

SUMMARY OF CMI WORKING PAPER 44

Introduction

This document provides a brief synopsis of Working Paper 44. Working Paper 44 is one of a series of annual reports setting out the results of the CMI SAPS Mortality investigation, analysing the experience of data submitted to the investigation up to 30 June 2009.

The SAPS Committee encourages readers to refer to the full Working Paper, especially if using the results.

The Data

The CMI SAPS investigation collects data from actuarial consultancies in respect of self-administered pension schemes – the requirement for data submissions is that schemes have more than 500 current pensioners. Data had been submitted in respect of approximately 435 different schemes in advance of 30 June 2009.

The analysis in Working Paper 44 includes pension schemes members exposed to risk during the eight years from 2001 to 2008. This compares to the “S1” tables which were based on data received by 30 June 2007, relating to the years 2000 to 2006. A substantial amount of new data was submitted during 2009, and the total lives exposed to risk in the new dataset has increased by nearly 40% for males and 50% for females since the data used to produce the “S1” tables (as shown in table 1 below).

Table 1

	Pensioners Lives	Pensioners Amounts (£'000)	Average Amounts (Pensioners) (£ pa)	Dependants Lives	Dependants Amounts (£'000)	Average Amounts (Dependants) (£ pa)
Males						
WP 44 Exposure	6,874,683	46,598,408	6,778	156,407	264,489	1,691
WP 44 Deaths	258,926	1,247,420	4,818	6,708	10,321	1,539
WP35 Exposure*	4,999,887	32,815,319	6,563	100,484	172,011	1,712
WP35 deaths*	194,025	864,065	4,453	4,426	6,587	1,488
Females						
WP 44 Exposure	3,542,729	9,880,205	2,789	2,369,258	7,132,478	3,010
WP 44 deaths	85,612	206,713	2,415	119,944	322,052	2,685
WP35 Exposure*	2,364,767	6,420,049	2,715	1,672,940	4,697,266	2,808
WP35 Deaths*	61,298	140,186	2,287	83,619	203,617	2,435

*These figures relate to the dataset underlying the graduations produced for the S1 Tables.

The volume of data submitted to the SAPS investigation is large but it could be much larger. In particular, the Committee is aware that very little data has been submitted for public sector schemes. The Committee is keen to increase the market coverage of the investigation and would like to encourage firms to submit data for all schemes with more than 500 pensioners.

The data analysis

Overall, the experience in the dataset analysed in Working Paper 44 is consistent with the dataset underlying the S1 tables. Tables 2 and 3 show the experience for males and females respectively over the period analysed. There is some evidence that mortality rates overall are improving, particularly for males, and the SAPS Committee is currently undertaking further work to investigate any emerging trends.

Care should be taken when interpreting the annual results in this paper due to low volumes of data in the latest years and heterogeneity in the data for different years.

Table 2 – Males “S1” Series Pensioner comparison

		100A/E based on “S1” Series			
		Male Pensioner Lives S1PML	Male Pensioner Amounts S1PMA	Male Dependant Lives S1PML *	Male Dependant Amounts S1PMA *
100A/E					
	2001	103	109	109	115
	2002	102	107	103	120
	2003	102	103	99	115
	2004	95	98	107	154
	2005	93	96	106	141
	2006	90	92	104	110
	2007	88	89	102	114
	2008	81	85	110	119
	All	97	99	104	125

* note: the “S1” Series of tables does not include a separate table for male dependants. The male dependant experience is therefore shown compared to the appropriate pensioner table, which is not directly comparable.

