

Life expectancy at birth in Cuba

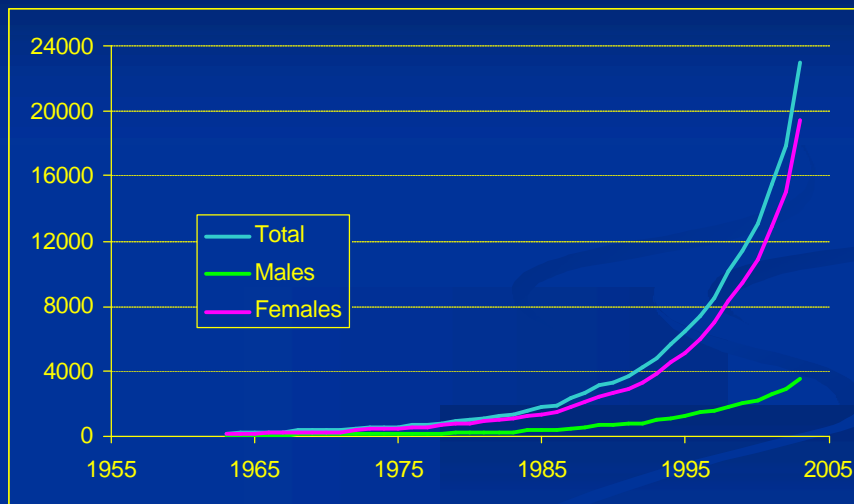
Ciudad de la Habana, January 2006

Healthy life expectancy

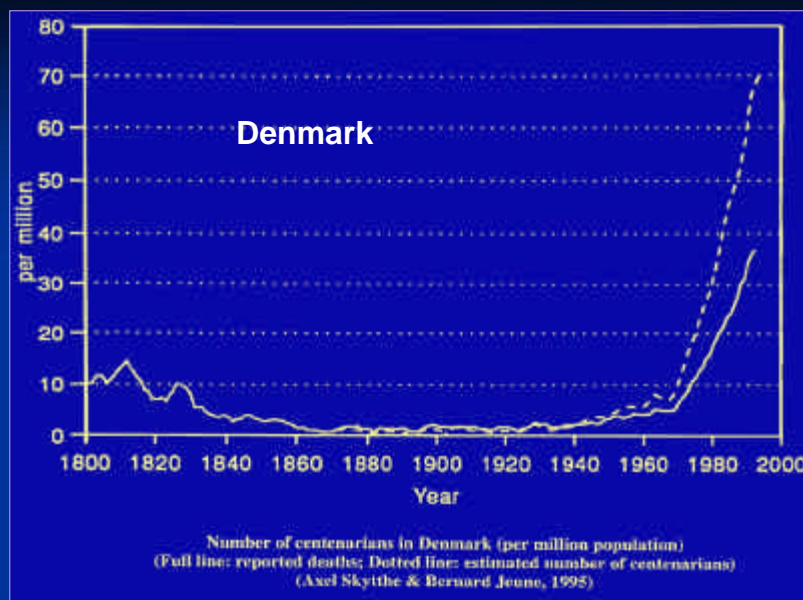
Jean-Marie Robine
INSERM, Health and Demography, CRLC,
University of Montpellier, France

