



An international Comparative study of mortality tables used for pensions: preliminary results

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Study objectives



- **Examine standard mortality tables used in the EU and other selected countries to understand the extent to which differences could be accounted for by:**
 - Methodological differences used in their construction
 - Differences in the underlying data
 - Differences in assumptions
 - Differences in projection methods

Methodology



- **Population mortality**
- **Mortality tables currently in use for pensioners**
 - Comparison with population mortality
 - Comparison with previous study results (2005)
 - Assumed future improvements
 - Assumptions
- **Essentially an update of previous study published in 2005**

Preliminary results – life aged 65

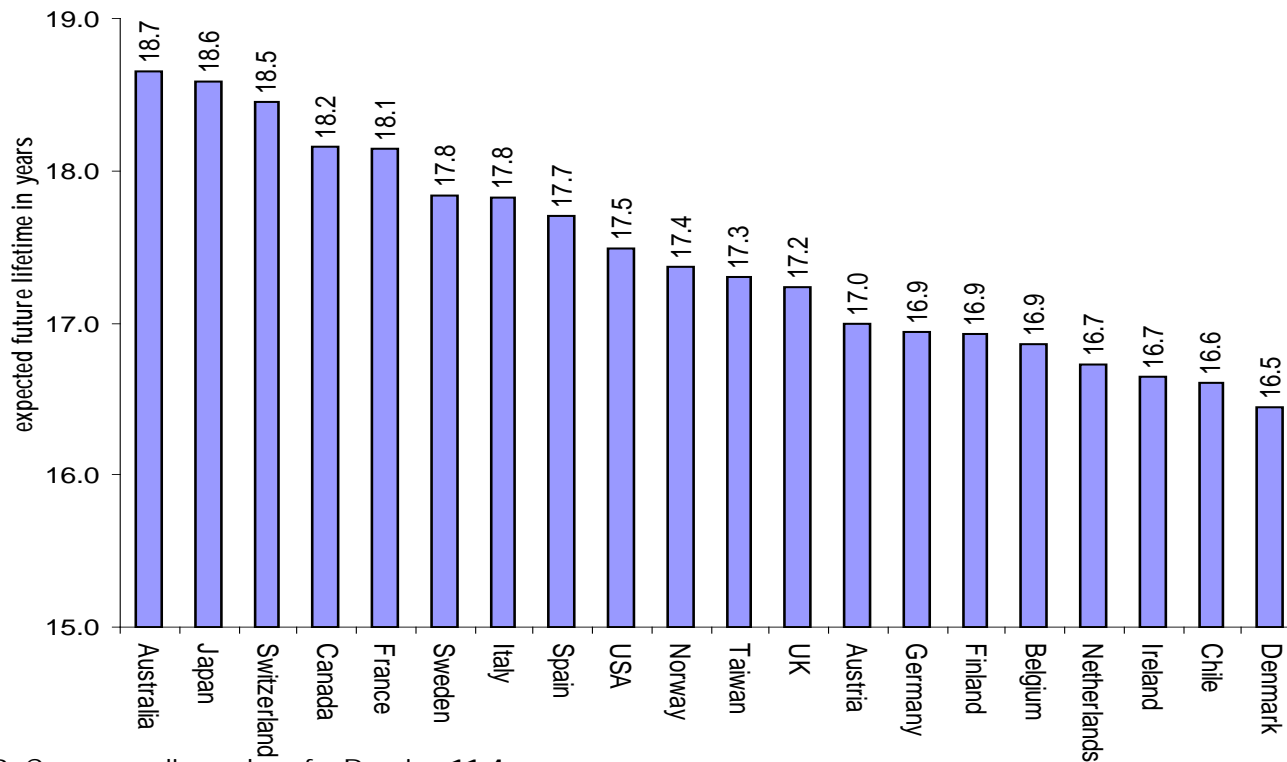


- **Observed life expectancy for the general population across countries considered in this study**
- **Comparison between current population future life expectancy and observed population life expectancy in previous study**
- **Expected future lifetime for pensioners assumed**
 - Comparison with previous study
 - Comparison with observed population
- **Comparison of annuity values between male pensioners (assumed) and observed population**

Expected future lifetime: male population



Expected future lifetime for a male age 65 from the general population:
2009 study

