

# EIOPA report on the fifth Quantitative Impact Study (QIS5) for Solvency II

March 2011



EIOPA has published the results of the intensive fifth Quantitative Impact Study conducted across reinsurance and insurance undertakings throughout Europe during 2010. While the report demonstrates increased participation in the study it also highlights significant work which needs to be done in order to reduce complexity in the guidance and to ensure consistency across territories.

## INTRODUCTION

On 14 March 2011 EIOPA issued its report on the fifth Quantitative Impact Study (QIS5) for Solvency II. The study was conducted during the second half of 2010 in order to assess the impact and practicability of the potential quantitative requirements under the new insurance directive Solvency II.

In general, EIOPA has commented that although the reported surplus across Europe under QIS5 is roughly 12% lower than under the current regime, the financial position of the (re)insurance industry remains comfortable. Almost half of all participants in the QIS5 exercise held own funds equivalent to at least twice their SCR.

However, EIOPA has also identified that 15% of participants failed to fully cover their SCR, while 5% did not meet their MCR and hence would come under immediate regulatory supervision. 8.8% of the participating undertakings had a solvency ratio of less than 75%. Ireland is shown as having the 4<sup>th</sup> highest proportion of undertakings with less than 75% SCR coverage.

The report highlights a number of areas where further work and guidance will be needed to address the complexity of certain calculations and to ensure that undertakings apply the guidance in a consistent manner across Europe.

To assist you in digesting this lengthy report, Milliman has produced the following short summary highlighting the key results and findings from the EIOPA report. The full report is available on [eiopa.europa.eu](http://eiopa.europa.eu).

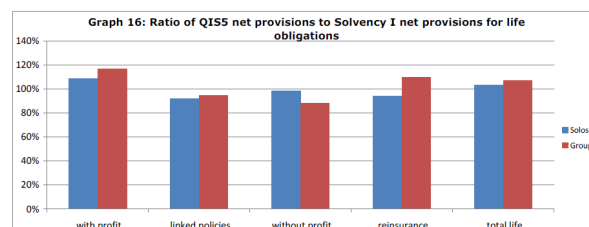
## VALUATION OF ASSETS AND LIABILITIES

In general, EIOPA has highlighted broad support for the market-consistent approach to valuing assets and liabilities under QIS5 and found that this was applied effectively. However, there are a few areas where inconsistent treatment was noted, in particular there was a wide variety in the way deferred tax assets were recognised and valued.

## VALUATION OF TECHNICAL PROVISIONS

Overall gross technical provisions for all lines of business decreased by 1.4% from Solvency I to QIS5.

For life insurance business, net technical provisions in QIS5 increased in comparison with Solvency I. This was mainly caused by the decrease in reinsurance recoverables. The graph below shows a comparison of life net provisions for all QIS5 participants under QIS5 and Solvency I.



While EIOPA notes the general support for the approach to technical provisions, a number of areas have been highlighted for further development:

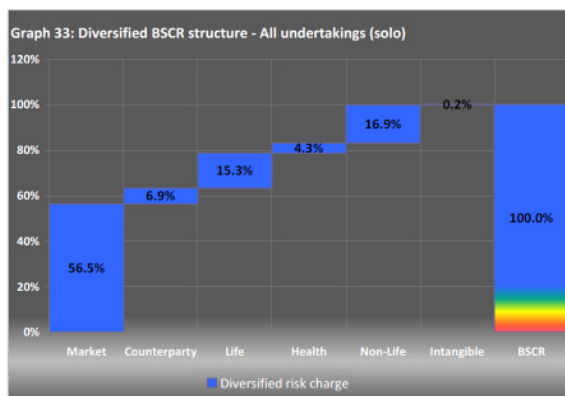
- **Risk margin** – the calculation by the full approach is considered too complicated.

Interestingly, EIOPA comments that no major concerns were raised over the current cost of capital (of 6% per annum).

- **Contract boundaries** – further guidance will be issued to address the perceived lack of clarity in the definition.
- **Illiquidity premium** – the introduction of the illiquidity premium was found to reduce technical provisions by only 1% overall (although significant variations were observed in different markets). Inconsistent application of the illiquidity premium was noted and many participants cited technical difficulties in its application. Further guidance will be issued in due course, potentially limiting the application of the illiquidity premium to 0%/100% buckets.
- **Segmentation by lines of business** – the value of including a second level of segmentation for life business seems limited.
- **Loss absorbing capacity of technical provisions and deferred taxes** - Only 60% of participating undertakings calculated a loss absorbency adjustment, which may mean that the SCR is overstated. EIOPA notes that this indicates a need for additional guidance.

