

The Actuary

SOCIETY OF ACTUARIES

APRIL/MAY 2015 VOLUME 12 ISSUE 2

INTERNATIONAL ISSUE

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INTERNATIONAL ISSUE



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The Actuary

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Carl Hansen

Editorial

MY INTERNATIONAL LIFE

BY CARL HANSEN

READERS MAY NOTICE that we have made some minor changes to how *The Actuary* is produced. Going forward, we expect to have more issues of the magazine with much of the content covering a theme or an area of practice. However, we hope that each issue continues to appeal to a broad audience. I have had the privilege of being the lead editor for what I hope is the first of many internationally themed issues. As you can imagine, it was challenging to pull together material from busy people working in many different countries, and I thank each contributor who helped to turn our concept into reality. It all may not have been possible without help from Alan Cooke, who always seems to produce contacts or quality content on short notice. Thanks also to Jacque Kirkwood at the Society of Actuaries (SOA) for her patience as we went from no content to a full issue at (or maybe slightly past) our deadline.

While pulling together the content for this issue, I was contemplating the international life of an actuary from my own personal perspective. In my case, I have been based on the island of Guernsey for four years now. I am undoubtedly one of only a few SOA members who can look out their window at work and see an authentic castle (Castle Cornet), dating



Castle Cornet in Saint Peter Port Harbor, Guernsey (photo courtesy of Carl Hansen)

back to the 13th century. I can also see the islands of Sark and Herm on most days. They represent a slightly slower approach to the modern world. Both islands are populated year-round, but they have no cars. This contrasts with the relative chaos of Guernsey, which has one of the highest ratios in the world of cars to licensed drivers!

My own international journey started as a U.S. pension actuary at a major international actuarial consulting firm. I found myself doing an increasing amount

of work for multinational clients. During a casual conversation with an actuary from the United Kingdom, I mentioned that I might be interested in some sort of temporary assignment outside the United States. When nothing came of it for a year or so, I assumed that my comment had been long forgotten. One day, I had a call from the same U.K. actuary with an opportunity for a two-year assignment with the international pensions and employee benefits team in London starting as soon as practical. In the space of three months, I went from never having been to London

CONTINUED ON PAGE 8

CONTACT Ezra Penland AT actuaries@EzraPenland.com

CALIFORNIA – ANNUITY PRODUCT DEVELOPMENT ACTUARY

ASA or FSA sought by California insurer for annuity product development actuary for Position 62999. Requires annuity product development experience. Immediate need.

SOUTHEAST USA – LONG TERM CARE ACTUARY

Southeast USA client is searching for a Long Term Care Pricing Actuary with 5+ years of pricing experience. FSA preferred for Position 62985.

IOWA – LIFE ACTUARY

Life actuary with experience studies and AXIS / Prophet / MoSes / PolySystems / ALFA software experience immediately sought by Iowa insurer for Position 62957. ASA or FSA with 8+ years of life actuarial experience preferred.

NEW YORK – LIFE CONSULTING ACTUARY

New York life consulting group is searching for an FSA actuary for Position 61474. Must have at least 10 years of life actuarial experience. Some travel.

TENNESSEE – LIFE FELLOW ACTUARY

For Position 62944, a Life FSA actuary with pricing, risk management or valuation experience is needed by a Tennessee insurer. Requires 6 to 14 years of actuarial experience.

MASSACHUSETTS – HEALTH ASSOCIATE ACTUARY

For Position 62881, a prominent Boston health insurer is searching for a recently-credentialed Associate of the Society of Actuaries. This ASA should have some financial forecasting or pricing or valuation or statistical programming expertise.

GEORGIA – HEALTH PRICING ACTUARY

FSA Health pricing actuary sought by Atlanta insurer for Position 62388. Requires 7 to 17 years of experience. Unique opportunity for a Fellow of the Society of Actuaries with strong pricing skills.

PENNSYLVANIA – HEALTH ASA/NEAR-FSA

Pennsylvania client has asked Ezra Penland to find an ASA/near-FSA actuary with 4 to 10 years of experience for Position 62903. Consulting or insurance experience preferred. Some predictive analytics or pricing experience a plus.

