

Practical ERM Considerations — From an Insurance Carrier's Perspective

by Steve McElhiney, CPCU, MBA, ARe, AIAF



Steve McElhiney, CPCU, MBA, ARe, AIAF, is president of EWI Risk Services Inc., a Dallas-based reinsurance intermediary and a subsidiary of NL Industries, a diversified industrial company. He also serves as president of Tall Pines Insurance Company of Vermont, an affiliated captive insurance company. McElhiney's insurance industry experience has spanned over two decades in roles such as CFO, corporate treasurer and ceded reinsurance executive. McElhiney currently is the CPCU Society's president-elect.

Editor's note: This is the third and final installment of a three-part series on enterprise risk management written by Steve McElhiney, CPCU, MBA, ARe, AIAF. The first two installments were published in the June and October 2010 issues of *Personally Speaking*.

There are a variety of "soft" risks that can adversely impact an insurance carrier. First, the specialized staffing needs of the industry face demographic trends that are not favorable. A substantial percentage of insurance professionals are on the forefront of retirement; it will be a challenge to replace this level of institutional knowledge (a critical risk to the highly specialized monoline carriers).

Second, the industry is being transformed in certain lines through technology. Thus, a smaller regional carrier could be disadvantaged vis-à-vis the larger national carriers due to the depth of their financial resources to invest in such capital-intensive tools and systems.

Enterprise risk in an insurance organization is further complicated by the simple (obvious) fact that carriers are in the risk-taking and risk-bearing business. By their nature, insurance companies are taking calculated risks against their dedicated capital bases.

The successful and well designed retention of risk leads to the accretion of capital over time; selective "risk bearers" are advantaged relative to "risk traders" who simply arbitrage risks. In an enterprise risk management (ERM) framework, a balance is required to ensure appropriate risk appetites and controlled risk undertakings so that capital levels are never unduly threatened.

From an ERM perspective, some of the underwriting considerations for an insurance company include the accumulation of certain exposure types from both a gross and net (of reinsurance) perspective. The credit risk associated with reinsurance can never be overlooked; any uncollectible sums are borne by the ceding company, and most insurance insolvencies globally have been partially due to the impact of uncollectible reinsurance (e.g., Mission Insurance Company).

Catastrophic exposures and liability accumulations are managed through computer risk models that analyze the probable maximum loss (PML) arising from certain perils (e.g., wind, earthquake, tornado and hail). A couple of key metrics arise from the models:

- (1) The gross and net (of reinsurance) PMLs.

- (2) The annual average loss estimation — that is, the normalized CAT "load" that is evident annually when year-to-year volatility is removed.

Both the rating agencies and regulators carefully monitor CAT aggregations with respect to either the indicated economic capital or regulatory capital levels. The intent is to manage the exposures at a level of materiality that could adversely impact capital at reasonable "return period" intervals of severity spikes. As mentioned earlier, the extreme "mega-CAT" outlier events do not usually represent an efficient economic risk transfer proposition.

Further, underwriting limits are a key factor in an insurance company's enterprise risk assessment process. Key questions in this regard are:

- (1) What is the limits profile of the organization (or by business unit)?
- (2) Is there "balance" evident for certain premium or policy bands to compensate the carrier for the inherent degree of risk?

Risk is governed in an insurance carrier in a variety of ways, based on size. The large global organizations often have a dedicated chief risk officer, who has dual reporting relationships to both the CFO and the CEO of the organization as well as reporting to a risk committee of the board. In moderate-size insurance organizations, often the CFO is responsible for the ongoing monitoring of a variety of sources of organizational enterprise risks. In a small carrier, often the president of the company has this responsibility.

Risk governance takes a number of forms in an insurance company. First, the overall policies of risk need to be delineated and vetted.

Second, regulatory compliance is an absolute requirement — it is not discretionary. Regulators will monitor the level of capital via risk-based capital requirements and ongoing audits.

Third, rating agencies provide another level of risk monitoring for the insurance company across a variety of financial and operational ratios. The riskiness of the insurance company is captured in the assigned rating level and capital adequacy score that is determined.

Fourth, risks are periodically measured through audits of external CPAs and from reinsurers (both premiums and claims). These functions may be supplemented by some internal audit sources at the company.

Insurance companies can gauge and calibrate risks across a variety of measurements. These quantitative measures should be customized to the company and its unique book and its overall risk tolerance.

Ultimately, risk levels require disclosure to stakeholders via financial reporting guidelines (often in the form of footnote disclosure) and rating agency and regulatory disclosure.

Levels of liquidity that are maintained are a function of ERM within the insurance company. Longer-tailed business tends to suggest that less liquidity needs to be maintained than would be the case for a book that is subject to sudden spikes in severity.

ERM also suggests that sources of, and overall access to, capital be well understood and evaluated pre-event to ensure the survivability of the company post-event. Extreme events will cause a sudden and substantial depletion of capital levels, and a prudent carrier will have evaluated sources of capital and will have determined access to capital strategies in advance of the event.

Irrespective of size, one critical component of ERM is the risk tolerance

level or risk culture of the company. This is a function of the company's tolerance for variability and volatility in results as indicated by shareholders or owners. The dynamic of a publicly traded insurance company introduces general investor expectations for a more normalized and predictable earning stream over time (volatility constrained).

Insurance is, fundamentally, a balance sheet centric business. By contrast, the income statement of an insurance company will show natural volatility due to loss-severity spikes. Success comes through managing the balance sheet prudently over time as opposed to an exclusive focus on achieving quarter-to-quarter earnings growth expectations from capital providers.

A topic of increased interest to rating agencies especially, and more recently to capital providers, is that of economic capital and the risk adjusted returns on that economic capital. Economic capital attempts to calibrate the underlying riskiness of certain lines of business and, in turn, allocates higher relative amounts of capital to support the inherent underwriting risks.

Economic capital differs from accounting capital in that it is not nominally based on accounting ratios but is more subjectively determined based on the underlying business that is underwritten. Thus, the economic capital required to support a long-tail excess casualty line will be significantly higher than that required to support a short-tailed program. The higher levels of capital required necessitate higher relative returns; accordingly, capital is rationed within the insurance company to the highest and most efficient returns in such a model.

It is critical that any insurance carrier realize that the definition and quantification of risk is an evolving process. Emerging exposures need to be carefully studied and evaluated in terms of their potential impact to the organization over time. As a variety of

organizational disciplines are impacted by the various aspects of risk (particularly in the larger entities), it is imperative that risk be evaluated in a multidisciplinary matter and reported to the appropriate level of management (and ultimately to the board).

An ERM framework requires a vigilant devotion to employee training and cross-training. A risk culture connotes a company where the understanding of risk is an integral part of the overall decision making at all levels and the tactical operational plans support this overall strategic mission.

Finally, most extreme events introduce a very significant "risk error" component into their ultimate financial impact. That is, the actual results may not correlate highly with the anticipated results of the model.

Often, major earthquake or hurricane events have demonstrated actual losses that are substantially higher than the expected results of the CAT models. This phenomenon is called "modeling error" and is an expected outcome from these relatively nascent tools when compared to highly complex geologic and weather events that span thousands of years in frequency.

A prudent company manages its capital accordingly and, by design, carries a capital cushion for this unexpected error factor and other ERM-type events.

A key failing of the global banks and capital markets firms that succumbed to the financial crisis was their willingness to keep their capital cushions at the lower levels indicated by economic capital models (to better leverage results to meet investor expectations).

As insurance risk bearers, carriers should always be biased towards keeping more capital than is minimally required for certain rating levels or regulatory purposes for such unpredicted and emerging risks. ■