



SOCIETY OF ACTUARIES

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## Section Highlights

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### INTERNATIONAL SECTION

The International Section is unique among sections in that it serves members who have a strong international interest and members who actually work overseas. In fact, only 60 percent of the current membership resides in the United States. This is a different perspective compared to other sections in terms of scope and coverage. In other words, the International Section really is “international”!

The section provides the usual menu of services to its members, but there are two areas where it is specifically trying to bridge the gap between the Society of Actuaries (SOA) and its international members. One effort is the Ambassador Program and the other is continuing education.

The International Section has been dedicated and will continue to support and expand the international Ambassador Program, which connects our members with the SOA in international markets. In 2011, the total number of countries with ambassadors was more than 30, spreading over five continents. The ambassadors have added tremendous value in bringing the SOA closer to our members overseas. As this program grows, it will be necessary to address the resources needed to effectively monitor and evaluate this program.

In North America, the section utilizes its diversified strength and a renewed commitment to offer international content at SOA meetings. In the growing Asian market, by partnering with other SOA sections and actuarial parties, the International Section

offers seminars in international locations. In the past, the International Section had sponsored a series of well-attended IFRS seminars located in Hong Kong. In addition, for the first time in 2011, the International Section offered a successful Variable Annuities seminar in mainland China as the result of responding to local regulatory changes and addressing local member needs to fulfill their CPD requirements. While there continues to be great value in the traditional continuing education formats, the section will be pursuing more ways to deliver timely and informative continuing education programs to our members by using quick-to-market media.

In October 2011, the board of the SOA approved the formation of the International Strategy Committee. The mandate and initiatives of this committee will certainly influence the future direction of the International Section. To support the SOA international initiatives, the section will continue to be one of the effective communication and execution channels for the membership in North America and the rest of the world. **A**

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### FORECASTING AND FUTURISM SECTION

While many of the sections of the SOA are centered on individual areas of practice, the Forecasting and Futurism Section instead focuses on tools, techniques and methods that are used in every branch of actuarial

work. One of the topics that the section has attempted to tackle during the last two years is the study of complexity science. Not only does the study of complexity science naturally fit in the section because several sub-topics can be very valuable in forecasting, but the phenomenon of interaction between elements creating larger scale effects fits into our usual style of thinking.

There are three requirements for an area of study to be considered a part of complexity science: complex collective behavior, signaling and information processing, and adaptation. While some of the areas of topics are fairly new to mainstream actuarial work, such as cellular automata and ant optimization, others are beginning to be much more widely used in the profession. Predictive modeling is being used to underwrite life policies using data from the Internet. Network science is being used to analyze distribution channels and help managers formulate succession planning. It has been debated, but behavioral economics, which has more history with the profession, is also included in complexity science.

Genetic algorithms are what spurred interest in several of us and have real applications in asset/liability management as well as portfolio and capital optimization. Our initial application of using genetic algorithms as a tool to efficiently search solution spaces is only the beginning for this technique—it is exciting to think where this technology will lead us! The curiosity of how other professions used these techniques led us to develop actuarial applications that provide

real contributions to actuarial work. As with this and other adaptations of complexity science, if other professions are so successful using these ideas and techniques, why can't we? **A**

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## PRODUCT DEVELOPMENT SECTION

The product development section focuses on individual life and annuity product development issues. We strive to provide relevant content and timely research to assist our members in their daily lives. One of the ways we are doing this is through a research project on market consistent embedded value (MCEV). Many sessions at meetings have used this MCEV acronym and many actuaries have a vague idea about what it is, but what the Product Development Section really wanted to explore is why this MCEV measure is getting so much attention and would it be a good idea to use this in the risk profiling tools that product development actuaries have. The project is meant to give a high level overview of MCEV and compare it to other profit measures that product development actuaries may currently be more comfortable with like internal rate of return (IRR). This may be able to help with discussions with management and getting a fuller picture of the products and risks that the company is opening itself up to.

Another area of research that the Product Development Section is trying to dive into is older age mortality. Many companies sell insurance at older issue ages, and as the in-force population ages, assumption setting that is realistic is key to understanding the risk profile for the products as well as the expectation of value added in offering the product. When experience is far from being

credible since it hasn't had time to develop, we want to provide a resource to know what companies are doing in terms of assumption setting at older ages to help others develop reasonable assumptions for their products.

Certainly one of the bigger venues we have to deliver information to members is at the Life and Annuity Symposium as well as the post-symposium seminar. We have two to three days of sessions and content that are geared to helping the attendees find material, experts and ideas to bring back with them to their workplace and use from that point on. In 2012, the Life and Annuity Symposium will be in Los Angeles and planning is well under way for sessions and the post-symposium seminar, so we encourage members and nonmembers to join us. Some session ideas include results from the research projects above, life and annuity market updates, illustration actuary compliance, underwriting trends, and much more. We also try to have networking sessions to help meet others who may have the same issues and provide a relaxed environment to talk with other product development actuaries. **A**

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## REINSURANCE SECTION

The Reinsurance Section is in the enviable position of having a diverse range of topics of interest to our varied membership. The Reinsurance Section aims to identify significant trends and events with an overriding objective of enhancing the understanding of reinsurance for all our actuarial and non-actuarial membership. After identifying the issues of interest to the section membership, our research, webcast and continuing education committees go to work to gather and disseminate information.

Risk identification and stratification in underwriting has historically been of keen interest to many professionals, including those employed by life insurers and reinsurers, and it continues to evolve. Current Reinsurance Section research is under way to evaluate the protective value to all cause mortality of a range of laboratory testing medical markers that are not currently widely used in the underwriting process. Research titled "New Medical Markers in Life Insurance Underwriting" will be available on our website. Separate research reports covering high face mortality experience and older age mortality experience will be coming soon as well.

Whether conducting an in-house meeting or negotiating an external reinsurance arrangement, the professionalism with which we conduct our day-to-day activities is critical not just to the actuarial profession, but to other professionals we interact with daily. Realizing that our section members pride themselves in abiding by the SOA Code of Professional Conduct, we supported this with a webcast outlining some of the reinsurance-relevant precepts of that code. We hope you found this refresher of the code of value in your daily work! **A**

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