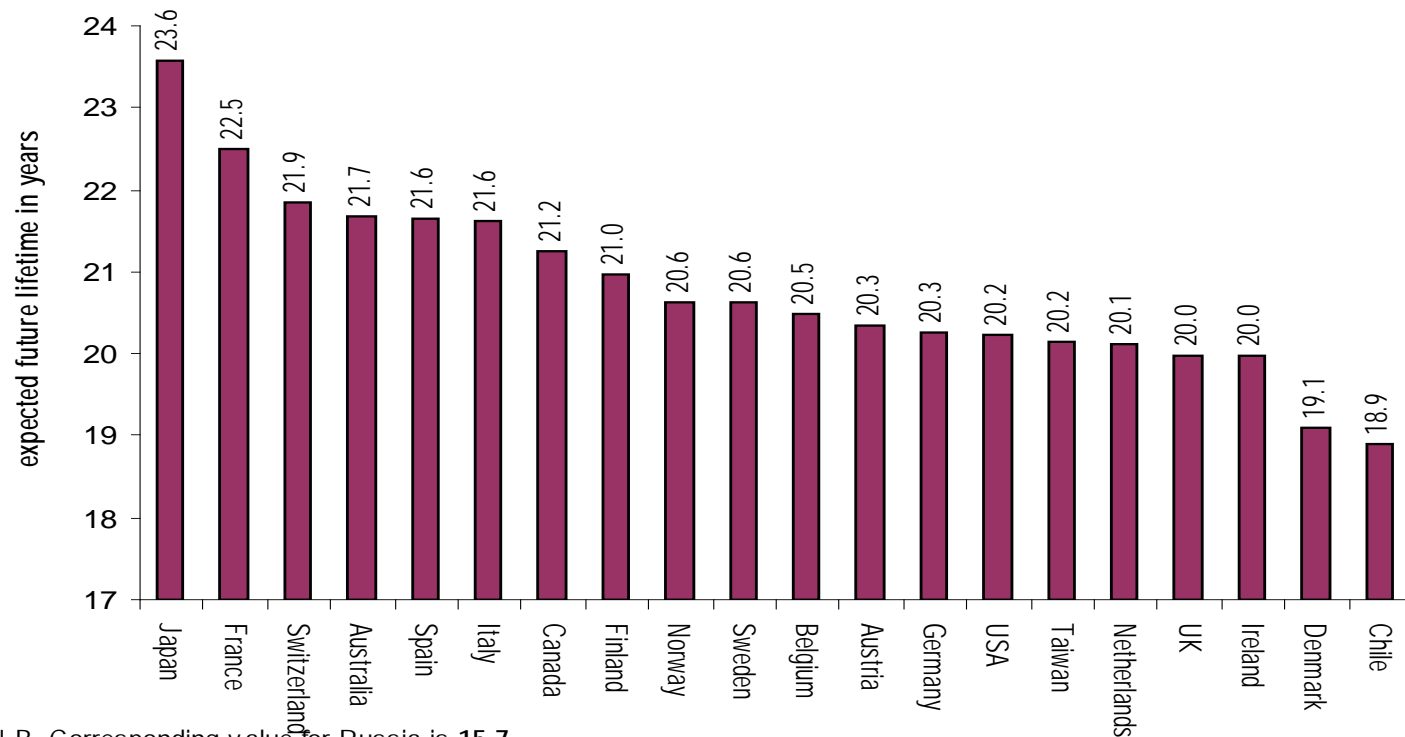


N.B. Corresponding values for Russia: 11.4

Expected future lifetime: female population

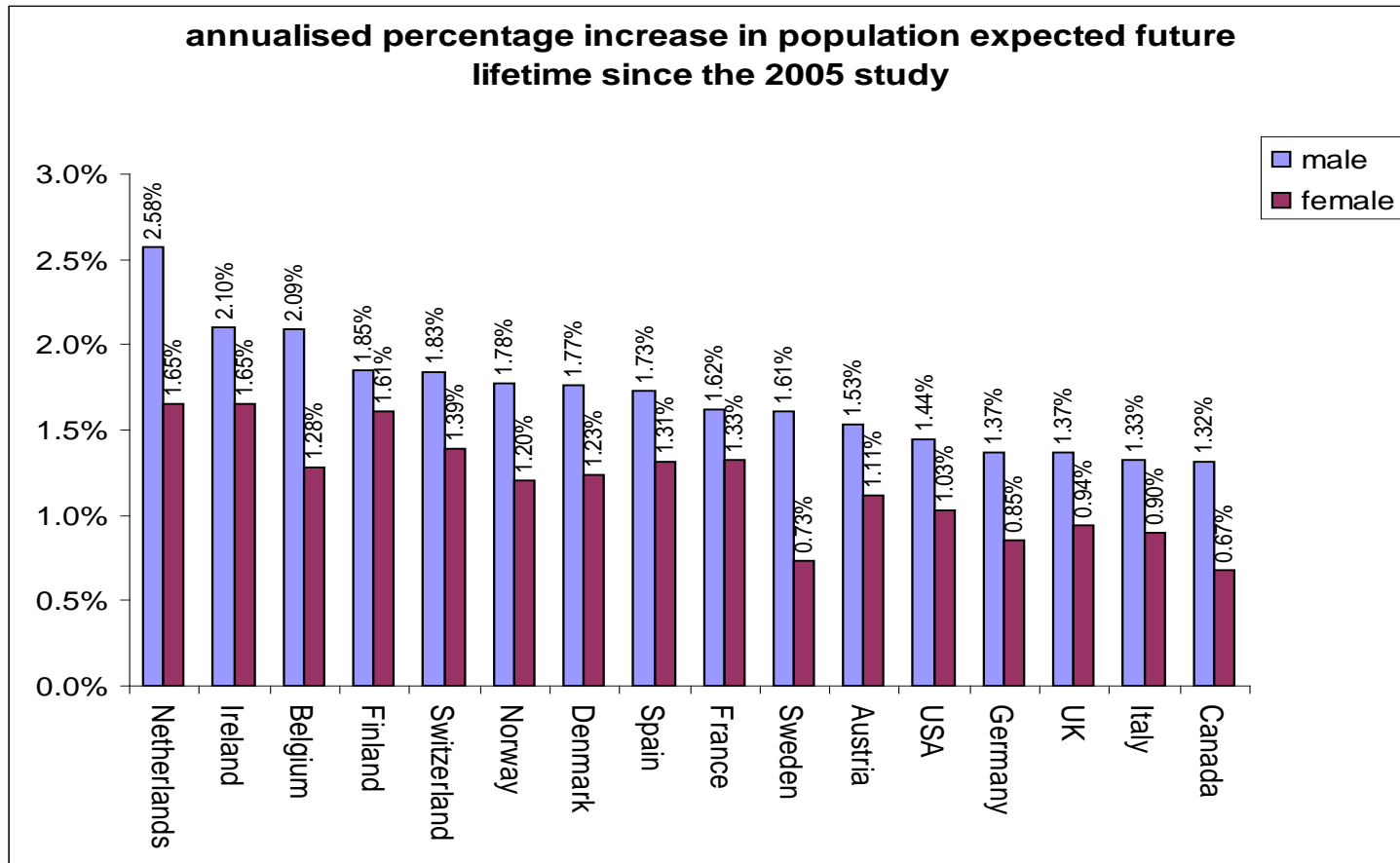


Expected future lifetime for a female age 65 from the general population:
2009 study