MICHIGAN – HEALTH ASSOCIATE ACTUARY

ASA health actuary is sought by our Detroit-area client for Position 63008. Requires 3+ years of actuarial consulting or insurance experience. Exam support.

PENNSYLVANIA – RETIREMENT CONSULTANT

For Position 62565, a Philadelphia consulting group is now seeking a pension actuary at the EA/ASA or EA/FSA level. Must have at least seven years of retirement consulting experience. Immediate need.

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to living and working there. The first few months were very difficult, with maybe too much focus on what was happening back in the United States on “important” issues like TV shows and sports teams. At a certain point in time, I started to realize the incredible opportunity I had to meet people, see new places, and learn more about work issues and the world in general. After many subsequent curves, mountain passes and valleys along the road of life, it might now be more difficult for me to go back to the United States than to relocate to other countries.

In my current role, I work on a wide variety of things. I manage the day-to-day operations of an international organization

involved with saving for retirement, instead of getting caught up in the tax and legal tinkering that has led to the inefficient patchwork systems that do not seem to accomplish much of anything for anyone when it comes to providing adequate retirement income. I think many countries could benefit from some sort of a “fresh start” by focusing on basic principles instead of worrying about the short-term tax implications of encouraging retirement savings!

Probably the most challenging part of working abroad is letting go in the first place. It can be easy to find excuses why it is not the right time to leave your home country. I now try to focus on the future

is how much I have learned about myself along the way.

Whether you work abroad or focus purely on domestic issues, the concepts are the same. Challenge yourself by expanding your horizons and seeing the opportunities ahead. You just might be surprised at what you learn about yourself and the world around you.

We hope that you enjoy this issue of *The Actuary*, and we welcome your feedback. Send your comments to theactuary@soa.org. **A**

Carl Hansen, FSA, MAAA, FCA, EA, is international director at the BWCI Group in Guernsey. He can be reached at chansen@bwcigroup.com.

I have met so many interesting people and had some incredible, in-depth conversation on a wide range of topics.

of local actuarial firms in about 20 countries, and coordinate activities between the firms. I also do consulting work for the local firm here in Guernsey, mostly dealing with retirement benefits for internationally mobile employees and other specific topics. The Foreign Account Tax Compliance Act (FATCA) is a current “favorite.” I am actively involved with the SOA’s International Section and the International Actuarial Association. In any given workday, I probably interact with people from at least five countries.

Working internationally helps to focus thinking at a high level. Taking retirement benefits as an example, it can be quite helpful to concentrate on the basic issues

and think in terms of regrets if I do not take opportunities when they come. I find that I put far fewer mental and physical limits on myself these days, yet I can still surprise myself with my ability to cope with new challenges.

The rewards of working internationally would have been impossible for me to comprehend 15 or 20 years ago. I have met so many interesting people and had some incredible, in-depth conversations on a wide range of topics. A local perspective adds so much more color to world events. I have been in awe at some of the most famous sites in the world, and at some stunning places that I had never heard of until I got there. Maybe the bottom line

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Errol Cramer

Letter From The President

A GLOBAL VIEW OF THE ACTUARIAL PROFESSION

BY ERROL CRAMER

I HAVE STRADDLED TWO WORLDS— South Africa by birth and the United States by choice—with a unique background that has shaped my views on the profession in a global sense. I would like to share with you these perspectives: in particular, why it is of utmost strategic importance that the Society of Actuaries (SOA), a U.S.-based organization, continues to support the inclusion of candidates and membership across the globe and continues to engage actively with its actuarial partners worldwide.

MY PERSONAL EXPERIENCES

I started my actuarial career in South Africa and studied under the U.K. actuarial system. A couple of years into my career, I accepted an offer of an actuarial consulting position in the United States. While in South Africa, I had made good study progress and had nearly completed my exams to become a fellow of the Institute of Actuaries (FIA). However, at that time, an FIA would have qualified me only for an ASA from the SOA. I elected instead to transfer to the SOA and retook most of my exams to qualify as an FSA. I felt it necessary to fully establish my credentials as a member of the SOA and as a U.S. practitioner.

Taking a major portion of both sets of exams, I can tell you that they were equally tough!

