romania	21.4	17.9	17.9	212.2	259.7	-4.4	-0.8	1.32	1.46*	1.67	25.2	69.8	77.4	14.0	17.2	15.0	14.3	28.5	20.3	39.2	53.9	23.6	22.2	48.8	30.4	32.7	51.6	Romania		
Russia	141.9	129.2	116.3	1788.9	2028.5	178.9	191.3	1.54	1.66	1.60	24.6	62.8	74.7	12.0	16.5	12.6	14.7	23.5	18.0	37.9	44.5	18.9	22.7	41.6	29.0	38.2	58.5	Russia		
San Marino	0.03	-	-	0.3	0.2	0.3	-0.9	1.38	-	-	-	29.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	San Marino	
Serbia	7.3	5.9	5.9	68.3	103.2	5.1	4.4	1.40	1.76*	-	26.9	71.8	77.0	14.0	16.2	16.8	17.1	29.1	20.0	41.5	49.6	26.9	27.5	54.4	32.0	27.8	53.7	Serbia		
Slovakia	5.4	5.2	4.8	60.4	53.4	4.8	3.4	1.40	1.70	1.93	27.0	71.7	79.3	14.0	18.0	12.4	11.4	29.2	19.5	37.2	50.5	18.8	17.0	54.0	30.6	34.7	58.9	Slovakia		
Slovenia	2.1	2.2	1.9	22.3	18.6	9.5	-0.5	1.57	1.71	1.71	28.4	76.4	83.1	16.8	21.0	16.5	12.0	32.6	17.5	41.7	50.3	25.7	17.5	66.0	27.1	23.7	42.7	Slovenia		
Spain	46.2	56.0	43.5	485.6	381.4	593.8	59.8	1.39	1.54	1.47	29.8	79.1	85.3	18.6	22.7	17.1	11.1	30.7	15.7	40.3	46.0	27.0	16.0	61.6	24.2	41.7	63.7	Spain		
Sweden	9.4	11.7	10.1	115.6	90.5	42.5	49.7	1.99	1.97	2.00	28.9	79.6	83.6	18.3	21.2	18.5	11.7	26.0	13.5	40.8	43.7	31.6	18.0	49.						

Regional overview

POPULATION CHANGE

Region	Population size on January 1 st , 2011 (millions)	Projected population size, 2050 (millions)	Annual rate of population change, 2004-2008 (per 1000)	Projected annual rate of population change, 2011-2050 (per 1000)
Southern Europe	130.0	150.3	6.6	3.9
Western Europe	158.2	191.6	5.0	5.3
German-speaking countries	98.0	97.0	-0.4	-0.3
Nordic countries	25.6	31.3	5.9	5.6
Central-Eastern Europe	77.4	71.7	0.4	-1.8
South-Eastern Europe	42.1	35.1	-1.8	-4.1
Eastern Europe	200.5	172.9	-2.1	-3.4
Caucasus	16.8	18.8	7.8	2.9
EU-27	500.5	545.1	3.2	2.2
EU-15	397.4	451.8	4.1	3.4
EU-12 (new members)	103.1	93.3	-0.2	-2.4

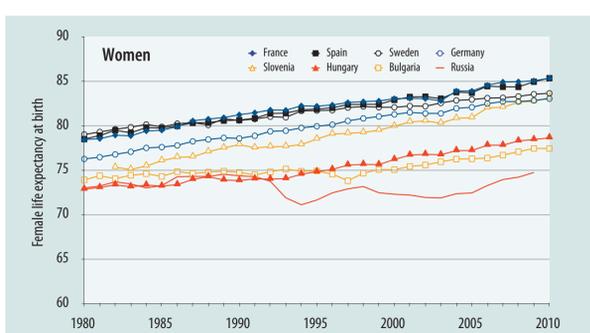
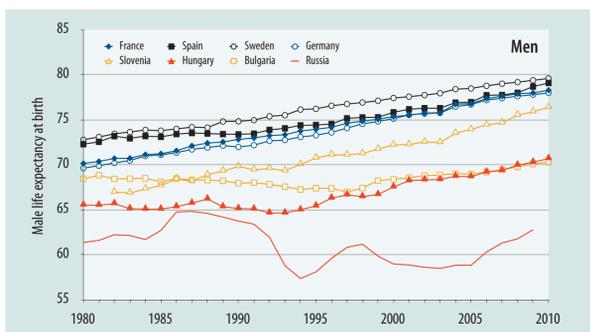
POPULATION AGEING

