Assessing the Appropriateness of the Standard Formula – Survey Results August 2015

INTRODUCTION

Under the Central Bank of Ireland's *Guidelines on Preparing for Solvency II* all insurance and reinsurance undertakings are required to prepare a Forward Looking Assessment of Own Risks ("FLAOR") in 2014 and 2015. Those companies rated as high or medium-high impact under the Central Bank's PRISM rating system, which are not in either the pre-application or application process for an internal model, are required from 2015 to perform an assessment of whether their risk profile significantly deviates from the assumptions underlying the standard formula Solvency Capital Requirement ("SCR").

This requirement will apply to all companies from 2016 onward. We are therefore expecting an increased focus in this area in 2015.

In order to gain some insight into companies' progress in relation to assessing the appropriateness of the standard formula for their risk profile in their 2015 FLAOR, we have conducted an analysis of the responses of twenty seven standard formula companies who agreed to participate in our survey. The survey results have been divided between high / medium-high, and low / medium-low, PRISM rated companies. This note summarises our findings from this analysis.

EIOPA GUIDANCE

The FLAOR is the precursor to the Own Risk and Solvency Assessment (ORSA) that will come into effect in 2016. The explanatory text in EIOPA's Guidelines on the ORSA state that the assessment of whether the risk profile deviates from the assumptions underlying the SCR calculation is expected to include:

- an analysis of the risk profile and an assessment of the reasons why the standard formula is appropriate, including a ranking of risks;
- an analysis of the sensitivity of the standard formula to changes in the risk profile, including the influence of reinsurance arrangements, diversification effects and the effects of other risk mitigation techniques;
- an assessment of the sensitivities of the SCR to the main parameters, including undertaking-specific parameters;
- an elaboration on the appropriateness of the parameters of the standard formula or of undertaking-specific parameters;
- an explanation why the nature, scale and complexity of the risks justify any simplifications used;
- an analysis of how the results of the standard formula are used in the decision making process.

The EIOPA explanatory text also states that due consideration needs to be given to differences due to risks that are not considered in the standard formula and differences due to risks that are either under or overestimated by the standard formula compared to the risk profile.

SURVEY FINDINGS

Observations from the analysis of the responses to our survey include the following:

2014 FLAOR

63% of high / medium-high rated companies surveyed did not include an assessment of whether or not the company's risk profile significantly deviates from the assumptions underlying the SCR in their 2014 FLAOR. The remaining 37% carried out this assessment on a qualitative basis only.

The fact that over 60% of high or medium-high rated companies surveyed did not include an assessment of standard formula appropriateness in their 2014 FLAOR indicates that there is likely to be significant work required in 2015 in order to meet this requirement.

Somewhat surprisingly, over 45% of low / medium-low rated companies surveyed included an assessment of the significance of the deviation in their risk profile from the assumptions underlying the SCR, despite not being required to do so until 2016. Approximately 20% of low / medium-low rated companies included a quantitative assessment as well as a qualitative assessment.

2015 FLAOR

As expected, all high / medium-high rated companies plan to include an assessment of standard formula appropriateness in 2015, as required under the Preparatory Guidelines. However, only 50% expect to carry out the assessment both quantitatively and qualitatively.

90% of low / medium-low rated companies surveyed intend to include an assessment of standard formula appropriateness in their 2015 FLAOR. As mentioned, this is not strictly required until 2016. 40% of low or medium-low companies surveyed intend to carry out both a qualitative and a quantitative assessment.

Definition of Significant

70% of all companies surveyed have not yet defined what constitutes a significant deviation between their risk profile and the assumptions underlying the standard formula. 15% of respondents plan to define a significant deviation as 10-20% of the SCR. 7% of respondents plan to define ‘significant’ in qualitative terms only. 7% plan to use a company-specific definition of ‘significant’.

Sensitivity Analysis

In their 2015 FLAOR, 55% of high / medium-high rated companies surveyed do not intend to include an analysis of the sensitivity of the standard formula to changes in the company's risk profile, including the influence of reinsurance arrangements, diversification effects and the effects of other risk mitigation techniques. This is surprising given the requirement for high / medium-high rated companies to include an assessment of standard formula appropriateness in their 2015 FLAOR. 30% intend to do so quantitatively and qualitatively and 15% intend to carry out a qualitative assessment only.