The SOA now has a Mutual Recognition Agreement (MRA) with the Institute and Faculty of Actuaries (IFoA), whereby an FSA can become an FIA (and vice versa), subject to certain conditions. This is a good development that enhances the portability of our equivalent credentials. Given the extraordinary quality of our two organizations' educational and validation programs—which we mutually evaluate on a regular basis—I was happy recently to sign a renewal of the MRA which included acceptance of our new General Insurance (GI) track.

For many of us, our most valuable personal financial asset is our SOA credential, which, together with our IFoA partner and a few other selected organizations, represents what I consider the gold standard of actuarial training and credentialing in the world.

Actuaries are well known for our technical prowess. However, what makes us great as professionals is the combination of business acumen and leadership skills applied to our solid technical training. In South Africa, I was fortunate to be given considerable leadership opportunities right at the entry level, something I attribute to a relative shortage then of business managers. It required me at an early age

to learn to manage, to supervise a staff, and to accompany a sales team with the authority to negotiate deals directly with clients. It was invaluable! In meetings with students and candidates, I constantly drive home the importance of developing critical business and leadership skills throughout their careers.

As a candidate under the U.K. system, we were tested on a broad swath of actuarial practice, including life, pensions, retirement and GI. I started my career in pensions, but have spent the bulk of my career in life insurance, working on financial reporting, product development and innovation, regulatory affairs, and mergers and acquisitions (M&A), to name a few. I credit my broad background training, both in the U.K. system and in the SOA, along with my desire to learn continuously throughout my career, with enabling me to move across the range of assignments I've carried. SOA candidates benefit from the choices available to them among the specialty tracks and the (relative) ease of entry that exists where an actuary is committed to new learning.

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OUR GLOBAL MEMBERSHIP

A surprise coming aboard as SOA president was to discover a conspicuous absence of marketing efforts at attracting candidates outside of North America—and yet, we have a large and growing base of international candidates and members. In large part, this is from China where there is a growing demand for actuaries, and a desire by a select few to attain the high-level SOA credential as a distinguisher. At SOA gatherings, I seek out members from outside North America, or China, to ask, “Why FSA and not an easier and more local pathway?” The most common response is the value of our credential—it’s tough to get, but is among the highest prestige of any actuarial credential in the world!

I am always impressed at the high quality of our international members, but not surprised, as they have actively sought out a rigorous credential that is typically neither required in their country nor studied in their native tongue. I would like to share with you the stories of three new fellows I met at our most recent Fellowship Admissions Course (FAC).

Achille Raoul Sime Lanang, FSA, MAAA, CERA, from Cameroon, studied in France and is now a successful consultant in the United States. He is also our first General Insurance fellow, earned entirely through our new track, an achievement that drew thunderous applause from his fellow graduates! Ahmed Mohamed Abdelrahman,

FSA, from Egypt, worked at Goldman Sachs in London, United Kingdom. He has a Master of Mathematics from the University of Waterloo and a Master of Finance from the Massachusetts Institute of Technology (MIT) Sloan School of Management, in addition to a bachelor’s degree in actuarial science from the American University in Cairo. He has also just been accepted into the Ph.D. program in the Department of Economics at the University of Chicago. He plans to work on social systems to raise economic safety nets globally with great attention to his home country, Egypt. Incredibly, all this at 22 years of age! Finally, Guy Camille Saad, FSA, from Lebanon, has been highly successful in starting his own insurance business in Beirut providing services to the Gulf States.

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All of our new fellows have their own, unique stories to tell. My point is simply that our continued focus on the quality of our credentials leads to the ever increasing diversity of our members and opportunities for actuaries to make a difference around the world. This raises the collective prestige of our credential and benefits us all.

OUR GLOBAL PARTNERS

Relationships with other actuarial organizations globally are important to us in supporting our global members, but, even more importantly in helping strengthen the value of the actuarial credential worldwide. While we value and cherish our SOA-specific credential—and this is recognized by our employers, clients and publics—the world sees us collectively as a singular actuarial profession.