Region	Proportion of the population aged 65+, 2011 (%)	Projected proportion of the population aged 65+, 2050 (%)	Old-age dependency ratio 65+ / 20-64, 2011 (%)	Projected old-age dependency ratio 65+ / 20-64, 2050 (%)
Southern Europe	18.8	32.4	30.5	65.2
Western Europe	16.5	27.0	27.8	52.3
German-speaking countries	20.1	32.9	32.8	66.1
Nordic countries	17.2	26.5	29.1	51.2
Central-Eastern Europe	14.7	30.4	23.0	57.7
South-Eastern Europe	15.3	28.7	24.3	51.3
Eastern Europe	13.2	24.7	20.0	44.2
Caucasus	8.8	22.8	14.0	40.1
EU-27	17.5	29.9	28.7	58.7
EU-15	18.2	30.0	30.1	59.3
EU-12 (new members)	14.9	29.8	23.3	55.5

FERTILITY INDICATORS

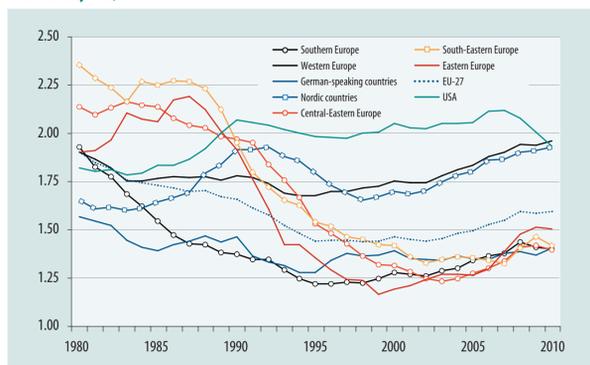
Region	Total fertility rate, 2010	Tempo-parity adjusted TFR, 2008	Mean age at first birth, 2010	Completed cohort fertility rate, women born 1970
Southern Europe	1.40	1.54	29.4	1.50
Western Europe	1.96	2.08	28.1	1.92
German-speaking countries	1.40	1.68	28.8	1.52
Nordic countries	1.93	1.98	28.5	1.98
Central-Eastern Europe	1.40	1.67	26.9	1.83
South-Eastern Europe	1.42	1.61	25.5	1.87
Eastern Europe	1.51	1.65	24.5	1.59
Caucasus	1.84	1.81	24.4	-
EU-27	1.59	1.77	28.0	1.71
EU-15	1.65	1.81	28.6	1.69
EU-12 (new members)	1.38	1.62	26.4	1.79

Life expectancy at birth, selected European countries



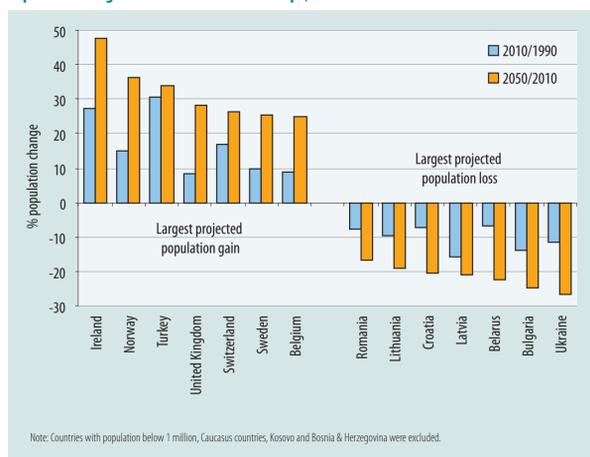
Total fertility rate in selected regions of Europe and in the USA

Total fertility rate, 1980-2010



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 1 st , 2011 (millions)	Projected population size, 2050 (millions)	Rank		
EU-27	500.5	545.1	EU-27	545.1	
USA	310.5	439.0	USA	439.0	
1	Russia	141.9	Russia	129.2	
			1	Turkey	97.3
2	Germany	81.8	Japan	97.1	
3	Turkey	73.7	United Kingdom	79.5	
4	France	63.1	Germany	77.4	
5	United Kingdom	62.4	France	73.4	
6	Italy	60.6	Italy	69.3	
7	Ukraine	46.2	Spain	56.0	
8	Spain	45.6	Poland	34.8	
9	Poland	38.2	Ukraine	33.5	
10	Romania	21.4	Romania	17.9	