Despite high / medium-high rated companies being required to assess standard formula appropriateness in their 2015 FLAOR, it is unclear from the responses how exactly this will be done. For example, it is difficult to see how this can be done without an analysis of the sensitivity of the standard formula to changes in the company's risk profile yet 55% of high or medium-high respondents stated that they do not intend to do this.

30% of low / medium-low rated companies surveyed expect to carry out this assessment both quantitatively and qualitatively, with a further 45% carrying out a qualitative assessment only.

Appropriateness of Parameters

45% of low / medium-low rated companies surveyed do not intend to carry out an assessment of the sensitivities of the SCR to the main parameters of the standard formula in 2015. Furthermore, 55% do not intend to include an elaboration on the appropriateness of the parameters of the standard formula.

45% of high / medium-high rated companies surveyed are also not intending to assess the sensitivities of the SCR to the main parameters nor do they intend to include an elaboration on the appropriateness of the parameters of the standard formula.

It is interesting to note that almost half of high / medium-high rated respondents using the standard formula are not planning to include an assessment of, or elaboration on, the appropriateness of the standard formula parameters in order to assess the appropriateness of the standard formula in their 2015 FLAOR.

SCR Over / Under Estimation

Low / medium-low rated respondents expect most aspects of the standard formula do not significantly over or under-estimate the risks compared to their risk profile. A few low / medium-low rated respondents identified potential areas for over-estimating the risks relating to the operational risk, life/non-life underwriting risk and counterparty default risk modules.

30% of high / medium-high rated companies surveyed expect that operational risk is significantly understated by the standard formula. 20% of non-life respondents expect non-life risk to be significantly over estimated by the standard formula.

Companies will face the challenge of addressing any significant deviations identified in their FLAOR, such as operational risk.

Approach to Addressing Significant Deviations

Low / medium-low rated respondents are generally not expecting to find any significant deviations. However 25% responded that they will work to align their risk profile with the standard formula if significant deviations arise.

Asked whether they would consider de-risking if significant deviations are identified, 60% of high / medium-high rated companies indicated that they would. Asked whether they would consider aligning their risk profile with the standard formula or developing a (partial) internal model in order to address deviations, 30% indicated that they would.

Capital Needs Compared to TPs / SCR

All low / medium-low rated companies surveyed intend to use the same approach to calculating their capital needs as defined in the FLAOR ('FLAOR Capital') as is used in their SCR and Technical Provisions calculations in the following respects:

- Ultimate forward rate and yield curve extrapolation
- Volatility adjustment
- Confidence level

Approximately 20% of low / medium-low rated companies surveyed intend to use different approaches in their FLAOR for the time horizon and contract boundaries applied compared to the SCR and Technical Provisions. These areas are also the most significant differences expected amongst the high / medium-high rated companies surveyed. Approximately half of high / medium-high rated companies expect to use a different time horizon and contract boundary definition.

45% of high / medium-high rated companies surveyed plan to use different contract boundaries and 15% of low / medium-low rated respondents intend to do the same. We expect that differences in contract boundaries relates to companies allowing for more future premiums in their FLAOR capital needs calculations.

