EU Population Ageing: Is the Divide in Conditions followed by a Split in Attitudes?

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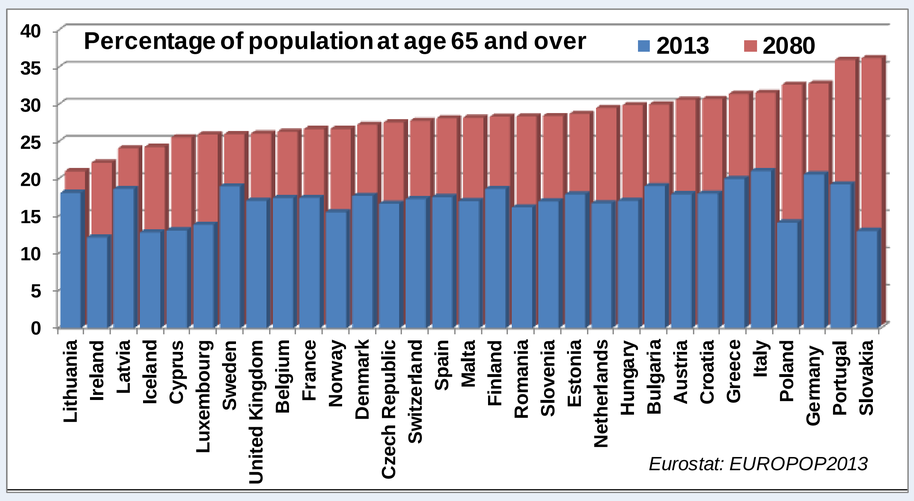
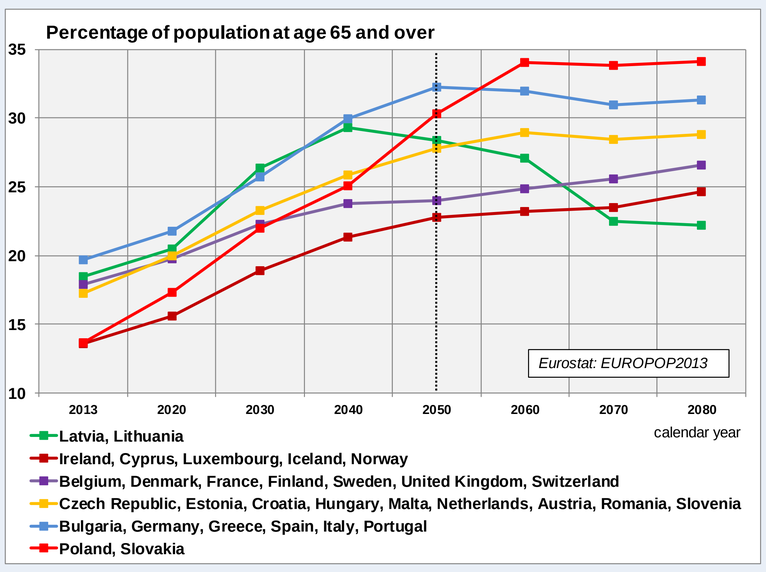
In the future, virtually all countries will face population ageing and the phenomenon is expected to be irreversible. According to EUROPOP2013 projection, the percentage of people in EU28 aged 65+ will increase from 18.2 % in 2013 to 28.7 % in 2080. However, the pace of ageing will vary across countries. Former Eastern European populations, while young today, will belong among the oldest in the future. On the other hand, West and North of Europe will experience a rather decelerating trend in the population ageing. The shift in the proportion of the age groups will result in the increase of old age dependency ratio (OADR=$P_{65}+/P_{20-64}$). The traditional backward looking definition of OADR based on chronological (**retrospective age**) has recently been replaced by a new concept of forward looking **prospective age** when measuring population ageing (Sanderson, Scherbov 2007).