N.B. Corresponding value for Russia is 15.7

Change in population life expectancy



Assumed pensioner mortality: male expected future lifetime



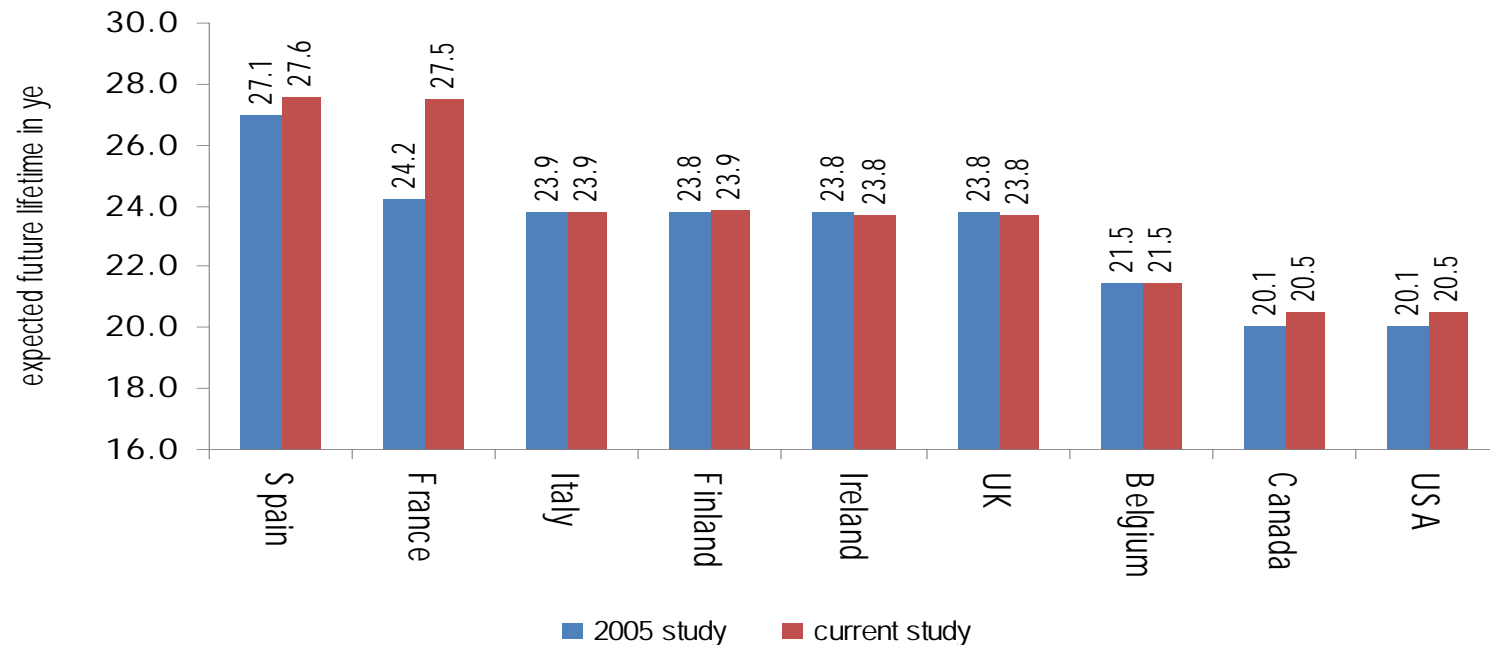
Comparison of the expected future lifetime for a male aged 65: assumed mortality tables for pensioners



