



SOCIETY OF ACTUARIES

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BRINGING RESEARCH FRONT AND CENTER

BY GREG HEIDRICH

Research is a fundamental part of what the SOA does. It's an integral piece of our mission statement, "The SOA, through research and education, advances actuarial knowledge and improves decision making to benefit society."

Now, more than ever before, we are focusing on our research activities and stressing the importance of how critical it is that we work on projects that look into the future, that advance our profession, and inform and benefit society.

It's important that our members, our stakeholders and other organizations and businesses know what we're doing in the research arena. So we're shining a spotlight on it now as we migrate into the areas of public policy and other relevant topics ... topics that people really care about today.

In the experience studies world, there are major regulatory changes that are beginning to happen with state insurance regulation in the United States. We need to be there, front and center, to be an integral part of these opportunities to demonstrate how actuaries can be significantly involved in this important work.

How do we step ahead? Thoughtfully, strategically and steadily.

We've been gradually adding pieces to our research area. We now have in-house modeling research capability that didn't exist before. And we just added a researcher in Canada to work in partnership with the Canadian Institute of Actuaries on retirement-related research. In addition, we now have a staff health actuary to produce research in this important area and have increased our experience studies actuarial staff.

To bring all these pieces together, we recently hired Dale Hall, managing director of Research. Dale is doing a great job to bring together the various resources and opportunities we have to highlight the contributions of actuarial research.

Dale will be writing regular columns in *The Actuary* to highlight the important work that is in progress at the SOA. In this issue, he talks about ASIA insurance opportunities. In future issues of our magazine, he'll address new health research and other projects that we'll be spearheading.

We're going front and center with our research endeavors, getting involved in issues that face the public and publicizing member expertise in as many ways as possible. With your knowledge and actuarial expertise, we're making



a significant impact on the actuarial profession and with regard to significant societal matters. Important work is being done here and we're sharing it. **A**

Greg Heidrich is executive director of the Society of Actuaries. He can be reached at gheidrich@soa.org.

SOA 2014

SOCIETY OF ACTUARIES
Annual Meeting & Exhibit

Oct. 26-29, 2014
Rosen Shingle Creek
Orlando

Invent
Change
Adapt
Learn
Build
Innovate
Perform

Through the profession,
collaboration, research, education and
our members...

TOGETHER WE PROGRESS

SOAAnnualMeeting.org

100+ INSIGHTFUL SESSIONS

25+ PRODUCTIVE
NETWORKING
OPPORTUNITIES

1,800+ INNOVATIVE MEMBERS

300+ DEDICATED
PRESENTERS

SOA RESEARCH— ASIA INSURANCE OPPORTUNITIES

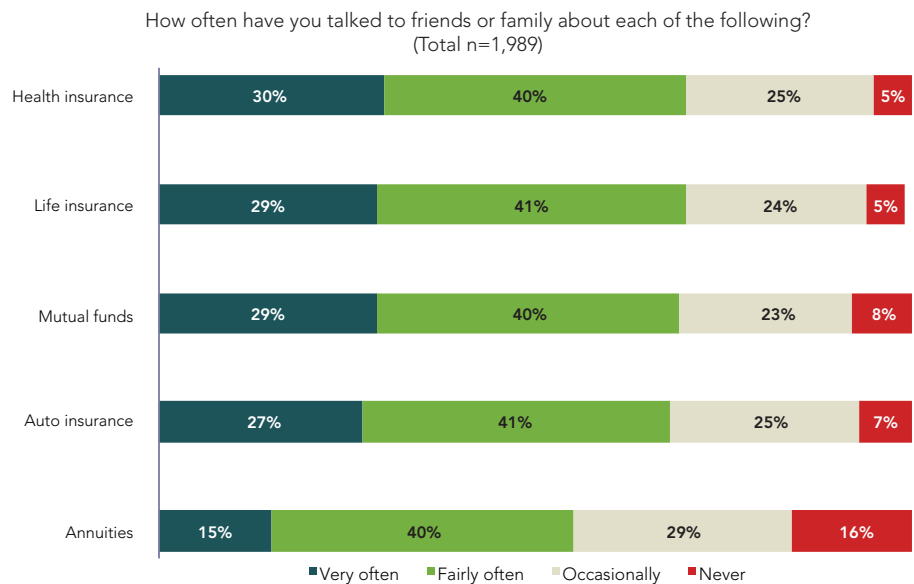
BY R. DALE HALL

As part of the Society of Actuaries' (SOA's) broader work supporting the global actuarial profession, we have a growing number of research projects specifically addressing opportunities and insights for our membership in Asia. While the SOA does develop many North American focused studies, several other projects and efforts also help provide a global perspective to the actuarial profession.

