IAA Mortality Working Group

Paul Lewis
plewis@genre.com
April 2015
International Actuarial Association

- Founded in 1895, and reformed in 1998 with a new constitution
- The IAA is the worldwide association of professional actuarial associations, with a number of special interest sections for individual actuaries.

The IAA exists to encourage the development of a global profession, acknowledged as technically competent and professionally reliable, which will ensure that the public interest is served.
Mortality Working Group

- **Vision:**
  - The Mortality Working Group will be preeminent international actuarial body to provide insights and knowledge with respect to mortality and trends in mortality.

- **Membership**
  - Members of the MWG are selected based on interest, expertise and the need for additional specific representation within the MWG.

**MWG purpose:**

To serve as a working group within the IAA devoted to the worldwide study of mortality, particularly mortality impacts on insurance (including life, pension and living benefits) products or on government or world organisation (such as WHO and the UN) sponsored programs. Studies of the mortality experience of general populations, insured life and other population subsets are within in the scope of the MWG.
Countries Represented

- 30 Members from 24 Countries
- Represent 12.24% of 196 countries and 37.1% in terms of population numbers

- Largest countries by population not represented include India (17.6%), Indonesia (3.5%), Pakistan (2.6%), Nigeria (2.4%), Bangladesh (2.2%) and Mexico (1.7%)
Terms of Reference

MWG

Grow international body of knowledge

- encourage actuarial research on mortality
- monitor data collection
- facilitate global sharing of mortality knowledge
- assist in conducting experience studies
- aiding countries with less developed actuarial resources
- encourage attendance & delivering of papers at professional seminars & conferences
Areas of Investigation

- Collection of global mortality tables
- Mortality trends
- Healthy longevity
- Pandemics
- Social and demographic stratification
- Analysis by cause of death
- Graduation techniques
- Projection techniques
- Data availability
- Uncertainty
- Mortality related financial products
- Society of Actuaries (SoA) International Experience Study
- Mortality assumptions used in pensions and annuity reserving
- Underwriting
- Mortality of disabled people
- Current issues
Papers presented - DC 2014

MWG

• A CROSS-COUNTRY COMPARISON OF HISTORICAL CHANGES IN PERIOD LIFE EXPECTANCIES AND MORTALITY IMPROVEMENT - Period Life Expectancy for all countries …Mortality Improvement Heat Maps … Bridget Browne, (Australia)

• LONGEVITY RISK IN LIFE ANNUITIES AND PENSIONS: RISK SHARING SOLUTIONS - Appropriate risk management actions …Ermanno Pitacco, (Italy)

• UNDERSTANDING MORTALITY DEVELOPMENTS - analysing the way trends are historically developed… Henk van Broekhoven, (Netherlands)

• UNDERWRITING AROUND THE WORLD - study was sponsored by the International Actuarial Association Mortality Working Group… Allen M. Klein, (United States)

• LONG TERM CARE INSURANCE IN AUSTRALIA: A SURVEY OF INSURER ATTITUDES - whether LTCI is a viable private insurance product in the Australian marketplace… Bridget Browne, (Australia)

• A FRAMEWORK FOR MODELLING CAUSE-OF-DEATH MORTALITY AND IMPLICATIONS OF CAUSE-ELIMINATION - multinomial logistic model… forecast mortality without reliance on the independent cause-of-death assumption. Séverine Arnold (-Gaille) (Switzerland)
April 2015 Swiss Mortality Seminar

- Recent developments in the MWG and elsewhere - Brian Ridsdale, Co-Vice Chairperson
- The search for new sources of mortality improvement - moving from remedial to curative medicine - Daniel Ryan, Head, R&D - Life&Health & Big Data, Swiss Re
- Preferred Underwriting - Al Klein, Co-Vice Chairperson
- Projecting mortality of small populations - Ermanno Pitacco
- A multi-disciplinary approach to managing longevity risk - Joseph Lu
- Discussion session – all speakers
thank you