A few words on longevity

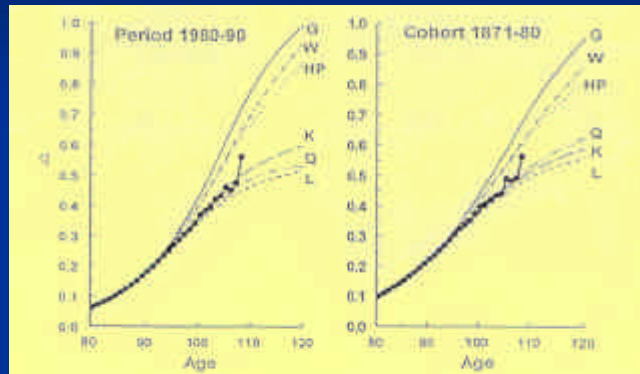
23,000 centenarians in Japan in 2003



Robine & Saito, 2003



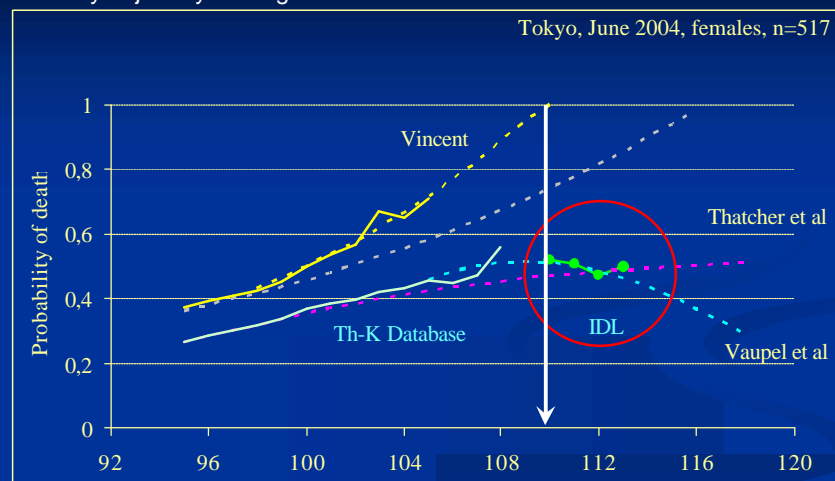
Mortality trajectory with age...



Figures 6.1. OBSERVED VALUES OF q COMPARED WITH G-M MODELS FITTED TO AGES 80-94 AND EXTRAPOLATED TO AGE 120 (continued).

