

CMI Annual Review 2009-2010

**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.

A New Mortality Projection Model

A CMI Working Party, chaired by Richard Willets, developed a spreadsheet-based modelling tool, supported by a considerable volume of research. This was in response to the perceived need for new benchmarks of projections of improvements in mortality rates, to replace the increasingly-outdated Interim Cohort Projections.

A prototype version of the model was issued for consultation in June, alongside two CMI Working Papers: Working Paper 38 provided an overview of the Model and set out specific questions for the consultation, whilst Working Paper 39 detailed further analysis to help inform the setting of parameter values for the Model. Consultation meetings were held in Edinburgh and London and over 30 written responses were received. The vast majority of the feedback was supportive of the prototype model and there was no widespread support for any particular changes.

As a result, the structure of the final Model was broadly unchanged, other than simplifying the name to "CMI_2009". In addition, the default parameters were updated to use England & Wales population data for 2008.

In addition to conference presentations, the launch of the Model was supported by an Actuarial Profession webinar – the first to feature the CMI's work – allowing a very large audience to see a presentation and participate in a Q&A session on the Model.

We intend to update the Model with new population data late in 2010, and expect to consult further on its structure and ongoing value in 2011.

The future of the CMI

The Actuarial Profession launched its consultation on the future of the CMI via a web-based survey in the summer of 2009. The results were extremely supportive of the CMI's work. The main themes are now being discussed in greater depth with key stakeholders.

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 operations.

Individual data records

A key component of the CMI's future development is the move to "Per Policy" data for the Life Office Mortality and Critical Illness investigations. Much of the progress to date has been "behind the scenes", but in April the first of two Working Papers was released to consult stakeholders in advance of issuing the first results using Per Policy data.

Working Paper 45 proposes the analysis methodology for Per Policy mortality data and includes an assessment of the impact of the move from the Scheduled methodology. The second Working Paper consulting on the content, format and physical means of transmission of Per Policy results is currently being drafted.

As more offices have submitted Life Office Mortality data in Per Policy form, there has been a corresponding reduction in data submissions in the old Scheduled format. This has delayed the release of 2007 'All Office' results, which will have to be produced by combining Scheduled data with Per Policy data. We hope that the transition to full Per Policy results, and the more detailed analyses that can then be pursued, will not be too much further ahead.

One particular aspect of individual data records that has yet to bear fruit is the addition of postcode, which is now an optional data field for all the CMI's investigations. Concerns over data protection legislation may have inhibited the supply of postcode data. During the year, the CMI developed a set of standard terms to regulate the relationship between data contributors and the CMI, acting as a "data processor", in the event that a combination of full postcode with date of birth (and gender) is regarded as "personal data" in terms of the Data Protection Act 1998. These terms were sent to all data contributors and are also available from the website.

Defending Differentiation

The UK's implementation of the EU Gender Directive in 2008 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's bulletins for Life Assurance and Annuities and for Critical Illness Insurance have both now been updated to reflect 2003-2006 data; whilst those for Income Protection Insurance will be published shortly. The implementation of this legislation is due for review later in 2010 and the CMI is assisting the ABI in its efforts to influence the European review.

Age discrimination has also been in the headlines regarding travel insurance. On life and health insurance, HM Treasury has approached the CMI directly to discuss the scope for publishing data in a similar manner to that for gender differentials.

Unfortunately, discussions to re-launch our impaired lives investigation (which ceased due to a lack of submissions of data) have yet to bear fruit, leaving the insurance industry vulnerable to challenge on disability discrimination.

Analysing SAPS Mortality

Progress on the SAPS investigation has been slower than we would have liked but we are back on track with the publication of Working Paper 44, which analyses SAPS mortality experience for the period 2001 to 2008 based on data collected by 30 June 2009. An earlier report, based on data collected by 30 June 2008, was issued in draft form to SAPS members in March 2009. However a considerable volume of new data was then received and the Committee decided it was more productive to report on the larger, more recent dataset.

Working Paper 44 uses the “S1” tables as a comparison basis, as well as the “00” Series Normal retirement tables. A separate Executive Summary, designed for those who have no need to study the detail of the analysis, has also been published.

The SAPS Mortality Committee is now analysing the improvements in mortality within the SAPS dataset over the period 2001-2008 – in particular in comparison with the population data used in the Mortality Projections Model – and expects to issue a Working Paper shortly. The Committee then intends to analyse experience by industry type, using the dataset collected by 30 June 2010; it will also give consideration as to whether the experience of that dataset is sufficiently different to the S1 tables to justify producing the “S2” Series.

Understanding Critical Illness experience

The CMI has maintained its progress towards producing realistic measures of UK critical illness experience with the publication, in February, of Working Paper 43. This presents claim diagnosis rates for accelerated business using data for claims settled in 1999 to 2004. The results in this paper are the first the CMI Critical Illness Committee has produced that relate to the date of diagnosis, when a critical illness claim is incurred. Spreadsheets used to derive the rates have been made available to member offices to allow them to experiment with alternative approaches.

The Committee is now using the same methodology to derive diagnosis rates based on claims settled in 2003-2006. Provisional results were presented at the May 2010 Health and Care conference and the Committee expects to publish the results of this analysis later in 2010.

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 2010

Appendix

CMI Publications during 2009-10

- Working Paper 38 & 39: A Prototype Mortality Projections Model (June/July 2009)
- Working Paper 40: Changes to the Coding Guide for CMI 'Per Policy' data (August 2009)
- Working Paper 41: CMI Mortality Projections Model – Feedback on Consultation and Issue of 'CMI_2009' (November 2009)
- Working Paper 42: CMI Life Office Mortality Experience 2003-2006 (December 2009)
- Working Paper 43: CMI Critical Illness Diagnosis Rates for Accelerated Business, 1999-2004 (February 2010)
- Working Paper 44: An analysis of the CMI SAPS mortality experience for the period 2001 to 2008 based on data collected by 30 June 2009 (April 2010)
- Working Paper 45: Consultation on the Proposed Methodology for the Analysis of CMI 'Per Policy' mortality data (April 2010)

CMI results released to members during 2009-10

Critical Illness

- 2006 'All Office' results, including "adjusted" results (October 2009)
- 2003-2006 'All Office' quadrennial results (December 2009)

Income Protection (Individual)

- 2006 'All Office' results for Individual business (July 2009)
- 2003-2006 'All Office' quadrennial results (April 2010)

CMI seminar presentations during 2009-10

- Consultation meetings on the prototype CMI Mortality Projections Model were held in Edinburgh and London (July 2009)
- Presentation on recent progress in the CMI Critical Illness and Income Protection investigations at the Current Issues in Health & Care seminar (October 2009)
- Presentations on the final version of the Model were given at the Current Issues in Life Assurance II and Current Issues in Pensions events (in October and November 2009) and via a webinar in December 2009.
- Presentation on recent mortality-related activity, including a review of issues commonly raised on implementation of the CMI Mortality Projections Model, at the Mortality & Longevity seminars (March 2010)
- Presentation on the key features of Working Paper 43, and the results of subsequent work on 2003-2006 Critical Illness data at the Health & Care conference (May 2010)

Copies of the slides can be found on the CMI's pages of the UK Actuarial Profession's website (http://www.actuaries.org.uk/knowledge/cmi/cmi_seminars).