

# Taking the strain out of technical provisions

## Countdown to Solvency II

Getting to grips with the technical provisions is proving to be one of the toughest and most time-consuming aspects of Solvency II. Are there any ways to make it simpler?

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*While the technical provisions are undoubtedly a challenging area of Solvency II implementation, many insurers may be making them more complicated than they actually need to be. How can you cut through the complexity and cut down on the workload? By seeing the technical provisions as solely a back office issue, many firms may also be failing to take account of the wider implications for profitability, financial reporting and investor relations. How can you address the big picture?*

Last year's quantitative impact study (QIS 5) and the findings published in the recent European Insurance and Occupational Pensions Authority (EIOPA) report<sup>1</sup> provide a telling indication of just how many moving parts are involved in calculating the technical provisions. Imagine having to do that at least four times a year and still find time for your day job.

The technical provisions are the principal building block of the Solvency II balance sheet. Given their crucial importance, supervisors won't just be scrutinising the numbers, but also how they're produced. A dozen of the consultation papers for Solvency II are devoted to providing implementation guidance on the technical provisions, ranging from the calculation methodologies to the requirements

<sup>1</sup> EIOPA Report on QIS 5, published on 14.03.11.

on data, validation and documentation. The market-consistent approach to provisioning will be a new departure for many insurers. Even companies in countries such as the UK that have a broadly comparable approach to the Solvency II internal model will see crucial differences in this area. The complexities are compounded by uncertainty, with a number of key areas still to be finalised, as was highlighted in EIOPA's QIS 5 report.

The draft transitional measures ('Omnibus II') provide little respite from this aspect of implementation. From the outset, you'll have just a few weeks after each quarter-end to update your technical provisions ready for disclosure to your supervisor, making this as much of a logistical as a technical issue. The need to explain the differences between the Solvency II technical provisions and financial reporting GAAP reserves, and how this affects the reported numbers, will also have a crucial impact on investor relations, making this as much of a business issue as a back office one.

In this article, we look at some of the ways to make introducing the Solvency II technical provisions quicker, simpler and more sustainable, and how to integrate them into other key aspects of your business management and disclosure. Some of the technical questions are specific to life or non-life insurers and are addressed separately. The organisational and investor relations challenges are broadly comparable and are addressed together.

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## Non-life

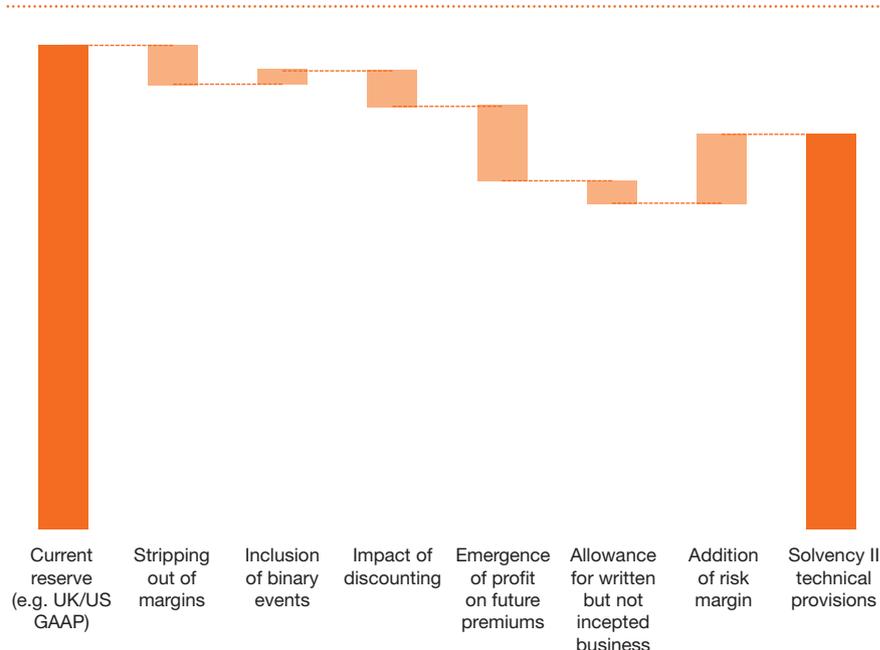
### Reconciling the differences

By way of illustration, Figure 1 sets out the main differences between UK GAAP reserving and Solvency II technical provisions for non-life insurance and their likely impact on the final numbers. While some aspects of the evaluation are higher under Solvency II and some lower, most insurers are finding that their Solvency II figures are lower overall, with the allowance for profit on unearned premiums being the main reason.

