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Risk Management Newsletter

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Chairperson's Corner

Toward Leadership in Risk Management

by David Ingram

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"The vision of the Society of Actuaries is for actuaries to be recognized as the leading professionals in the modeling and management of financial risk and contingent events."
—SOA Mission Statement

The SOA adopted the above as part of the mission statement in 2001. For many years actuaries were the only professionals who were trying to model and manage risk. Throughout the 20th century, the application of statistical techniques to business and investment problems became more and more widespread. In the 1970s, the revolution in financial economics started and very sophisticated modeling became the backbone of financial analysts. Futures contracts came into being in the 1970s, options in the 1980s and by the early 1990s there were several incidents of massive company (and government entity) losses from derivatives portfolios. The discipline that is now widely called risk management came out of the impact of those problems in the banking industry.

During the past 30 years, actuaries have significantly added to the sophistication and complexity of our risk-management techniques. Actuarial and insurance company risk management practices had taken a different track than those of banks. During the 1980s when billions of dollars were being lost due to interest rate mismatch in savings and loans, actuaries were working on developing ALM systems for insurance companies. Insurance companies were largely kept out of significant derivative exposures by regulatory restrictions and inherent conservatism of management. In addition, the book value accounting system used by insurance companies shielded them from some of the volatility that was plaguing banks where "mark-to-market" was implemented as the solution to slow recognition of problem situations. During the 1980s, actuaries developed rudimentary economic capital calculations and used them to develop what are now called RAROC internal financial reporting systems when banks use them. In addition, many actuaries led their companies to develop profit analysis (pricing) systems that reflect the impact of risk capital allocation as a cost or deferral of profits.

By the 1990s, banking regulators had started to insist that banks adopt the new risk management techniques of identifying risks, measuring risks, controlling risks and managing risks. Some large banks are now reported to have risk management departments of over 100 people.

In the late 1990s, a task force of the Finance Practice Area under Jack Gibson was formed to study what banks were doing. In 2000, Sue Collins, the SOA vice president for the Finance Practice Area, asked me to form a risk management task force (RMTF) with the charge to (a) hold a seminar to introduce actuaries to these new risk management ideas and (b) to explore areas where the SOA could expand the available resources for actuaries to learn about risk management. That original group, Todd Henderson, Steve Marco, Josephine Marks, Hubert Mueller, Jim Reiskytl, Max Rudolph, Ruth Sayasith, Bill Schnaer and Vinaya Sharma met via teleconference for about six months discussing the definition of risk management and trying to develop a priority project that we could undertake. We never reached consensus. We agreed to disagree. But rather than give up at that point, the group agreed to take our wide range of interests public and find out how many people were like-minded. We started with a list of over 30 possible projects and eventually got down to 10 that two or more of us agreed were of high priority to the profession and of high personal interest. At the end of February 2001, the new Finance Practice Area staff actuary, Valentina Isakina, organized a blast e-mail to the SOA membership soliciting volunteers for the 10 new risk management projects.

What happened next was unexpected and probably totally unprecedented. In the next month, Valentina and I received over 150 e-mails from interested volunteers!!! The 10 groups scrambled to get started to make sure that we put that volunteer interest to work. The groups all developed as very member-directed and high-energy project teams. Some groups held monthly calls and for others that wasn't enough; they did their calls twice a month. Group members scoured Web sites and libraries and developed reading lists for several subjects. One group hosted several telephone mini-seminars, the most popular of which brought the SOA phone system to its knees with over 50 participants, while dozens complained of being unable to connect. One group has produced a practice guide and another secured funding for a research project. Several groups did surveys of current risk management practices. The groups were very electronically oriented from the start and, as work product was developed, Rick Pitts stepped forward to coordinate the development of the RMTF Web site.

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At the 2002 Annual Meeting, Harry Panjer took the gavel as the 54th president of the SOA. Dr. Panjer, who has published papers on risk-management topics in actuarial and non-actuarial publications, included risk management as one of his key areas for development during his term. The SOA strategic planning committee, led by Norm Crowder, worked to complete their investigation into member and market needs and perceptions. Much of the research and committee discussion focused on possible roles for actuaries in risk management. In the spring of 2003, an SOA board member, Mike McLaughlin, volunteered to take up the charge from the board to help to develop a new Risk Management Section. Members and leaders from the RMTF and several other key people were recruited to develop bylaws, a petition to the board and a call for initial members. Those steps were completed in about one month and at the June board meeting, the board approved the petition allowing the organizing committee to go ahead with recruiting members for the section. By August, the required minimum of 200 members had sent their $20 to Lois Chinnock, who is the tireless back-office manager for all of the sections, and we were live. As of January 2004, Lois told me that there were almost 700 members in the Risk Management Section and more are to come as the 2004 dues are paid.

