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# Dialogue on risk Toward a greater role in the financial services industry

by Anna M. Rappaport and Zain Mohey-Deen

he work of actuaries is changing with the rapidly occurring developments in the financial services industry. Key changes include new approaches to handling and managing risk on both the asset and liability sides of the balance sheet. The business of financial institutions is increasingly overlapping. The traditional disciplines of actuaries and other financial managers are coming together to build new ideas and develop new tools so all can do a better job.

An outstanding SOA conference late last year was important in helping the profession advance the work of risk measurement. The conference, "Integrated Approaches to Risk Measurement in the Financial Services Industry," brought together a diverse group of 84 professionals, including actuaries and others working in risk measurement and management. (See

"Integrated approaches to measuring risk is topic of December SOA conference," *The Actuary*, September 1997.)

All of us gained by having a dialogue with a multidisciplinary group of experts.

- The exchange of information enhanced the visibility of actuaries within the financial community. Fewer than 20% of the attendees
  - were academics; the rest represented insurance companies, investment houses, and other financial services organizations. Several of the participants were from overseas.
- A number of speakers and attendees at the conference are involved in

- research on different aspects of risk measurement. The ideas and contacts available to actuaries at the conference could be very helpful.
- Future SOA meeting sessions could focus on some of the conference topics, and one or more conference speakers might be recruited for those sessions.
- The conference papers in the aggregate are a substantial addition to our knowledge base.

This conference was truly a team effort. First, it was sponsored jointly by the SOA's finance practice area and Investment Section. Second, the program arose from a discussion of gap analysis by the 1996-97 Strategic Planning Committee. In developing ways to make the SOA mission and vision statement a reality — the committee's goal — the committee

discussed the growing actuarial opportunities

in the finance and investment area. This led to a discussion of the measurement known as value at risk (see "Value at risk: New tool focuses the hunt for built-in risk," *The Actuary*, September 1997). As Strategic

Planning Committee members Cindy Forbes and Irwin Vanderhoof sought ways to close the gap between the SOA's current activity in the finance practice area and what the SOA should be doing, the idea of a call for papers and the conference emerged.

Following are some highlights of the ideas presented at the conference.

Value at risk (VaR) measures as applied in banks are essentially one-day or 10-day measures; they are not long-term measures. VaR focuses on the largest amount that can be lost, in all but a very low probability, over a given time period in a portfolio, and one of its uses is to help set minimum capital requirements.

When VaR timelines are lengthened, VaR can be a successful tool for insurance companies to use to manage risk. VaR offers another way to look at risk theory. Several conference papers investigated issues involved in applying VaR to life and casualty insurance.

#### **Beyond VaR**

VaR and a range of other ideas provide some different ways to look at portfolios and to integrate the asset and liability sides of insurance. The ideas also provide a way to look at insurance and other financial products in a unified way.

There are several different methodologies for doing calculations; none are perfect. Ongoing work focuses on practical methodologies, the theory supporting the calculations, and the difficulties inherent in developing models, collecting data, and implementing models. The papers spanned all of these issues.

William H. Panning, executive vice president, Advanced Risk Management Services, Willis Corroon, demonstrated pitfalls when risk measures are used blindly. He also gave a practical demonstration of how VaR can be applied to casualty risks.

Liam Mason and Peter Zangari of J.P. Morgan provided an overview of value at risk and the theoretical approaches which can be used for calculations. They also provided insight into how these ideas are used today on a short-term basis.

Models were discussed often. Two presentations stood out. Teri Geske, vice president, product development, Capital Management Services, focused on considerations for selecting models and on the risks inherent in building models and constructing assumptions. Colin McKee, financial analyst, Bank for International Settlements, focused on stress testing of models.

Several of the papers and tapes of conference sessions are available for

purchase. (See column at right.) Selected papers in edited form will appear in a special issue of the North American Actuarial Journal.

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## New service: 'Job Link' lets employers list openings on SOA Web site

The SOA Web site's new "Job Link" service can help link employers to actuarial students and actuaries seeking new job opportunities.

An employer can post a job opening and a link to its Web site for 60 days on the SOA Web site (www.soa.org) for a fee of \$200. That's less than the cost of one advertisement in most suburban newspapers. The SOA Web site boasted more than 1 million hits in January and has visitors from around the world.

Guidelines for participating employers are designed to encourage appropriate job seekers to apply.

- Each job title must have a separate listing (although a posting asking for several individuals for the same title constitutes one posting).
- Companies must identify themselves and list the position's title and the city where it is located.
- Nonprincipals including recruiters, search firms, employment consultants, and placement services — must identify themselves as such.

Details are available from Debbie Jay, SOA online development coordinator (phone: 847/706-3539; fax: 847/706-3599; e-mail: djay@soa.org).

### **Ball State University announces faculty opening**

The Department of Mathematical Sciences at Ball State University announces a search for a professor or associate professor of actuarial science, effective fall 1998. If credentials permit, the appointment will be as the Lincoln National Corporation Distinguished Professor.

Minimum qualifications for this position are either Fellowship in the Society of Actuaries or similar organization and a master's degree in a

mathematical science or Associateship in the SOA or similar organization and a doctorate in a mathematical science.

A full announcement is posted at www.cs.bsu.edu/~math/actsci.html. For a printed copy, contact: Dale Umbach, Chair, Actuarial Science Search Committee, Ball State University, Muncie, IN 47306-0490 (phone: 765/285-8640; e-mail: dumbach@wp.bsu.edu).

### In the know about the conference

The conference "Integrated Approaches to Risk Measurement in the Financial Services Industry" was held Dec. 8-9, 1997, near the Georgia State University campus in Atlanta.

Several papers, handouts, and tapes are available. A dozen papers and several handouts may be obtained for \$20 from the SOA Books Department. For information, contact Beverly Haynes (phone: 847/706-3526; fax: 847/706-3599; e-mail: bhaynes@soa.org). Tapes of all conference sessions are available from Teach'Em; cost and other information is available from the company at 800/225-3775.

#### Project oversight group

The conference and call for papers were developed over several months by an SOA project oversight group. Members were:

- Cindy L. Forbes, chair; vice president, Risk Management, Manufacturers Life Insurance Co., Toronto
- John Aquino, representing the Casualty Actuarial Society; senior vice president, Aon Re Services Inc., Chicago
- Harry H. Panjer, professor, Department of Statistics and Actuarial Science, University of Waterloo, Ontario
- William Panning, executive vice president, Advanced Risk Management Services, Willis Corroon, Nashville, Tenn.
- James Tolliver, vice president and associate actuary, Prudential Insurance Company of America, Newark, N.J.
- Irwin Vanderhoof, clinical professor, Stern School of Business, New York University