Assumed pensioner mortality: female expected future lifetime



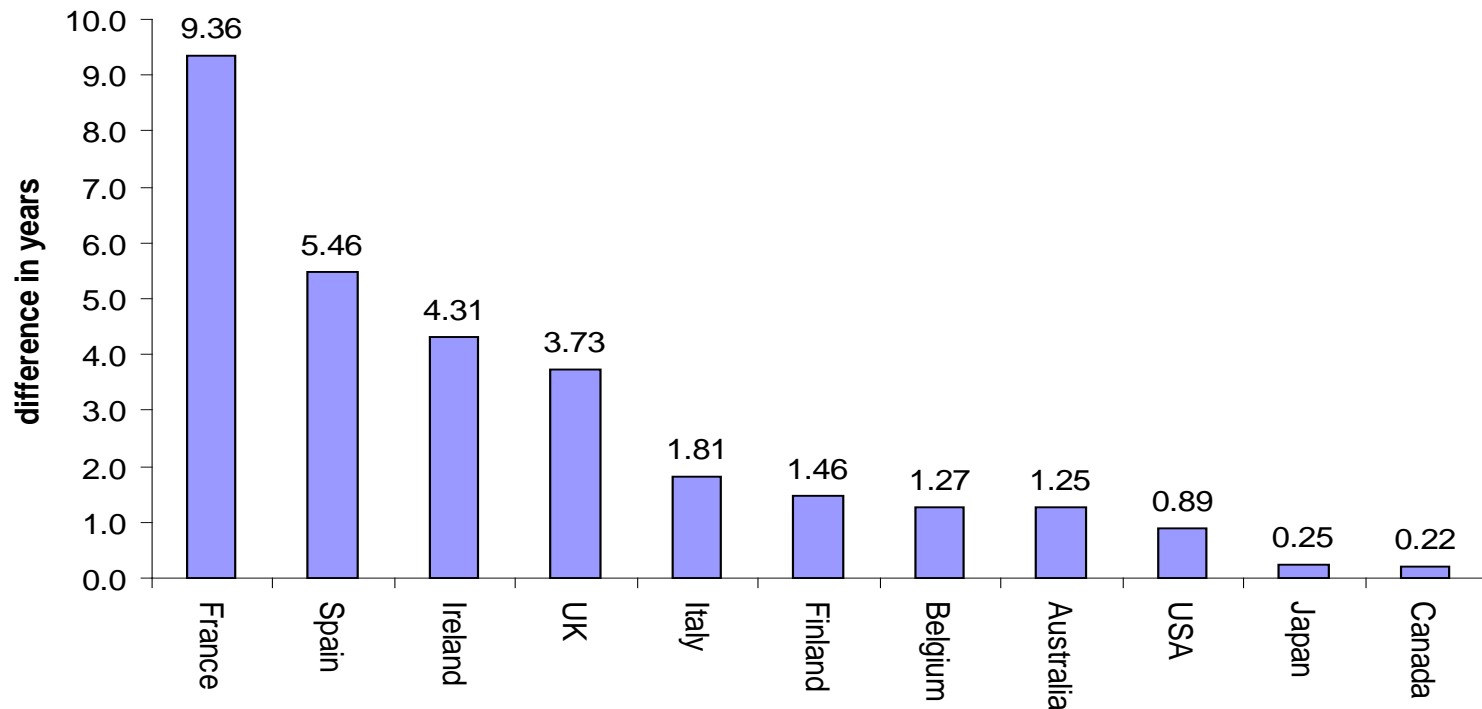
Comparison of the expected future lifetime for a female aged 65: assumed mortality tables for pensioners