In September, the Risk Management Section held our first election and elected nine council members. At the annual meeting in October, we held our first section council meeting and elected officers. So here we are. What are we going to do?

All nine council members were able to attend an all-day planning meeting in December to address that question. I have to say that you, as members, have elected an amazing group. The discussion lasted over five hours with all council members being active participants in almost every part of the agenda. The middle of the day was reserved for the strategic discussion. What emerged in that discussion was a remarkable clarity and unanimity of vision for what the section should be about. Here is a brief summary of that vision:

1. The Risk Management Section will work to further risk management education and re search in a manner that will serve section members across all industries, focusing on insurance and broader financial services industries.
2. The Risk Management Section will work to establish leading, practical risk-management techniques and practices.
3. The Risk Management Section will perform, sponsor, and encourage risk management research, working with the Casualty Actuarial Society to the greatest extent practical.
   - Sponsor risk-management education material, seminars and symposiums
   - Develop communication skills for complex risk-management ideas
   - Advance the risk-management skills of actuaries

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Taking a break from the inaugural meeting of the Risk Management Section Council in Orlando are:

(Back row, left to right):
Charles Gilbert (section treasurer), Hubert Mueller (Spring Meetings Program Committee representative), Frank Sabatini (vice-chairperson and Annual Meeting Program Committee representative and David Ingram (section chairperson).

(Front row, left to right):
Mike McLaughlin (section organizing committee chairperson), Lois Chinnock (SOA staff) and Michael Kaster (former SOA staff).

Other Council Members: Beverly Margolian, Henry McMillan, Ruth Sayasith, Ken Seng Tan and Shaun Wang.

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   - Monitor and share best practices for risk management
4. The Risk Management Section will work to increase the profile of the actuarial profession in the risk management field.
   - Promote the value of ERM and CRO, and the actuary in that role
   - Encourage a focus on risk management for business decision making
5. The Risk Management Section will be a key participant in the process of setting standards of practice for risk management.
6. The Risk Management Section will encourage appropriate standardization of risk metrics and capital adequacy measures.
7. The Risk Management Section will work favorably to influence regulators in the formation of risk management regulations so that they conform to emerging best practices, working with the American Academy of Actuaries.

Underlying this vision of the section's activities is the belief that risk management is a holistic activity that covers a broad spectrum of risks, including credit, market, operational and insurance/hazard, and that risk management must integrate measurement, monitoring, strategy development, tactical execution and risk preferences.

From this base, we will be working to select some additional projects that the section will undertake. Our starter list has over 40 items. There is no doubt that we will be coming back to you asking for more support and help in one way or another. Anyone who has any suggestions for the section is encouraged to send them to the section council and/or to this newsletter.

My hearty thanks to everyone who has participated in all aspects of this process so far. If you ask me if I think that actuaries will again be recognized as the leading professionals in modeling and management of financial risks, all I can say is that with all this enthusiasm and the high quality of people involved, "You gotta believe!" ✦

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Insurer Solvency

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that emerge. It follows that in order for a supervisor to be content with a lower amount of required capital under a company-specific approach, there must be some assurance that the particular source of risk is under control, its effects are well mitigated and there is a reduced need for the required capital. Therefore, in approving a company's use of an advanced or company-specific approach, the supervisor should confirm that the company has inplace appropriate risk management processes together with a satisfactory reporting structure.

A particular strength of internal models is their ability to capture the impact of combinations of risks beyond a simple aggregation of individual risk factors that cannot accurately assess risk interaction effects.

Market efficient capital requirements

It is the WP's view that excessive minimum capital requirements, while affording additional solvency protection, will also serve to impede capital investment in insurers because of the perceived additional cost of capital required in the business, beyond that required by economic levels of capital, that may not be recoverable in product pricing. ✦

Comments on the WP report are actively welcomed and can be sent to the author at swason@mow.com.