In addition to upholding the quality of the ASA and FSA designations around the world, the SOA is also committed to the career-long learning programs to all members to develop actuaries. Part of this process is maintaining common actuarial standards through membership and participation (along with 70+ other countries) in the International Actuarial Association (IAA), growing long-term, special relationships with organizations like the Canadian Institute of Actuaries (CIA) (I'm looking forward to celebrating with the CIA on the occasion of their 50th anniversary), and the IFoA of the United Kingdom; and developing relationships like those with the China Association of Actuaries (CAA). These key global relationships combined represent the majority of credentialed and designated actuaries world-wide. Being committed to professional development for members choosing the ASA

and FSA designation, regardless of where they live and work, requires the SOA to be accountable to local issues important to their market, employers and regulators.

As I write this, I am preparing to depart for an SOA trip to Asia to make connections with members there and learn more about their local issues and how we continue to build and tailor services to members in that region. The actuarial profession has taken me on a personal and professional journey that spans the globe. I invite you to virtually take the same trip in this special international issue of *The Actuary* where several of our actuaries living and working around the world have contributed their ideas and knowledge as examples of the global view of the actuarial profession. Now where is my passport? **A**

Errol Cramer, FSA, MAAA, is president of the Society of Actuaries. He can be reached at errol.cramer@soa.org.

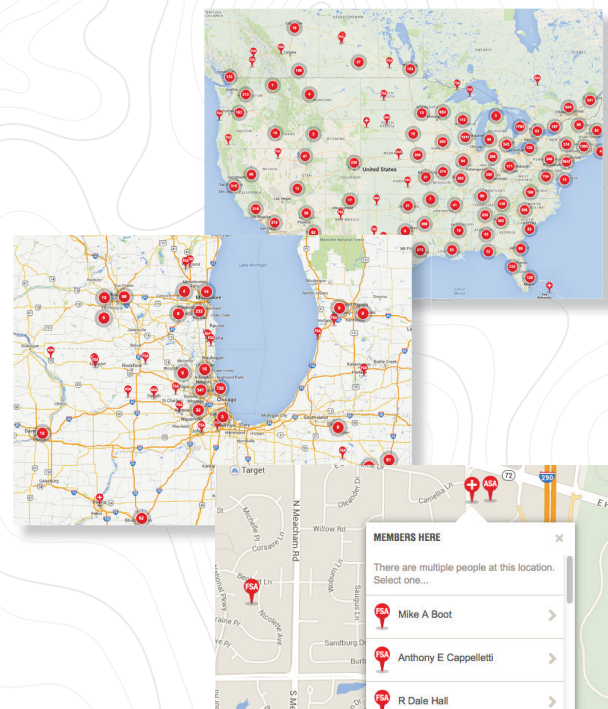
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WHETHER YOU TRAVEL THE WORLD, OR NEVER LEAVE THE BORDERS OF YOUR HOME COUNTRY, YOU ARE AFFECTED BY GLOBAL ORGANIZATIONS, INTERNATIONAL REQUIREMENTS, AND THE INCREASINGLY INTERNATIONAL NATURE OF THE PROFESSION ITSELF. BY DARRYL WAGNER

WHERE IT ALL BEGAN

Perhaps surprising for a boy from Omaha, I have had the privilege of working internationally for much of my career. In my 25-plus years as a consultant, my professional travels have taken me to six continents and given me tremendous experiences both in terms of addressing international business challenges as well as getting to know interesting people and parts of the world. My international interests have carried over into my volunteer activities with both the Society of Actuaries (SOA) and the International Actuarial Association (IAA). I led the task force that developed the SOA's international strategy and served as the first chair of the SOA's International Committee. I currently serve as the vice chair of the IAA's Advice and Assistance Committee and as chair of the IAA Asia Subcommittee, where

my primary focus has been on helping developing actuarial associations across Asia.

OK, so I'm an international guy. But that's not really the point of this article. The point is that, as actuaries, we are all international to some degree. Whether you travel the world, or never leave the borders of your home country, you are affected by global organizations, international requirements, and the increasingly international nature of the profession itself. We have a tendency to think of things international as things that are "far away." While that is true, it is incomplete. Those things "far away" affect our work and lives at home and abroad in profound ways.

