Bank of England

Prudential Regulation Authority

Solvency II Review: Summary of Quantitative Impact Study (QIS) Engagements

1. Introduction

The Prudential Regulation Authority (PRA) would like to thank all participants for their interactions with us, during the QIS and Qualitative questionnaire[1] and subsequently through the series of meetings and roundtables. Today we are publishing a summary of the technical discussions held, along with the main messages we received from participants. The information received through these interactions has achieved its purpose of allowing the PRA to model the impact of a range of potential reforms to the risk margin and fundamental spread, and continues to play an important role in informing potential reforms to Solvency II.

- The PRA's statement on the 'Review of Solvency II' consultation published by HM Treasury; and
- DP2/22 – Potential Reforms to Risk Margin and Matching Adjustment within Solvency II.

2. Conclusions from Engagements

Matching Adjustment/Fundamental Spread (MA/FS)

The QIS collected data on two alternative possible FS design variations. These designs linked the FS to credit spreads and impacts were requested under different economic scenarios. The calibrations used were designed to allow us to collect a range of data points for use in our own modelling. Neither the designs nor the calibrations used in the QIS represented proposed policy options.

The PRA took away three key points from the Qualitative and Quantitative submissions and industry responses following the MA/FS roundtable held on Wednesday 16 February. First, participants were very concerned about the volatility that any FS calibration based on spot spreads would introduce to their balance sheets. Specifically participants noted the costs of managing this volatility as well as potential impacts on investment strategy, pricing, volumes and the attractiveness of the UK annuity sector for future investment. Second, participants suggested that its design could be improved by increasing the granularity of the current FS calibration. Ways of doing this included the introduction of ratings notches to replace credit quality steps. Finally, the QIS tested a valuation uncertainty component that was designed to address the risk of assets with no market price potentially being over-valued. QIS results showed this component had been applied by firms to a wider range of assets than the PRA had intended.

[1] Quantitative data collection issued on Tuesday 20 July 2021 and Qualitative questionnaire issued on Friday 13 August 2021 with submissions received on Wednesday 20 October 2021. These collections were intended to supplement information gathered by HM Treasury's Call for Evidence (issued Tuesday 23 June 2020).

The PRA did not request firms to determine the impact of the QIS scenarios on their internal models and hence Solvency Capital Requirements (SCR), as we considered this would have been a significant burden for firms in the time available for the QIS. The PRA appreciates the concerns raised by participants that there may be an interaction between the design of the FS and the internal model, and recognises the importance of understanding any such impacts. To partly mitigate this, the PRA collected qualitative information on the SCR during the QIS, and discussed potential impacts on internal models and the SCR during bilateral and roundtable conversations.

All of the above points are being considered as part of our continuing work on potential reforms to the design and calibration of the Fundamental Spread.

Risk Margin

The QIS collected data to allow the PRA to model a range of possible designs and calibrations of the risk margin, with two main approaches being explored: 1) a percentile approach, similar to that used by the International Association of Insurance Supervisors (IAIS) for the Margin Over Current Estimate (MOCE), the equivalent to the risk margin within the Insurance Capital Standard; and 2) a modified version of the current cost-of-capital (CoC) approach. The QIS data has been extremely helpful in allowing the PRA to assess different calibrations of these approaches, under different economic conditions, and to compare the impacts across firms and sectors.

The PRA held a risk margin roundtable event on Monday 7 March. There was discussion of the pros and cons of the two main approaches, but no consensus preference on methodology was expressed by participants. Participants gave a clear message that making the risk margin calculation very granular (for example by applying different calibrations to different individual lines of business) would add unwarranted complexity. However, it was also noted that a single calibration applied to all business could potentially result in inappropriate outcomes, such as excessively high risk margins for shorter-tail products. In addition, it was noted that although a reduction in the size of the risk margin may reduce firms' incentives to use reinsurance (particularly in respect of longevity risk), firms may continue to maintain such reinsurance arrangements as part of their overall business strategies.

The PRA also hosted a risk margin discussion with members of the Association of Financial Mutuals on Wednesday 16 March. This allowed discussion of how risk margin reform may affect the mutual sector on account of its particular products and commercial environment.

The PRA will draw on all of these inputs when developing its own views on risk margin reform.

Internal Models

The PRA held a roundtable event on internal models on Wednesday 16 March. Participants were supportive of simplifying the Test & Standards (T&S) that firms' models must meet for internal model approval. They also encouraged the PRA to allow a range of approaches in meeting the T&S, and would welcome further guidance from the PRA on how firms can meet the requirements in a proportionate manner. Participants requested additional clarity on the PRA's 'philosophy' of internal models (e.g. more standardisation or bespoke models) and the extent to which the PRA's approach could support diversity in modelling approaches and outputs. Participants were supportive of the potential use of safeguards as part of the model approval process in certain circumstances, especially if they facilitated quicker model approvals and supported additional flexibility and dynamism of models to respond to the needs of their businesses.

Potential improvements to the application process (including for internal model changes) and ongoing monitoring of internal models were also discussed. Roundtable participants considered a more streamlined process for reviewing major model changes to be useful, with more PRA feedback on the content and quality of applications. We heard firms' requests for faster review and processing of future applications; along with the benefit of the PRA making use of external resources, where necessary.

Participants were supportive of the introduction of analysis of change as part of a reformed internal model framework. However, they cautioned that its value may be diminished if made overly standardised through compulsory reporting templates. Finally, participants were keen that the PRA re-consider its approach to monitoring model drift and also the requirement for internal model firms to calculate and annually report SCR figures on standard formula basis.

We will consider the views of participants in developing our proposals to reform the internal model framework.

Transitional Measures on Technical Provisions (TMTP)

The QIS collected data showing how firms' TMTP would change after allowing for the impact of the QIS scenarios on the risk margin and fundamental spreads (as discussed above), as well as under changes in market conditions. The data has helped the PRA understand how TMTP could change in value, how the drivers of TMTP may change, and to compare the impacts across firms.

The PRA held a roundtable event on Tuesday 19 April to seek industry views on the objectives for TMTP reform and how these might be achieved. Participants agreed the PRA should simplify the process of calculating TMTP, with a number of participants arguing in favour of removing the Financial Resource Requirement (FRR) test — a check to make sure that post TMTP firms have at least the same amount of resources under Solvency II as would have been required under Solvency I.

Participants supported reforms which would move away from placing reliance on legacy Solvency I models and instead develop a simplified way of calculating TMTP based on drivers bespoke to the firm. In such a case it was acknowledged by participants that the PRA would initially need to approve firms' individual approaches, however participants also envisaged that firms should then be permitted to recalculate TMTP on a regular basis with limited need for further discussion with their supervisors.

When considering how to achieve the right level of risk sensitivity for TMTP, participants recognised the question may ultimately depend on the outcome of reforms to the risk margin and the matching adjustment. Participants also called for reforms to processes around TMTP, in particular, a relaxing of the requirement for Audit Committees to sign off each recalculation of TMTP. We also discussed potential for complexity to arise in the recalculation to TMTP following business transfers and restructuring, and how this might be looked at in any policy reforms.

The PRA will consider the QIS results, along with the views that participants presented at the roundtable, when developing its proposals to reform TMTP.