



SOCIETY OF ACTUARIES

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# Ad hoc group seeking modeling research questions

by Allan Brender

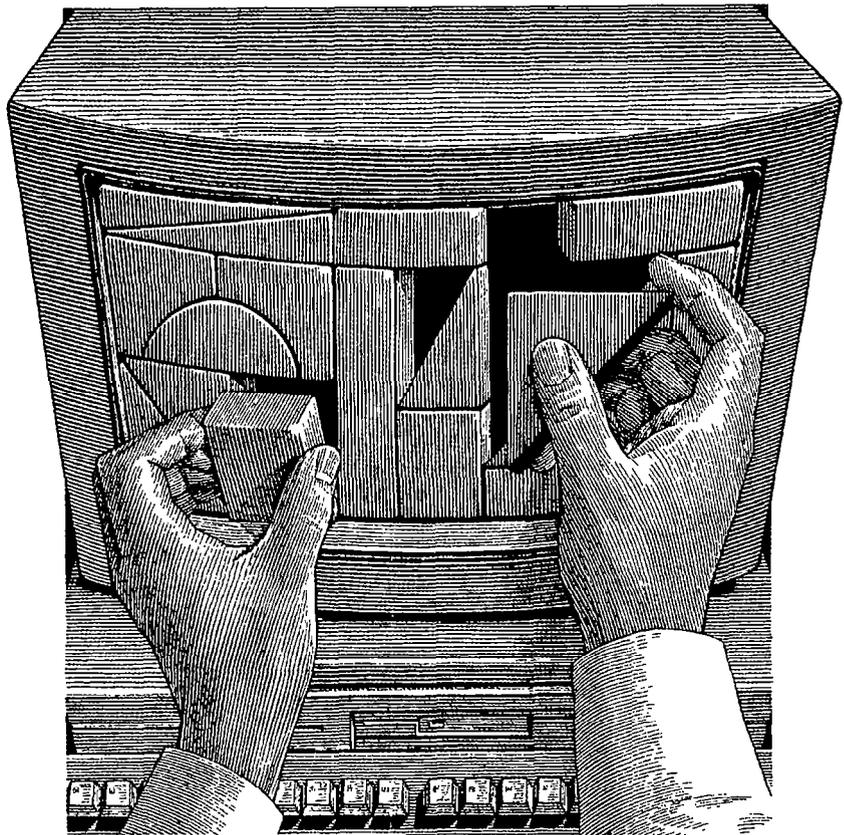
**B**uilding models is becoming an important component of actuarial practice. Some actuarial tasks that now require use of computer models include cash flow testing and dynamic solvency testing (known as dynamic financial condition analysis in the United States and dynamic capital adequacy testing in Canada). Some actuaries find models useful in pricing and in setting policyholder dividend scales. Asset/liability matching is usually done with heavy reliance on cash flow modeling.

The detail and sophistication found in an actuarial corporate model will depend on the purpose of the model and on the skill of the modeler.

Although the use of models is growing rapidly, the actuarial profession has not yet taken an organized approach toward developing our skills in this area. Hopefully, this is about to change.

Individuals from the SOA's Committee on Knowledge Extension Research, the Finance Practice Area, and the Life Insurance Practice Area have formed an ad hoc group to investigate and stimulate research on modeling. The members are Allan Brender, Shane Chalke, Curtis Huntington, Roger Smith, and Irwin Vanderhoof. SOA staff members Warren Luckner and Judy Strachan provide support to the group.

To begin, the group wants to collect a list of modeling issues or questions that actuaries would like to have investigated. A key question is, "Can we expect one model to serve the needs of the profession?" The obvious answer is "no," but to a great extent, the actuarial profession has been built on the use of one model: the Asset Share. This



model has been elaborated to include multiple decrements, which allows for modeling of disability and pensions. In recent years, the model has further been elaborated to include multiple scenarios for cash flow testing and option adjusted pricing.

The group has concluded that sponsoring regular symposia or conferences on modeling issues is desirable. Thus, it has asked Warren Luckner, SOA director of research; Steve Strommen; Barb Choyke, SOA director of continuing education; and Allan Brender to design the first one in late fall. The focus is to be on raising the questions, so the general format might include a few invited speakers, but will emphasize small group discussions. The event is intended to attract speakers and attendees from both the actuarial and

non-actuarial communities and from all parts of the world. The objectives are to stimulate discussion and to motivate writing of papers for subsequent symposia or conferences, with the anticipation that ultimately the practice of actuarial science will be enhanced.

More details will be communicated as they are available. In the meantime, we welcome your suggestions for structure and content of the event and for keynote speakers. Please direct your suggestions to Warren Luckner at the SOA office: phone: 847/706-3572; e-mail: 73462.21@compuserve.com  
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