TOTAL FERTILITY RATE 2010

Rank	Total fertility rate, 2010	Adjusted TFR* 2008
1	Ireland	2.07
2	Turkey	2.04
3	France	2.00
4	Sweden	1.99
5	United Kingdom	1.98
	EU-27	1.59
34	Portugal	1.36
35	Romania	1.32
36	Moldova	1.30
37	Hungary	1.25
38	Latvia	1.17

MEAN AGE OF MOTHER AT FIRST BIRTH

Rank	Mean age of mother at first birth, 2010 (years)	
1	Switzerland	30.0
2	Spain	29.9
	Japan	29.3
3	Netherlands	29.2
4-5	Greece	28.9
4-5	Sweden	28.9
	EU-27	28.0
32	Belarus	24.6
33	Ukraine	24.4
34	Moldova	24.1
35	Albania	23.4
36	Turkey	22.3

NET MIGRATION

Rank	Net migration, 2010 (thousands)	
EU-27	862.2	
USA	703.8	
1	Turkey	381.7
2	Italy	311.7
3	Russia	191.3
4	United Kingdom	163.1
5	Germany	130.2
35	Albania	-5.5
36	Latvia	-7.9
	Japan	-23.3
37	Bulgaria	-24.2
38	Ireland	-33.6
39	Lithuania	-77.9

LIFE EXPECTANCY AT BIRTH, MEN

Rank	Male life expectancy at birth, 2010 (years)	
1	Switzerland	80.2
2	Sweden	79.6
	Japan	79.6
3	Italy	79.4
4	Spain	79.1
5	Norway	79.0
	EU-27	76.7
34	Lithuania	68.0
35	Ukraine	65.2
36	Moldova	64.9
37	Belarus	64.6
38	Russia	62.8

LIFE EXPECTANCY AT BIRTH, WOMEN

Rank	Female life expectancy at birth, 2010 (years)	
1	Switzerland	84.4
1-2	France	85.3
1-2	Spain	85.3
3	Switzerland	84.8
4	Italy	84.6
5	Cyprus	83.6
	EU-27	82.6
34	Serbia	77.0
35	Belarus	76.5
36	Ukraine	75.3
37	Russia	74.7
38	Moldova	73.5

DIFFERENCE IN MALE AND FEMALE LIFE EXPECTANCY

Rank	Difference in male and female life expectancy at birth, 2010 (years)	
1-2	Russia	11.9
1-2	Belarus	11.9
3	Lithuania	10.9
4	Estonia	10.2
5	Ukraine	10.1
	EU-27	5.9
34	Norway	4.3
35	Denmark	4.2
36	Netherlands	4.1
37	Sweden	4.0
38	United Kingdom	3.9

POPULATION MEDIAN AGE

Rank	Population median age, 2011 (years)	Rank	Projected population median age, 2050 (years)		
1	Germany	44.6	Japan	56.0	
	Japan	44.3	1	Romania	53.9
2	Italy	43.5	2	Croatia	53.0
3	Greece	42.2	3	Albania	52.1
4	Finland	42.1	4	Latvia	52.0
5	Austria	42.0	5	Poland	51.7
	EU-27	41.3		EU-27	48.0
34	Macedonia, FYR	36.1	34	Sweden	43.7
35	Ireland	34.7	35	Turkey	43.3
36	Moldova	34.2	36	Ireland	43.2
37	Albania	31.0	37	United Kingdom	42.6
38	Turkey	29.3	38	Cyprus	40.1
			USA	38.0	

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

Rank	Old-age dependency ratio, 2011 (years)	Rank	Projected old-age dependency ratio, 2050 (years)		
	Japan	39.5	Japan	81.1	
1	Germany	33.8	1	Italy	67.9
2	Italy	33.3	2	Germany	67.7
3	Sweden	31.6	3	Greece	67.3
4	Greece	31.4	4	Portugal	66.7
5	Portugal	29.5	5	Slovenia	66.0
	EU-27	28.6		EU-27	58.7
34	Russia	18.9	34	Lithuania	45.8
35	Slovakia	18.8	35	Cyprus	44.2
36	Macedonia, FYR	18.5	36	Russia	41.6
37	Moldova	15.2	37	Moldova	40.7
38	Turkey	12.3	38	Turkey	38.7
			USA	37.3	