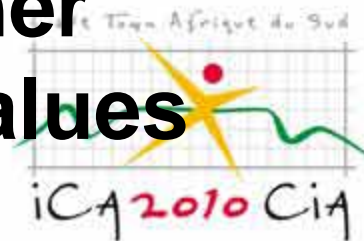
Difference in life expectancy: population and assumed pensioner mortality



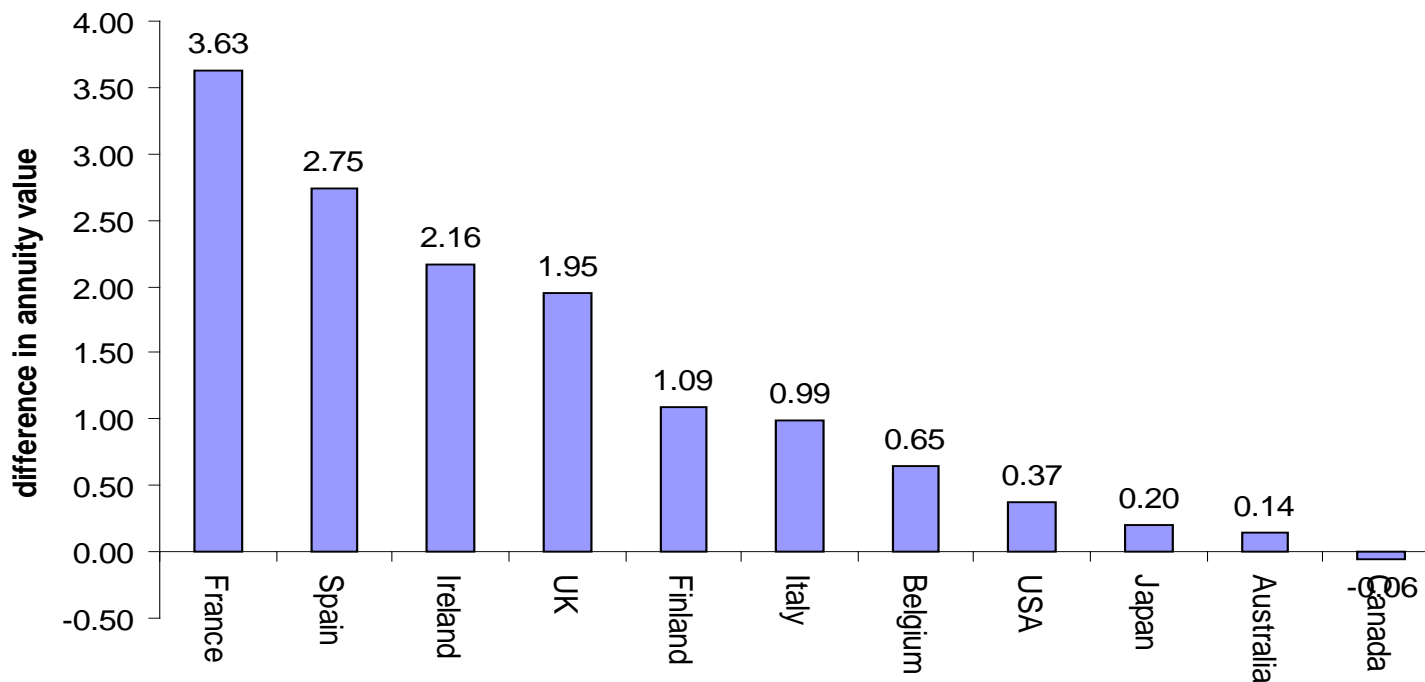
difference between male population future life expectancy and assumed future life expectancy for male pensioners: age 65



population and assumed pensioner mortality: difference in annuity values



difference between present value at 3% of an annuity of 1 paid annually to a male starting one year after attaining age 65 (includes reversionary widow's pension)



conclusions



- **As in previous study, practice varies widely across countries**
- **Different approach taken to projection**
- **Highest differences between observed population mortality and assumed pensioners mortality occurs when projection is on a cohort basis**

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