I am often asked by SOA members and others about the reasons for and the importance of the SOA's international

strategy. As I'm sure you've heard before, the SOA is truly an international organization. With members around the world, international activity runs throughout the SOA's core missions of education, research and member service. Just as important in my mind, however, is the SOA's support of ALL our members to help equip them for working in an increasingly international environment.

To help make my point, I call on one of my favorite holiday films, "It's a Wonderful Life." After George Bailey is granted his wish of never having been born, he learns just how much of an impact he has made on his world and the people in it. Not to overdo the metaphor, I believe the analogy can be made to actuaries with respect to international influence and impact. While we might like to think that international issues don't have

much bearing on our lives, I believe that if we were granted the wish of “never having been international at all,” you would be sorely surprised and disappointed with the result. While I don’t have the powers of Clarence to grant that wish (nor would I want to), I can show you how international matters permeate the life of this U.S.-based actuary, even when I’m not traveling in some faraway place.

What follows are excerpts from a typical week in my calendar—and this is a week where I stay home. Showing you a week when I travel internationally would have been too easy!



MONDAY 8 A.M.—PREP CALL FOR IFRS SEMINAR

The week starts early so I can join a call with a team of presenters, including two based in Hong Kong. Together, we form the panel for an International Financial Reporting Standards (IFRS) seminar that has been held each year in Hong Kong for several years running. The seminar is co-sponsored by the SOA, the SOA International Section and the SOA Financial Reporting Section. IFRS is a great example of a global framework that affects SOA members around the world.

In the United States, the Financial Accounting Standards Board (FASB) has moved away from convergence with IFRS, but many U.S. companies with non-U.S. parents or non-U.S. subsidiaries will need to implement IFRS. What’s more, even companies who do not have to implement IFRS may be affected by the change in the competitive landscape that occurs as much of the rest of the world shifts to this new accounting framework. For these reasons, many U.S. actuaries are involved in the development of IFRS: providing comments on proposed standards, evaluating their potential impact, understanding the differences in products and accounting impacts around the world, and suggesting

alternative solutions for challenging areas such as participating business. The SOA is even sponsoring the development of a textbook focused on the new insurance IFRS.

Of course, our non-U.S. members are even more directly affected by IFRS, since most jurisdictions outside the United States plan to adopt IFRS or something close to it going forward. Another point of international connection among our members is the presence of U.S. GAAP filers outside the United States. In fact, the Hong Kong IFRS seminar began as a seminar on U.S. GAAP to benefit actuaries in the greater China region working with U.S. GAAP.



TUESDAY 9 P.M.—MEETING WITH CLIENT—ASIA CHIEF ACTUARY

Many actuarial employers do business internationally. This is certainly the case with my own firm, as well as with the client I’m meeting with by phone this evening. My client has insurance operations around the world, and its Asia chief actuary, whom I’m speaking with, worked for many years in the United States before taking an assignment abroad. Expatriate assignments are one of the most tangible ways to work internationally. Many SOA members take on such assignments, and I regularly hear from expats how rich and rewarding their experiences are.

As we talk, I realize how much commonality there is between the challenges faced by actuaries in Asia and those we face in the United States, Canada, or elsewhere in the world. My client is a U.S. GAAP filer, so there is plenty to talk about on that subject. Like most insurers today, regulation is a key priority and concern. In particular, the development of international capital standards by the International Association of Insurance Supervisors is top of mind.

Environmental issues like low interest rates and longevity patterns strike a familiar tone as well. From an operational perspective, technology platforms are also increasingly being harmonized across international borders, as are efforts to transform or modernize actuarial functions. It’s a reminder that we have much to learn from each other and that exchanging knowledge internationally is essential to tapping into the best and brightest thinking in today’s global business environment.



WEDNESDAY 9 A.M.—STATUS MEETING WITH OUR INDIA TEAM

Like a growing number of actuarial employers today, my firm has established an actuarial practice in India, referred to as USI. Our USI actuarial team is engaged in the same types of activity as its U.S.-based colleagues: studying for and taking actuarial exams, working on client assignments, and performing research and other projects to support the development of the practice. I have had the opportunity to visit our Hyderabad office on four occasions and have been impressed with the talent, work ethic and enthusiasm of our team there. Several of our USI practitioners have also worked on projects in the United States, lending much-needed experience on client engagements.