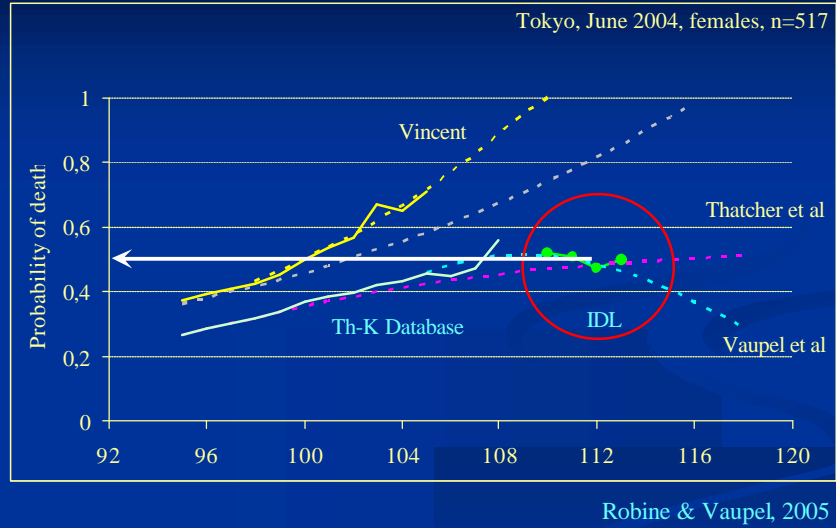
Thatcher-Kannisto, database, 1998

Mortality trajectory with age

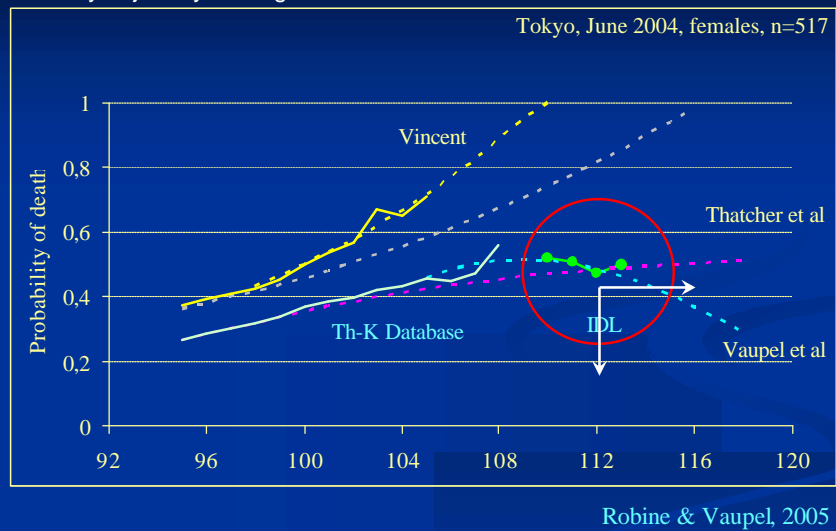


Robine & Vaupel, 2005

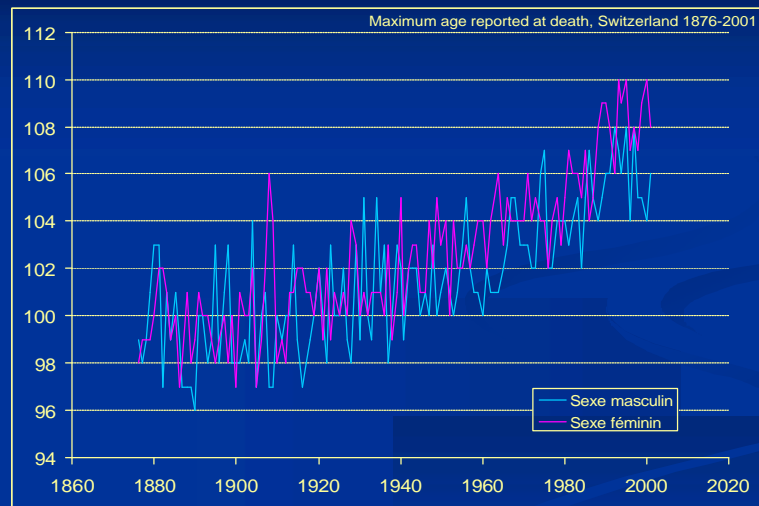
Mortality trajectory with age



Mortality trajectory with age



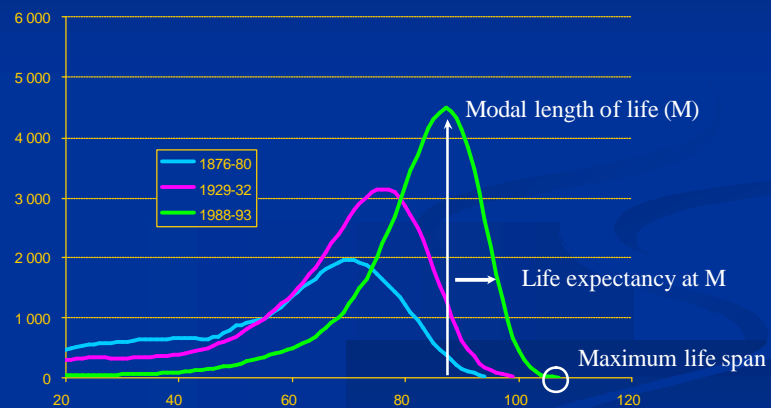
Maximum age reported at death, Switzerland



