



INTERNATIONAL ACTUARIAL ASSOCIATION

Mortality Working Group

April 10 - 11, 2015

Renaissance Zurich Tower Hotel, Zurich, Switzerland

Minutes

Present:

Paul Lewis – Chairperson
Al Klein – Co Vice chairperson
Brian Ridsdale – Co Vice chairperson
Erik Alm
Michael Eves
Ricardo Frischtak
Dieter Gaubatz
Bill Horbatt
Mika Mäkinen
Hans Michael Overgaard
Ermanno Pitacco
Lars Pralle
Adam Reese
Martin Stevenson
Hiroshi Yamazaki

Regrets provided:

Séverine Arnold
Bridget Browne
Chresten Dengsøe
Ksenia Novikova
Luis Maria Sáez de Jáuregui Sanz
Paul John Sweeting
Marc Tardif
Henk van Broekhoven
Benoit Laurent Yerna
Peter Ying
Zhaolan Zhan

Observers:

Ayse Arik	Actuarial Society of Turkey
Rikard Bergström	Sweden
Assia Billig	Canadian Institute of Actuaries
Simon Brimblecombe	ISSA
Sam Gutterman	Chairperson, Private Sector Task Force
Ibrahim Muhanna	LAA (Lebanon)
Jari Niittuinperä	Suomen Aktuaariyhdistys
Eduardo Trigo Martinez	Instituto de Actuarios Españoles

Guest speakers:

Chris Daykin	Institute and Faculty of Actuaries (UK) /Actuarial Associations of Europe
Joseph Lu	Institute and Faculty of Actuaries (UK)

The Chairman welcomed all members and observers present. The meeting included two sessions with a combined length of 7.5 hours over the two days.

1. Minutes of the previous meeting

No corrections to the [minutes of the prior meeting](#) in London, England were noted.

2. New members / retiring members

Eric Alm is retiring, and this will be his last meeting. On behalf of the group, Paul Lewis thanked Eric for the immense amount of work provided to the MWG over the years. There were also discussions of potential new members, particularly from regions not currently represented. The resumes of several potential new members will be reviewed.

Rikard Bergström was added as a new member of MWG. Also, Rikard has agreed to take over the duties of coordinating the administration of this group's new and retiring members.

3. Country reports

[Brazil](#) Ricardo Frischtak

[Germany](#) Lars Pralle

Information provided includes current research, update of current population (as of 2012) statistics, German insurance market statistics (as of 2013) and a number of links to other informative websites, including papers on socioeconomic and regional mortality differences.

[Norway](#) Hans Overgaard

The report included information on the new mortality table "K2013", published by Finance Norway for collective pension insurance. The report also provides population demographics (as of 2015) and life expectancies (as of 2014).

[Poland](#) Ewa Dylewska

[USA](#) Dieter Gaubatz

New information was provided on U.S. population statistics (2011). The report also provides information on new studies or updates on uninsured pensions (new table RP2014), group life (expansion of 2013 study), mortality experience of group annuities and mortality experience on individual payout annuities.

The various reports are included in the meeting package.

4. Multi-disciplinary approach to managing longevity risk

Joseph Lu, Director, Longevity Risk at Legal & General, [presented](#) the need for the cooperation of multiple disciplines in managing longevity risk. He described the work being conducted by the “Multidisciplinary Longevity Science Panel”. The panel is coordinated by University College – London. Its membership includes high level professionals from health, medical research and practice, statistics, demography and academia. Challenges include finding common ground among the various disciplines, determining the impacts of various factors on mortality and future mortality trends. His presentation is [here](#).

He also provided a website www.longevitypanel.co.uk/biology-ageing as a source of additional information.

5. Pensioner Mortality Task Force

The Social Security sub-committee of the Pensions Committee of the Actuarial Associations of Europe has established a task force to study issues relating to the mortality of pensioners in the EU. Chris Daykin, chair of the sub-committee [provided an overview of the work](#). Chris requested volunteer support of the work which is just beginning.

6. Brazilian mortality tables BR-EMS 2015

Ricardo Frischtak gave [a comprehensive review](#) of the new Brazilian tables BR-EMS 2015. There are separate tables for mortality and survivorship. Rates vary by gender. These tables are expected to be adopted by the market as the standard tables shortly.

7. Japanese 2007 Standard Mortality Tables

Hiroshi Yamazaki provided [a detailed review](#) of the Japanese 2007 Standard Mortality Tables and the methodology used in their creation. There are versions for life insurance, annuities and medical insurance.

8. Population, pension and life mortality comparisons

Paul Lewis [provided a comparison](#) of the various mortality rates for South Africa and Canada. The Canadian results were provided by Marc Tardif, who was not able to attend this meeting. These are the first in a series of comparisons which the MWG expects to provide.

9. Swiss Re seminar

A seminar sponsored by Swiss Re was held in their facilities on the day before the MWG meetings. Approximately 100 individuals attended. Of the six speakers, four were MWG members. Topics included [information about the IAA MWG](#) (presented by Paul Lewis and Brian Ridsdale), preferred underwriting (Al Klein) and projecting mortality of small populations (Ermanno Pitacco). Joseph Lu discussed the need for a multi-disciplinary approach to managing longevity risk. Daniel Ryan discussed the search for new sources of mortality improvement.

