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ACTUARIAL SOCIETY of HONG KONG 香港精算學會

Notice for Appointed Actuaries: Chapter 41E – Reinvestment Yield for Reserving

Over the last two years, the Life Insurance Committee has been developing guidance for Appointed Actuaries and the valuation bases they choose under Chapter 41E. A draft Guidance Note has been circulated to members, but since that note was issued there have been dramatic changes in financial markets. As a result many appointed actuaries have been concerned about how Chapter 41E should be interpreted.

In response, the Life Insurance Committee arranged two meetings of a representative selection of Appointed Actuaries, auditors and consultants to consider these concerns. It was agreed that the focus of the meetings should be on matters which (i) have arisen from the changes in financial markets and (ii) are expected to apply to the Hong Kong life insurance industry as a whole at the coming year end.

In view of the limited time before the year end, one single point was discussed, in respect of the following extract from Section 8 ("Rates of interest"), subsection (7)(a) of the regulations. This subsection addresses the yield on investment to be made more than 3 years after the valuation date ("reinvestment yield"), and states:

> "The yield assumed, before any adjustment to take account of the effect of taxation –
>
> (a) on any investment to be made more than 3 years after the valuation date shall not exceed the lowest of –
>
>   (i) a prudent assessment of the yield, current on the valuation date, of long term fixed interest securities issued by the national government of the country in which currency the liabilities are denominated; or
>
>   (ii) 6% per annum, increased by one quarter of the excess, if any, of the yield referred to in subparagraph (i) over 6% per annum; or
>
>   (iii) 7.5% per annum;"

The attendees felt that the common application of this wording in the past had been to use the yield on the valuation date (adjusted as appropriate according to (ii) and (iii) above) in respect of all investment to be made more than 3 years after that date. However, it was agreed that the wording can be interpreted as allowing the Appointed Actuary to apply judgement if he or she feels that the use of the yield at the valuation date is in some way inappropriate to the purpose of investment more than 3 years after the valuation date.

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In applying such judgement, it was further agreed in the meetings that the following principles should apply:

- The judgement should be prudent.
- The assessment of the yield to apply on investments in the future can involve a forward-looking consideration of how yields are expected to move up or down from their level at the valuation date; the yield, current on the valuation date, of long term fixed interest securities issued by the national government of the country in which currency the liabilities are denominated ("Yield at Valuation Date") is the starting point for this consideration and should not be overlooked.
- Relevant economic and other external data at and prior to the valuation date should be considered in judging any movement away from yields at the valuation date; such data might for example include government bond yields, yields on long-dated interest rate swaps, spreads on long-dated high-grade corporate bonds, observed and expected volatility, and relative trading volumes and market liquidity.
- Any chosen method for deriving the final reinvestment yield should be actuarially sound and should remain robust under changing future interest rate conditions; in particular, if interest rates remain low then the reinvestment yield assumed should trend lower, and if interest rates rise then the method should not require substantial adjustment.

Within these principles, a number of different approaches were discussed. It was agreed that the final choice of approach is a matter for the Appointed Actuary.

However, it was agreed that a sample approach could be instructive, as follows:

- General format of a formula to derive the final reinvestment yield:
  - X% x {Yield at Valuation Date} + Y% x {forward-looking yield}
  - Where X% + Y% = 100%
- Sample parameters for a valuation carried out at the date of this notice (i.e. considering investment conditions at that date) could be:
  - Forward-looking yield = average of yields of long term fixed interest securities issued by the national government of the country in which currency the liabilities are denominated over the 3-year period ending on (and including) the valuation date
  - X% = 50%
- On each valuation date, the Appointed Actuary should apply judgement as to the appropriateness of the approach and the parameters chosen for the valuation.

Additionally, it was noted that:

- Chapter 41E sets down the conditions for a minimum valuation basis and that Appointed Actuaries still need to consider whether or not the valuation basis is adequate and suitable in addition to whether or not minimum requirements are met.
- Appointed Actuaries shall include adequate disclosure in the abstract of the actuary's report prescribed in Section (18) of the Insurance Companies Ordinance regarding the appropriateness of the approach and the parameters chosen for the valuation.
- In the current volatile environment, it is advisable that Appointed Actuaries apply additional rigour in documenting the reasons for choosing the assumption for reinvestment rates.

The Insurance Authority is aware that the ASHK is issuing this notice and has not raised any objections. It asked for it to be noted that Appointed Actuaries should be prepared to furnish justifications for the choice of such assumptions when required by the Insurance Authority for its review.

Council of the Actuarial Society of Hong Kong

Copies to:
Office of the Commissioner of Insurance
Hong Kong Federation of Insurers