INTERNATIONAL ACTUARIAL ASSOCIATION

Mortality Working Group
September 12-13, 2014
Millennium Gloucester Hotel and Conference Center-London, England

Minutes

Present:
Paul Lewis – Chairperson
Al Klein – Co Vice chairperson
Brian Rdisdale – Co Vice chairperson
Erik Alm
Bridget Browne
Michael Eves
Ricardo Frischtak
Dieter Gaubatz
Bill Horbatt
Aline Lamoureux
Mika Mäkinen
Darko Medved
Hans Michael Overgaard
Lars Pralle
Dov Raphael
Martin Stevenson
Marc Tardi
Henk van Broekhoven
Hiroshi Yamazaki

Regrets provided:
Séverine Arnold
Chresten Dengsøe
Ksenia Novikova
Ermanno Pitacco
Adam Reese
Luis María Sáez de Jáuregui Sanz
Paul John Sweeting
Benoit Laurent Yerna
Zhaolan Zhan
Observers:
Morteza Aalabaf-Sabaghi  Eurasia and Middle East Subcommittee Member
Assia Billig  Canadian Institute of Actuaries
Christelle Dieudonné  Institut des Actuaires
Francis Gota  Actuarial Society of Ghana
Sam Gutterman  Chairperson, Private Sector Task Force
Greg Martin  Actuaries Institute Australia
Jari NiitILLISENPERA  Suomen Aktuaariyhdistys
Thierry Poincelin  Institut des Actuaires
Eduardo Trigo Martinez  Instituto de Actuarios Españoles
Andrés Villegas  Asociación Colombiana de Actuarios

Guest speakers:
Peter Banthorpe  Chair, IFoA Mortality Research Steering Committee
Tim Gordon  Chair, IFoA Continuing Mortality Investigation

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 Washington, DC, USA were noted.

2. New members / retiring members
There were no new or retiring members. It was noted that Martin Stevenson’s many years of service as chair of this committee was recognized at the IAA official dinner on the evening of Sept. 12. The committee also expressed its thanks to Martin.

3. Country reports
Japan  Hiroshi Yamazaki
Netherlands  Henk van Broekhoven
USA  Dieter Gaubatz

The reports are included in the meeting package. Henk will be sending a copy of his to be included in the full package.

4. Feedback on international research
   • Brian Ridsdale presented from a written report. Topics included: mortality by cause of death, including the prominence of Dementia and Alzheimer’s, longevity inequalities by socio-economic status, and different views on longevity improvements. It was noted that the Continuous Mortality Investigation (CMI) released several papers, including updates on Mortality Projections version 1.5, Critical Illness (CI) results based on data from 2007-2010, individual life income protection experience by cause of sickness based on data from 1991-2009 and an experience study of self-administered pension scheme mortality.

Assia Billig had been involved in the mortality projections for Social Security Programs in Canada, and commented on the value of the Human Mortality Data Base. There were some areas that could be improved, however, and further work on it should be encouraged.
Dieter Gaubatz presented from a written report. Subjects included: Two new U.S. mortality tables have been released for comment. For the uninsured private retirement market, the RP-2014 Mortality Tables and the accompanying MP-2014 mortality improvement scale. For the individual life market, the 2014 VBT table has been exposed for comment. In addition, an experience study of individual payout annuities was published. The results of a survey providing insights into the nature of underlying select mortality assumptions has been published. Issue 1 of 2014 of the North American Actuarial Journal (published by SOA) provides a number of articles focusing on Longevity Risk and Capital Markets.

5. “Projecting Mortality by Cause of Death” presentation
Peter Banthorpe discussed a project in the UK on projecting mortality by Cause of Death. There are arguments both for and against this method. All solutions are imperfect. It was mentioned that additional work will be done based on the “Global Burden of Disease” studies. There is growing interest in “multiple state of disease” based models.

6. Mortality Improvement work by CMI
Tim Gordon, chairperson of the Continuous Mortality Investigation (CMI), discussed the work currently underway at the CMI. The CMI’s mortality improvement model is updated annually. The committee is still looking for ways to improve the model, for example with international cooperation on clarifying terminology and sharing data between countries. He would like to see assistance in this from the Mortality Working Group.

It was agreed by the MWG that Paul Lewis will put together a document describing the issues and how they might be handled. At the very least, the MWG should be able to provide a contact for this topic at various IAA member organizations.

7. Longevity Strategy of the SOA
Al Klein discussed a Society of Actuaries initiative to create a longevity strategy taskforce. Its goal is to educate actuaries and the public about the implications of longevity. Al also mentioned that they are also looking for potential partnerships.

