Actuarial Services: A Key Success Factor

Circumstances have changed drastically for European (re)insurance in particular: Overall economic growth is once again threatened by slowing momentum. Government bonds, the backbone of the sector's investment portfolio, are no longer risk-free and record low interest rates are eroding an important source of income for (re)insurers. Experiences of economic and financial crisis over the last ten years have resulted in a conspicuous tightening of quantitative regulation. The Swiss Solvency Test (SST) and Solvency II are raising solvency capital requirements which will in future be a function of a (re)insurer's actual economic risk profile. The sum total of all relevant risks (including those arising from financial markets) will be calculated and the market valuation of assets and liabilities, along with their volatilities, will be factored in. In short, regulatory criteria, accounting principles (IFRS) and internal models will merge to produce a joined-up economic picture of the (re)insurance entity in question. As things stand today, however, the various models are still not fully aligned with one another, if we are to arrive at a truly risk-adjusted approach in managing a company.

(Re)insurers are also facing additional qualitative regulatory challenges.
The new rules contain comprehensive structural requirements for company risk management processes as well as for the nature and scope of risk and solvency disclosure.

These will be further compounded by the consequences of tighter regulation or a shift in market conditions for the business model, product design and process management. Here actuaries will be needed to assess the impact of these changes on products and processes and to evaluate which solutions should be implemented.

Increasing relevance of internal capital models

The use of economic capital models to manage business has been widespread among larger (re)insurers for some time. Under SST and Solvency II, (re)insurers now also have the opportunity to use their own internal models to determine their solvency capital. The attractions of doing so are obvious: If every company applies the standard formula under Solvency II, the EU's Quantity Impact Study 5 (QIS5) estimates that (re)insurers' regulatory surplus capital will shrink by EUR 86 billion (or 44%). However, if internal capital models were to be used across the board

instead, QIS5 suggests regulatory surplus capital available to (re)insurers would fall by just EUR 3 billion.
This result comes as no surprise. Internal models reflect the individual risk profile and diversification characteristics of a specific company, whereas the standard model, which is based on a market average, is a “one-size-fits-all” approach and, as such, it inevitably presents a skewed picture. Internal models also make for more effective financial management and better decision-making in a range of areas, including premium-setting, asset/liability management, strategic planning and reinsurance purchases. PRS believes that the fears harboured by many smaller (re)insurers regarding the stress and cost of developing and implementing an internal model are unfounded; any downside will easily be outweighed by profitable refinements in company and capital management.

What this means for the (re)insurance value chain

The introduction of risk-based, holistic and economic solvency regulation will oblige European (re)insurers to make far-reaching changes to their product strategies: The minimum capital requirement for traditional life policies with interest guarantees will increase several fold as a result of the SST and Solvency II and (re)insurers will be at pains to restructure their palette of products towards capital-saving, unit-linked policies. Policyholders will thus bear the investment risk and life policies will lose the most important trait differentiating them from other bank products: a guaranteed return. Volatile lines such as liability, technical insurance and natural-catastrophe cover will also face increased capital requirements, while sectors in which the basic principles of diversification and the law of large numbers apply (such as motor insurance) may even see their capital requirements fall.

Change is also anticipated on the risk management front. While it may often have been used in the past merely to quantify and record risk, in the future it will play a central role in the financial planning and management of (re)insurance companies. An economic and holistic view of risk, as prescribed by the new regulatory criteria and implemented via internal models, will enable firms to dovetail their risk appetite much more closely with their capital resources in future. Under the SST and Solvency II, (re)insurers must also introduce transparent and comprehensively documented risk management processes (such as Swiss Quality Assessment or Own Risk and Solvency Assessment) – and these procedures will have to be embedded in day-to-day operations.

The capital costs of (re)insurance underwriting and financial market, credit and operational risks are taking over as the most important planks of pricing, product and investment policy, thus considerably raising the profile of risk management – and actuarial services in particular. Anticipated capital implications – and thus the valuations supplied by actuaries – are becoming an essential deciding factor in product development, for example. The same is true on the capital investment side: Actuarial expertise is required to improve dynamic asset/liability management, and thus capital efficiency. Ultimately, actuaries will also set parameters for (re)insurers' investment policies by developing holistic economic models to quantify a company's value – independently of strategy or external factors.

How PRS actuaries can help

New regulations, internal models and a value chain exposed to an array of external influences pose considerable challenges for financial controllers and risk managers as well as for actuaries and (re)insurance companies' internal auditors. PRS offers these stakeholders a broad palette of practical, integrated services. We can help with developing, validating and implementing internal models, for example. We can also train management and technical specialists to use these models (see illustration, page 3). Entirely in the spirit of the PRS motto, "experts for experts", we are able to draw on our actuaries' reservoir of knowledge and their hands-on approach at all stages of the advisory process (see www.prs-zug.com). As experienced internal modellers and practicallyorientated (re)insurance specialists, we know that reducing complexity is currently at the forefront of our clients' minds.