There are a large number of actuarial students in India, most of whom are pursuing actuarial credentials with the U.K. Institute and Faculty of Actuaries. As more and more international insurers and consultants set up actuarial teams in India, there is a growing need for training on topics such as U.S. valuation, accounting and capital standards. It’s also increasingly important that teams with members located in different parts of the world learn to work together effectively. Communication is key to success



for international teams. From being sensitive to cultural and time zone differences, to communicating clearly and frequently enough to make sure all team members are on the same page, the communication and management skills developed in this environment benefit all involved.

“Offshoring” can be a controversial topic, but I believe it to be a natural extension of globalization. While there is an element of cost arbitrage to setting up shop in a lower-cost area such as India, more important is the “talent arbitrage” gained by accessing an available pool of talent that would be otherwise inaccessible. And, personally, I

the actuarial profession globally. I and many other SOA volunteers actively participate in the IAA by staffing and leading IAA committees, subcommittees and sections, and by participating in IAA events such as the International Congress of Actuaries, regional outreach events, and communication with other supranational organizations.

The Asia Subcommittee reports to the Advice and Assistance Committee of the IAA and is tasked with facilitating the support and development of actuarial associations across Asia. As a recent example, the Institute of Actuaries of Korea (IAK) became a

The efforts I’m describing bring together actuaries from around the world to volunteer their time and expertise to make a difference. I have worked with actuaries from the United States, U.K., Canada, Australia, France, Belgium, Hong Kong, Taiwan, Singapore, China, India and Japan, just to name a few. And our volunteer ranks cut across the actuarial disciplines of life, property-casualty, health and retirement. In many cases, companies with operations in a given country have gotten involved given their familiarity with the location and vested interest in building a strong local actuarial community. Actuaries Without Borders (AWB) is a section of the IAA dedicated to organizing actuarial volunteers to go “on the ground” and deliver value-added projects such as educational seminars. The IAA is also increasingly looking to work with supranational organizations who have a strong interest in developing the actuarial profession around the world.

Our actuaries spend anywhere from a few weeks to a few years in another part of the world, learning about how things are done elsewhere and exporting knowledge and experience from their home country.

have found the concerns typically expressed around impact on jobs and career paths in the “onshore” location to be unfounded. Our India team has been an important complement to our U.S. team, with both practices adding and promoting practitioners in concerted fashion.



THURSDAY 7 A.M.—IAA ASIA SUBCOMMITTEE CONFERENCE CALL

As I mentioned earlier, I chair the Asia Subcommittee of the IAA. With most of the members of the subcommittee residing in Asia, we typically have our phone meetings at an early U.S. hour, which also allows for IAA volunteers in Europe to join. Stepping back for a moment, the IAA is a global “association of associations” with membership comprised of actuarial associations around the world, including the SOA. The IAA promotes and supports

full member of the IAA in 2013. I had the opportunity, along with a dedicated group of IAA volunteers, to help the IAK complete the steps necessary to make this happen. Sri Lanka has a growing actuarial association and is an associate member of the IAA. The IAA and the Asia Subcommittee are working with the actuaries in Sri Lanka to put on educational events and help them work toward becoming a more independent and mature actuarial association. As a final example, Vietnam does not now have a formal actuarial association, one of the first requirements for IAA membership. We are working with the Vietnamese actuaries and the IAA to help them get the necessary structure in place to make IAA membership possible. While IAA membership in and of itself is not the goal, it’s a great measuring stick for the progress and development of the actuarial associations in the region.



FRIDAY 10:30 A.M.—SECONDMENT OPPORTUNITY DISCUSSION

We talked about expat opportunities earlier. Secondments are short- and long-term assignments from part of a company or firm to another, most often cross-border arrangements. Secondments have served my firm as a great way to give our professionals growth experiences and even out the supply and demand for resources at the same time. Our actuaries spend anywhere from a few weeks to a few years in another part of the world, learning about how things are done elsewhere and exporting knowledge and experience from their home country. Colleagues in the “receiving” country also benefit from working with someone with a different background, training and perspectives.