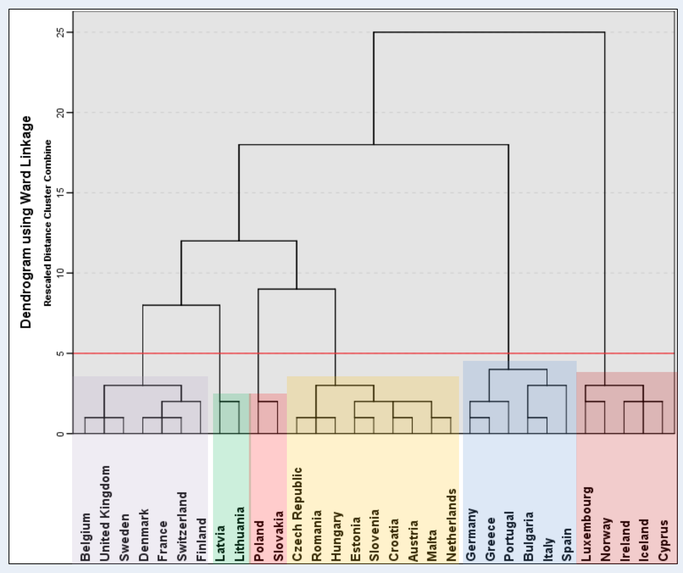
These new perspectives raise questions: What will the attitudes be towards the elderly? What age is considered as the starting point of being old?



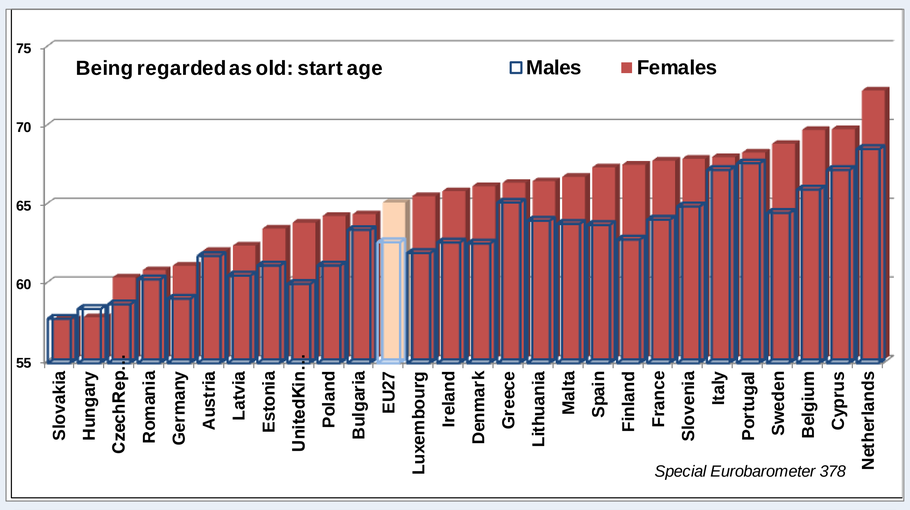
The oldest populations will be expected in Central and Southern Europe irrespective of the current age structure. Future fertility and mortality trends will impact on the pace of population ageing.