For instance, every three years the SOA hosts the Living to 100 Symposium, which brings together actuaries, demographers, physicians, academics, gerontologists, economists, financial planners, researchers, and other professionals from around the world, to discuss research and insights on health, retirement and aging. We released the 2014 Living to 100 Monograph, which highlights the challenges and solutions for longevity risks. Additionally, we are working on a research paper that compares and contrasts the process for creating regulatory experience studies in the United States and Taiwan. Results will be presented with our academic partners in Taiwan at the 2014 East Asian Actuarial Conference in October.

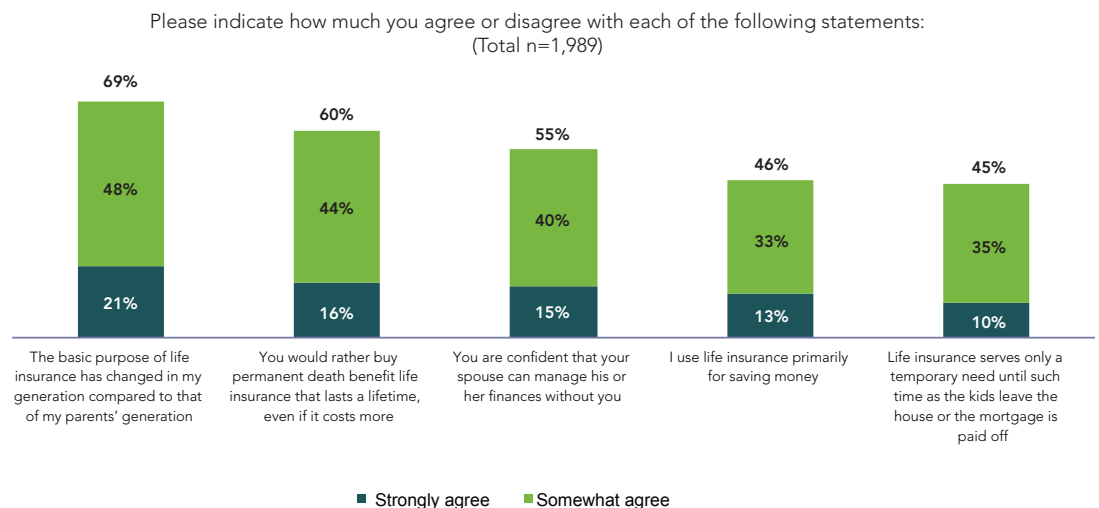
The SOA has also released a new report and survey that examines the China middle market in terms of life insurance opportunities. The report compares the different consumer segments—those uninterested in life products, the “life protectors” (those with an appreciation

Chinese consumers report fairly high levels of knowledge about life insurance.



Greenwald and Associates, 2013

Most agree that the role of life insurance is changing. Fewer than half see it as serving a temporary need.



Greenwald and Associates, 2013

of the value of life insurance and its role throughout one's lifetime) and "life investors" (those who view life insurance as a temporary need and retirement saving as a primary focus).

This report, "The Changing Middle Market for Life Insurance in China," written by Walter H. Zultowski, Ph.D., provides the following:

- Perspectives on the changing middle market for life insurance in China
- An understanding of the market segments that currently exist in this changing marketplace
- Suggestions as to how companies may best market to these different segments.

The report's accompanying survey looks at Chinese consumers' knowledge about life insurance, and how they maintain a sense of skepticism toward certain ways of how life insurance products are sold.

Not only does this report provide a new perspective on how to reach the Chinese middle market on life insurance projects, it also helps establish an important connection to our members throughout the world. It's an important research project that shows many global similarities, but also acknowledges major differences and nuances to international life insurance markets.

More opportunities are in store in the future for the SOA and our members to

help develop vital research benefiting the actuarial profession and the respective stakeholders. We're looking forward to contributing to the development of this vital international research. **A**

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Knowledge On The Go

Insightful podcasts are now available to listen to **anywhere!**

The Society of Actuaries is offering topical podcasts for those interested in insight and perspectives from **fellow members**. The podcasts are **free** to download and can be listened to from your computer or any portable audio device. Check back often as new podcasts are released.

www.SOA.org/podcast

E-COURSES: GROWING YOUR KNOWLEDGE

THE SOA IS PROUD to offer 20 e-courses worth more than a combined 80.00 continuing professional development (CPD) credits. E-course topics range from professionalism and communication to social insurance and enterprise risk management, and can be completed in as little as two hours. Whether you're changing fields, in need of some refreshers or looking to improve your communication skills, get the knowledge you desire by registering for an e-course today. See our full listing at www.soa.org/ecourses.



FINANCIAL ECONOMICS: FINANCIAL MATHEMATICS

This e-course focuses on the financial mathematics branch of financial economics. You will learn about derivative securities and options, modeling returns, and option pricing and hedging.

