

Minutes of the IAA Mortality Task Force Meeting October 13, 2008 – Quebec City, Canada

Members Present

Martin Stevenson, Chairperson
Bill Horbatt, Vice-Chairperson
Henk van Broekhoven, Vice-Chairperson
Erik Alm
Bob Howard
Helge-Ivar Magnussen
Mika Mäkinen
Brian Ridsdale
Yoshihiro Takahashi

Observers Present

Rob Brown Canadian Institute of Actuaries
Alan Joynes Institute of Actuaries (UK)
Norman Gendron Canadian Institute of Actuaries
Tom Terry Conference of Consulting Actuaries
Dan McCarthy American Academy of Actuaries

Apologies

John Armstrong
Chresten Dengsøe
Peter Ying

1. Minutes of last meeting

The minutes of the last meeting were accepted.

2. Progress of list server/web pages

In May 2008, members were advised of the direct link to the IAA webpage, as well as the list server to be used to communicate amongst members of the Task Force. Those members who had not advised the IAA Secretariat of their details for the web page were requested to do so.

3. Expansion of Terms of Reference to include persistency rates

It was noted that persistency rates are frequently more significant than rates of mortality in life insurance, for the purposes of actuaries pricing products, establishing the reserve for the product, analysing product experience or other actuarial responsibilities. However, it was also noted that the study of mortality was a sufficiently large topic in its own right; and as well as life insurance, the Mortality Task Force needed to consider pensions work and Social Security.

Accordingly it was resolved that a note would be sent to the Life Section, suggesting that persistency was an area worthy of study.

4. Report on progress on collection of information in respect of mortality studies of actuarial associations

Progress reports in respect of Australia and Taiwan were tabled.

The Society of Actuaries table manager was discussed, and it was agreed that the table manager would be the basis for collection of data – there was certainly no intention for the Task Force to “reinvent the wheel”.

An observer asked whether the Task Force was only formed to collect data. In reply the “all inclusive” principle was restated – all aspects of interest to actuaries were to be considered.

As well as the topics previously set out in minutes of the previous meeting, another topic was added: financial instruments that included mortality risk.

An observer noted that Social Security records were often a better source of mortality data rather than national statistics.

5. ICA 2010

The Chairman of the Task Force had written to the Program Committee 2010 requesting an opportunity to present on the work of the Task Force at ICA 2010. A response was received indicating that our presentation would be welcomed at one or more sessions.

In the discussion at the meeting it was agreed to put a number of possibilities to the program committee, all derived from the fact that mortality is currently a major issue in a number of actuarial disciplines:

- Hold a plenary session on mortality;
- Have a half day on mortality, with the sections meeting separately;
- Combine the sections together for a session(s) on mortality.

6. Committees and Sections

The Chairman of the Task Force had written to the Chairs of a number of Committees and Sections, asking for:

- A description of any work currently being undertaken by the Committee or Section in respect of mortality studies or investigations;
- Advice of any mortality study or investigation that the Committee or Section considers should be undertaken by the Task Force.

Replies in the negative were received from the Enterprise and Financial Risk Committee and the IAA Health Section.

However, in the case of the Social Security Committee, a meeting between representatives of the IAA and World Bank Officials had been held in Washington, DC on June 9, 2008. One of the action items of the meeting was:

“The WB and IAA are both users of mortality projections. The WB would welcome a proposal by the IAA to develop reliable mortality estimates, especially for low income

countries where such estimates don't exist. There is a need to have specific mortality tables by level of income. In that regard, UN projections are not accurate enough. As a first step, the proposal would respond to these two questions: Why do we need such mortality estimates? Hence could the IAA produce such estimates or support with methodologies?

It was agreed that the Chair of the Social Security Committee and the Chair of the Mortality Task Force would stay in touch in respect to these issues.

7. Presentation by Henk van Broekhoven on models and longevity

Henk van Broekhoven gave a [presentation](#) on a method of projecting future rates of mortality for a specific population. The method involves:

- (1) determination of the mortality at the base date;
- (2) projection of the rates of mortality in the short term by extrapolation of mortality trends in the recent past;
- (3) consulting with medical practitioners and demographers about the likely level of mortality improvement by the end of the projection period;
- (4) projection of the rates of mortality from the end of the short term to the end of the projection period, taking into account the levels of mortality in (2) and (3).

8. Presentation by Bill Horbatt on SoA software to assist mortality investigation modelling

Bill Horbatt demonstrated the Society of Actuaries software that enabled participating life offices to pool decrement experience (including mortality) and hence gain a greater level of experience, and to compare their results with those of other life offices. At least three sources of data needed to be supplied for each comparison group.

The software was clearly very comprehensive and very flexible.

9. Presentation by Brian Ridsdale on Developments in the UK

Brian Ridsdale provided an [update on developments](#) in the UK. These included three areas:

- Continuous Mortality Investigation (CMI)
- UK Government's Office for National Statistics (ONS)
- UK Actuarial Profession's Mortality Scoping Group

The CMI is a research body of the UK Actuarial Profession and carries out research into mortality and morbidity experience. Traditionally this has covered life assurance contracts. More recently the CMI also officially took over research into the mortality of members of Self-Administered Pension Schemes (SAPS) based on data submitted by actuarial consultancies. In recent years, the mortality tables published by the CMI incorporated projections of future mortality. However, most recently, it has published a library of mortality projections but without a recommendation.

The ONS publishes a wide variety of mortality data for England and Wales. Results include life tables, expectation of life, projections and sub-division by characteristics such as marital status and social class.

The Scoping Group has a multi-disciplining focus and has a wide ranging research ambit, and in particular seeks to identify relevant and particularly recent research findings on mortality developments from medicine, epidemiology, gerontology, demography, health economics, medical sociology, social policy and psychology.

Brian's presentation was particularly interesting in setting out results of recent cohort analysis.

10. Presentation by Helge-Ivar Magnussen on new mortality tables for pensioners

Helge-Ivar Magnussen shared the presentation that he had made to IOPS in April this year.

The paper outlined information on the level of mortality improvements that had been experienced in a number of countries. The question that is posed is: Can the experience in one country be assumed to apply in others? Or can population experience be assumed to apply for pension plans?

The Task Force advised Helge-Ivar that he could provide assurance to IOPS that the Task Force would assist them as much as possible.

11. New members

It was resolved to invite the following to join the Task Force:

- Anne Drouin – ILO
- Florian Léger – ISSA
- A representative from the Actuarial Society of South Africa.