For practical reasons, many companies are likely to use their financial reporting GAAP reserves as the starting point for their technical provision calculations and adjust accordingly, which underlines the importance of involving finance and accounting teams in Solvency II implementation from the outset.

The extent of the divergence will make it difficult to reconcile the two sets of numbers. You'll need to be able to explain the differences and their impact or you could find yourself facing some awkward questions from analysts and rating agencies. The structure set out in Figure 1 will provide a good way to break down these conversations with the markets.

**Figure 1: Comparing non-life GAAP reserving and Solvency II technical provisions**



Source: PwC

### Cutting through complexity

Solvency II introduces a range of new concepts and approaches. Of these, the risk margin and inclusion of binary events are creating some of the biggest headaches for non-life insurers. To calculate the risk margin, you need to know your current and future solvency capital requirement (SCR). However, the SCR calculation depends on prior knowledge of your risk margin. Solving this conundrum is stretching many firms. There may be an easier way. The risk margin can be approximated by assuming that it's a fixed proportion of the best estimate and can therefore be estimated through a simple gross-up adjustment.

Some companies are spending a huge amount of time, energy and money trying to come up with complex formulae for evaluating the impact of binary events such as a future catastrophe, a large and disputed claim, or a future latent liability comparable to the emergence of asbestosis. In fact, given the high level of uncertainty that exists in quantifying the value of some binary events, especially in relation to future latent claims, there's a real danger that all this effort and elaboration will simply result in a figure that is of spurious accuracy. A perfectly reasonable, proportionate and certainly more straightforward answer could be derived from the original pricing analysis for catastrophes, evaluating the mean probability of different outcomes for disputed claims, or benchmarking for latent liabilities.

## Life

Across Europe, life insurers are using a variety of different methods for setting technical provisions under Solvency I. The adoption of embedded value supplementary reporting and internal economic capital models in recent years mean that many life insurers have introduced ways of measuring technical provisions that are broadly in line with Solvency II. As the QIS 5 exercise demonstrated, however, a number of technical uncertainties remain, and most companies still have some way to go before evaluation processes are up to speed.

### Contract boundaries

The contract boundary determines the cash flows to be included in the technical provisions. The approach used in QIS 5 differed from the way many insurers manage their business and how their systems are set up. The eventual methodology has yet to be finalised. The outcome will have an important impact on systems development and the final numbers.

### Illiquidity premium

QIS 5 responded to industry calls by including a formula-based approach to calculating the 'illiquidity premium' within the discount rate. The inclusion of such a premium and how it's calculated will have an important influence on the magnitude of the technical provisions, overall solvency and asset-liability management for 'spread-based' products, such as annuities in payment, in particular.

There are a number of issues still to be resolved following QIS 5. There's a risk that a formula may not be included in Solvency II. Instead, EIOPA may be given the power to decide when there are stressed conditions for the illiquidity premium to be applied, which would cause practical and commercial challenges in a framework designed to assess risk and solvency on a regular basis.

In addition, it wasn't always clear how the illiquidity premium was applied to particular products in QIS 5, leading to a variety of interpretations and mechanically, the premium was also applied to spot (rather than forward) discount rates, leading to technical difficulties. These issues will need to be addressed before Solvency II is implemented.

### Treatment of long-term guarantees

Specific areas that will need to be resolved include the use of market data, as opposed to model approaches, in setting financial variables. More generally, there'll be pressure to ensure that the way risks are evaluated doesn't make guaranteed products uneconomic, given their importance to pensions and long-term savings.

### Transitional measures

The proposed transitional measures may have a significant impact on technical provision calculations in the initial years of Solvency II. This might possibly include allowing companies to continue with the Solvency I discount rate methods for a period of time – as was tested in QIS 5. However, it will be some time before the transitional provisions are finalised, and it would be unwise to assume too much at this stage.

### Dealing with the uncertainty

With the exception of contract boundaries, the areas of uncertainty are largely matters of model calibration rather than methodology. As a result, you can now move forward with the production and industrialisation of the processes needed to calculate the technical provisions. For contract boundaries, it's important to identify the product lines where the definition significantly differs from IFRS or other measures that are embedded into administration systems and actuarial models. This would ensure that when the guidelines are eventually finalised they can be rapidly implemented.

