

FINANCIAL SERVICES

ERM — AN INTEGRAL WAY OF DOING BUSINESS

Enterprise risk management has become an important part of doing business. However, insurers continue to test various metrics and processes, and they have yet to settle on uniform best practices.

By Linda Chase-Jenkins, Ian B. Farr and Lisa Balatbat

More than a decade since its inception, enterprise risk management (ERM) has become an integral process for proper management of an insurance company. Today, the companies that do not have a defined process for identifying, measuring, aggregating and managing risk are among a very small minority.

This is one of the chief findings from the Tillinghast biennial ERM survey, based on interviews with more than 200 senior executives, including chief financial officers, chief risk officers and chief actuaries, in June and July 2006. The respondents represented the full spectrum of the insurance industry and came from across the globe. While there were regional variations regarding the emphasis and extent of ERM integration, responses showed that ERM has moved into the mainstream.

The evolution of ERM has been driven by several converging forces, including regulatory and reporting requirements, rating agency criteria and progress in the supporting information technologies — all helped along by the experience of companies.

KEY FINDINGS

In addition to confirming the growing entrenchment of ERM as a core business activity, our latest survey produced these key findings:

■ **Insurers are using increasingly sophisticated risk metrics, though no single metric is favored.** More than two-thirds of survey respondents determine the impact of risk on their capital, value and earnings from at least three metrics, including

statutory capital, GAAP/IAS earnings and economic or embedded value.

■ **Two-thirds of the global insurance industry relies on economic capital (EC) as a risk assessment tool.** This is up from just over a half in our 2004 survey. Many of those who are not currently calculating EC are considering it. Insurers most frequently use EC for capital allocation and other strategic decision making and to measure risk-adjusted performance.

■ **Insurers are not satisfied with their current risk and capital management efforts.** More than three-quarters of respondents are not satisfied with their ability to quantify operational risks; 71% are not satisfied with their ability to integrate risk considerations in performance measures; and 89% of those who calculate EC are planning to make further improvements in the way they do it. Exactly 77% of respondents are concentrating their risk management efforts on improving risk measurement and quantification processes.

In 2004, insurers were focused mainly on risk identification. Now, more than three-quarters of respondents are concentrating on improving their risk measurement and quantification processes, a much greater effort than two years ago.

Other highly ranked goals identified by respondents include better management of their risk profile and improved risk reporting. Almost 60% cited the importance of factoring risk management considerations into decision making. Michael Mahaffey, associate vice president of Enterprise Risk Management at Nationwide Mutual Insurance Co., says, “Nationwide sets its financial ‘North Star’ around the creation

Solvency II and ERM

Solvency II is now taking clearer shape. There is an emerging consensus among European insurers that the new requirements will have significant implications for their capital structure, the business they write and how they undertake risk management. The impact on overall capital requirements remains, however, difficult to predict as no definitive parameters have been set for the standard approach to calculating the solvency capital requirement.

Regardless of any regional differences, European insurers agree that they will need to make significant improvements to their risk management capabilities under the new Solvency II regime. The most frequently cited action is the enhancement of risk quantification capabilities (63%), closely followed by the need to improve actuarial and accounting tools (59%). Perhaps more challenging will be improving risk governance, clearly defining risk appetite and embedding risk management across their businesses, all of which attracted frequent mention.

of economic value. As part of our ERM efforts, we have calibrated our risk decision framework to align decision-making criteria with this governing objective.”

There are interesting regional variations in our findings. Efforts to improve risk measurement and quantification processes were a comparatively more significant focus for those in the U.K. (97%) and Japan (95%). Further, just under two-thirds of the overall respondents are focused on managing the risk profiles of their organizations and improving internal risk reporting processes (see *Exhibit 1*).



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EXHIBIT 1

Focus on risk management improvement efforts



Note: Percentages of survey respondents citing each factor as a current objective

Typically, insurers rely on dedicated risk management professionals — chief risk officers or risk management directors — to be responsible for their ERM efforts. Forty-three percent of respondents indicate that these officers are responsible for risk management, although these positions are more prevalent in insurance companies in Japan and Europe, where over half of respondents have CROs or someone in an equivalent position. Only a third of insurers in North America have such executives. A further 18% of respondents indicated that the chief financial officer or finance director is mostly responsible for risk management.

At the same time, insurers across the globe rely on cross-functional risk committees to provide guidance on risk tolerance and management issues, led by companies in Asia/Pacific. Fully 87% of insurers across the globe indicated that they had a risk committee or were considering creating one, up from 80% in 2004. Only 13% of insurers are not considering a cross-functional risk committee.

HOW DO INSURERS MEASURE RISK?

Insurers approach the impact of risk on their capital, value and earnings from multiple perspectives, with 63% using at least three different assessment measures. In consid-

ering risk to the balance sheet (e.g., risk of insolvency, bond default), companies said they focus primarily on statutory capital and economic/embedded value. However, when considering risk to earnings, the focus is more on GAAP/IAS measures.

Overall, 56% of insurers globally rely on statutory or regulatory capital and surplus as a metric, which was also the leading choice among participants in North America (70%) and the U.K. (67%). Economic value was cited by 42% and embedded value by 26% (see *Exhibit 2* on page 12).

