International Actuarial Association

Mortality Working Group
October 11-12, 2013
Pan Pacific Hotel Singapore, Singapore
Ocean 3 Room

Minutes

Present:
Martin Stevenson – Chairperson
Bill Horbatt – Co Vice chairperson
Henk van Broekhoven – Co Vice chairperson
Erik Alm
Bridget Browne
Michael Eves
Dieter Gaubatz
Al Klein
Paul Lewis
Mika Mäkinen
Darko Medved
Ermanno Pitacco
Thierry Poincelin
Lars Pralle
Brian Ridsdale
Hiroshi Yamazaki

Absent:
Chresten Dengsøe
Séverine Gaille
Aline Lamoureux
Ksenia Novikova
Dov Raphael
Adam Reese
Luis María Sáez de Jáuregui Sanz
Paul John Sweeting
Benoît Laurent Yerna
Peter Ying
Marc Tardif
Zhaolan Zhan

Observers present:
Ricardo Frischtak – Co Vice Chairperson, Accreditation
Don Fuerst
Gary Hibbard – Chairperson Pension and Employee Benefits Committee
Debbie Lore – Singapore Actuarial Society
Jason Malone
Sam Gutterman
The Chairman welcomed all members and observers present.

1. **Minutes of the previous meeting**

   The minutes of the previous meetings in The Hague, Netherlands were accepted.

2. **New members / retiring members**

   The following changes in membership were advised:

   - Ricardo Frischtak joins the Group
   - Jorge Miguel Ventura Bravo (Portugal) joins the Group
   - Ewa Dylewska (Poland) joins the Group
   - Hans Michael Øvergaard (Norway) joins the Group

   Thierry Poincelin advised that this was his last meeting as a member due to his commitment to other committees. He will contact the French Association for a replacement.

3. **Country reports**

   Country reports were received in respect of:

   - **Australia** Bridget Browne
   - **Belgium** Aline Lamoureux
   - **Chinese Taipei** Peter Ying
   - **South Africa** Paul Lewis
   - **Sweden** Erik Alm
   - **United Kingdom** Brian Ridsdale
   - **USA** Dieter Gaubatz

   The Group expressed its appreciation at the work done by the authors of the reports and by Peter Ying for his role in co-ordinating them.

   Additional reports will be sought in respect of Finland, Germany, Italy, Poland, Portugal and Spain. Peter Ying will again be involved in co-ordinating the production of these reports.

   An interesting development in the USA is that some State regulators are insisting that insurance companies provide information in respect of experience analysis to the regulators. The information is then passed to the SoA for analysis. Dieter Gaubatz is to send details to the Group.

   It was agreed that it would be worthwhile to have a summary document of the main aspects of the country reports.
4. **Trend modelling**
Henk van Broekhoven provided an update on his modelling techniques for future levels of mortality.

The presentation is entitled *Trend modelling* A stochastic model based on Drift modelling.

5. **International Experience Study**
Bill Horbatt presented the results from the *IES investigation* in Croatia

6. **Historic comparative mortality improvements using the HMD**
Bridget Browne presented the results of *comparative mortality studies* using the HMD data base. The outputs were heat maps showing whether mortality improvements were aligned with age, year or cohort. After the paper is presented at ICA 2014, a tool will be made available to actuaries to carry out their own investigations.

A lively discussion ensued.

Bridget will send individual country outputs to members to comment on country specific results.

7. **Report from the Underwriting Committee**
Al Klein updated members of the Group on the *Underwriting Around the World* paper that will be presented at ICA 2014. The paper details comparative underwriting methodologies of different countries.

8. **Publicising the activities of the MWG**
Brian Ridsdale provided an *update on publicity*. Whilst there was only limited response to the method adopted (ie publicising the activities of the MWG to local associations) it was decided that it was appropriate to continue this action a few more times, as it was likely that the message needed to be reinforced.

It was also decided to publicise the MWG through the Life Section and PBSS Section of the IAA.

It was also agreed that we should seek publicity after ICA 2014 on the release of the tool that Bridget Browne had developed in respect of comparative mortality using the HMD.

9. **Upcoming events**
- **SoA's Living to 100 Symposium** (January 2014)
  - Henk van Broekhoven is on the Committee; Ermanno Pitacco is presenting a paper.
- **Mortality Seminar of European Actuarial Academy**
  - Paper will be presented by Ermanno Pitacco.
  - Papers will also be presented by Erik Alm and Hen van Broekhoven.
ICA 2014

Papers will be presented by Bridget Browne, Séverine Gaille, Al Klein and Ermanno Pitacco. Our brochure is to be printed and made available to delegates through the IAA booth. Three members of the MWG will be invited to attend the Advice and Assistance reception (Paul Lewis, Bill Horbatt plus one to be nominated by Paul).

It was noted that Jay Olshansky and James Vaupel would be presenting at ICA 2014.

Mortality and Longevity Symposium (September 2014)

Brian Ridsdale to send further details to the Group as they become available.

IAA Committee Meetings (Zurich April 2015; Vancouver October 2015; St Petersburg May 2016)

The MWG will offer to talk at local association meetings or to run a seminar, in conjunction with the Committee meetings. Paul Lewis to circulate the list of our topics / speakers (this may need updating). Co-ordinators of our involvement:

- Zurich – Michael Eves
- Vancouver - Marc Tardif
- St Petersburg – Ksenia Novikova

10. **Debrief on Geneva meeting with international organisations**

Brian Ridsdale presented on his [Geneva meeting](#) with international organisations. (ILO, ISSA and OECD).

11. **Local associations’ registers of mortality and longevity research**

A comprehensive discussion was lead by Brian Ridsdale. Outcomes of the discussion included:

- the country report templates could be altered to accomodate advice of research being undertaken (rather than only including research completed).
- some of the current papers in the Information Base are becoming out of date. Brian Ridsdale is to check which papers might need updating and ask page owners to provide updates.

Paul Lewis will meet the chair of the UK’s CMI to discuss working together to promote more interaction between national actuarial societies when creating mortality projections.
12. **How Swiss Re manages mortality uncertainty**
Michael Eves provided a comprehensive presentation on *How Swiss Re manages mortality uncertainty*. Topics included:

- Risk measures
- Mortality Trend Model
- Modelling of Influenza Pandemic Risk
- Risk Assessment and Risk Management
- Options to reduce mortality exposure
- Modelling the future

- Members of the Group expressed their appreciation of the presentation.

13. **Integrating our various areas of study**
A discussion was led by Bill Horbatt, Bridget Browne and Henk van Broekhoven. In particular there was a demonstration showing a comparison of population and insured mortality in Estonia. The spreadsheet was put together by combining the work of the International Experience Study and Bridget’s paper on comparative mortality using the HMD.

14. **The effect of the economy on mortality**
Paul Lewis provided a presentation on *the effect of the economy on mortality*. The counter intuitive result was that short term economic downturns lead to a decrease in rates of mortality.

15. **Topics for the next meeting**
The topic chosen for the next meeting of the Group was a comparison of mortality according to sub-group: population, insurance, annuity or pension.

The members working on this topic will be:

- Bill Horbatt (Chair)
- Erik Alm
- Henk van Broekhoven
- Paul Lewis
- Mika Makinen
- Ermanno Pitacco
- Martin Stevenson

16. **Office holders going forward**
Following the close of the meeting the new office holders are:

Chairperson – Paul Lewis
Co Vice Chairpersons – Al Klein and Brian Ridsdale
17. **Next meeting**

The next meeting will be held in Washington 26-29 March 2014.