International mortality developments

Key factors today:
- Relevance to social security and labour policy

Two parts
- Update on developments
- Discussion on areas of common interest
Update on developments

- Global Burden of Diseases Study
- Healthy Life Expectancy
- Social Inequalities and Mortality in Europe
- Comparative Mortality Improvements using the HMD
- Mortality at Advanced Ages
- OECD project on Mortality and Annuity Products
- IAA MWG outputs
Global Burden of Diseases Study

- **Largest ever survey**
  - Since 1970:
    - Reduced: infectious diseases, mother/child mortality, malnutrition
    - Life expectancy up by 10 years +
  - Remaining: non-communicable diseases s/a cancer, heart disease
Healthy Life Expectancy

- Healthy life Expectancy for 187 countries. Salomon et al
- As life expectancy has increased, Healthy years lost to disability has also increased in most countries

- Healthy life expectancy: Jagger et al
- Longevity Bulletin
- Good overall introduction to the subject
Social Inequalities and Mortality in Europe

Social Inequalities and Mortality in Europe, Gallo et al

- Analyses differences in cause-specific mortality by education level
- Male: lightest mortality is 57% of heaviest
- Female: lightest is 79% of heaviest
- All causes examined - but some deaths still unaccounted for
Figure 1. Cumulative mortality at different ages by education level and sex (blue lines for men, orange/red lines for women; circles for none-primary education, triangles for technical education, squares for secondary education, diamonds for university degree).

http://www.plosone.org/article/info:doi/10.1371/journal.pone.0039013
Social Inequalities and Mortality in Europe

- The uneven health of Europeans, Mackenbach et al
  - West v East - reasons for differences
Social Inequalities and Mortality in Europe

- The uneven health of Europeans, Mackenbach et al
  - West v East - reasons for differences

- Following slide

*Figure 1*: Trends in life expectancy at birth in men in selected countries in western Europe (A) and central and eastern Europe (B), 1960–2010. Source: Human Lifetable Database. *Federal Republic of Germany until 1990, western Länder subsequently. †German Democratic Republic until 1990, eastern Länder subsequently.*
Comparative Mortality Improvements using the HMD

- Comparative Mortality Improvements, Browne - in progress
  - Compares life expectancy at birth, 40 and 65 for 37 countries
  - Will analyse changes by country, gender, age, cohort and period
  - Will provide tools to allow analysis of the available data by other users
Other recent developments

- Mortality at advanced ages in UK
  - Likely that age 90+ mortality projections are optimistic by 15%

- OECD project on reserving bases for pensions and annuities, Pablo Antonin
  - to come

- International Handbook of Mortality, Rogers et al
  - Helpful articles on a variety of subjects
IAA Mortality Working Group outputs

- Biannual report

- Information Base:
  - www.actuaries.org/mortalityinfo

- Local mortality events at IAA meetings
  - An inexpensive way to use expertise of members
Discussion
Social Security and Labour Policy Discussion Forum
International mortality developments
18 Sept 2013

Brian Ridsdale
br@ridsdales.com