

Solvency II newsflash

PRA publishes its Quantitative Impact Study



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On Tuesday 20 July 2021 the Prudential Regulation Authority (the ‘PRA’) published the Quantitative Impact Study (‘QIS’) which is expected to be a key stage in the much anticipated post-Brexit review of Solvency II. The full publication can be found [here](#).

Background on the review of Solvency II

Now that the UK is no longer directly subject to the Solvency II Directive, there has been much speculation about how it may shape the regulatory regime to make it more aligned with the characteristics of the UK insurance industry. The first key milestone in this review was Her Majesty’s Treasury’s (‘HMT’) [Call for Evidence](#) which was published in October 2020 and asked for views on various aspects of the Solvency II regulatory regime. As we discussed in a [previous Newsflash](#), the Call for Evidence did not contain any indication of changes that were likely to be supported by the Government or the PRA, but did provide an insight into the aspects of the existing framework that would likely be considered.

Earlier this month, HMT published an initial [response to the Call for Evidence](#). Again, the document did not propose any specific changes to the current regime – those will be primarily for the PRA to decide – but it did indicate a number of principles that would likely be supported by the Government. These included reforms to the Risk Margin, the Matching Adjustment (the ‘MA’), the Internal Model application process and reporting requirements. The paper also provided a summary of the responses received to the Call for Evidence which provide insights into the general views held across the industry.

The QIS

With the Government having now indicated the areas in which it may support changes being made and the results of the Call for Evidence published, the next key milestone is the PRA’s QIS. The aim of the QIS is to understand the likely impacts of potential changes to the regulations on the balance sheets of a sample of UK insurers. The PRA has stressed that the requests made to insurers should not be interpreted as likely changes and notes that a number of different approaches and designs will be tested and reviewed before any proposals will be made.

The QIS focusses heavily on the areas where the Government has indicated it would be prepared to consider reforms, such as the MA and Risk Margin. More generally, the focus of the QIS is on the aspects of the current regime that the PRA sees the most scope for changes to be made and those for which quantifiable impacts would be expected to be reasonably straightforward to determine. While the main themes covered are the Risk Margin, the MA and the Transitional Measure on

Technical Provisions ('TMTP') the PRA has noted that more qualitative questions will be issued to participants in order to gather opinions on some aspects that are less easily quantified. For example, these might cover aspects such as the application processes for Internal Models and MA asset eligibility requirements.

Participants

The PRA has contacted a number of individual firms to invite them to take part. However, the QIS templates have been made available on the [Bank of England website](#) and all UK-regulated firms are encouraged to take part. The PRA and HMT have agreed that the Standard Formula methodology should not be included within the QIS – instead focussing on areas such as the Risk Margin and MA. However, Standard Formula firms have been encouraged to take part which may suggest that there are aspects of the Standard Formula methodology which the PRA would be open to changing despite not being a specific focus of the QIS.

Participating firms have been warned that they will be asked to provide granular data and "high-quality" data subject to internal validation within relatively short timelines – firms have only 3 months in which they must i) decide whether to participate; ii) plan their response and find the resource required; iii) produce the requested information; and iv) submit their response via the Bank of England Electronic Data Submission portal.

Risk Margin

Insurers will be pleased, if unsurprised, to see the Risk Margin included as one of the key components of the QIS as it is one of the aspects of Solvency II that is most frequently mentioned in discussions around Solvency II reforms. In the Dear CEO letter from Charlotte Gerken – Executive Director of Insurance at the PRA – published alongside the QIS, the PRA notes that it broadly agrees with the Government and the insurance industry that in the current low-rate environment Risk Margins are generally too high and are also too sensitive to movements in interest rates.

The PRA also notes that, while there is consensus that the current methodology should be amended, there is no agreement on what it should be replaced with. Consequently, QIS participants have been asked to provide specific data (such as the projected run-off of Solvency Capital Requirements ("SCRs") in respect of non-hedgeable risks currently used in the Risk Margin calculation) to allow the PRA to do its own quantitative analysis on a range of possible approaches. Additionally, participants are asked to calculate balance sheet impacts for two different specified approaches.

The first approach (or 'Scenario A') involves assessing the impact of calculating the Risk Margin in a similar manner to Margin Over Current Estimate ('MOCE') that is used in International Capital Standards ('ICS'). The MOCE is calculated using a value-at-risk approach – i.e. in a similar manner to the current SCR calculation. The key differences between the calculation of the SCR and the calculation of MOCE are:

- The SCR covers all risks, whereas MOCE would cover only non-hedgeable risks (as is the case in the current Risk Margin calculation);
- The SCR is calibrated to the 99.5th percentile, whereas the PRA has asked firms to use the 85th percentile for life insurance liabilities and the 65th percentile for non-life liabilities for the calculation of the MOCE; and
- The MOCE would be approximated from the 99.5th percentile for non-hedgeable risks, using the assumption that losses are normally distributed.