### SOLVENCY CAPITAL REQUIREMENTS

The main risk drivers of the SCR were highlighted as the market sub-risk modules (making up 67% of the SCR for life undertakings) and the non-life underwriting sub-risk modules (>50% of the SCR for non-life undertakings). The chart below shows the composition of the SCR for Europe as a whole for solo undertakings:



A number of areas of development were highlighted by EIOPA in respect of the SCR calculation, including:

- reducing the complexity of the market risk module, in particular the spread risk sub-module and the need to adopt a look-through approach on unit-linked business (the counterintuitive approach to currency risk was also highlighted as incentivising undertakings to hold excess assets in the reporting currency rather than the currency of the liabilities);
- simplifying the approach to counterparty default risk (and in particular the adjustments in respect of the risk mitigation effects);
- improvements in the lapse risk sub-module where the need for per-policy level calculations and segmentation by surrender strain were highlighted as problematic;
- standardising the health catastrophe scenarios; and reducing the complexity of the non-life catastrophe sub-module.

### OWN FUNDS

Of the reported own funds, almost 92% were classified as Tier 1 and as such were freely available to meet capital requirements. While QIS5 attempted to test the impact of including no transitional provisions for recognising hybrid capital and subordinated debt as basic own funds, it was not possible to reach a conclusion on this due to incomplete and incorrect submissions.

QIS5 included the incorporation of expected profits arising from future premiums (EPIFP) as a Tier 1 item within own funds. While only a small number of participants performed the required calculations, for those that did, this item was found to account for an average of 20% of Tier 1 own funds (and in some cases over 50%). In Ireland the EPIFP represented almost 30% of Tier 1 capital. Despite this, QIS5 saw a significant amount of relegation of own fund items from Tier 1 to Tier 2 (resulting from own funds in excess of the coverage of restrictive reserves) and Tier 1 to Tier 3 (as a result of the adjustment for deferred taxes).

### INTERNAL MODELS

Surprisingly, for solo undertakings, the SCR calculated using the standard formula was found to be consistent with that using an internal model. However, significant differences were seen for groups where capital requirements calculated using internal models were, on average, 80% of those calculated under the standard formula. Compared

to Solvency I, the group results show significant reductions in surplus of around 43% for groups using the accounting-consolidation method (compared to an increase of 6% when using an internal model) and lower still for those using the deduction & allocation method.

EIOPA has commented that no firm conclusions can be drawn from the use of internal models in QIS5 due to the small number of models used (and the even smaller number of those which would be approved). Despite this, EIOPA does note a degree of confusion over the scope of internal models, either between full and partial models or the differences between developing an internal model and merely using undertaking-specific parameters.

Most undertakings indicated that they would opt for the standard formula approach to operational risk.

## SUMMARY

In general, the increased participation for QIS5 relative to QIS4 demonstrates that the industry is successfully engaging with EIOPA on the development of Solvency II. This should help create a final Solvency II solution that is aligned with companies' needs and expectations.

QIS5 has identified a number of areas where complexity should be reduced, particularly surrounding a number of the SCR sub-modules. EIOPA has commented that it is already working on some of these areas and will issue further guidance on this in due course. At the same time, EIOPA has identified a number of areas where the current guidance is either unclear or has been interpreted differently across territories. Further work will be done on these areas to ensure consistency in the final guidance.

In the press release EIOPA concluded that transitional measures are needed to ensure a smooth transition from Solvency I to Solvency II. Such transitional measures should be of limited time and scope which would not disincentivise the move to Solvency II but at the same time would deem the measures effective.

QIS5 is expected to be the last in the series of impact studies, and as such any further improvements to the Solvency II regime will be through *ad hoc* work and tests leading to the finalisation of the Level 2 Implementing Measures later this year and the subsequent consultation on the Level 3 guidance. Companies are encouraged to engage fully in these further consultations to

ensure that the final Solvency II guidance provides a solution that is both sound and workable.

## ABOUT MILLIMAN

Milliman is among the world's largest independent actuarial and consulting firms. Founded in 1947, the company currently has 54 offices in key locations worldwide employing more than 2,400 people.

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## CONTACT

If you have any questions or comments on this briefing paper or any other aspect of Solvency II, please contact any of the consultants below or speak to your usual Milliman consultant.

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