

*The Faculty and Institute of Actuaries Claims Reserving Manual. Volume 1 and 2.*

The first edition of the Claims Reserving Manual was published by the Faculty and Institute of Actuaries of Great Britain in 1989. The present second edition, i.e., the 1997 revision of the Manual takes into account both the broadening of practical experience and the research on reserving methodology of the past ten years. The Manual consisting of two volumes is loose-leaf for ease of updating and inclusion of additional material. Volume 1 should be understandable to everybody who is involved in the process of claims reserving. Volume 2 contains a collection of more advanced actuarial approaches being, however, complemented by explanations and examples so that the readers of Volume 1 can gain at least an intuitive understanding of these methods by way of a summary overview. We would like to cite this small paragraph from the introduction: "The Manual describes methods; it does not discuss the suitability of any method, nor the level of caution at which a reserve should be set, for any specific purpose such as tax or solvency. Hence the essential interrelationship between assets and liabilities is ignored except for a short section on discounting. Within the chosen limited framework, intimately related actuarial subjects such as allocation of capital, return on capital, premium rates, investment strategy and release of profit are completely ignored, and the reader must make due allowance for this".

Volume 1 is subdivided into 15 sections from section A on the purpose and importance of claims reserves both in insurance and reinsurance to section O "Selected References/Reading List". Most of these sections deal with more or less wellknown reserving or IBNR methods, be it case estimates, the extrapolation of paid or reported claims, chain ladder type extrapolations, methods using loss ratios or methods based on claims frequency and severity. Rather than commenting on these sections in detail we decided to say something to three further sections which are in our opinion of basic importance, namely

- Section D: Dimensions of Choice,
- Section L: Actuarial Considerations and
- Section M: Towards a Formalised Approach.

In the preamble of section D there is a statement which we would fully support from our own practical experience which reads as follows: "When embarking on the claims reserving exercise, a number of underlying choices have to be made. ... To make these choices clear, they are here brought out as a series of 'either/or' dimensions. But often the right answer will not be 'either/or' but 'both'. The reserver is likely to build up a fuller and more reliable picture if he or she approaches the problem in a number of different ways."

After this preliminary statement section D discusses in a very clear and concise manner the following eight "either/or's":

- D1. Case Reserves versus Statistical Methods
- D2. Simple Statistical Methods versus More Sophisticated Ones

- D3. All Claims Together versus Separation of Large/Small Ones
- D4. Figures Gross versus Net of Reinsurance e.g.
- D5. Treaty Year versus Report Year Cohorts
- D6. Loss Ratios versus Claim Development Patterns
- D7. Paid versus Incurred
- D8. Claims Cost versus Claims Count and Severity

Section L “Actuarial Considerations” contains some general statements on two most important subjects, the possibility or rather impossibility of discounting claims reserves in general insurance and reinsurance on one hand and the retrospective monitoring of past estimates on the other. From our own practical experience we fully agree with the statements in this section and would only like to add that with regard to the question of discounting we sometimes put it in a nutshell like this: “When pricing, yes, when reserving, no!” This is the rule in most legal environments throughout the world for reporting purposes of most Non-life lines, with life annuities often being an exception.

In principle and in theory, discounting could be accepted under limited circumstances, just as is the case for life insurance where mortality statistics paint a more accurate picture of the future payments and timing of those payments. The practical aspect of discounting Non-life reserves, however, requires not only the already delicate calculation of expected ultimate claims, but also the reliance on the expected future payment dates and expected future interest rates to be achieved. In addition, a constant monitoring and unwinding of the discount applied must be made at each valuation date as the claims approach their final settlement. Finally, management would need to appreciate an entirely different approach to the concept of the use of the investment income achieved in comparison with current practice of undiscounted reserves, which would likely be unappreciated during any transition period.

In section M “Towards a Formalised Approach” an effort is made to arrive at a comprehensive systematisation of the reserving process. The many different concepts and quantities are brought together and a clear common notation is made in order to help the responsible persons to find an appropriate approach under the given specific circumstances. This chapter could also be called an attempt to formulate in an abstract manner the basic philosophy of claims reserving in general insurance and reinsurance. Researchers, actuaries and Non-life insurance mathematicians in particular will enjoy reading this kind of general reserving theory.

Volume 2 is on more advanced methods. It starts with a general discussion on “What makes a good stochastic model?” by pointing among other things at the dilemma between having too few and too many parameters in a given model, and by reminding ourselves that after all every model is just a simplified representation of reality. Section C contains summaries of the selected papers written by Ajne, Benjamin and Eagles, Reid, Christofides, Mack and Wright which are in full reproduced under section D. In section E, a précis of other actuarial papers on reserving can be

found. Finally, the Manual is accompanied by a disk illustrating the application of the two models contributed by S. Christofides and Th. Mack respectively.

Zurich, September 1998,  
ERWIN STRAUB and DAWSON GRUBBS