



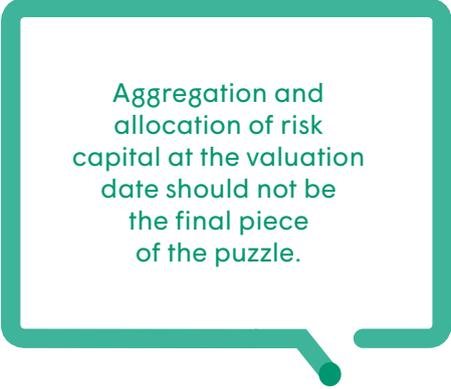
POINT OF VIEW

INSURANCE RISK MANAGEMENT

LIVING IN A RISK-BASED CAPITAL WORLD

BY RICHARD WEATHERILL,
SENIOR SOLUTIONS MANAGER, FIS' INSURANCE BUSINESS

Today's insurers face growing pressure to optimize their balance sheet and risk profile, while meeting the demands of regulators and management for greater business planning/projection and pricing capacity, together with better control of risk and capital.



Aggregation and allocation of risk capital at the valuation date should not be the final piece of the puzzle.

Managing capital under Solvency II

Many life companies in particular need to manage capital efficiently after the implementation of Solvency II, addressing regulatory and commercial changes that challenge the viability of many established business models. With this in mind, life companies are currently restructuring their businesses and balance sheets to reflect their changing risk/capital profiles in a Solvency II world.

To achieve this there is clearly a need for more efficient, faster and better structured risk/actuarial models that help firms achieve:

- Better embedded use of risk management in decision-making.
- Better informed risk appetite and risk tolerances.
- Business benefit from Solvency II and meeting the 'Use Test'.
- Improved model structure and model governance.

Implications for life insurers

Under Solvency II and the ORSA standard that has extended its reach internationally, have entered a risk-based capital era. This is the last part of a long process of adaptation.

Typical life company risk-based capital

Up to now, risk based-capital has worked as follows:

- Use complex and accurate models to evaluate assets and liabilities under a range of simulations or scenarios.
- They then build simpler models of the complex model to produce a very large number of scenarios or simulations.
- Next, companies insurers aggregate these results together to form a distribution of the potential range of outcomes, and finally read off points from that distribution to obtain required risk-based capital.
- Finally, capital allocation down to line of business is by 'rule-of thumb', management overlay or executive decision.

Capital efficiency and the impact of management actions

Aggregation and allocation of risk capital at the valuation date should not be the final piece of the puzzle. Such an 'end-piece' mind-set is a powerful barrier to effective Value Added or Return on Equity (ROE) analysis or efficient capital allocation in response to management action.

FIS believes that the logical step en route to living in a risk-based capital world is to use the results of your capital aggregation and allocation process to:

- Model the business management action/decisions that you would take as a result of that process.
- Then project forward your business allowing for those decisions.

Management actions

This would allow companies to examine the projected business profile at the end of each time period to test whether those decisions have the desired impact. The risk-based capital calculations can be used to dynamically re-price/drive forecast new business in the next time period.

Dynamic business planning

If the impact of the firm's decisions has undesirable consequences for the business, the insurer can adjust its decision-making process to arrive at a more desirable answer. Thus the actuarial model becomes a tool that informs the aspects of the decision-making framework that have come to the fore in a risk-based capital world, such as risk appetite and risk tolerances.

This can be used for:

- Investment/asset strategy optimisation.
- Developing Solvency II surplus investment strategies.
- Setting risk appetite and tolerances.
- Demonstrating and clearly meeting the Use Test.
- Providing a clearer link to model validation as an embedded process.

FIS' response

FIS already delivers solutions for the individual components required to achieve this calculation exercise. However, the new Nested Structures functionality in Prophet 9.0, provides the ability to assemble existing models into a single Prophet model, enabling actuaries to iterate through some or all parts of the calculation. This can be performed in a framework that has the flexible calculation structure and the logical graphical presentation of the calculations that are hallmarks of Prophet.

In particular, the detailed presentation of the structure of the model can improve the efficiency and robustness of the model development process, and offers the quality assurances and control that model governance frameworks seek to achieve, and indeed now demand.

With its Nested Structures module, Prophet can further enhance insurers' ability to manage their business in the new risk-based capital world. The Prophet suite — the platform, libraries and other modules — has been designed with such a transition in mind, and is able to support calculations of this complexity as a single process.

About FIS' Prophet solution

FIS' Prophet solution is a leading actuarial modeling system that helps insurance and financial services firms develop more profitable products faster, improve risk management decisions, and meet their reporting responsibilities efficiently. Prophet provides comprehensive coverage across life, general insurance, health and pensions for all major insurance markets on a single platform, providing common models, code, assumptions and reporting capabilities, plus end-to-end data management and business intelligence. It offers actuaries an easy-to-use, flexible product design environment combined with a controlled, enterprise-level production environment, enabling the fast delivery of accurate, auditable and clearly presented information to risk managers, senior management and regulators. Prophet can be deployed on-premise, hosted or on the cloud, and is relied on by more than 10,000 users at over 850 customer sites in more than 65 countries.

About FIS

FIS is a global leader in financial services technology, with a focus on retail and institutional banking, payments, asset and wealth management, risk and compliance, consulting and outsourcing solutions. Through the depth and breadth of our solutions portfolio, global capabilities and domain expertise, FIS serves more than 20,000 clients in over 130 countries. Headquartered in Jacksonville, Florida, FIS employs more than 55,000 people worldwide and holds leadership positions in payment processing, financial software and banking solutions. Providing software, services and outsourcing of the technology that empowers the financial world, FIS is a Fortune 500 company and is a member of Standard & Poor's 500® Index. For more information about FIS, visit www.fisglobal.com

 www.fisglobal.com

 twitter.com/fisglobal

 getinfo@fisglobal.com

 linkedin.com/company/fisglobal

©2016 FIS

FIS and the FIS logo are trademarks or registered trademarks of FIS or its subsidiaries in the U.S. and/or other countries. Other parties' marks are the property of their respective owners.