

CMI Annual Review 2008-2009

A summary of work undertaken by the CMI over the past year together with some of our future plans

Background

The Continuous Mortality Investigation (CMI) is the largest single research project organised by the UK Actuarial Profession. It has been accumulating and analysing data on mortality and morbidity risks arising under life assurance, annuity and pension business for over 80 years.

Mortality tables for pension schemes

The CMI has been publishing mortality tables – based on data collected from life insurers – for many years. In early 2008, the first draft tables were published based on data from self-administered pension schemes (SAPS). An extensive consultation exercise was undertaken prior to the publication of the final “Series 1” SAPS mortality tables in October 2008.

The final graduations were contained in Working Paper 35, which included a description of the methodology used to produce the graduations and the key statistics for each of the graduations. It also provides a summary of points made in feedback during the consultation on the draft tables published in Working Paper 32 and the Committee’s response to this feedback.

Working Paper 34, published at the same time, provides information about the methodology and assumptions underlying the results production process for individual and ‘All Schemes’ analyses, including data validation and results checking. Issues with the data submitted for some schemes were identified subsequent to the draft graduations and Working Paper 34 also outlines the resulting changes to the dataset.

A New Mortality Projection Model

The CMI has noted the continuing general demand for more work and guidance on projections of improvements in mortality rates, and in particular the concerns that the Interim Cohort Projections, or variants of them, are still in near-universal use, despite these projections being based on experience data only up to 1999.

In response, the CMI established a Working Party, chaired by Richard Willets, in summer 2008 to examine and report on the latest data on mortality improvements, and to develop a spreadsheet-based modelling tool, able to produce a range of different projections.

This Working Party is close to completing its initial work and will shortly be issuing a paper and an initial version of the model for consultation. It is hoped that these will help inform the setting of parameter values, stimulate and focus debate on mortality projections and may provide a platform for setting new benchmark projections.

The strategic importance of this area to the Actuarial Profession has been recognised by a financial contribution covering much of the cost of this work.

Assuring quality

The CMI has a proud heritage of producing high-quality outputs for the actuaries and we were naturally disappointed when a discrepancy was uncovered in the age definition between the data and the graduation software in the draft SAPS graduations noted above.

An enhanced “approval process” for all CMI outputs was instigated and a “quality assurance” review undertaken to validate our controls and processes. The review yielded a detailed report that made a number of recommendations for improvements to our processes, spanning the range of the CMI’s activities, from project management to database security. A working party, reporting to the CMI Executive Committee, is overseeing the implementation of its recommendations.

Whilst the implementation of some of the recommendations will not be visible to anyone outside the CMI, others will – indeed we have already introduced greater transparency in the process for recruiting new committee members; in future such vacancies will be advertised on the website and in the regular activity updates, to ensure we continue to attract high-quality candidates who complement the needs of the relevant committee.

The future of the CMI

The work of the CMI features prominently in a major consultation exercise that the UK Actuarial Profession is currently undertaking into its role in helping members in the areas of mortality, morbidity and other demographic analysis.

This is being done with the full support and encouragement of the CMI and we hope it will result in valuable input into our future strategy and perhaps to changes in membership criteria and funding.

A broadening of the organisations eligible for SAPS membership has already been agreed within the CMI and by Management Board, following consultation with existing SAPS members. Organisations other than those providing scheme actuary services can now become “SAPS members” and gain early access to draft SAPS working papers and membership of the SAPS User Group. The benefit of broadening the membership is of course that the CMI will receive increased funding that can be used to increase its research capacity or to reduce contributions from existing members.

Defending Differentiation

The UK’s implementation of the EU Gender Directive brought the CMI into new territory – seeking to make data available to demonstrate the differences that exist between men and women in a form understandable to the general public.

The CMI duly published bulletins for Life Assurance and Annuities, Critical Illness Insurance and Income Protection Insurance ahead of the legislative deadline of 30 June 2008. These were based on 1999-2002 data and the mortality differentials have now been updated to 2003-2006 data. We are pleased that so many companies appear to be relying on CMI data for the purposes of this legislation.