## Comparing Solvency II and IFRS Phase II

With a final standard on IFRS for insurance contracts due to be published later in the year, it will be important to consider how the Solvency II technical provisions will differ from IFRS contract liabilities and the impact on reporting systems and investor relations. The chart below outlines the main differences and their significance:

| Area                     | Solvency II <sup>1</sup>           | IFRS Phase II <sup>2</sup>                             | Significance | Observation  |
|--------------------------|------------------------------------|--|--------------|--|
| Definition and scope     | All contracts                      | Insurance plus some participating investment contracts | Red          | <ul style="list-style-type: none"> <li>The measurement of investment contracts in IFRS is likely to be significantly different to Solvency II.</li> <li>In IFRS, participating contracts are not automatically in the insurance standard.</li> </ul>   |
| Recognition              | Party to contract                  | Party to contract                                      | Green        | <ul style="list-style-type: none"> <li>Similar requirements.</li> </ul>  |
| Unbundling               | No                                 | Not 'closely related'                                  | Red          | <ul style="list-style-type: none"> <li>The scope of unbundling in IFRS is not clear. However, requirements to unbundle will have significant systems, data and process implications for some insurers.</li> </ul>  |
| Cash flows               | Prescribed                         | Incremental at portfolio level                         | Orange       | <ul style="list-style-type: none"> <li>There is the potential for certain cash flows, for example overhead expenses and tax to be different between Solvency II and IFRS.</li> </ul>   |
| Discount rate            | Risk-free plus illiquidity premium | Risk-free plus illiquidity premium                     | Orange       | <ul style="list-style-type: none"> <li>Potential grandfathering arrangements in Solvency II would significantly differ from IFRS.</li> <li>The discount rate is prescribed in Solvency II. It is likely that the Solvency II discount rate will be used as the starting point for determining the IFRS discount rate.</li> </ul> |
| Risk adjustment          | Prescribed 6% cost of capital      | One of three methods                                   | Orange       | <ul style="list-style-type: none"> <li>IFRS permits one of three methods, while Solvency II prescribes a 6% cost of capital approach. More diversification benefits will be permitted in Solvency II.</li> </ul>   |
| Residual margin          | No                                 | Eliminate day-one gain                                 | Red          | <ul style="list-style-type: none"> <li>Significant difference. The level of granularity required for the residual margin will impact modelling and data requirements.</li> </ul>   |
| Acquisition costs        | Expensed as incurred               | Contractual cash flows                                 | Orange       | <ul style="list-style-type: none"> <li>For IFRS, incremental acquisition costs are included in contractual cash flows. Additional data and modelling required compared to Solvency II.</li> </ul>  |
| Short duration contracts | No difference                      | Unearned Premium Reserve                               | Red          | <ul style="list-style-type: none"> <li>For IFRS, the Unearned Premium Reserve (UPR) model is mandatory for pre-claim liabilities with an onerous contract test at the portfolio level (by similar date of inception). There is no equivalent concept in Solvency II.</li> </ul>  |

<sup>1</sup> Solvency II as defined in QIS 5, 2010 <sup>2</sup> IFRS for Insurance Contract as defined in the Exposure Draft, 2010

### **Speeding up delivery**

The underlying challenge is timing. Over-reliance on manual processes will make it difficult to meet the required timescales and make the process much harder to control and document. It will also sharply reduce the time actuarial and finance professionals can devote to advising management. Further automation in areas such as data retrieval and manipulation is therefore crucial, though it's not the whole answer, especially as so many systems and areas of the business will need to be involved.

It's therefore important to identify the key outputs and then map them back to data sources to identify gaps, ensure quality standards are enforced and eliminate any logjams along the critical path. It's also important to focus resources on the areas that are likely to have the most material impact on the eventual numbers, including significant risks such as catastrophe exposures or areas that could give rise to potential challenge, such as management assumptions. In contrast, other less material risks may have limited likelihood or impact and a simplified approach would be proportionate.

### **Bringing everyone together**

This should ideally be a collaborative process that brings together all the key stakeholders, including actuaries, finance, auditors, boards and business teams. For example, the assumptions used by reserving and internal model teams should be consistent. To meet the use test, you'll also need to make sure that your reserving process is embedded within the business and that the assumptions reflect those used in areas such as pricing. This will require buy-in from management, underwriters and claims staff.

### **More for less**

There's no need to make the technical provisions any harder than they already are. Making best use of evaluations that are already in place and taking a pragmatic approach to some of the more complex questions can help to save a considerable amount of effort, which could be diverted to potentially more material areas. The underlying challenge is how to create a swift, streamlined and repeatable process. From a business perspective, you'll need to consider the impact on your numbers and explain why there are likely to be differences with the legacy financial reporting GAAP, Solvency I or IFRS figures. The key is getting all the stakeholders together and then assessing what the crucial deliverables are, whether they can be simplified and how they can eventually be built into business as usual.

### **Giving you the edge**

PwC is helping a range of insurers to get to grips with the practicalities of Solvency II implementation. If you'd like to know more about how to simplify and accelerate your technical provision evaluations and embed them into business as usual, please call:



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