MILLIMAN BRIEFING NOTE

EIOPA discussion paper on the review of Solvency II Delegated Regulation

What aspects of the standard formula could be changed?

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EIOPA is considering changes to the Solvency II standard formula SCR.

In July 2016, the European Commission wrote to EIOPA asking for technical advice by 31 October 2017 on the review of specific items in the Solvency II Delegated Regulation[1].

EIOPA has since agreed that the final technical advice will be submitted at the latest on 28 February 2018. This timetable suggests any changes to the Standard Formula will probably occur in 2018 or beyond.

The consultation ends on 3 March 2017. In particular, the European Commission have requested advice on the following:

- Proportionate and simplified application of requirements, in particular existing simplifications, the look-through approach, the non-life catastrophe risk sub-module and the counterparty default module;
- Removal of unintended technical inconsistencies including assessing credit risk (and removing reliance on external credit ratings), standard parameters used in mortality and longevity risk and non-life premium and reserve risk, assumptions used in the market risk concentration sub-module and risk mitigation techniques in particular embedded derivatives and longevity risk transfer;
- Removal of unjustified constraints to financing (this is not covered by the current call for advice but may be requested at a later stage).

EIOPA has launched a review of the Delegated Regulation and in particular the standard formula Solvency Capital Requirement ("SCR") with the following goals:

- to ensure a proportionate and technically consistent supervisory regime;
- to look for possible simplifications in the SCR standard formula and to ensure the proportionate application of the requirements.

EIOPA has published a 118 page discussion paper[2] to engage in a dialogue with stakeholders. EIOPA intends to suggest changes in methods, assumptions and standard parameters in the standard formula SCR. The discussion paper is structured as follows:

[1] http://ec.europa.eu/finance/insurance/docs/news/call-for-advice-to-eiopa_en.pdf

[2] https://eiopa.europa.eu/Publications/Consultations/EIOPA-CP-16-008_Discussion_Paper_on_SII_DR_SCR_Review.pdf

EIOPA DISCUSSION PAPER CONTENTS

[3] Undertaking Specific Parameters
[4] Group Specific Parameters

Overarching aspects

SIMPLIFIED CALCULATIONS

The European Commission has asked EIOPA to provide information on the use of simplified calculations and to suggest improvements to the current framework.

Simplifications may be introduced for premium and reserve risk and non-life lapse risk.

EIOPA has asked stakeholders to provide suggestions for a simplified calculation of the capital requirement for non-life premium and reserve risk, non-life lapse risk and for health Non-Similar-to-Life-Techniques premium and reserve risk and lapse risk. No simplifications currently exist for these modules.

For other SCR modules, EIOPA has asked stakeholders to describe the main challenges when calculating the capital requirements, whether they consider the current simplified calculations appropriate given the main challenges, and if they have any other suggestions for the current simplified calculation.

REDUCING RELIANCE ON EXTERNAL CREDIT RATINGS

Reliance on external credit ratings may be reduced.

The European Commission has requested EIOPA to advise on possible developments towards the use of alternative credit assessment in the standard formula.

EIOPA has asked stakeholders to answer questions on how the reliance on external credit ratings in the calculation of the SCR standard formula and in other areas could be improved or reduced. They ask for suggestions for calculating capital requirements on the basis of internal measures and ratings, on methodologies based on market implied ratings and accountancy-based measures or on alternative approaches.

TREATMENT OF GUARANTEES AND EXPOSURES

EIOPA has set out questions asking for information on the treatment of exposures guaranteed by a third party and by regional governments and local authorities (RGLAs). In particular they are asking if the differences between the banking framework and Delegated Regulation concerning these exposures are justified or if updates should be made to the Solvency II framework.

RISK MITIGATION TECHNIQUES

In order to identify relevant areas for further work, EIOPA has set out a number of questions to ascertain information on recent developments in risk mitigation techniques, in particular for embedded derivatives and longevity risk transfer, and possible issues with their treatment of the standard formula.

Non-Life Underwriting Risk Module

VOLUME MEASURE FOR PREMIUM RISK

The volume measure for premium risk is under consideration.

EIOPA is to reassess the appropriateness of the definition of the volume measure for premium risk through a series of stakeholder questions. In particular, it aims to consider whether the definition of volume measure for risk premium should be revised in order to improve its risk sensitivity. A caveat of any possible change in definition is that it should not increase the complexity of the standard formula.

STANDARD PARAMETERS FOR NON-LIFE PREMIUM AND RESERVE RISKS AND MEDICAL EXPENSE RISK

The standard parameters for credit and suretyship, assistance, legal expenses, worker compensation and medical expenses lines of business may be recalibrated.

EIOPA intends, if needs be, to recalibrate the standard parameters for those lines of business which are no longer appropriate. It has decided that credit and suretyship, assistance, legal expenses, worker compensation and medical expenses are reserve and premium risks worth assessing. For these five lines of business, EIOPA is requesting data from industry to carry out a recalibration. The recalibration will only be carried out if the number of undertakings that provide data is greater than the number of undertakings that provided similar data in 2010-2011. The data should also come from a range of different European countries – and at least the same number as in 2010-2011.