It is perhaps ironic that, so soon after the CMI has been able to publish data supporting the right of insurers to differentiate, we may need to close the investigation into the mortality of impaired lives that has demonstrated the excess mortality arising from a variety of medical conditions. The CMI has collected data on impaired assurances since 1982. The

investigation covers an extensive list of impairments, including Ischaemic Heart Disease and Tumours.

The complexity of the data requirements, and the likelihood that such detail is not held on offices' principal systems, has meant that this investigation has received data from only a small number of offices. Further falls in data volumes recently cast doubt on the credibility of the results, and the CMI decided to cease collecting data in its current form for years after 2006. A consultation on a revamped future investigation into impaired lives was contained in Working Paper 36, alongside the results for 1995-2006.

Responses to the consultation from data contributors have not indicated that the CMI is likely to be able to collect detailed data on impaired lives in the short term, beyond an indicator of whether or not a life is subject to special terms.

The CMI believes that the information yielded by an impaired lives investigation has strategic importance to the insurance industry, in demonstrating the need to underwrite, to charge additional premiums for impaired lives and also to help better understand trends in non-impaired mortality. For the foreseeable future, however, CMI analyses will be limited to 'standard business' and 'non-standard business' with no further analysis of the non-standard benefits, for example by type of impairment.

Improving the Analyses

Further progress has been made behind the scenes to transform the CMI's capability to analyse mortality data through the 'Per Policy' initiative.

Substantial volumes of Per Policy data have now been collected and analysis of this data has raised a number of issues regarding dates of exit and claims processes. In some cases these issues reflect a lack of clarity or consistency in versions of the Coding Guide to date. We will shortly be issuing a Working Paper that discusses these issues and sets out proposed changes to the Coding Guide. In particular it will expose a number of areas where we are hoping to obtain confirmation that the data we are seeking to collect can be provided by offices.

Feedback

Feedback is vital to many organisations, and not least to the CMI. We are grateful to all those who have taken the time to respond to our various consultations over the year. Further feedback on our activities, including any of the items listed in this Review, is most welcome. Please send any comments to info@cmib.org.uk.

And finally...

The Actuarial Profession and its users benefit greatly from the time and expertise donated by the many actuaries who participate in the CMI's research committees and working parties. I would like to thank, on behalf of the CMI Executive Committee, all volunteer members and the secretariat for their commitment and support.

Considerable thanks are also due to the life offices, reinsurers and actuarial consultancies that not only provide financial support but also, in many cases, provide data too. Without your continued support our work could not even begin.

Gordon Sharp, Chairman

May 2009

Appendix

CMI Publications during 2008-9

- Working Paper 34: Methodology and assumptions used for CMI Self-Administered Pension Schemes Mortality experience analyses (October 2008)
- Working Paper 35: The graduations of the CMI Self-Administered Pension Schemes 2000-2006 mortality experience: Final "S1" Series of Mortality Tables (October 2008)
- Working Paper 36: The mortality of impaired assured lives: Report on 1995-2006 experience and consultation on the future of the investigation (January 2009)
- Working Paper 37: Version 1.1 of the CMI Library of Mortality Projections (March 2009)

CMI results released to members during 2008-9

Life Office Mortality

- 2006 'All Office' results (compiled using scheduled mortality data) (September 2008). *(The underlying data was also made available to members on request)*
- 2003-2006 'All Office' quadrennial results (December 2008).
- 1995-2006 'All Office' results for the Impaired Lives investigation (September 2008).

Income Protection

- 2005 'All Office' results for Individual business (January 2009).

Critical Illness

- 2005 'All Office' results (October 2008). (This release included "adjusted" results for 2005, generated according to the methodology exposed in Working Paper 33)

Self-Administered Pension Schemes Mortality

- Draft Working Paper: A report on the preliminary results of an analysis into the mortality experience of pensioners of self-administered pension schemes for the period 2000 to 2007 based on data collected by 30 June 2008 (March 2009).

CMI seminar presentations during 2008-9

- Presentation at the Mortality & Longevity Seminars in Manchester (23 March 2009 by Neil Robjohns) and London (1 April by Brian Wilson) on the CMI's recent work on mortality

Copies of the slides can be found on the CMI's pages of the UK Actuarial Profession's website (www.actuaries.org.uk).