8. Publicizing the activities of MWG

8.1 The website
Brian Ridsdale provided an update on the activities of the MWG’s website.

8.2 Half-yearly report
A good number of our members had distributed the half yearly report to their own associations. The most recent report was available in five languages, English, French, Italian, Portuguese and Spanish. A process has been set up to monitor access to the website. In the two months before this meeting, the website was accessed an average of over 100 times, with 1300 page views per week. It is hoped that German, Mandarin and Japanese can be added before the next meeting. A thank you was given to all of the translators.

Additional note: the Japanese version of the Washington meeting update was added shortly after this meeting.

The group discussed additional ways to expand interest in the MWG webpages. Some thought might be given to providing materials that could be placed on an actuarial exam syllabus, encouraging associations to award Continuing Professional Development (CPD) credits for reading MWG materials and producing short video presentations based on MWG materials to include in the website.
9. **Structured Settlements**
   Erik Alm provided an overview of nature of structured settlement products.

10. **Upcoming events involving MWG members**
    - Mortality and Longevity symposium to be held in the UK in September, 2014
    - Several individuals from the MWG will be providing presentations at this symposium
    - Social Security and Labour Policy Discussion Forum to be held at Geneva, Switzerland on Sept. 30, 2014
    - IAA Committee meetings in Zurich, Switzerland (April 9-12, 2015)
    - IAA Committee meetings in Vancouver, Canada (Oct 15-18, 2015)

    Paul Lewis will coordinate an update of the [list of potential MWG presentations](#) which could be made to various actuarial audiences. The most recently available list is attached.

11. **USA select mortality assumption survey**
    Al Klein provided an overview of the results of an SOA survey on select mortality for U.S. individual life products.

12. **Scientific Committee**
    Martin Stevenson reported the formation of the new IAA Scientific Committee. Its purpose is to provide oversight of the various working groups. Working groups are not permitted to publish in the name of the IAA. The Scientific Committee will be the official channel for all communications. It will also seek to have greater interactions with other international organizations. All working groups must submit their 2015 plans and budgets to the Scientific Committee by Oct. 15. Paul Lewis will be responsible to submit the MWG’s information.

13. **International Experience Study**
    The [responses to a survey](#) on interest in having the MWG sponsor the International Experience Study (IES) were provided. Those who responded expressed a high level of interest in this. Several members of the MWG also volunteered to participate in the process. Bill Horbatt will lead a group to put together a proposal for this project in advance of the next meeting so that it can be approved. It is expected that this document will then be presented to the IAA Scientific Committee after being finalized by the MWG.

14. **International comparison of the cohort effect on mortality projections and its parameterization**
    Dov Raphael gave a presentation on his work of the impact of evaluating cohort mortality in a wide range of countries. Although the impact is not uniform, it exists in 34 of the 36 data sets which he studied. He will also be presenting his paper at the Mortality and Longevity symposium to be held in the UK in September, 2014

15. **Finnish mortality research**
    Jari Niituinperä presented the work on Finnish mortality research completed by the Suomen Aktuaariyhdistys.

16. **Historic comparative life expectancy and mortality improvements**
    Bridget Brown provided a brief update on this project. A paper has been submitted to the SOA research clearing house.
17. Population vs. life insured vs. pension mortality
Bill Horbatt will lead the development of a plan for this project, including timeframes. This will be presented at the next MWG meeting.

18. Issues Advisory Group
As part of the discussion for item 17, it was agreed by the MWG, that, at a minimum, when a project is voted on and approved, the newly formed team will create a tentative plan along with timeframes before the next meeting. This plan is to be discussed with the MWG at the meeting immediately following the choice of topics. If more work can be completed by then, so much the better, but the working plan is the minimum amount of work now required.

The agenda for Zurich will include a discussion on what can be done to help low income countries. It was suggested that a topic for an outside speaker could be big data and data analytics.

19. Next meeting
The next IAA committee meeting will be held in Zurich, Switzerland April 9-12, 2015.
Appendix – list of papers / presentations / reports

1. Minutes of MWG Washington meeting (body #1; -original agenda)

2. Country reports
   - Japan (body #3; original agenda #3)
   - Netherlands (body #3; Lewis email #1)
   - United States (body #3; original agenda #3)

3. Feedback on international research
   - UK – Mortality and Longevity updates [Slides] (body #4; original agenda #4.2)
   - USA – Mortality Table development (body #4; original agenda #4.1)

4. Projecting mortality by Cause of Death presentation by Peter Banthorpe (body #5)

5. IAA Mortality Working Group Publicising MWG activities (body #8; original agenda #11)

6. IAA MWG Communication Strategy (body #8.1)

7. Structured Settlements (body #9; original agenda #14)

8. Geneva Discussion Forum (body #10; original agenda #15)

9. IAA MWG potential presentations (body #10; original agenda #16)

10. U.S. Select Mortality survey (body #11; original agenda #17)

11. International Experience Study – survey feedback (body #13, original agenda #21)

12. Mortality cohort effect (body #14; original agenda #21)