MILLIMAN BRIEFING NOTE

CBI review of Solvency II life insurance pricing and reserving assumptions

Findings for Boards and Heads of Actuarial Function

Aisling Barrett, FSAI
Sinead Clarke, FSAI

Milliman

CBI Correspondence

In June 2016, the Central Bank of Ireland ("**CBI**") initiated a review of the consistency of Solvency II life insurance pricing and reserving assumptions. In February 2017, the CBI published letters (on their website) that were sent to life undertakings in relation to this review. Letters were sent to the chairman of the Board of life insurance undertakings (link) and to the Head of Actuarial Function ("**HoAF**") (link). The detailed content of the letters are the same but the opening sections of the letters give a slightly different context for Board and HoAFs.

The CBI has stated in the letters that, as a result of this review, it has found that:

- Boards are generally not fulfilling their role in relation to oversight and governance of the assumptions; and,
- HoAFs are generally not fulfilling their role in relation to informing the Board of the reliability and adequacy of the calculation of technical provisions.

The CBI has met with life undertakings that participated in the review to discuss their findings. We believe the review involved approximately ten life undertakings.

We expect that undertakings that did not participate in the review may have found the tone in the letter somewhat critical. However it provides a useful insight into the expectations of the CBI in this area.

Under Solvency II, the Board is ultimately responsible for oversight of assumptions and ensuring compliance with regulations. The CBI has stated that it is not appropriate to delegate this responsibility to the Head of Actuarial Function ("**HoAF**"). The CBI expects Boards to request sufficient information to challenge key assumptions, expert judgements, results of experience analysis and the assumptions setting process.

The letter to HoAFs suggests actions in the following areas:

- Communicating key assumptions;
- Commenting on the use of marginal costing in pricing;
- Reflecting uncertainties in a range of scenarios.

Areas of concern highlighted by the CBI are:

- Delegation of assumption setting to the HoAF with insufficient Board oversight;
- Insufficient information provided by the HoAF to the Board on key judgements underlying the HoAF's recommendations;
- Overviews presented to Boards or Committees with insufficient rationale for significant deviation in experience;
- Very detailed information being provided without sufficient highlighting of the most material parameters or risks;
- Insufficient highlighting of cross subsidies when looking at market-related pricing decisions.

The CBI set out actions for HoAFs to consider as set out below. In particular, some areas discussed by the CBI include assumptions with regard to:

- Management actions;
- Constant per policy expense assumptions;
- Expense inflation;
- Price matching and special deals.

HoAF responsibilities

COMMUNICATING KEY ASSUMPTIONS

The CBI states that the nature and content of the key assumptions used in the calculation of the Solvency II technical provisions should be sufficient to satisfy the Board's requirements when making decisions based on the HoAF's recommendations. HoAFs should outline key judgements made in the process of deriving material assumptions and the materiality of products and sensitivity impact of the assumptions should be set out in HoAFs' communications to the Board on assumptions.

The CBI lists the following examples of key judgements:

- Choice of method used for experience analysis and assumption setting;
- The time period chosen for analysis;
- Any material adjustment applied;
- An allowance for events not in data.

The HoAF is responsible for ensuring the appropriateness of the assumptions in coordinating the calculation of the technical provisions. Some companies may use other functions or teams to derive and recommend assumptions to the Board.

It is not clear if the CBI requires the HoAF to communicate to the Board in this situation or if the department responsible for setting the assumptions should communicate with the Board.

The CBI states that it considers the application of a **management action** to be a key assumption where it has a material impact on results. It states that the HoAF should ensure that management actions are justified, aligned with the business strategy and that emerging experience is monitored. We also note (ref. Article 310 of the Delegated Acts) that companies should detail management actions in the Regular Supervisory Report ("**RSR**").

The CBI letter comments that the use of a **constant per policy expense assumption** where business volumes are expected to decrease is an implicit management action, which should be justified and supported by an approved management action plan.

The process of setting expense assumptions under Solvency II is a key area of judgement. Ultimately the Board is responsible, with guidance from the HoAF, for deciding on the assumption for the level of future expenses in the technical provisions. Boards will need to ensure that they are comfortable with the approach taken for their specific undertaking, taking into account the CBI's comments and also compliance with the Solvency II requirements - in particular, Articles 22 and 31 of the Delegated Regulation which state:

"Assumptions are based on the characteristics of the portfolio of insurance and reinsurance obligations, where possible regardless of the insurance or reinsurance undertaking holding the portfolio";

"Undertakings shall only use information specific to the undertaking, including information on claims management and expenses, where that information better reflects the characteristics of the portfolio"; and,

"Expenses shall be projected on the assumption that the undertaking will write new business in the future".

The CBI notes that they observed significant variation in the **expense inflation** assumption being applied and reminds HoAFs to justify the assumption used, ensure it is aligned with the undertaking's business plan and consider the need for a stress on expense inflation in the ORSA.

USE OF MARGINAL COSTING IN PRICING

Where marginal costing, **special deals, price matching** or market driven prices are used in pricing, the CBI states that the HoAF should (when providing the underwriting opinion to the Board):

- Ensure that there is sufficient consideration of the business mix and consider whether the business mix remains within the firm's risk appetite;
- Ensure checks are carried out to ensure overall costs are being met;
- Consider whether the strategy remains appropriate and highlight any material concerns in this regard;
- Make clear whether group costs and overheads are included in profitability and reserving metrics.

REFLECTING UNCERTAINTIES

The CBI letter states that HoAFs should provide the Board with an understanding of how actual outcomes could deviate from those expected, so that the Board has an understanding of the uncertainty around the most material assumptions and the significance of the assumption used.

The CBI expects HoAFs to consider a reasonable range around the expected results, rather than a single point estimate of the technical provisions.

CBI feedback on SCR calculations

In December 2016 the CBI also issued a letter to industry (link) in relation to its review of the standard formula Solvency Capital Requirement ("**SCR**") of some undertakings. This letter set out general findings as follows:

- Inadequate controls and testing of manual spreadsheets used in SCR calculations;
- Solvency II regulations not being applied correctly;
- Management actions being assumed in the calculation of the technical provisions and SCR that had not been approved;
- Employee defined benefit schemes should be treated as ring-fenced.

The CBI stated that future management actions assumed in technical provisions and SCR calculations, which reduced a firm's expenses, should be supported by a Board approved management action plan.

Again in this December letter the CBI has mentioned Board approved management action plans relating to future expenses and the implications for technical provisions and SCR (for example in mass lapse shocks). This suggests that the CBI wants Boards to be particularly aware of how expense assumptions are being set in this area and how the approach complies with Solvency II.

How Milliman Can Help

Our consultants have been involved in advising our clients on Solvency II issues since its conception. We have undertaken a range of work for clients across all three pillars of Solvency II. Our services include:

- Independent review of assumption setting process;
- Independent review of Solvency II pricing assumptions and profit testing approach;
- Independent review of Solvency II balance sheet, technical provisions and SCR;
- Independent review and gap analysis of Solvency II requirements;
- Preparation and review of SFCR and RSR;
- Independent review of QRTs;
- Solvency II training.

Milliman also has a range of software available to support companies in the ongoing Solvency II requirements including:

- Solvency II Compliance Assessment Tool (link)
- Milliman Star Solutions - Vega®: An automated Pillar 3 reporting and standard formula aggregation system (link)
- Milliman Star Solutions - Navi®: A liability proxy modelling tool (link)

As a result, we have a wide range of experience that can be brought to bear to benefit your business.

CONTACT

Aisling Barrett
aisling.barrett@milliman.com

Sinead Clarke
sinead.clarke@milliman.com