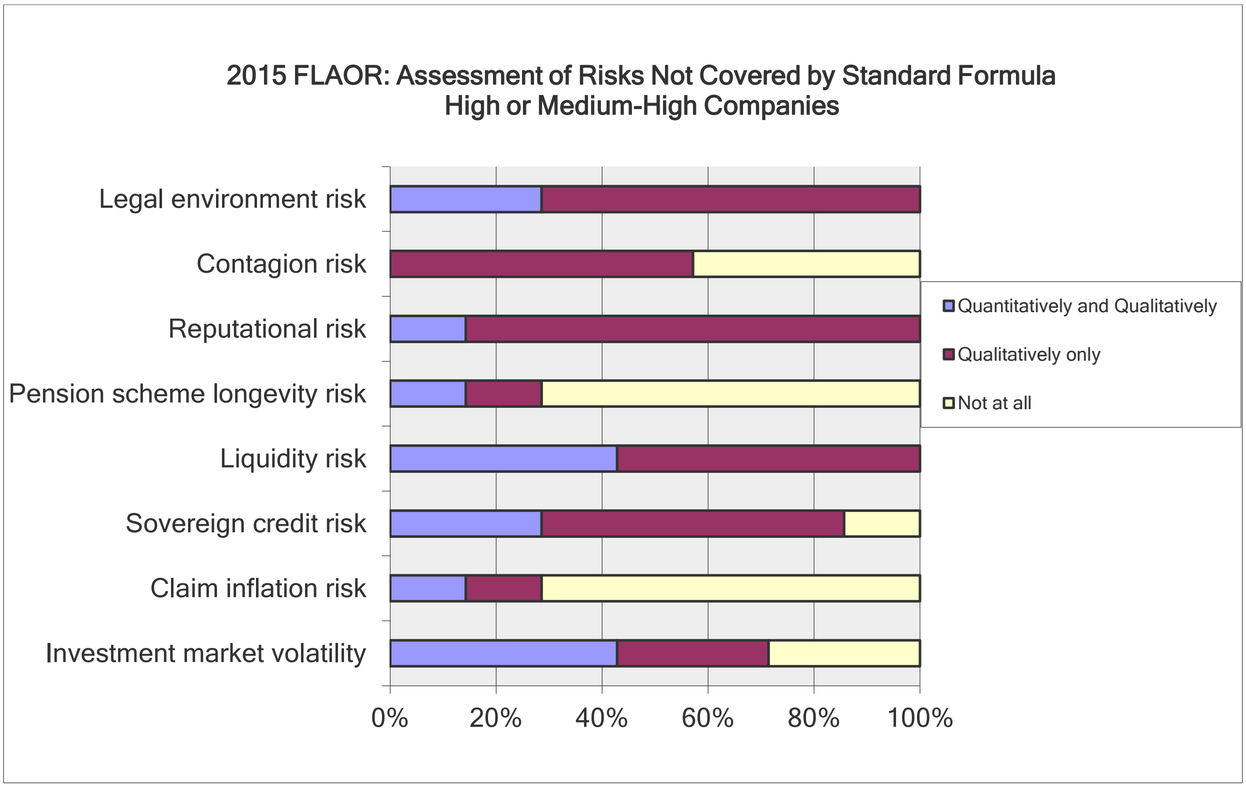
We expect that some companies may also consider FLAOR scenarios incorporating fixed costs or potentially moving to a closed to new business scenario in order to calculate their FLAOR capital needs.