Robine & Paccaud, 2005

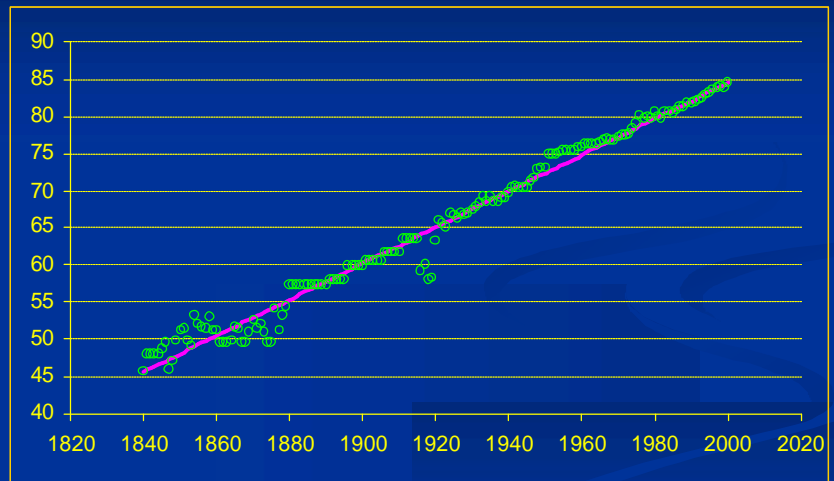
Lenghening of life

Distribution of deaths in Switzerland 1876-1880, 1929-1932, 1988-1993



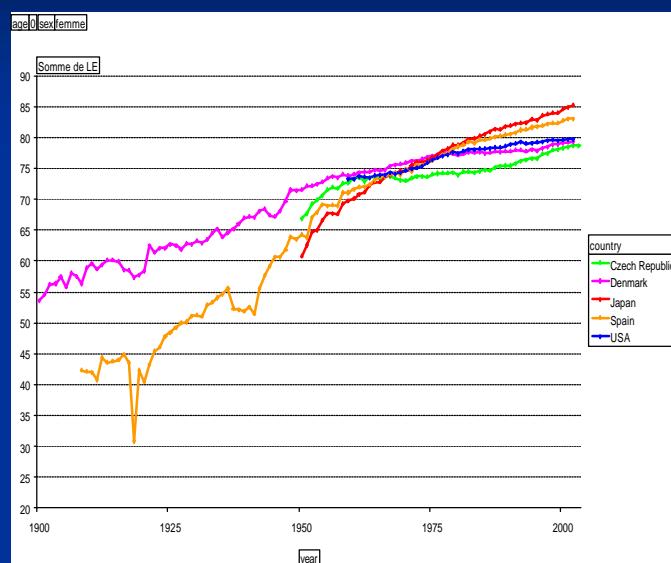
**Life expectancy,
convergence and divergence**

