

ERM Goes Global

Regulators around the world are converging in their assessment of insurer creditworthiness. Enterprise Risk Management (ERM) and Solvency II are on everyone's lips. Richard Rodriguez and Dave Sommer of EMB discuss the resulting challenges and opportunities for company management.

Solvency II is the biggest ever exercise in bringing together insurers and reinsurers under one regulatory regime. If all goes to plan, thirty European countries will be united in 2012 by a single set of rules governing what constitutes an acceptable level of insurer creditworthiness.

Europe is seen by many as leading the way. And its ambition, both in terms of scale and scope, is acting as a catalyst, spurring regulators in other jurisdictions to review their supervisory policies. Across the globe we are seeing a growing convergence of two core, related, strands: principles-based regulation and Enterprise Risk Management (ERM).

Does this mean that we are heading for a world where prudential regulation of the industry is identical in all major centres? Not quite. Whilst there may be an emerging alignment in the fundamental principles, implementation approaches are likely to differ significantly. Europe is by no means unique, nor even the first, in its move to a risk-based regulatory regime.

There is no doubt, however, that the traditional rules-based solvency standard is now widely viewed as inadequate. It bears no relation to the risks that are in the business. It means that capital may be tied up unnecessarily. And it encourages an attitude of box-ticking regulatory compliance rather than supporting dynamic business management.

Principles-based regulation moves the onus of assessing a firm's explicit level of solvency from the regulator to the company management. One benefit is that the market will have a stronger notion of the capital necessary to support their operations. But possibly the most important advantage is that firms become much more risk aware in their management and culture.

Enterprise Risk Management is becoming established as a management discipline covering the methods and processes used by firms to identify, assess, measure and monitor risks within their business. And it has recently gained greater prominence through legislation such as Sarbanes-Oxley, and its inclusion in ratings agencies' credit assessments. But it should not be viewed as a regulatory demand. Rather, it is a tool that offers real competitive advantage and enables firms to manage not just their capital, but their entire business, more effectively.

Indeed, we are seeing not only a convergence of regulatory standards, important as that is, but also a growing consensus as to what constitutes best management practice.

Europe - 'Solvency II Uber alles'

The UK became the first major jurisdiction to put self-assessment at the heart of regulation when the Financial Services Authority introduced the ICAS (Individual Capital Adequacy Standard) regime in 2004. One distinctive feature is that, in practice, all but the smallest of UK insurers are required to produce models to demonstrate and support their financial strength. This has forced them to review all aspects of the business and to consider the financial impact of risk.

Despite initial complaints about the burden imposed, executives in the UK recognise that ICAS has brought advantages. It has encouraged a dramatic improvement in management standards: risk management, technical competence, business processes and accountability have all advanced significantly.

In 2006 the Swiss introduced their own system of principle-based regulation, following on from Basel II for banks, to encourage greater risk awareness. The Swiss Solvency Test (SST) is risk-based and again can be calculated either by a standard formula or through the use of an internal model.

Internal models bring benefit...

Solvency II proposes using many of the UK ICAS principles, but there are also some significant developments including:

- Prescribed calculations for two levels of solvency standard
- The option to calculate the standard using either an internal model or a formula
- Internal models must demonstrate that they are embedded in a firm's decision-making process through a 'use test' before they are approved
- International groups will be supervised by a lead regulator co-ordinating the other relevant territorial regulators

There is no doubt that Solvency II represents the biggest single move towards ERM the world is ever likely to see. However, the inherent complexity of the exercise is compounded by the tremendous diversity of companies and countries within today's EU. The decision to offer firms a choice between a formula and an internal model for capital calculations is a practical approach to dealing with this diversity.

The formula allows companies to calculate all their risk types and aggregate them separately and is a natural progression from the prescriptive style of Solvency I.

But it is a compromise on the essence of ERM as, crucially, it does not reveal how different risks inter-relate. The 2002 CEIOPS Report into the Supervision of Insurance Undertakings highlighted that company failure is as much about risk interactions as about the level of capital held.

Companies wishing to construct an internal model must initiate a structured process of identifying risks, modelling the potential interactions, determining the likelihood of occurrence, and estimating the financial impact. It is a much more holistic approach that creates the collective understanding of an organization and goes beyond regulatory compliance. It is an invaluable management tool.