EC AS A CRITICAL TOOL

EC is rapidly becoming a universal risk management tool. What's more, our survey reveals that insurers are increasingly sophisticated in their approach to EC, and many have moved quickly to broaden their risk coverage to include many risks that historically have been difficult to model. Having said that, insurers are not yet satisfied with their current EC modeling processes, are looking to improve the way they calculate EC and see it as something that will need continuous improvement.

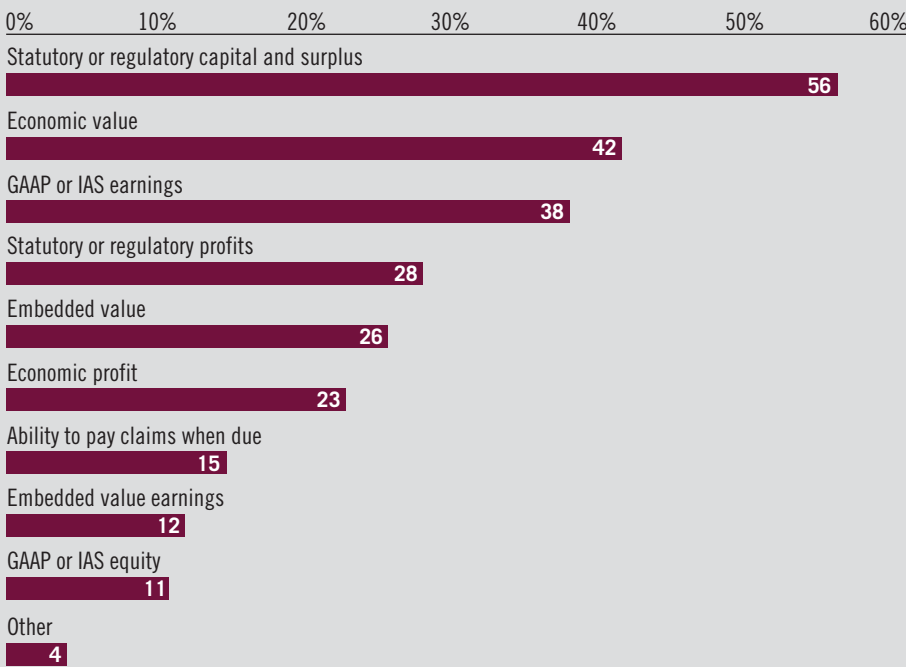
Other issues arise as companies attempt to make use of their models in managing their business. "You need to be convinced the model is fit for purpose before making changes to business practices," said Peter Needleman, managing director of the Tillinghast life practice. "It can take a long time to get comfortable with the results."

Two-thirds of all survey participants said that their organizations calculated EC this year. This increase from 53% in 2004



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EXHIBIT 2
Factors insurers use to measure impact of risk



Note: Percentages of survey respondents citing each factor as a key measure of risk

reflects comparatively new regulatory requirements in the U.K. and the implementation of many EC programs that were under consideration at the time of the last survey. Only 28% of companies said that they were considering EC in 2004.

This year, another 19% said that they are considering calculating EC — implying that by the time of the next survey, it may well be close to being a universally applied risk management tool.

This is no doubt because EC is largely seen as a strategic tool for insurers. When asked what the principle drivers are for calculating EC, 56% responded “allocation of capital,” with “measure of risk-adjusted

performance” and “making strategic or tactical decisions” the next most significant reasons (see *Exhibit 3*).

Other key points to emerge from the survey include:

Modeling techniques: Most insurers are increasing the sophistication of their EC calculations, with 57% using stochastic approaches. Of these, 38% model each risk separately before statistically aggregating them, while a further 19% take their EC modeling one step further and model multiple risks together.

As EC models become more advanced, companies are able to model more types of risks. For example, credit risks such as

asset default and counterparty risks are modeled more frequently than indicated in our prior surveys. “By using more refined modeling systems and incorporating more types of risk in their models, companies are better able to demonstrate their ability to model, understand and manage their risks — including, critically, diversification effects,” said Steve Taylor-Gooby, managing director of the Tillinghast business of Towers Perrin. This enables them to substantiate claims for lower capital requirements.