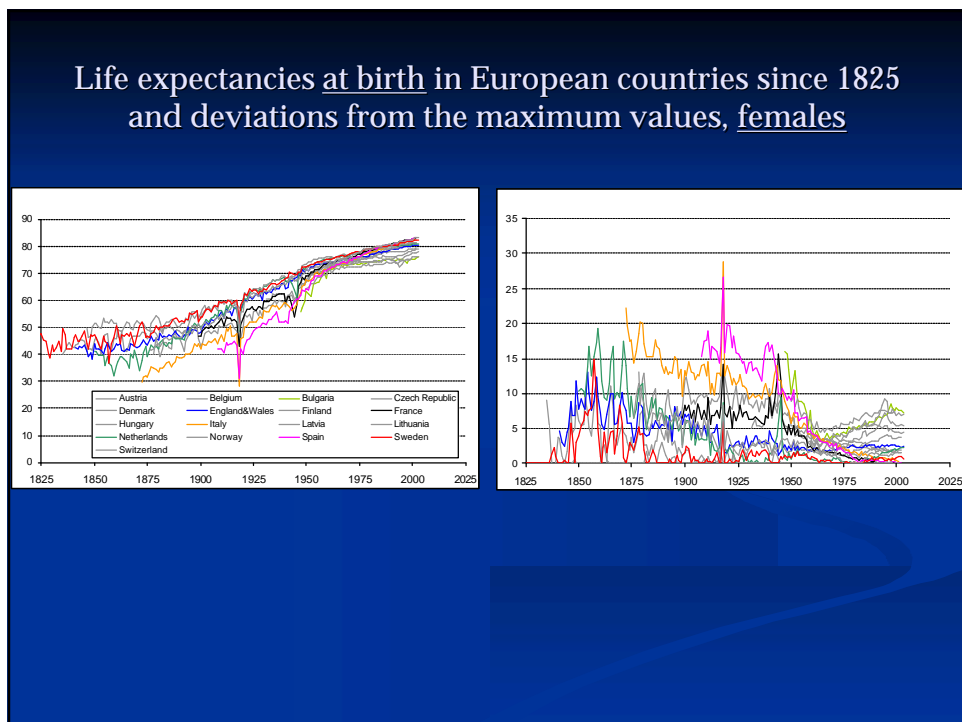
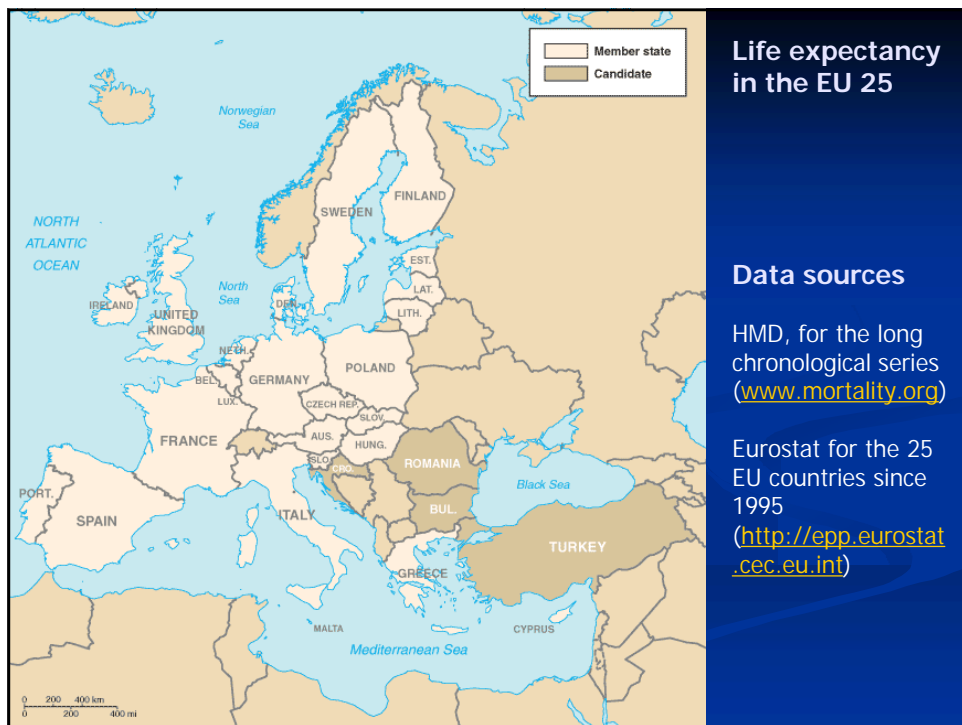
Female life expectancy in the record-holding country since 1840...

