

# Questions for Users of Actuarial Work

## Life Insurance Technical Provisions and Capital

Directors are responsible for determining the technical provisions and capital requirements (currently under the FSA's Solvency I and ICAS regime but changing to Solvency II in the next two to three years) having taken advice from their actuarial function holder. It is important that Non-Executive Directors (NEDs) understand the actuarial advice they are given and are able to engage effectively with the actuary providing that advice.

We set out below some questions which we hope will help NEDs when determining Provisions and Capital.

### Governance

**The Board needs to understand the role of the actuarial team and how its responsibilities relate to other functions such as risk management, finance and operations.**

- Do you have a clear understanding of what work has been done by the actuarial team and the extent of their reliance on other functions?
- Have all actions recommended by Internal Audit to improve actuarial processes and controls been implemented?
- What actions have been taken in response to the work of the External Auditor's Actuary?
- What actions have been taken in response to any actuarial issues raised by the FSA?

### Market risk

**A major source of risk for life insurers is uncertainty arising from the level or volatility of market prices of the firm's assets and the consequent impact on the value of liabilities.**

- What are the material judgements concerning market risk which inform the results?
- What impact has the current market uncertainty had on the economic assumptions including the discount rates used?
- How has the current market uncertainty impacted the cost of options and guarantees and the results?

- By how much does any prudence in the technical provisions change on plausible optimistic and pessimistic assumptions concerning investment returns and volatility?

### Insurance risk

**Risk arising from uncertainty about the current levels of mortality and morbidity rates and future changes in these rates is also often significant.**

- What are the material judgements about insurance risk which inform the results?
- What range of assumptions about current underlying mortality and morbidity rates and changes to these rates were considered but discarded?
- By how much does any prudence in the technical provisions change on plausible optimistic and pessimistic assumptions concerning insurance risk?

### Models and methods

**While the specific assumptions about investment returns and mortality and morbidity are obvious judgements for debate, the models and methods used might also have a significant impact on the results.**

- What is the process for confirming that the models and methods used are generally accepted actuarial practice?

- What other models and methods were considered and why were they rejected?
- What changes were considered and then rejected (and why)?

### Scenario Analysis and Stress-Testing

A key part of capital adequacy is consideration of “tail events”. Models are typically developed on the basis of extensive data about events in the middle of the distribution of possible outcomes, but more limited data about the tails.

- How is uncertainty in tails assessed and explained?
- What judgements have been made about correlations in tails of distributions?
- What alternative judgements were considered and why were they rejected?

### Cash flows

Life insurance provisions represent the present value of cash flows that can extend out over many years. Matching of asset and liability cash flows might be used to justify both lower technical provisions and capital.

- Do you consider projected asset and liability cash flows as well as discounted or other present or market values?
- Are there peaks of cash demands or troughs in the availability of cash that need to be recognised?
- Are any illiquidity premiums that are used in models and calculations justifiable?

### Solvency II

Current requirements for calculating provisions and determining capital adequacy are driven by existing regulation but considerable work is being performed to implement the new Solvency II regime.

- How does the actuary anticipate technical provisions and capital requirements will change on the introduction of Solvency II?
- How will the actuarial function support the work of the risk function?
- Are the actuarial components of the Solvency II project on schedule and which areas have been most problematic recently?

### Working with your Actuary

To ensure you get high quality actuarial work it is important that you can rely on your actuary and have an effective working relationship.

- Have you agreed the level of detail you would like to be reported? Have you agreed a format for reporting actuarial information?
- What quality assurance processes does your actuary use?
- How is your actuary’s compliance with statutory requirements, BAS standards and professional standards monitored?
- Does your actuary have other interests or responsibilities which might affect their perceived objectivity, such as managing the interests of shareholders and management?

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The questions are not exhaustive or intended to apply in every case. They do not replace specific regulatory guidance. They are intended to stimulate discussion and improve understanding of relevant issues, and thereby promote the quality of actuarial work.

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