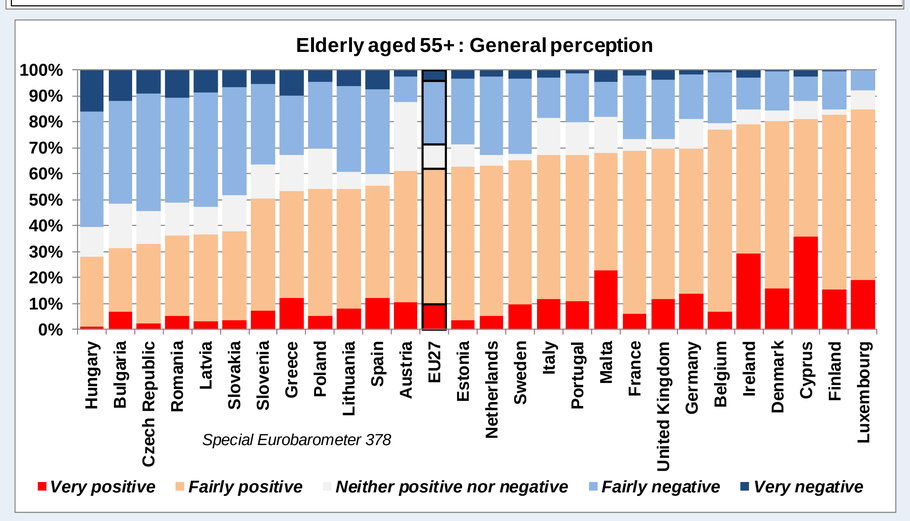
Different pace of population ageing





The pace towards ageing will be country specific and of different speed. 1) populations that are younger today will stay relatively young in the future although they will experience the increase of those aged 65 or over (Ireland,Iceland, Cyprus), 2) populations already old will become older (Germany Italy), 3) populations showing the fastest speed of ageing will be shifting from being young towards some of the oldest ones (Southern, Central, and most of Eastern Europe).





Dependent variable: **Start age when being regarded as old**	Estimate	Pr > ChiSq
Male	-2,00	<.0001
Female	*0*	
15-24	-8,89	<.0001
25-34	-6,13	<.0001
35-44	-5,06	<.0001
45-54	-3,90	<.0001
55-64	-2,34	<.0001
65+	*0*	
Slovakia	-12,41	<.0001
Hungary	-12,41	<.0001
Czech Republic	-10,90	<.0001
Germany	-10,87	<.0001
Romania	-9,63	<.0001
Austria	-8,62	<.0001
United Kingdom	-8,46	<.0001
Latvia	-8,23	<.0001
Estonia	-7,83	<.0001
Poland	-7,42	<.0001
Bulgaria	-6,70	<.0001
Luxembourg	-6,57	0,0018
Denmark	-6,14	<.0001
Ireland	-5,78	<.0001
Finland	-5,39	<.0001
Lithuania	-4,96	<.0001
Spain	-4,95	<.0001
Malta	-4,90	0,0335
Greece	-4,58	<.0001
France	-4,57	<.0001
Slovenia	-4,01	0,0003
Sweden	-3,90	<.0001
Italy	-3,21	<.0001
Belgium	-2,63	<.0001
Portugal	-2,39	<.0001
Cyprus	-1,63	0,3187
Netherlands	*0*	

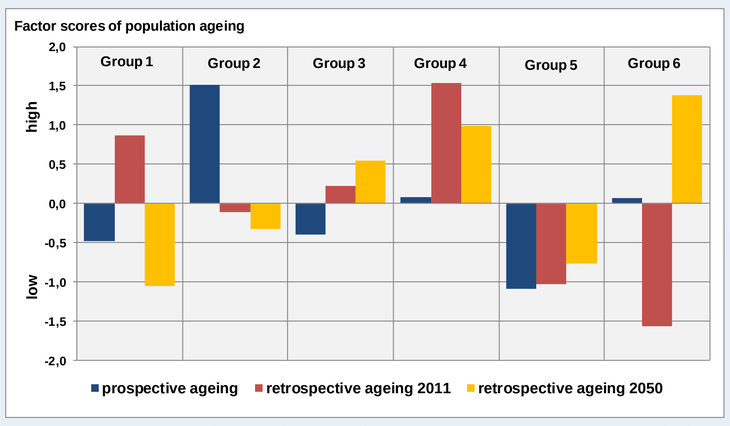
Generalized linear model
Higher negative value of the estimate, younger start age being old is reported
SAS 9.4 GENMOD