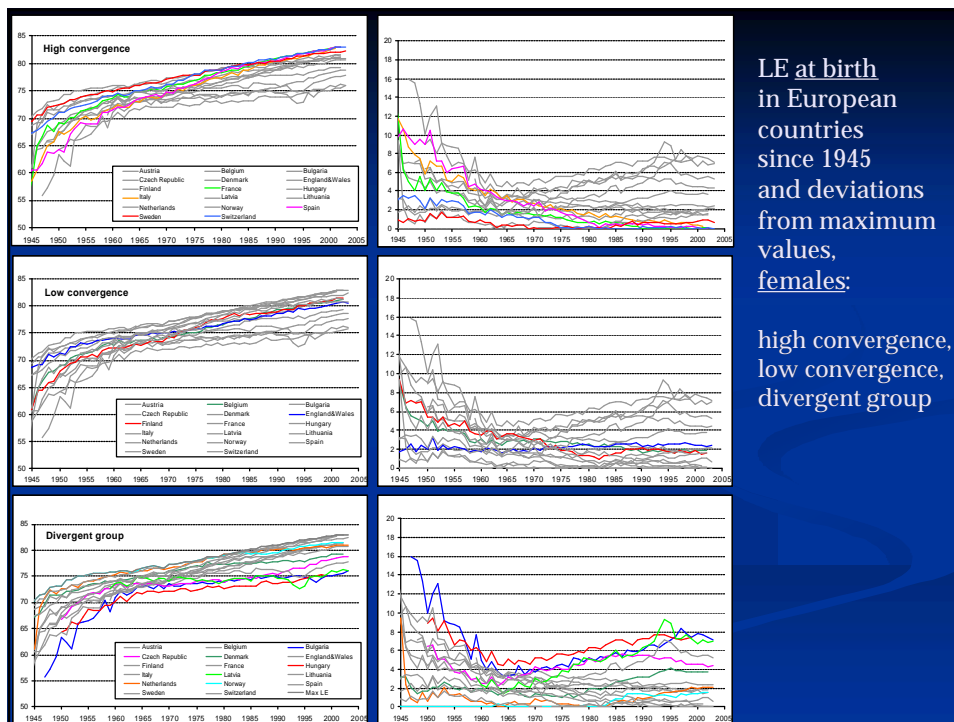


Oeppen & Vaupel, 2002

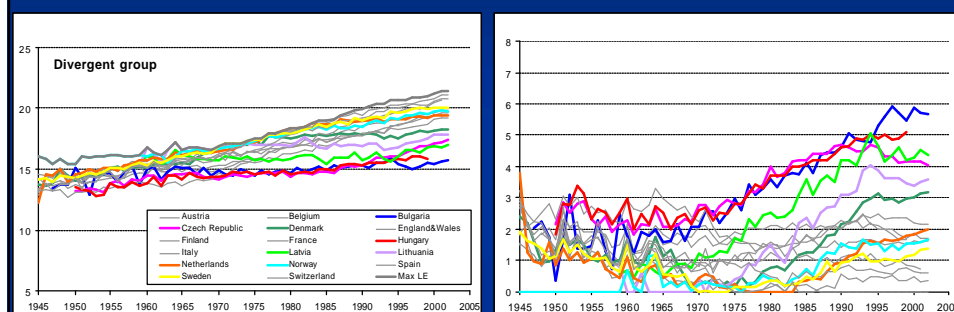
Life expectancy at birth in several countries, women – Human Mortality Database (HMD)







LE at age 65 in European countries since 1945 and deviations from the maximum values, females: divergent group

