

How asset management firms can use their knowledge of **look-through data** to assist insurers in their Solvency Capital calculations

An Asset to the Insurance Industry

Not much of the insurance industry has been left unscathed by the upheaval of its regulatory climate and the associated evolution of attitudes towards risk and risk management. Before, insurers and the asset managers with whom they invested, enjoyed a polite, yet arm's length acquaintanceship. Now, thanks to expectations around transparency (for example, look-through data requirements), the two factions have been thrust together to forge a level of intimacy for which neither had quite been prepared.

But with Solvency II implementation around the corner, much of the reluctance towards this forced cooperation has dissipated, and all involved have made great strides towards finding sustainable solutions for healthy and productive partnerships. One of the areas in which asset managers have identified their potential to assist insurance companies is in the calculation of the Solvency Capital Requirement (SCR). This makes perfect sense, given the asset managers' access to the most granular data of all their funds.

But we all know that this is never going to happen.

Although asset managers are well-placed to calculate the Standard Formula market stresses accurately (and help insurers avoid the penalties associated with opaque data), there are many other complexities around solvency calculation and reporting requirements which insurers are better equipped to manage.

Modelling is complicated

Insurance companies – for reasons more profound than the notorious need of actuaries to maintain control at all costs – are unlikely to depend on results as crucial as their SCR being calculated externally. Asset managers generally do not have an in-depth understanding of the complexities faced by insurers in their Solvency II reporting and, even more so, the modelling behind it. The insurers themselves dedicate innumerable resources just to the task of keeping abreast of reporting requirements; which include compliance with the Technical Actuarial Standards on Modelling (TAS M). Actuarial modelling and the setting of appropriate assumptions are highly specialised skills. Expecting asset managers to attain the required level of understanding demanded by TAS M is too much to ask or realistically expect.

Some of the aspects of TAS M which particularly lend themselves to the skills of life insurance actuaries include:

- **Documentation**, which needs to contain enough detail for a technically competent person with no previous knowledge of the particular model being documented to understand the matters involved.
- **Checks**, which need to be constructed and performed in order to determine the fitness for purpose of the model as a whole and of its specification, implementation and realisations.

One size does not fit all

Another potential difficulty asset managers may face when attempting to perform SCR calculations is the lack of a one-size-fits-all solution. Individual insurers have to apply judgement in each Solvency II calculation to ensure that their unique risks (e.g. differing currency risk exposure for companies based abroad) and needs are being managed optimally and compliantly within their risk management frameworks.

TAS M specifically requires:

- **Data** used for any realisation shall be **suitable for the purpose** of the model.
- **Assumptions** used in a model or in a suite of models that operate in conjunction shall be consistent with each other, taking into account the purpose of the model or models in question.
- **Reports** must include explanations of any material **limitations** of the models that have been used and the implications of those limitations; and how the users' needs are addressed by the models that have been used.

The reasons listed above clearly demonstrate that it would be futile for asset managers to attempt to provide accurate capital requirement values for each insurer that invests with them – especially on a regular basis. So if it's best to leave the modelling to the actuaries, where can asset managers focus their energy to make the optimal impact?

Save the data

Insurance companies are also subject to Technical Actuarial Standards on Data (TAS D), the purpose of which is to ensure that data is subject to sufficient scrutiny and checking so that users can rely on the resulting actuarial information, and any actions taken to improve data increase the reliability of the resulting actuarial information.

TAS D standards include:

- **Assessments** need to be made of the data required in order to deliver the actuarial information needed by the user.
- **Checks** shall be constructed and performed in order to determine the extent to which, taken overall,

the data is sufficiently accurate, relevant and complete for users to rely on the resulting actuarial information.

- *When data is materially **incomplete or inadequate**, an **assessment** shall be made to determine whether the reliability of the **data can be improved by adjusting or supplementing it.***

These are the standards, given the significance of their insurer clients, with which asset managers should be (but currently may not be) very familiar. There are many problems on the data side, including gaps, errors and lack of freshness, which asset managers could go a long way to plug. Get the actuaries comfortable with the data so that they can focus on the modelling.

Capital is not always a value; sometimes it's a spectrum

Asset managers can also add value in the capital planning space. Capital planning is less of an exact science than SCR point-in-time calculations. Capital requirement values for reporting need to be produced in adherence to very precise modelling specifications and are signed off only after rigorous checking. Also, they are highly dependent on the current asset mix and the market conditions, and are therefore not necessarily appropriate for planning or projection exercises, where a range of future scenarios needs to be considered. Capital requirement ranges used for planning, on the other hand, have a much more lenient materiality threshold. Setting these ranges may be seen as more of an art than SCR calculations. They are used as a reference

for future planning and provide decision-makers with a feeling of what conditions will be like going forward. A 5% shift of such a range, for example, will have much less severe implications than a 5% shift in a company's SCR value. Instead of trying to pinpoint an accurate capital requirement (with relatively low confidence), asset managers could consider providing a "capital requirement range" to insurance companies, including maximum and minimum values. These would correspond to high and low risk investment strategies respectively, as illustrated by the real world example below, relating to a European Balanced Fund:

“The fund’s objective is to invest primarily in equities and bonds denominated in Euro. The fund will invest at least 30% and a maximum of 60% of the total assets in equities. The remainder (minimum 40%, maximum 70%) will be invested in bonds. Balanced funds are the most conservative form of growth investment and invest in a diversified portfolio of equities, bonds and ancillary cash.”

source: www.morningstar.co.uk

High Risk Strategy
(likely to be pursued in buoyant market conditions)

Best Estimate

Low Risk Strategy
(likely to be pursued in depressed market conditions)



| Equity Investment | Bond Investment |
|--|-----------------|
| 60% | 40% |
| Maximum Standard Formula Equity Stress: 49% | |
| Maximum Market Risk Capital Requirement: 31% * | |

| Equity Investment | Bond Investment |
|--|-----------------|
| 50% | 50% |
| Average Standard Formula Equity Stress: 39% | |
| Best Estimate Market Risk Capital Requirement: 22% * | |

| Equity Investment | Bond Investment |
|--|-----------------|
| 30% | 70% |
| Minimum Standard Formula Equity Stress: 29% | |
| Minimum Market Risk Capital Requirement: 16% * | |

* Assuming Corporate Bonds of duration 10 years and SII credit quality step of 2.

Somewhere between the high and low extremes would lie a “best estimate” capital requirement, based on assumptions gleaned from historic data. The provision of these three key values per fund – along with other projections and metrics – would go a long way to assist insurance companies not only in validating their market risk capital calculations, but also in guiding their capital planning (especially in cases of data suppression issues).

Insurance companies are ultimately responsible for – and best suited to provide – the calculation and reporting of their capital requirements. There is, however, a lot of potential to share the load with other stakeholders in the industry. Encouraging asset managers to exploit their unique access to transparent data (and improve the quality thereof) is just one way of adding value to insurance companies’ risk management frameworks, to their capital planning processes, and to the industry as a whole.

If you would like to find out more about data, capital planning and how MBE can best support asset manager/insurer relationships, please visit our website or email info@mbe-intl.com.

Muller
Beukes
Edvardsen



www.mbe-intl.com

MBE, Castle Court, 41 London Road, Reigate RH2 9RJ
info@mbe-intl.com T: +44 (0) 1737 735563

Issued by Muller Beukes Edvardsen (MBE),
a trading division of Global Actuarial Services Ltd