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

Rank	Prospective old-age dependency ratio, 2011 (years)	Rank	Projected prospective old-age dependency ratio, 2050 (years)		
1	Serbia	27.5	1	Ukraine	36.3
2	Bulgaria	27.4	2	Bulgaria	35.9
3	Ukraine	27.0	3	Belarus	33.9
4	Latvia	25.3	4	Croatia	33.5
5	Belarus	25.2	5	Serbia	32.0
	EU-27	18.7		EU-27	25.7
34	Switzerland	14.9	34	Sweden	21.1
35	Luxembourg	14.5	35	Norway	20.7
36	Cyprus	12.7	36	Cyprus	19.2
37	Ireland	11.5	37	Turkey	18.8
38	Turkey	9.9	38	Ireland	17.1

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

Rank	Proportion of the population with a remaining life expectancy of 15 years or less, 2011 (%)*	Population 65+, 2011 (%)	Rank	Projected proportion of the population with a remaining life expectancy of 15 years or less, 2050 (%)*	Projected population 65+, 2050 (%)	
1	Bulgaria	17.4	17.7	1	Ukraine	22.1
2	Serbia	17.1	16.8	2	Bulgaria	21.7
3	Ukraine	17.0	15.3	3	Croatia	21.1
4	Latvia	16.2	17.4	4	Belarus	20.8
5	Belarus	15.9	13.8	5	Romania	20.3
34-35	Albania	9.7	11.3	34	Sweden	13.5
34-35	Luxembourg	9.7	13.9	35	Norway	13.3
36	Cyprus	8.6	13.4	36	Turkey	12.5
37	Ireland	7.4	11.6	37	Cyprus	12.4
38	Turkey	5.9	7.2	38	Ireland	11.3

* Ranked according to the % of the population with a remaining life expectancy of 15 years or less

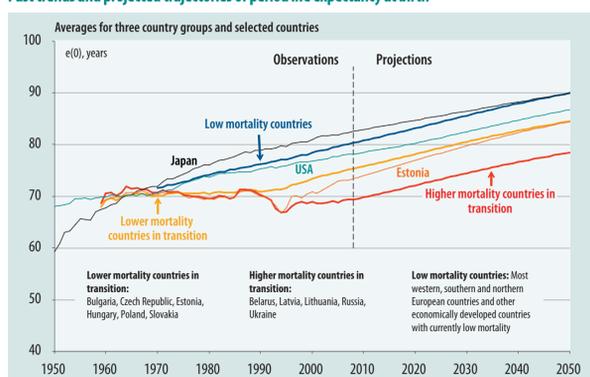
Data for the USA and Japan are shown in italics and displayed only when their values fall between top five or bottom five European countries. Caucasus countries, countries with total population below 500 000 (Andorra, Iceland, Liechtenstein, Malta, Monaco and San Marino) and Kosovo are not ranked. The 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.

Future life expectancy in developed countries

In recent times, the human lifespan has shown a stable growth of more than two years per decade in economically developed countries. Whether this development will also continue in the future is an issue debated between those who point to the lack of fundamental medical innovations extending the lifespan and those who argue that the discontinuity of this remarkably stable trend would be an (unfortunate) innovation in itself. The mortality projections used in this Data Sheet are based on a demographic trend often neglected in this discussion, namely that the currently younger cohorts are healthier than their older peers. When these young cohorts reach old age, their mortality rates may thus be lower than those of the currently old cohorts. In populations comprising a growing number of healthier cohorts, mortality will continue to decline. We call this *mortality inertia*: it implies the existence of a transitory period in the future, when age-specific mortality rates are likely to change if they change in the current period. We use these transient dynamics to forecast mortality. For low-mortality countries, we forecast the conventional period life expectancy at birth to be 90 years by 2050, which exceeds the UN forecast by about five years. The results obtained with our method are consistent with the previously reported linear trend in the conventional period life expectancy for low-mortality countries and in line with the assumptions used in previous editions of the Data Sheet.

Further reading:
Edley, D. M. 2011. Life expectancy in developed countries is higher than conventionally estimated. Implications from improved measurement of human longevity. *Journal of Population Aging* 4:5-32.
Edley, D. M. 2012. A note on the compression of mortality. Paper presented at the annual meeting of the Population Association of America, San Francisco, 3-5 May 2012. <http://paa2012.princeton.edu/download.aspx?submissionid=120026>

Past trends and projected trajectories of period life expectancy at birth



Economic Recession and Recent Fertility Trends in Europe

The ongoing economic recession has left its imprint on demographic trends, particularly on migration, but also on fertility, union formation and, to a smaller extent, on health and mortality. The availability of detailed data for 2009-2010, along with first results for 2011, permits us to analyse the initial impact of the recent economic downturn on fertility.

