The Actuarial Profession
making financial sense of the future

"Is it time for a review of guaranteed income protection?"

5-7 October 2003
Scarman House, The University of Warwick

Agenda for today

- Background on income protection (IP) guarantees
- Summary of previous publications
- FSA returns of key providers
- Morbidity trends & influences
- Existing regulation
- Current issues & concerns
- Key messages

Background on income protection (IP) guarantees

Setting the scene

- Recent debate and changes in the guaranteed critical illness (CI) market have been will publicized
- One year ago the difference between reviewable and guaranteed CI rates was about 5%
- This differential has now widened up to 25%
- Generally a greater awareness, post Equitable Life, of the impact of potentially onerous guarantees
- The main issue for IP is whether the guarantees are appropriate given the guarantee loadings currently provided in the market

Valuation margins

- Uncertainty about the correct level of reserves required to provide for the underlying volatility in experience and also whether current premium rate levels reflect the true cost of these guarantees
- Margins should be held to reflect:
  - The volatility
  - The poorer quality of information on which to base morbidity costs (compared to mortality)
  - The greater need for judgement commensurate with the greater uncertainties of IP

Extent of guarantee and assessment of risk level & volatility

- Extend of guarantee:
  - Full guarantee
  - Partial guarantee
  - Fully reviewable
- Explicit/implicit guarantees
- Implicit guarantees:
  - Commercial pressures
  - PRE
- Assessment of risk level & volatility – actuary must consider:
  - Credibility of data
  - Appropriateness of data
  - Effects of trends
  - Effects of shocks

The market

- Long-term premium guarantees are much less prevalent for IP than they are for life and CI; however, they do dominate the IFA market
- Early nineties IP market moved away from guarantees
- In recent years companies are re-entering the guaranteed market

Experience of other products

- Sources of pricing error (TA/IP/CI):
  - Credibility – high/medium/low
  - Appropriateness – high/medium/low
  - Trends – down/up/?
  - Shocks – rare/some/many?
- Robustness of definitions:
  - Against medical advances – good/good?/poor?
  - Against social change – good/poor/medium
- Prevalence of guarantees – 100%/30%/60%*
- Typical charge for guarantees – nil/25%*/10%

* recent information suggest that these figures have changed

Summary of previous publications

Main papers

- Reserving for CI Guarantees, SoA Ireland, 30 November 1994
- Practical PHI Reserving, Elliott et al, May 1997
- IoA Healthcare Guarantees Working Party 1st Report (IP), Nuttall et al, July 1998
- IoA Healthcare Guarantees Working Party 2nd Report (IP & CI), Nuttall et al, September 1999
- IoA Healthcare Guarantees Working Party 3rd Report (IP, CI & LTC), Collier et al, September 2000

Key messages (1)

- Long-term premium guarantees must be adequately reserved for & the AA must take account of the high level of uncertainty in establishing prudent reserves
- IP is subject to significant influencing factors that are outside the insurer's control
- Using reinsurance rates plus a margin may not necessarily allow adequately for the degree of uncertainty in setting reserves
- There is significant role for stochastic modelling (models to date are largely theoretical)
- There are two key sources of variation – pure statistical fluctuation and pricing error
- Pricing error can be due to credibility of data, appropriateness of data and the effect of trends and shocks

Key messages (2)

- The input parameters can be very subjective as the experience between offices is subject to significant variation
- The stochastic models indicate that the required reserves and corresponding premium rates for guaranteed business are considerably higher than those needed for truly reviewable business
- Even apparently reviewable business may contain implicit guarantees
- Capital discussions must encompass both reserving and pricing considerations
- The price that should be charged for guarantees must cover all claims costs and also the costs of capital backing the business

Key messages (3)

- The use of reinsurance has been an important consideration for guarantees
- When considering the appropriate allowance for premium guarantees the actuary must consider the following:
  - The extent of the guarantee
  - Assessment of the risk level and volatility
  - The methodology to be used
  - Typical risk margins
- A premium guarantee can be explicit or implicit
- Implicit guarantees can be the result of:
  - A delay in recognizing experience
  - Commercial pressures
  - PRE
  - Effect of selective lapsation following premium reviews

FSA returns of key providers

Previous recommendations on margins, guidance & disclosure

- "Practical PHI Reserving" (1997) recommendations:
  - IP valuation margins should be greater than life
  - IP valuation margins should be greater than the "0-10%" range reported in the survey
  - Enhance guidance on setting morbidity basis
  - Enhance disclosure to include method of valuation, adjustments to standard tables, internal/external experience used, allowance for future trends, allowance for IBNR and allowance for claims reported & awaiting authorization
- Recommendations accepted by Statutory Valuation Working Party (1998):
  - Use the inception/annuity approach
  - Ensure adequate provision for claims expenses
  - Consider PRE before taking credit for the right to review premiums

Summary of Appointed Actuary Investigations

- The inception/annuity approach is used for all of the providers & reinsurers surveyed
- The morbidity bases are fairly explicit separating out inceptions, terminations and key rating factors
- In the majority of cases an allowance for future deterioration is not mentioned