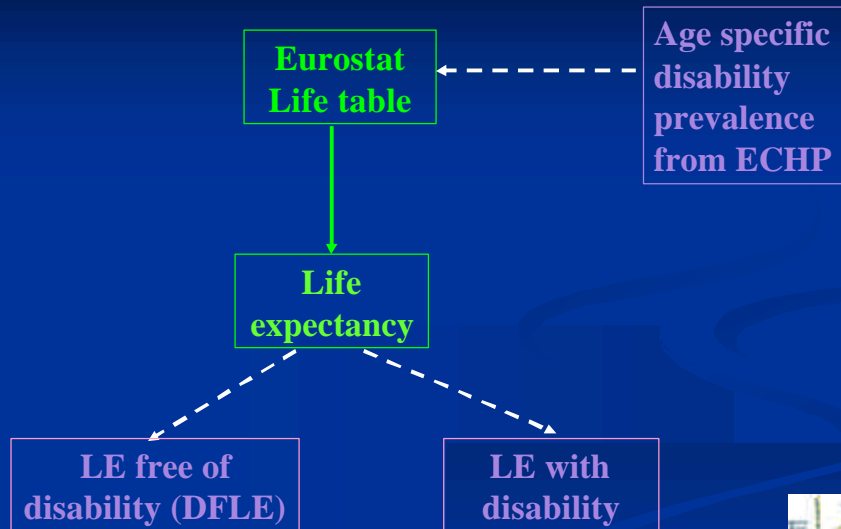


Conclusions for LE

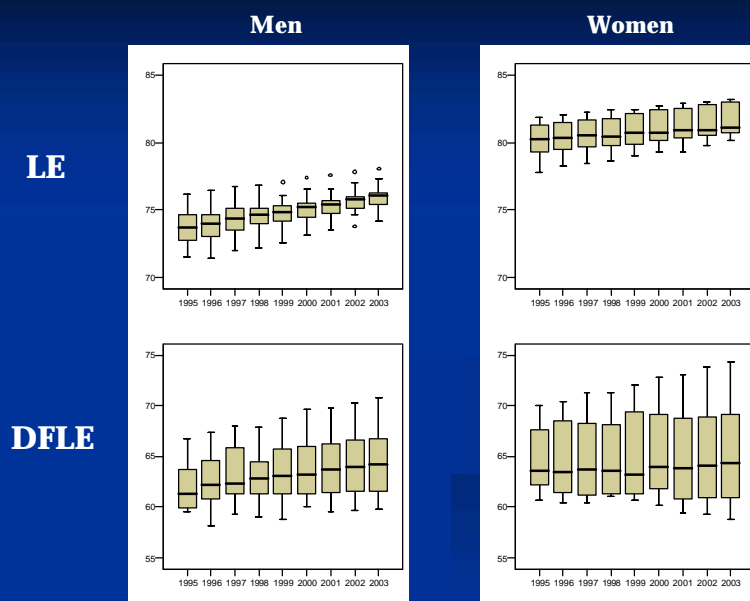
- ✓ **The deviations in life expectancy are considerable within the European Union** (reaching a maximum of 12 years for men at birth)
- ✓ **The current trends do not suggest that life expectancies are converging**
- ✓ **Monitoring changes in life expectancy is crucial for the EU**

Healthy life expectancy

DFLE calculation

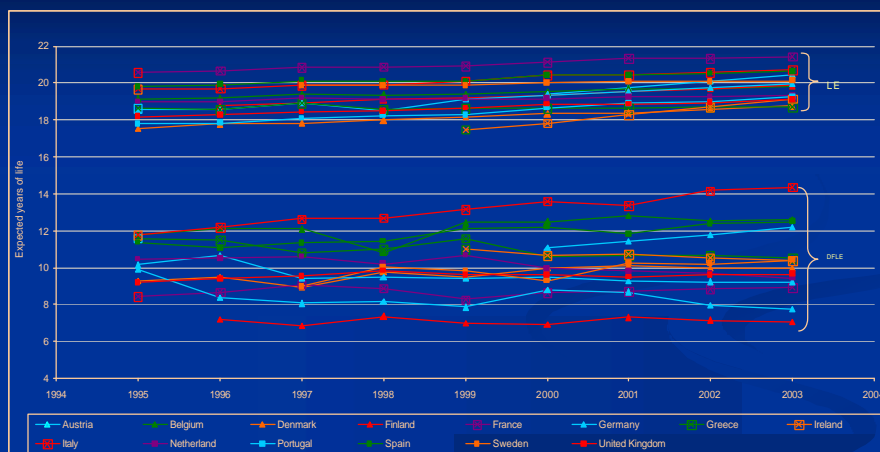


Distribution of LE and DFLE at birth EU(14), 1995-2003



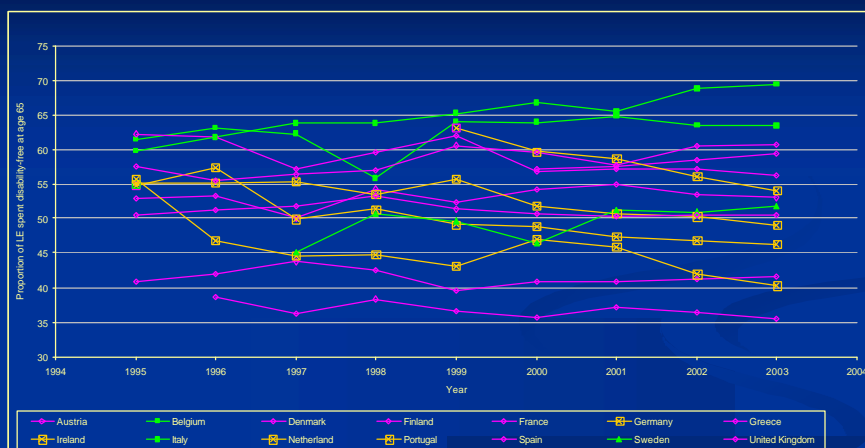
Trends in LE and DFLE at age 65 in EU (14), 1995-2003