FUNDAMENTALS OF ACTUARIAL PRACTICE (FAP)

This e-course is set in the context of the control cycle. It encompasses real-world applications and uses examples to demonstrate actuarial principles and practices. You will also have opportunities to apply these principles and techniques in traditional and nontraditional actuarial practice areas. With the fundamentals

in your toolkit, you will be better prepared to apply your learning to new areas of practice that may emerge during the course of your actuarial career.

HEALTH FOUNDATIONS

The Health Foundations e-course discusses the health care system at a micro level. It begins with an exploration of health care terminology and coding. The module moves on to discuss sources of data with regard to medical treatments and claims experience. The next step is to learn about the administrative systems that bring the data sources together. The module ends with examples illustrating how these elements combine to help provide solutions to actuarial problems.

INTEGRATED DECISION-MAKING PROCESS (IDMP)

The Integrated Decision-Making Process (IDMP) provides a foundation for making decisions related to complex business problems that require the involvement of many stakeholders and decision makers. IDMP presents a decision-making process that is specific enough to provide solid guidance when making decisions yet general enough to be applicable in a wide variety of situations.

PRICING, RESERVING AND FORECASTING

This e-course is designed to build upon the information presented in the Design and Pricing (DP) and Company Sponsor Perspective (CSP) examination syllabi and the Health Foundations module in the Group and Health FSA Track. Basic concepts that were presented in the exams will be integrated and expanded upon in this e-course. You will learn practical techniques involved in managing the financial control cycle of a health care company—from trend determination to pricing and reserving to analysis of historical results to forecasting future experience. **A**

analyst

specialist

manager

consultant

director

strategist

leader

executive

Already an FSA? CERA with Four Exam Hours More

On July 1, 2013, changes to the Society of Actuaries' fellowship exam structure will allow current Fellows of the Society of Actuaries (FSAs) to obtain the Chartered Enterprise Risk Analyst® (CERA) credential with just four additional exam hours.

As the most comprehensive and rigorous risk management credential available, the CERA offers an enhanced enterprise-risk-based curriculum that better prepares professionals with the in-depth knowledge and expertise they need to play more strategic roles across more industries—including risk managers, chief risk officers and CFOs.

To become a CERA, Fellows need only complete the four-hour Enterprise Risk Management (ERM) exam, along with the ERM module if it was not part of their FSA pathway.

Get on the path to the future of risk management.

See what the future holds at CERAnalyst.org.

CERA
Chartered Enterprise Risk Analyst
CREDENTIAL

GOOD RESEARCH READS

COMPLETED EXPERIENCE STUDIES

POST-LEVEL PREMIUM PERIOD LAPSE AND MORTALITY STUDY

This project is the latest research on mortality and lapse experience at the end of the level premium period. This report updates the initial 2012 study but contains enhancements such as additional lapse and mortality credibility, monthly lapse and mortality analyses, an analysis of issue age and face amount within a given premium jump, and a predictive model on the T10 duration 10 shock lapse.

To view a complete listing, visit *SOA.org/Research* and click on Completed Experience Studies.

COMPLETED RESEARCH STUDIES

SELECT PERIOD MORTALITY ASSUMPTION SURVEY

Performed by Al Klein and Michelle Krysiak of Milliman Inc. and sponsored by the Product Development Section and the Committee on Life Insurance Research, this study identifies pricing assumptions that are being used during the select period and provides insight into the nature of the assumptions underlying the mortality assumptions themselves.

EVALUATING APPROACHES FOR ADOPTION OF MEDICAL TECHNOLOGIES

This project created a tool that allows actuaries to derive an understanding of the



evidence for medical technologies that are provided through health plans. The study, conducted by Robert Lieberthal, Tony Amos and Jessica Lopatto of the Jefferson University of Population Health, provides educational and background material regarding the evaluation of medical technologies tailored for actuaries. In addition, the study produces a structured tool to allow actuaries to organize the existing body of evidence for any medical technology.

2013 EMERGING RISKS SURVEY RESULTS

Results from the seventh Emerging Risks Survey, conducted by Max Rudolph of Rudolph Financial Consulting, LLC., indicate that new risks are gaining increased attention among risk managers around the world. Most notably, rapidly changing regulations and risk of cyber-attacks may be slowly replacing the risk of oil price shock and other economic risks, which were of major concern just six years ago when the survey was first conducted.

LAND THIS PLANE: A DELPHI STUDY OF LTC FINANCING SOLUTIONS

In this report overseen by the Long-Term Care (LTC) Think Tank and authored by John O'Leary, a wide range of LTC financing issues and potential solutions are explored. Employing the Delphi method, the study gathered the opinions and thoughts of a diverse multi-disciplinary group of LTC experts and stakeholders.. Issues examined include key macro issues such as the role of government, the role of private insurance, the need for social insurance, the regulatory environment, and the future of Medicaid. The study also delved into a range of insurance product concepts that may provide more affordable LTC financing options.