10. Long Term Care insurance

Ermanno Pitacco, University of Trieste, Italy, [presented his paper](#) on the calculation of actuarial values for Long Term Care products and the sensitivities involved in the resultant model.

11. Mortality and Longevity update

Brian Ridsdale provided an update on longevity and mortality activities in the UK and other countries. The attached reference material provides an inventory of a number of papers, presentations and articles. Paper: [\(available here\)](#), Presentation: [\(available here\)](#)

Particular items of interest are:

[Mortality and Longevity Seminar Jan 2015](#) Presentations on: annuities, the biology of ageing, communicating longevity risk, hot topics, CMI developments.

[Longevity Basis Risk](#) - A Methodology for Assessing Basis Risk

The IFoA has prepared a [Mortality Data Directory](#) for researchers, which lists free and commercial datasets available internationally in the area of mortality.

12. Longevity Seminar (USA)

Al Klein provided an overview of a special Society of Actuaries symposium on longevity which occurred in Chicago in February, 2015. This was an invitation only event and three MWG members, Severine Arnold, Dieter Gaubatz and Al Klein, were invited to attend. The symposium was set up through a recommendation of an SOA longevity strategy taskforce.

13. MWG website review

Brian Ridsdale led a discussion on the current status of [the MWG website](#). The website continues to receive an increasing number of views. There were over 25,000 views in the last four months of 2014. It is believed that this is at least partially due to the recent expansion of the translation into multiple languages of the document providing recent updates of our meetings.

The management of the website content needs further attention. Content relevancy, search simplicity and effort required for content maintenance are of particular concern. An editorial committee will be formed to ensure that all content is relevant and actually adds to the knowledge base.

A new subject page will be introduced: Long-term influences on future mortality. A consolidated list of all papers will appear on a new page.

14. Upcoming events involving MWG members

- A seminar is being considered for Vancouver in conjunction with October IAA meeting.

15. Scientific Committee

Paul Lewis represented the MWG at the latest IAA Scientific Committee (SC) meeting. Several other members of the MWG also attended. The purpose of the SC is to coordinate activities and supervise all of the IAA working groups. It would control all official external IAA communications, such as any formal public statement the working group might provide to a supranational organization. (Paul, Al suggested that you may have more to add here)

Martin Stevenson provided an update on SC activities discussed at its last meeting that could impact the MWG

- There is a proposal to set up a working group for Big Data.
- The International Experience Studies (IES) initiative was discussed. The MWG is a natural home for the IES for less developed countries. The committee asked for more detail in the presented proposal, including member representation, cost details, mitigation of litigation, proposed involvement of IAA staff and country demand for the IES. Martin, Bill Horbatt and Dieter Gaubatz will provide an updated proposal for the SC.

16. Future issues of interest

The list of future topics was reviewed. Some volunteer commitments were made. Those are included below. Additional participation will still be required.

The topics include:

- "Underwriting around the world" update (Al Klein)

- Reasons for various cause of death improvements (Adam Reese)
- Life/pension/population mortality comparisons (Marc Tardif, Al Klein)
- Individual pension select period (Ermanno Pitacco)
- Mortality improvement
 - Long term drivers of future mortality (Assia Billig, Simon Brimblecombe, Michael Eves, Al Klein, Mika Mäkinen, Lars Pralle, Brian Ridsdale)
 - Mortality improvement committee in Canada (Assia Billig)
 - At the older ages (Ayse Arik, Assia Billig, Michael Eves, Sam Gutterman, Adam Reese)
- Population issues working group update (Sam Gutterman)
- Mortality research
 - Old age mortality (Al Klein, Ermanno Pitacco)
 - By socioeconomic class
- Pensioner mortality in EU assistance to European Actuaries Association and Chris Daykin (Chresten Dengsøe)
- MWG website webinar organization (Adam Reese, Brian Ridsdale)
- Website “topic” management owners
 - Financial Products (Mika Mäkinen)
 - Projection techniques (Bridget Browne)
 - Trends and Uncertainty (Henk van Broekhoven)

17. Next meeting

The next IAA committee meeting will be held in Vancouver, Canada Oct. 15-18, 2015. The meetings in 2016 will be in St. Petersburg, Russia (May 25-29) and Cape Town, South Africa (November 18-21).

18. To-do list

- IES proposal to SC update (Martin, Bill and Dieter)
- Create a “Country Report” status list (Paul Lewis)
- MWG website editorial committee (Bridget Browne, Dieter Gaubatz, Ermanno Pitacco)
- Develop seminar for Vancouver (Paul Lewis)
- Create a speakers list (Paul Lewis)

Appendix – list of papers / presentations / reports

1. [Minutes of MWG London meeting](#)
2. Country reports
 - a. [Brazil](#)
 - b. [Germany](#)
 - c. [Norway](#)
 - d. [United States](#)
3. [Multi-disciplinary approach to manage longevity risk](#) – Joseph Lu
4. [Pensioner Mortality Task Force](#)
5. [Brazilian mortality tables](#)
6. [Japanese 2007 Standard Mortality Tables](#)
7. [Mortality rate comparisons for South Africa and Canada](#)
8. [Swiss Re seminar documents](#)
9. [Long Term Care](#)
10. Mortality and Longevity update ([Paper](#) and [Presentation](#))
11. [MWG website review](#)
12. [Future Issues of Interest – Issues Advisory Group: Topics Needing Volunteers](#)