Asia-Pacific - toe in the water

The Australian regulator APRA was a very early pioneer introducing a risk-based regulatory framework at the start of this decade. As with other regimes, companies are offered a choice of internal model or formula to calculate their required capital.

Virtually all insurers have followed the formula route and at the time of writing, APRA has yet to approve an internal model under its system. It has however recently published guidelines for the preliminary 'road test' and a small number of insurers are preparing to go through the approval process.

Many Asian regulators are watching the Solvency II process closely. Japan, with the biggest insurance industry in Asia, currently has a formula-system, although the regulator is exploring a more principles-based approach and insurers have been warned to prepare for the future introduction of internal models. The Chinese regulators are also experimenting with internal models and risk-based solvency regulation.

The Americas - tentative first steps

Until recently, North America and Bermuda would have been off any list of territories adopting risk-based regulation. But now there are signs of movement. In the United States, where insurance regulation is at state level, Minnesota has already laid out plans for a risk-based audit of insurers within its own jurisdiction.

More importantly, New York has openly discussed change, not only for companies domiciled in the state but also everyone who is licenced there. "New York must have the best, most effective regulation of financial services in order to remain the financial capital of the world," according to Insurance Superintendent Eric Dinallo "Today that means principles-based regulation." If New York moves, other states will need to follow.

In January 2008 the Bermuda Monetary Authority (BMA) announced the phased introduction of risk-based capital requirements to replace the current solvency margin regime, to be known as the Bermuda Solvency Capital Requirement (BSCR).

In Latin America, Brazil is leading the drive towards risk-based solvency regulation with rules regarding underwriting risk becoming effective in January 2008. While an internal model cannot yet be used to determine an insurer's capital requirement, any company that has such a model receives a discount. These new rules met with strong industry objections last year, prompting the regulator to significantly reduce the factors in the calculation. But many companies have already begun to build dynamic financial models to improve their own internal analyses and risk management.

...beyond regulatory compliance

Middle East and Africa - driven by international standards

The growing influence of ratings agencies in the Middle East is driving many local insurers towards ERM and internal modelling to keep up with their larger international competitors. In addition, the authorities in Dubai and Bahrain are employing former FSA staff to advise them, supporting the growth of these countries as financial centres.

In South Africa, which operates as an insurance hub for all of sub-Saharan Africa, the regulator has issued draft regulations to be implemented by 2010/11. According to the draft regulations, all companies are expected to move towards a full internal model within five years of implementation. Most of the larger South African insurers and some smaller ones are already developing internal models, mainly for competitive reasons.

Conclusion

While some important jurisdictions, such as US, Japan and China are less advanced in embracing risk-based solvency regulation, there can be no doubt about the direction of the tide. Indeed, so widespread has its practice become, that it is difficult to envisage international companies ignoring ERM, particularly with ratings agencies and competitive pressures all pushing in the same direction.

The fact that regulators around the world are moving towards adopting the principles of ERM as the standard is good news. It makes business sense. Although Solvency II is leading the way today, by the time it is implemented in 2012, other countries may have already overtaken it. With the arguable exception of the UK (coming under Solvency II anyhow), all jurisdictions implementing risk-based regulation allow a certain amount of compromise. Specifically, they do not normally demand the use of internal models.

Although in many ways regrettable, this concession recognises a number of points. Many countries do not have the actuarial resources with the knowledge and experience to design, build, parameterise, and implement internal models. Furthermore, regulators and auditors face a similar if not more aggravated limitation of resources. But with the global emergence of ERM and the requisite dynamic financial models, the spread of this knowledge will come sooner rather than later.

In the meantime, re/insurers need to define their aspirations towards ERM. Those that opt for the initially more complex use of internal models will gain many business and capital advantages over their less ambitious competitors.

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Richard heads up the London office of EMB and specialises in working on financial modelling and London Market assignments. The financial modelling assignments have covered business planning, the pricing of commercial contracts, capital adequacy and allocation and reinsurance purchase. Richard's expertise in capital modelling and ERM has increasingly led to him helping companies plan for Solvency II.



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David Sommer is the only Fellow of the Casualty Actuarial Society in South America, having moved to Brazil in the beginning of 1999. He has been working on Dynamic Financial Modelling projects for 15 years and written a number of papers and articles about the topic and its role in Solvency Regulation. He represented the insurance industry as part of the working group formed to craft Brazil's new solvency regulations and advises insurer's and the insurance trade group on the construction and implementation of internal models.



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