Women



Trends in proportion of life spent disability-free at age 65

Women



- = gain of 5% + between 1995 and 2001
- = gain or loss of less than 5% between 1995 and 2001
- = loss of 5% + between 1995 and 2001

Trends in the proportion of life spent disability-free at age 65

Men	Women
↑ Austria, Belgium, Italy, Finland, Germany	↑ Belgium, Italy, Sweden
- France, Greece, Ireland, Spain	- Austria, Denmark, UK, Finland, France, Spain, UK
↓ Denmark, Portugal, Netherlands, Sweden, UK	↓ Germany, Greece, Ireland, Netherlands, Portugal

Trends in DFLE using the ECHP

- 1) **Life expectancy:**
 - Small variation in LE between these 14 MS
 - Increase between 1995-2003
- 2) **Disability Free Life Expectancy and %DFLE/LE**
 - Large variation in DFLE between these 14 MS
 - Diverging trends over 1995-2003: reduction / stagnation / increase in the proportion of life with reported disability at age 65 while LE increases
 - Gender differences in trends

Conclusions

✓ **Population aging has a different impact in the 14 Member States in Europe:**

- different levels of reported disability (larger dispersion than LE)
- variation in the magnitude of the gender difference
- different trends over time

✓ **Need to improve cross-national comparisons in self-reported disability to ensure differences are not an artefact:**

- improved harmonisation of the instruments
- using different levels of severity
- documenting differences in reporting
- documenting differences in selection in the surveys

The main current summary measures of population health

■ **The WHO summary measure: Health Adjusted Life Expectancy**

(HALE) Since 2000, estimated from three kinds of information: the fraction of population surviving to each age; the prevalence of each type of disability at each age; and a weight assigned to each type of disability.

■ **The US Healthy People summary measure: Years of Healthy Life**

(YHL) 'No single measure can adequately incorporate all aspects of health and mortality. A set of summary measures including both mortality and various aspects of morbidity or health that can be calculated from existing or collectable data should be proposed for healthy People 2010.' Including YHL defined as life without disability.

■ **The EU structural indicator: Healthy Life Years (HLY)** In the European Union, the Commission selected in 2005 the Healthy Life Years (HLY), defined as disability-free life expectancy, as one of the Structural Indicators to be examined every year, during the European Spring Council.

Robine JM. Oxford Handbook of Public Health Practice, In press



Next Reves meeting

- 29-30-31 May in Amsterdam
- www.reves.net



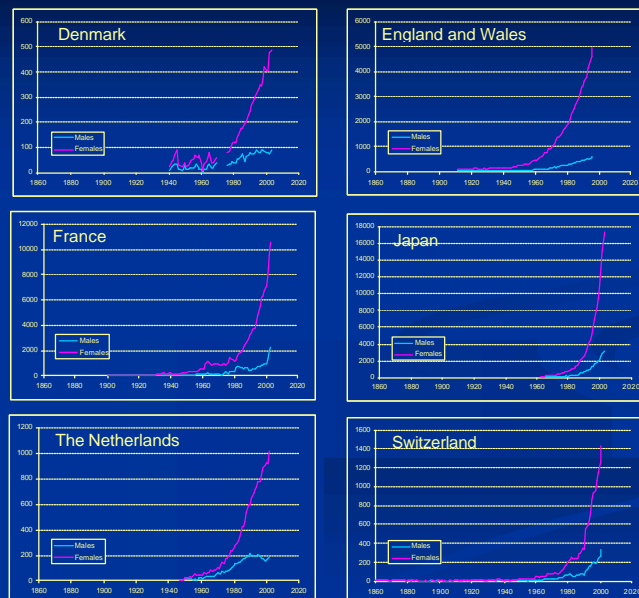
Jeanne C, 122 years

- In the community until 110
- Alone until 110
- Mentally alert until death





Persons aged 100 years and over according to the annual population counts in six countries



Robine et al,
2004