MODELING OF POLICYHOLDER BEHAVIOR FOR LIFE INSURANCE AND ANNUITY PRODUCTS

Authored by a joint PwC and LIMRA research team and sponsored by the Financial Reporting Section and

Committee on Life Insurance Research, the report examines the current state of the life insurance and annuity industry with respect to: (1) available policyholder behavior experience data sources, (2) credibility of current experience data, (3) assumption structure and modeling, and (4) current challenges in the area of policyholder behavior modeling. In addition, the research examines developments in other industries and disciplines that could help actuaries better understand policyholder behavior.

MODEL VALIDATION FOR INSURANCE ENTERPRISE RISK AND CAPITAL MODELS

The authors of this report, Markus Stricken, Shaun Wang and Steve Strommen,

examine model risk and validation in this paper sponsored by the Joint Risk Management Section. The first part of the paper identifies and describes five distinct elements of model risk and then outlines a model validation process with specific steps to address each element. The second part discusses the challenges faced when performing model validation in a dynamic environment. Finally, a case study is provided describing the ways models and model risk play a role in the development of a life insurance product.

BEHAVIORAL DECISION-MAKING IN RETIREMENT

In this paper, sponsored by the Pension Section Research Committee, author Jodi DiCenzo provides a thorough review

of survey and empirical research on behavioral decision-making in a retirement context. The increased individual involvement in planning and providing for retirement has generated significant research by behavioral economists and others. The work in this area has provided an understanding of retirement-related decision making that often differs from decisions predicted by traditional economists. **A**

To view a complete listing, visit SOA.org/Research and click on Completed Research Studies.



Equity-Based Insurance Guarantees Conference

CELEBRATING OUR 10TH ANNIVERSARY

NOV. 17-18, 2014
Renaissance Chicago Downtown Hotel
Chicago

The Equity-Based Insurance Guarantees Conference, sponsored by the Society of Actuaries and Annuity Systems Inc., is designed to give risk management, product development and valuation professionals an understanding and appreciation of how to better quantify, monitor and manage the risks underlying variable annuity and equity-indexed annuity products. The 2014 conference will celebrate the 10th anniversary of this successful industry meeting and its influence on the practitioners and market practices in relation to how the products and their underlying risk-management practices have evolved. Attend this conference and gain tangible solutions to your day-to-day risk management, pricing, valuation and product development challenges.

Learn more at SOA.org/calendar.

 **ANNUIITY SYSTEMS INC.** **SOCIETY OF ACTUARIES**

PROFESSIONAL DEVELOPMENT: Your Opportunity to Grow

When is the last time you attended a meeting or seminar, or tuned into a webcast? As an SOA member, there are a number of events you can attend, in person or from your computer. Here are just a few of the upcoming meetings and webcasts coming your way that can help you:

- Stay up to date with current trends in your area of practice,
- Continue to make meaningful contributions to your company, your team and the profession, and
- Develop or fine tune new knowledge and skill areas.

MEETINGS AND SEMINARS

ERM SYMPOSIUM

Sept. 29–Oct. 1

Chicago

The purpose of the ERM Symposium is to provide thought leadership to professionals and practitioners working in Enterprise Risk Management, including discussion of risk topics and challenges across a broad spectrum of industries.

INVESTMENT BOOT CAMP FOR PENSION ACTUARIES

Oct. 14

Toronto

This interactive day will cover a range of topics starting with fixed income and derivative markets and their application to pension liabilities, moving to discussions of other asset classes and finishing with instruction about current pension investment strategies.

SOA 2014 ANNUAL MEETING & EXHIBIT

Oct. 26–29

Orlando

Join nearly 2,000 actuarial professionals in Orlando for the SOA 2014 Annual Meeting & Exhibit—an event showcasing our progress. Progress in the profession, progress in business and progress in society.

VIRTUAL SESSIONS/WEBCASTS

GENETIC ALGORITHMS: WHAT THEY ARE, HOW TO APPLY THEM TO SOLVE PROBLEMS AND HOW TO CREATE YOUR OWN

Sept. 23

Who should attend? Forecasting & Futurism Section and Health Section members, and those generally interested in data science business impact.

AN INSIDER'S VIEW ON CHANNEL EXPANSION

Oct. 7

Actuaries who need a better understanding of retail financial services product distribution, whether they work directly in or with distribution or are involved in developing pricing assumptions for distribution costs and behavior, should attend.

READY TO REGISTER?

Visit SOA.org/calendar for the full complement of meetings, seminars, virtual sessions, webcasts and more. We look forward to hearing from you!