Catastrophe Risk Modules

The catastrophe risk sub modules may be simplified.

NATURAL CATASTROPHE RISKS

EIOPA is investigating whether the complexity of this sub module is proportionate to the nature, size and complexity of risks, particularly for small and medium-sized undertakings. EIOPA has set out 13 questions to determine which specifications for capital requirements could be simplified and why. As part of this approach it is looking for feedback on each natural catastrophe sub-module including the appropriateness of the methods, assumptions and parameters used.

MAN-MADE CATASTROPHE RISK

Much like natural catastrophe risks, EIOPA has set out 12 questions to investigate the complexity of this sub module and find ways for simplification.

HEALTH CATASTROPHE RISK

Similar to the natural catastrophe risks EIOPA wants to investigate the complexity of the health catastrophe sub-module and its appropriateness for small or medium sized undertakings. For each type of health catastrophe EIOPA have requested firms to outline the challenges faced when calculating this sub-module and suggested simplifications. There are two additional questions aimed at determining whether terror risk is appropriately taken into account in the mass accident risk sub-module.

Life Underwriting Risk

CALIBRATION OF MORTALITY AND LONGEVITY RISK

The mortality and longevity risk sub-modules are to be recalibrated.

EIOPA has outlined a suggested approach using a stochastic mortality model. Three questions have been set out addressing the appropriateness of this methodology and requesting alternative approach or improvements. A further two questions are raised about the data that could be used in the recalibration.

EIOPA also addresses the level of granularity in the mortality calculation, asking if a more granular approach is appropriate and, if so, what approach should be used. A final question is raised on whether an instantaneous shock which is uniform across all ages is appropriate for a 99.5th percentile calculation.

USPs

USP AND GSP ON UNDERWRITING RISKS

EIOPA has set out questions asking for suggestions on Undertaking Specific Parameters (USP) and Group Specific Parameters (GSP). They ask for suggestions on the introduction of USP in the mortality and longevity risk modules and for suggestions on any other standard parameters which could be replaced by USP for calculating the life, non-life and health underwriting risk modules. They also ask for suggestions on how the current non-proportional reinsurance factor USP method could be amended or replaced, as well as asking about issues and suggested solutions related to the application of GSP.

Counterparty Default Risk Module

SIMPLIFYING THE COUNTERPARTY DEFAULT RISK MODULE

The counterparty default risk module may be simplified.

EIOPA has set out three questions addressing any lack of clarity around what exposures are captured within this risk module and any aspects of the calculation that are unclear. There are a further four questions on the complexity of the calculation and suggested simplifications that could be implemented.

EXPOSURES TO QUALIFYING CENTRAL COUNTERPARTIES AND DERIVATIVES

An approach for the treatment of exposures to qualifying central counterparties in the counterparty default risk module may be developed.

EIOPA has set out six questions asking for information on this. They ask about insurers exposures to central counterparties or clearing members other than those resulting from derivative transactions. In addition they ask for information on insurers using the standard formula that are clearing members. They ask for any reason why stakeholders consider that the current standard formula treatment does not adequately reflect the risks for derivatives subject to the margining requirements set out in Article 11(3) of the European Market Infrastructure Regulation. They also ask for any other arrangements related to derivatives it should consider.

Market Risk Module

MARKET CONCENTRATION RISK SUB-MODULE

EIOPA has set out nine questions on the assumptions currently made by companies when calculating the capital requirement for market concentration risk and their impact, in particular to identify areas where assumptions differ between insurers. The questions include information on the scope of the market risk module, assumptions made in relation to single name exposures, the definition of exposure, and the interpretation of Article 186 of the Delegated Regulation (on the risk factor for market risk concentration).

EIOPA also asks a further three questions on the use of risk mitigation techniques used in determining the market concentration risk capital requirement.

CURRENCY RISK AT GROUP LEVEL

EIOPA has been asked to provide information on currencies chosen by insurance groups to hold their own funds and investigate if the approach taken to group currency risk adequately covers the risk to which the group is exposed, and suggest modifications where appropriate. EIOPA has set out four questions to stakeholders to investigate this.

LOOK-THROUGH APPROACH

The look-through approach may be extended to investment related undertakings.

EIOPA identified some important elements which could be considered as part of a proper definition of “investment related undertakings”, a term which is not defined in the Delegated Regulation. Stakeholders were asked if they agree that the elements identified by EIOPA are relevant, and what criteria and elements they think could be used.

EIOPA also set out questions to collect stakeholders’ views on the estimated costs and benefits of extending the look-through approach, as well as an indication of the estimated impact on the SCR calculation.

In addition, EIOPA set out questions to review the appropriateness of the current simplification for the application of the look-through approach (which allows undertakings to calculate the SCR on the basis of the target underlying asset allocation when the look-through cannot be applied, subject to certain conditions), with a particular focus on investments backing unit-linked products.

INTEREST RATE RISK SUB-MODULE

The design of the interest rate risk sub-module needs to be amended to properly reflect the risks in a low interest rate environment.