Table 3 – Females “S1” Series Pensioner comparison

		100A/E based on “S1” Series			
		Female Pensioner Lives S1PFL	Female Pensioner Amounts S1PFA	Female Dependant Lives S1DFL	Female Dependant Amounts S1DFA
100A/E					
	2001	100	106	99	102
	2002	100	105	103	107
	2003	101	103	103	107
	2004	97	102	93	96
	2005	95	100	94	96
	2006	92	97	93	90
	2007	92	93	92	91
	2008	93	85	92	90
	All	97	101	97	98

Observations based on the dataset's experience are that

- Overall the mortality experience of the more recent dataset is lighter than that expected using the unadjusted "S1" tables (which is as expected if mortality rates are improving, since the average experience of the latest dataset is nearly 1½ years more recent than that underlying the "S1" tables).
- The amounts experience of female pensioners appears to be slightly heavier, relative to the "S1" tables, although no firm conclusion should be drawn from this, due to the significant increase in female data received for the latest dataset, and the heterogeneity underlying the data.
- The more recent mortality experience of SAPS pensioners is still slightly heavier overall than the experience expected using the (unadjusted) PA00 tables.
- The patterns of mortality experience observed for members with different pension amounts are similar to those seen in the dataset underlying the "S1" tables and earlier datasets (see Charts A and B).
- As shown in Table 1, the exposed to risk for female pensioners is materially less than that available for male pensioners. Particularly when the data is analysed in smaller subsets (for example, the analysis by amount) this gives rise to more volatile outcomes. For example, the number of females with pensions greater than £8,000 is very small, so only to a limited extent can conclusions be reached from some of the outcomes illustrated in Chart B.

Chart A: 100 A/E values for Male Pensioners Amounts compared to S1PMA

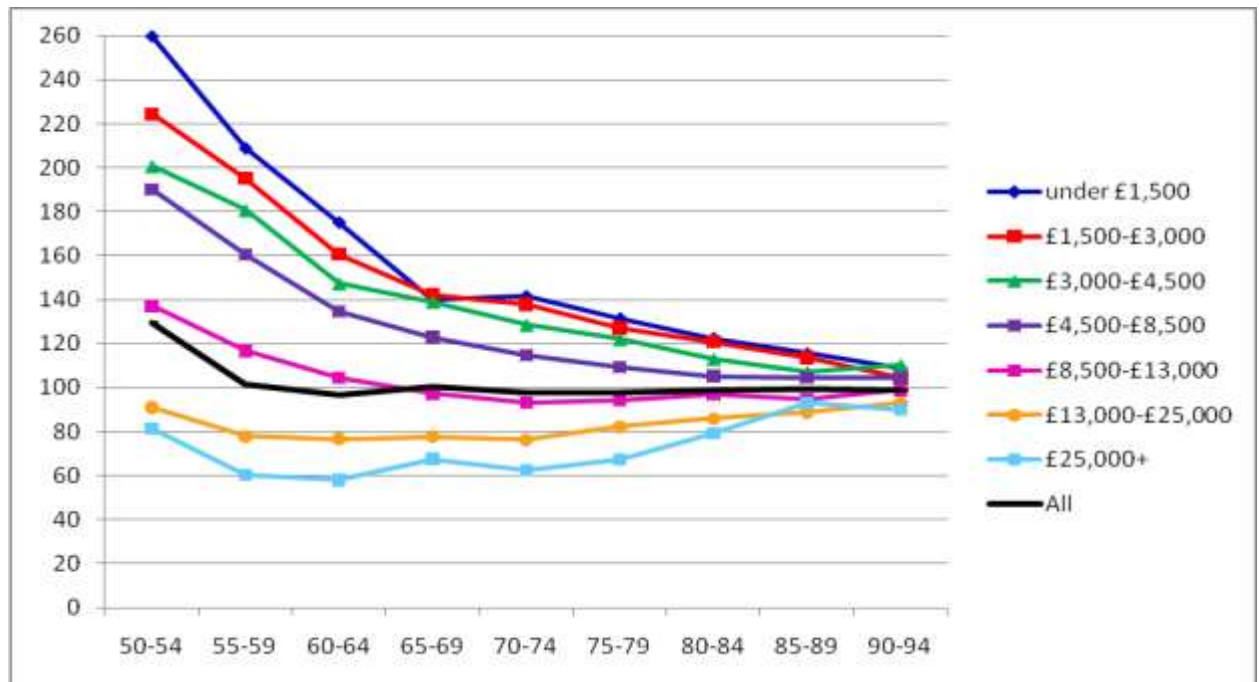


Chart B: 100A/E values for Female Pensioner Amounts compared to S1PFA