Past evidence shows that economic recessions have a negative effect on fertility rates. However, most of these fertility declines were relatively small, time-limited and had little effect on cohort fertility. Recession-related decreases are often concentrated around younger reproductive ages, suggesting that they are typically driven by the postponement of childbearing rather than constituting a durable change in fertility patterns. Research based on individual data shows, however, that women and men react differently to economic recessions, as do people of different ages and with

different numbers of children and different partnership and social statuses. Hence the observed aggregate change in fertility is a 'net effect' of these often contradictory individual responses.

How do fertility trends unfold in the current recession? By and large, they are in line with past evidence. The economic downturn terminated the Europe-wide increase in period total fertility rate in the early 21st century. After peaking in 2008, fertility rates stagnated or declined in many countries. In the European Union, the total fertility rate (TFR) rose from 1.44 to 1.59 between 2002 and 2008, but remained at the same level in the subsequent two years (see graph of Total fertility rate in selected regions of Europe and in the USA on this side of the Data Sheet). All EU countries except Germany exhibited an increase in their TFR in 2008, but only 11 out of 27 did so in 2009. Outside Europe, the United States experienced an early onset of the recession, with the TFR falling below 2 in 2010.

Yet more compelling evidence of the fertility trend reversal is furnished by 31 European countries that either reported data or for which we calculated estimates for 2011. Across these countries, the TFR peaked at 1.59 in 2008 and stabilised in 2009-10 before dropping below 1.55 in 2011. Preliminary data suggest that the TFR declined in as many as 25 out of these 31 countries in 2011, while the number of countries recording an increase in their TFR plummeted from 30 in 2008 to 14 in 2009 and 5 in 2011. These data also indicate that countries struck by a more severe recession in terms of declining GDP and rising unemployment rates in 2008-10 also faced more pronounced fertility reductions earlier than countries hit less hard.

These aggregate statistics mask great differences in country-specific trajectories. Only a few countries experienced sudden downturns in fertility in 2009-2010. Latvia stands out for its immediate 'shock-like' reaction to the very severe recession: its TFR plummeted to an estimated low of 1.16 in 2011. Fertility rates in Spain and Hungary also dropped rather early (Figure 1). The Czech Republic is an example for a more typical pattern of stagnating fertility in 2008-10, followed by a decline in 2011. In other countries such as Ireland and Sweden, the TFR continued to rise for one or two years after 2008 before it fell in 2011. A few countries, among them Austria and France, had relatively stable TFRs in 2008-11, while others such as Denmark showed an irregular pattern of de-

cline. In contrast, Ireland recorded a continued increase in its TFR through 2011 despite its relatively severe economic recession. Surprisingly, all Nordic countries, known for their generous welfare and family policies, experienced fertility declines in 2011.

Figure 2 depicts the renewed trend towards delayed childbearing. A clear age gradient of fertility decline emerges after 2008. Following a slight rise in the pre-recession period, fertility rates dropped most among women below age 25. In contrast, the fertility of women in their late reproductive years continuously increased after 2008, albeit at a slower pace than in the previous period. This age gradient was particularly pronounced in the countries hit hardest by the economic downturn.

As the recession persists in parts of the European continent and government budgets are vigorously cut, fertility may decline even further in the coming years.

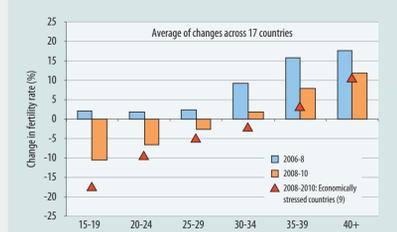


Figure 2: Average change in fertility rates by age prior to 2006-2008 and after (2008-10) the onset of economic recession (17 countries)

Note: Data for the following countries were used (asterisk denotes the 'economically stressed'): Austria, Bulgaria, Czech Republic, Denmark*, Estonia*, Greece*, Hungary*, Ireland*, Latvia*, the Netherlands, Norway, Poland, Portugal*, Slovenia, Spain*, Sweden, Ukraine*.

Notes: EU-15 refers to the EU member states prior to 2004; EU-12 (new members) covers 12 countries accessing the EU in 2004 and 2007. Countries with total population below 100 000, Bosnia and Herzegovina and Kosovo are not included in regional overview tables. Countries with total population below 500 000, Bosnia and Herzegovina, Kosovo and Caucasus countries are not included in the ranking tables. Data for France exclude overseas departments. Data for Cyprus and Moldova refer to the government-controlled area only. Definition of regions in the regional overview table into account geo-political criteria as well as similarity in demographic trends in countries they cover. Countries