EIOPA assessed the appropriateness of the current interest rate risk calibration and the following main issues were identified:

- Due to the relative calculation of the shocks, the absolute shocks become smaller with decreasing interest rates and are zero for negative interest rates.
- The current approach underestimates the interest rate risk in a low yield environment, particularly in the downward scenario.
- This underestimation remains even
    - If a minimum downward shock of 1% is introduced
    - If negative interest rates are stressed with the current approach
    - If the relative stress factors are recalibrated using more recent data.

EIOPA set out three questions to stakeholders on the main issues identified.

EIOPA set out a further five questions on the data which should be used for the calibration of the interest rate stress factors and a further two questions on the calibration methodology.

Stakeholders were also asked for their opinion on alternative approaches such as an additive stress approach, an interest intensity-based approach, an approach that uses absolute changes in a low interest rate environment and relative changes in a high interest rate environment, or any other suitable approaches.

LACDT

LOSS ABSORBING CAPACITY OF DEFERRED TAXES

EIOPA is investigating the need for more detailed and standardised legislation for the projections of future profits used in the utilisation test of deferred tax assets.

EIOPA has sent a questionnaire to all supervisors to identify practices used to calculate the LACDT.

EIOPA is investigating the need to prescribe more detailed calculation methods and assumptions for projecting the utilisation of the deferred tax asset after the shock loss. EIOPA has set out 16 questions in the discussion paper in relation to the projection of future profits for the utilisation test of deferred tax assets including taking account of new business and the time horizon.

Risk Margin

RISK MARGIN

EIOPA has set out 4 questions in relation to the methods and assumptions used in calculating the risk margin, including the use of a long-term average cost of capital rate of 6% rather than a rate reflecting current market conditions.

Own Funds

COMPARISON OF INSURANCE & BANKING

EIOPA has compared the classification of own fund items under the insurance and banking frameworks. It is asking for any issues arising due to these differences. EIOPA has identified two issues:

- A Principle Loss Absorbency Mechanism is an instrument which provides equity-like loss-absorbing qualities after a pre-determined trigger is reached. It is classified differently by the insurance and banking sectors.
- There is a difference between the insurance and banking frameworks in relation to the redemption of tier 1 and 2 instruments prior to 5 years of the issue date in the event of a material change in tax treatment of those instruments.

EIOPA has asked for comments on these identified issues.

RESTRICTED TIER 1 INSTRUMENTS

The European Commission is considering removing the 20% limit on restricted tier 1 own funds.

Currently no more than 20% of tier 1 own funds may be comprised of the following instruments:

- paid-in subordinated mutual member accounts;
- paid-in preference shares (and the related share premium account);
- paid-in subordinated liabilities;
- items included in Tier 1 basic own funds under the transitional arrangements.

The amount of own funds represented by these instruments is referred to as “Restricted Tier 1”.

The European Commission has asked EIOPA whether the features determining tier 1 classification should be changed if the 20% limit were removed.

Milliman Conclusions

A number of the points under consultation could have a significant impact on companies. During our review of the consultation paper we noted the following points:

- **External Credit Ratings** – if EIOPA move away from external credit ratings this could be a big issue, especially if smaller companies have to determine credit risks (and ratings) by themselves.
- **Premium and Reserve Risk** – if the calibration of the premium and reserve risk measures is revised this should be good news for non-life and health insurers, in particular as it is generally considered that the current premium risk parameter for some classes such as medical expense insurance is too high.
- **Look-Through Approach** – if the look-through approach were extended to investment related undertakings this would be an additional burden for companies to implement. However it seems EIOPA are also considering further simplifying the look-through approach for unit-linked assets, which may be good news for some companies.
- **Interest Rate Risk Sub-module** – since EIOPA concluded that the current interest rate risk calibration is underestimated in a low yield environment it seems any changes to this module could lead to an increase in SCR for companies.
- **LACDT** – while more advice and guidance on LACDT would be welcomed it would likely limit/reduce the LACDT if EIOPA places rules around the utilisation test.
- **Risk Margin** – if EIOPA moves to a market consistent Cost-of-Capital rate companies would be more exposed to movements in own funds due to the credit risk perception of the market, and it would be more complicated to calculate.
- **EU Government Bonds** – there was no mention of credit risk on EU government bonds in the discussion paper, indicating that EIOPA don't seem to have any plans to include these in the SCR stresses in the future.

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. In relation to the SCR in particular, this includes:

- Extensive experience of modelling projected balance sheets, technical provisions and SCR calculations
- Independent Review of Solvency II balance sheet, technical provisions and SCR;
- Assessment of standard formula SCR appropriateness;
- Operational risk modelling.

Milliman also has a range of software available to support companies in the ongoing Solvency II requirements including:

- Solvency II Compliance Assessment Tool (link)
- Milliman Star Solutions - Vega®: An automated Pillar 3 reporting and standard formula aggregation system (link)
- Milliman Star Solutions - 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.

Milliman is among the world's largest providers of actuarial and related products and services. The firm has consulting practices in life insurance and financial services, property & casualty insurance, healthcare, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

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