Probability modeled is positive perception *Dependent variable:* **General perception of elderly aged 55+**	Estimate	Pr > ChiSq
Male	0,08	0,0078
Female	*0*	
15-24	0,32	<.0001
25-34	0,36	<.0001
35-44	0,29	<.0001
45-54	0,09	0,0547
55-64	-0,02	0,6298
65+	*0*	
Hungary	-1,44	<.0001
Czech Republic	-1,17	<.0001
Bulgaria	-1,16	<.0001
Latvia	-1,07	<.0001
Romania	-1,04	<.0001
Slovakia	-0,93	<.0001
Lithuania	-0,36	0,0406
Spain	-0,34	<.0001
Slovenia	-0,34	0,1203
Greece	-0,19	0,1176
Poland	-0,09	0,2914
Netherlands	*0*	
Sweden	0,05	0,6621
Estonia	0,09	0,7554
France	0,29	0,0007
United Kingdom	0,30	0,0004
Portugal	0,53	<.0001
Italy	0,65	<.0001
Germany	0,67	<.0001
Belgium	0,68	<.0001
Malta	0,77	0,1977
Austria	0,95	<.0001
Ireland	0,95	<.0001
Denmark	1,00	<.0001
Finland	1,03	<.0001
Cyprus	1,26	0,0091
Luxembourg	1,50	0,0265

Binary logistic regression:
Positive vs negative perception
Positive= very positive+fairly positive
Negative=very negative+fairly negative
SAS 9.4 LOGISTIC

Old and new perspectives of population ageing: retrospective and prospective approaches

Country grouping according to the change of population ageing between 2011 and 2050



	Factor 1 Prospective ageing	Factor 2 Retrospective ageing 2011	Factor 3 Retrospective ageing 2050
Prospective old-age dependency ratio 2011	0,902	0,389	-0,006
Prospective old-age dependency ratio 2050	0,897	0,097	0,383
Proportion with a remaining life expectancy of 15 years or less 2011	0,887	0,424	0,071
Proportion with a remaining life expectancy of 15 years or less2050	0,847	0,070	0,472
Old-age dependency ratio 65+/20-64 2011	0,138	0,977	0,102
Proportion of the population aged 65+ 2011	0,250	0,943	0,203
Population median age 2011	0,283	0,854	0,335
Proportion of the population aged 65+ 2050	0,219	0,247	0,939
Old-age dependency ratio 65+/20-64 2050	0,046	0,333	0,925
Population median age 2050	0,549	0,000	0,790
Cumulative variance %	*62,0*	*80,4*	*96,3*

Group 1:	Belgium, Denmark, Finland, Sweden, United Kingdom
Group 2:	Bulgaria, Croatia, Estonia,Hungary, Latvia, Lithuania, Romania
Group 3:	Austria, Czech Republic, France, Netherlands, Portugal, Slovenia, Spain, Switzerland
Group 4:	Germany, Greece, Italy
Group 5:	Cyprus, Iceland, Ireland, Luxembourg, Norway
Group 6:	Malta, Poland, Slovakia

Source: European Demographic Data Sheet 2012; http://www.oeaw.ac.at/vid/datasheet/index.html

Prospective indicators of population ageing when compared to retrospective ones mostly show lower values. However, in former Eastern Europe (group 2) due to high mortality and low fertility levels, the new concept of measuring does not improve the image of ageing.

People view the beginning of old age differently. Women feel that old age begins later than men do. The start of old age is increased by older respondents compared with youngsters. After adjustment for gender and age, country ranking does not change too much, compared with an unadjusted picture. To feel old at a lower age can be found in Slovakia, Hungary, Czech Republic, while not feeling too old despite higher chronological age is seen in the Netherlands, Cyprus, Portugal, Belgium...

Negative opinions towards elderly are particularly seen in Hungary, Czech Republic, and Bulgaria. Men perceive older people more positively than women. Older respondents were more likely to see negative attitudes towards people over 55 years of age in their country.

Despite apparently negative connotations, population ageing should be seen as a human success story – the triumph of public health, medical advancements, and economic development over diseases and injuries that had limited human life expectancy for millennia (*Kinsella* and *Philips* 2005). To compute demographic and statistical indicators, including modelling and forecasting, is important. **However, population attitudes are no less important for coping with our future!**

Acknowledgments

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