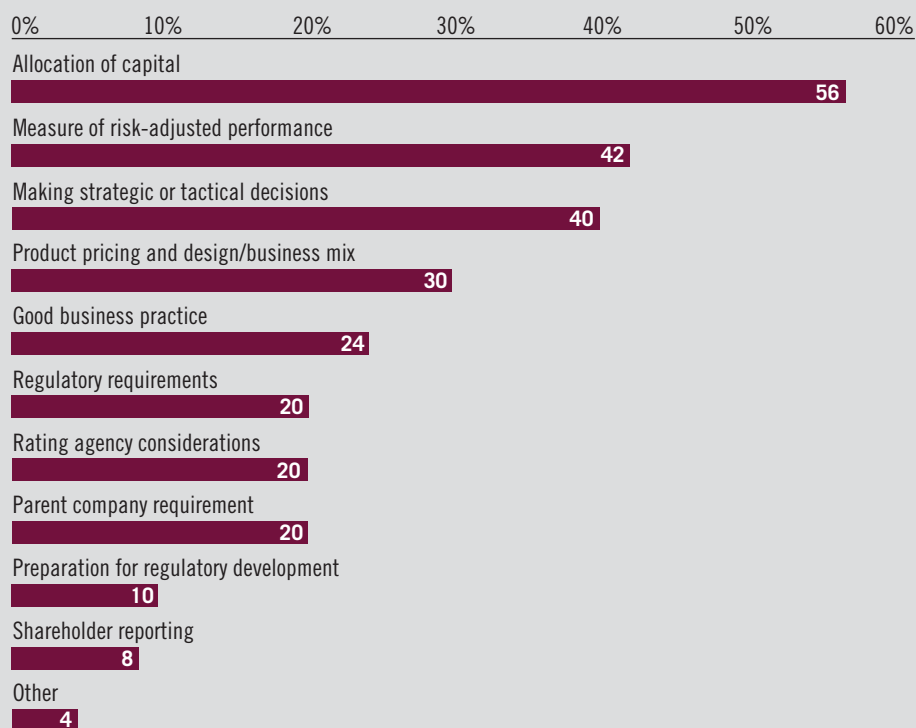
Measurement period: Assessing EC over a one-year period is becoming the most widely accepted methodology. Fifty-six percent of respondents indicated that they measure EC over a 12-month duration — a sharp increase over 2004 when only 32% of respondents did so. Assessing risk over a two- to five-year period has decreased from 22% to 12% and the runoff-of-portfolio approach has declined from 29% to 14% since 2004.

Looking at risk over a 12-month period is less complicated from a modeling perspective, and its increasing acceptance indicates that insurers are finding it useful. Nevertheless, 26% of U.K. insurers indicate they use a combination of one-year and multiyear approaches, perhaps reflecting their business mix.

Correlation matrices: The most popular method for aggregating risk is the correlation matrix applied to risk capital results for each risk or business unit, with 46% of respondents saying this is the method they use.

EXHIBIT 3

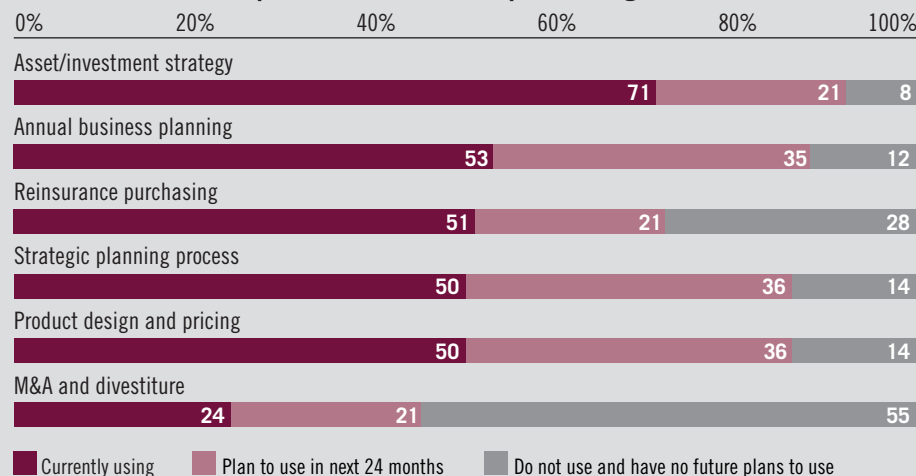
Drivers for calculating economic capital



Note: Percentages of survey respondents citing each factor as a primary driver for calculating EC

EXHIBIT 4

How insurers use and plan to use risk and capital management tools



Note: Percentages of survey respondents citing each factor as a primary and planned use

Risk reporting: The survey revealed that nearly two-thirds of respondents formally report on risk to the board of directors at least quarterly, up significantly from prior surveys. Companies are reporting to senior management, shareholders and regulators more frequently, and a majority of insurers around the world are reporting on risk issues to rating agencies at least annually.

Decision making: The use of risk and capital management models is becoming an integral part of strategic as well as business planning, reinsurance purchasing, and product design and pricing. However, the primary use of these models is focused on asset and investment strategies (71% of respondents) (see *Exhibit 4*).

Room for improvement: Insurers have made significant progress developing and implementing ERM frameworks and models over the last few years, but few are satisfied with their current capabilities. They are most confident in their asset liability management capabilities as well as their ability to apply risk transfer techniques and manage and mitigate important risks. They remain broadly dissatisfied with their ability to quantify operational risks and link risk considerations with performance management.

MOVING BEYOND THE STANDARD

Our survey shows that nearly all insurers have integrated ERM processes into their everyday business practice at least to some extent. The objectives for the future are to further this integration with their business processes, improve ERM methodologies to better reflect the risk realities that companies face, and embed ERM further into decision making, employee behavior and remuneration. Regulatory changes such as the advent of Solvency II in Europe as well as rating agency influences will continue to build demand for better ERM capabilities. Insurers will benefit to the extent that they understand and improve the value-adding capabilities of their risk management systems.

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