Summary of Form 51 (13 providers & reinsurers)

- Total office premium = £250,893
- Total value of sum assured = £2,779,835
- Total active life reserves = £ 949,475
- Total disabled life reserves = £ 782,305

* all figures are in £000
* source 31/12/02 FSA Returns

Morbidity trends and influences

Morbidity trends
Inceptions – male class 1; expected = 100% CMIR12

DP (wks)	91-94 %	95-98 %	1995 %	1996 %	1997 %	1998 %	1999 %	2000 %
1	98	92	99	95	85	88	84	84
4	72	69	81	66	64	65	48	57
13	97	86	107	91	79	72	64	76
26	141	152	180	159	150	124	115	119
52	276	321	417	318	346	232	281	261

Morbidity trends
Inceptions - female class 1; expected = 100% CMIR12

DP (wks)	91-94 %	95-98 %	1995 %	1996 %	1997 %	1998 %	1999 %	2000 %
1	121	126	131	120	127	128	106	86
4	141	104	132	124	97	78	68	51
13	200	137	175	158	128	110	112	126
26	367	302	337	326	276	288	262	348
52	596	618	682	745	644	505	434	588

Morbidity trends
Terminations - male class 1; expected = 100% CMIR12

DP (wks)	91-94 %	95-98 %	1995 %	1996 %	1997 %	1998 %	1999 %	2000 %
1	100	101	98	104	105	98	100	93
4	61	53	55	50	52	54	55	55
13	49	44	37	42	51	46	43	51
26	43	41	38	42	41	44	36	44
52	31	29	27	41	30	22	26	55

Morbidity trends
Terminations - female class 1; expected = 100% CMIR12

DP (wks)	91-94 %	95-98 %	1995 %	1996 %	1997 %	1998 %	1999 %	2000 %
1	96	90	90	94	94	92	102	95
4	59	56	60	56	60	50	41	49
13	50	46	41	67	39	42	37	42
26	40	47	64	47	38	46	50	41
52	32	34	44	14	40	34	40	34

Morbidity influences

- Internal influences:
  - Underlying risk management philosophy & ability especially with respect to underwriting & claims management
- External influences:
  - State of the economy
  - Attitude of the medical profession
  - Healthcare provision
  - Increasing stress in the workplace
  - Increased consumer understanding & awareness
  - Government policy, eg “Saving Lives: Our Healthier Nation”
  - Financial Services Ombudsman Scheme (“FOS”)

Existing regulation

Background on FSA rules

- The Appointed Actuary is required to do an actuarial valuation which must be carried out with the appropriate margins for adverse deviation
- The FSA rules are general in nature and are not IP specific
- Guidance notes provide further guidance for the Appointed Actuary on how the rules should be interpreted (see GN1 and GN8)

Existing regulation – required solvency margin

- Definition:
  - Minimum amount of extra capital that insurance providers are required to hold as a buffer against unforeseen events such as higher than expected claim levels or unfavourable investment results
- Solvency I:
  - Adoption of two Directives of life and non-life to reinforce safeguards to policyholders by strengthening the solvency margin requirement for the healthcare business written in the Class IV fund
  - CP181 – Implementation of Solvency I Directives
- Solvency II:
  - A more wide-ranging review

Current issues & concerns

Main issues

- Potential impact of economic downturn
- Increased consumer awareness & legal challenges
- Changing stance of FOS
- The potential impact of medical advances
- Increasing stress-related claims
- Reinsurance capacity
- Long-term premium guarantees

Changing stance of FOS

- FOS philosophy:
  - They operate on a “fair & reasonable” basis
  - They put a lot of emphasis on what the person thought they were buying and their general knowledge of the contract
  - It does not suffice to simply refer to key features document
- Current concerns:
  - Cases that once would have been rejected are now being accepted
  - Anecdotal evidence suggests that 40% of cases are being decided in favour of the claimant
  - Apparent change in stance not reflected in original pricing

Reinsurance capacity

- Reinsurers are having a major impact on the protection market
- Withdrawing support for guaranteed CI; concern that this could spread to other protection products
- As per “The Protection Review 2003” large ceding offices are becoming increasingly concerned about:
  - The financial stability of their reinsurer
  - Counterparty risk that they assume

Key messages

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- Guarantees in the UK market

Key messages

- Guarantees in the UK market
- Guaranteed IP market potentially under-priced
  - From FSA returns total value of sum assured = £2,779,835
  - If experience were to deteriorate by say 10%, without a commensurate increase in premiums, the potential loss (for the providers surveyed) could be around £300 million

Key messages

- Guarantees in the UK market
- Guaranteed IP market potentially under-priced
- Guaranteed IP market potentially under-reserved
  - Past industry surveys have shown loadings for guarantees in the region of 25%
  - Current average loading appears to be around 15%
  - Potential impact on reserves could be as high as £200 million if the current average loading of 15% should really be 25%

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