Given these points – and in particular the assumption that losses are normally distributed, regardless of the specific loss distribution that individual insurers may have used to calculate their SCRs - we'd expect the MOCE for a life insurer to be c.40% of the total SCR in respect of non-hedgeable risks.

A further new feature of the MOCE is the allowance for long-term guarantee measures such as the MA and Volatility Adjustment – currently insurers cannot take credit for these within the Risk Margin calculation.

The second approach (or ‘Scenario B’) is more similar to the current cost of capital approach, but allows for tapering in the SCR at longer durations. The approach is identical to that proposed by EIOPA following its 2020 review of Solvency II, which we covered in a [previous Newsflash](#). This approach allows for the cost of capital to vary over time which might be expected to reduce both the size of the Risk Margin and its sensitivity to interest rates compared to the current approach – particularly for firms with long-duration liabilities.

The Risk Margin is calculated as:

$$\text{Cost of capital} * \sum_{t \geq 0} \frac{SCR_t * \max(\lambda^t, 0.5)}{(1 + r_{t+1})^{t+1}}$$

Lambda has been set at 0.975 within the QIS, which is at the upper end of the range of the values suggested when such a tapering approach has been discussed previously – meaning that the tapering effect may have less of an impact than some insurers might have hoped for.

As with the current approach, within Scenario B firms should only include the SCR for non-hedgeable risks and the MA and VA should not be applied.

Despite these two detailed approaches being included in the QIS, the PRA has emphasised that insurers should not assume that the current approach will definitely be replaced by either a MOCE or tapering approach – the results provided will be used alongside the PRA’s own analysis in determining a preferred solution.

Matching Adjustment

While the PRA supports the fundamental principles behind the MA, it has some concerns that under the current methodology, insurers may be taking too much capital benefit up front for the ‘illiquidity premium’ which may still include some element of credit risk. Charlotte Gerken also noted that the make-up of MA portfolios has changed significantly since the introduction of Solvency II – with many insurers now holding material allocations to illiquid assets that are reliant on firms’ internal ratings approaches, which potentially introduces inconsistencies across the industry. The results of HMT’s Call for Evidence also highlighted a number of aspects of the MA process which the PRA believes are worth exploring as part of the review.

Within the QIS, participants are asked to carry out MA calculations under a prescriptive methodology. There are similarities to the current approach – such as the treatment of government bonds remaining unchanged – but there are also some key differences. In particular, there are some changes to the Fundamental Spread calculation which in the QIS comprises:

- An allowance for expected defaults using the same methodology as the current approach;
- A percentage of the spread on the asset;
- A percentage of the average spread over the previous five years on an index of assets with the same credit rating; and
- For illiquid assets, an allowance for valuation uncertainty, which depends on the position of the asset in the IFRS fair value hierarchy.

As with the Risk Margin, QIS participants are asked to carry out the MA calculations under Scenarios A and B, with the parameters to be applied in the Fundamental Spread calculation varying under each Scenario.

Given the PRA's potential concerns about the illiquidity premium potentially including some residual credit risk, we might expect that any reforms to the MA calculation will reduce the size of the MA for many asset classes which is unlikely to be well-received by the industry without some offsetting change elsewhere.

The QIS requirements are separate to the PRA's data request issued to MA firms on 16 June, but the QIS instructions do state that QIS responses should be consistent with data provided in response to the earlier request.

The PRA and Government have also recognised the view of the industry that the current MA asset eligibility criteria are overly restrictive. While this is not an area that appears to be covered by the QIS templates, we might expect that it would be included within the more qualitative questions that will be issued to participants in August.

Sensitivities

QIS participants are also required to provide balance sheet impacts of a number of sensitivities including parallel shifts in the risk-free rate, widening of credit spreads, credit downgrades and changes to the VA. While Charlotte Gerken's letter sets out the reasons for focussing on the Risk Margin and MA, there is no equivalent narrative on TMTP and so it is less clear what issue is that the PRA hopes to use these sensitivities to solve.

Next steps

The QIS was officially published on 20 July, and firms have until 20 October to provide responses should they decide to participate. We'd then expect the PRA to require at least the rest of 2021 to analyse responses. While there is an expectation in the industry that a comprehensive package of reform proposals will be published in the first half of 2022, insurers should remember that the QIS forms only one part of the review and so there may well be further consultation required before a more concrete set of proposals are published.

We continue to speak to a wide range of insurers across the UK and abroad about Solvency II developments and how this could impact their business. If you would like to discuss these points further, please get in touch with one of the authors of this Newsflash.