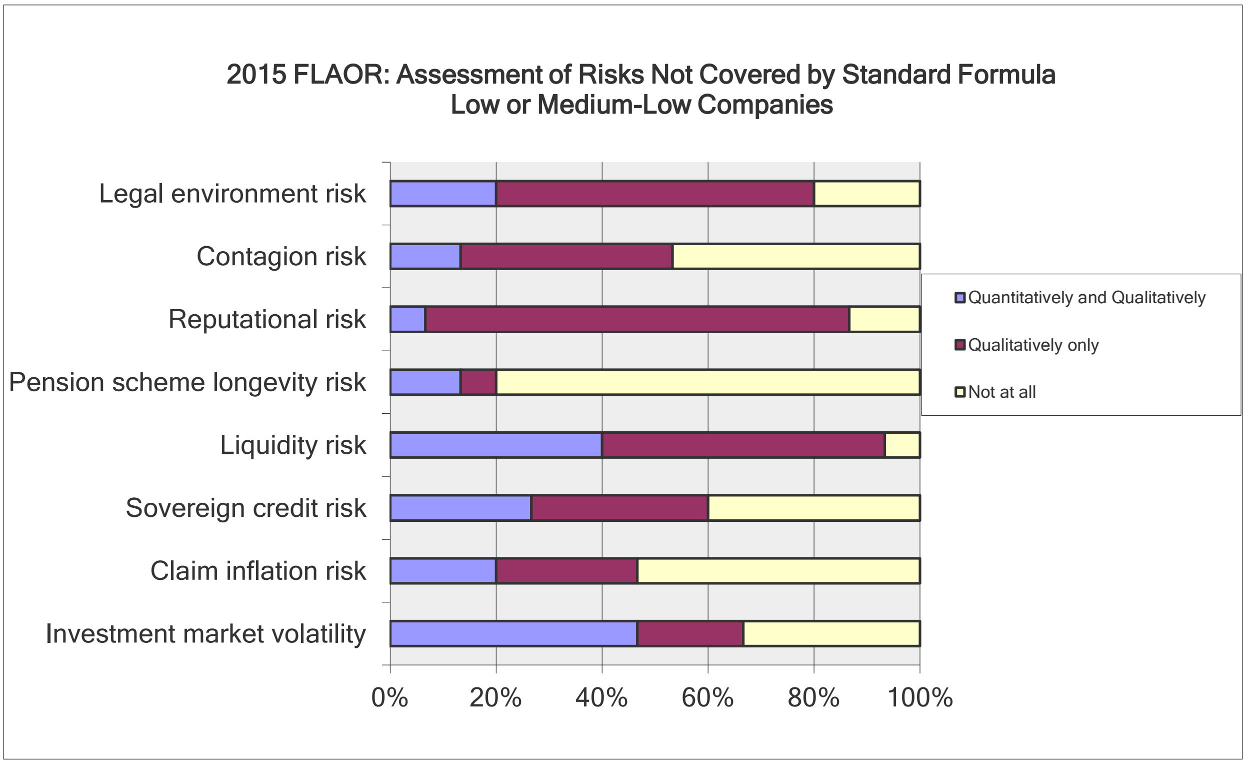
Simplifications

70% of high / medium-high rated companies surveyed intend to include an explanation of why the nature, scale and complexity of the risks justify any simplifications used. However, most of these companies intend do this on a qualitative basis only. 75% of low / medium-low rated companies intend to justify simplifications on a qualitative basis, while 5% expect to do so both quantitatively and qualitatively. The remaining 20% of low / medium-low rated respondents indicated that simplifications are not applicable for them.

Risks Not Covered

The following tables show the percentage of companies who intend to address various risks EIOPA have identified as not being covered by the standard formula in their 2015 FLAOR. The results are split between high / medium-high and low / medium-low rated companies.





All companies surveyed intend to address at least some of the risks not covered by the standard formula. Almost all companies plan to address liquidity risk – half of which expect only to do so qualitatively.

In general, low / medium-low rated companies surveyed indicated a greater inclination towards not covering some of these risks at all. All high / medium-high rated companies surveyed plan to address legal environment, liquidity and reputational risks, the majority of which expect only to do so qualitatively. In contrast, a number of low / medium-low rated companies surveyed do not intend to address these risks.

45% of the companies surveyed plan to address investment market volatility both quantitatively and qualitatively.

Decision Making

All high / medium-high rated respondents expect that their 2015 FLAOR will include an analysis of how the results of the standard formula are used in the decision making process. In contrast, 10% of low / medium-low rated companies surveyed do not intend to include such an analysis.

Summary

Whilst the standard formula is expected to be appropriate for many companies, the work involved in carrying out this assessment should not be underestimated.

Based on the results of this survey it is likely that companies have a significant amount of work yet to be done in order to ensure this assessment fully meets the relevant requirements.

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 including:

- Extensive experience of modelling for technical provisions and SCR calculations, including Independent Review;
- Assisted with the design, calibration, validation documentation and review of Internal Models;
- Design and implementation of Risk Management Systems and Own Risk and Solvency Assessment;
- Provided Solvency II training courses for senior management and directors;
- Advised on Pillar 3 reporting requirements;
- Milliman also has a range of software available to support companies in their implementation of Solvency II including:
    - Vega: An automated Pillar 3 reporting and standard formula aggregation system (link)
    - Solvency II Compliance Assessment Tool (link)
    - 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. Above all, we remain focussed on efficiency and practical delivery.

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