A related topic is cross-border education. Many international students enroll in actuarial



Challenges and Rewards

READ OTHER INTERNATIONAL PROFILES of actuaries in the article, “What Does It Mean To Work Around The World” on page 22.

programs at universities in the United States and Canada. After graduation, some take up employment in North America, while others return to their home country or elsewhere to pursue an actuarial career. Thus the impact of international relationships and perspectives can be felt even in the formative years of one’s actuarial education.

So there you have it—a sampling of the international activity in one U.S.-based actuary’s weekly schedule. Accepting my hypothesis that we are all international actuaries, what is your international profile? Working as part of an international team or with an international branch of your employer, dealing with international standards or regulatory requirements, volunteering with the IAA, a secondment or expat role, pursuing or facilitating cross-border education? I encourage you to think about it.

As one of my colleagues used to ask: “What is the ‘so what’ of this discussion?” Let me be clear about what it is not. It is not that international matters should be the only or even primary focus of the SOA or the actuarial profession. To the contrary, I think it’s critical that we keep focus on our core missions. However, I do believe that international implications run through just about everything we do, including our core missions. I hear from SOA members that we need to keep focus on “bread and butter” issues of our profession, and not get too caught up in “expanding our boundaries.” With those thoughts in mind, my takeaways from this international discussion are threefold:

1. In our increasingly global world, “bread and butter” cannot be separated from international. International connections and influences run throughout. So rather than try to view the two separately, I believe we should embrace the international aspects of “bread and butter” initiatives to make our approaches and solutions stronger by encompassing a broader constituency of membership and more multifaceted experience and perspectives.
2. With regard to international activity, I encourage our members to shift their mindset from one of “expanding boundaries” to one of “keeping up with shifting boundaries.” The reality is that the boundaries of our businesses, requirements, and our profession itself are shifting to be more international. To sustain and increase the value and reputation of our profession and our actuarial credentials, we need to keep up with and stay relevant amid these shifts.
3. Although this article has been written for SOA members, the topic transcends the SOA. Some of my most rewarding professional experiences have involved collaboration with members of other actuarial organizations. To most effectively tackle many of the issues we face as a profession, we must harness the power that comes from working together across the profession. Global challenges demand global solutions. Of course, as the boundaries of our profession have shifted, so too have the boundaries among actuarial

associations. Speaking to the U.S.-based organizations in particular, we are spending too much time and energy on boundary disputes, to the detriment of finding ways to work together for the good of the profession. I encourage all the U.S.-based organizations to heed this message and chart a different path going forward.

I expect that this article may provoke some discussion and different points of view. I welcome hearing from you and also ask that you share your international and “inter-actuarial organization” profiles. I look forward to featuring more such profiles in future editions of *The Actuary*. And perhaps next time you walk down your town’s Main Street or your place of business’s main hallway, you will echo George Bailey’s sentiment and reflect upon the fact that “it’s an international life!” **A**

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An abstract graphic consisting of several overlapping, elongated, arrow-like shapes in various colors: teal, magenta, yellow, dark blue, red, and green. The shapes are layered, creating a sense of depth and movement, pointing generally towards the upper right.

Deciding to work overseas can be a difficult, but exciting, decision. There are many challenges involved, but the gains to be found are plentiful. *Compiled by Carl Hansen, Darryl Wagner and the Editorial Staff*

WHAT DOES IT MEAN TO WORK AROUND THE WORLD?

Research shows that working internationally makes people more flexible and creative, and increases their ability to think strategically. Several Society of Actuaries (SOA) members share their international work and activities, at home and abroad.

SOA International Section

JOIN THE SOA INTERNATIONAL SECTION, whose purpose it is to encourage and facilitate the professional development of its members and affiliates who are involved in international insurance, pensions, or social security programs, or who are interested in international areas of practice, through activities such as meetings, seminars, research studies, and the exchange of information. Learn more at www.soa.org/international/.

The story of now-retired **Alan Cooke, FSA, FCIA, MAAA**, is a good example of that. His job in the group pensions department of a major international life insurance company in Toronto “was not very interesting, even on a good day.” This was the mid-1970s and the Employee Retirement Income Security Act (ERISA) had just been enacted only a few years before. Much of his focus was on the United States as his department grappled with the new legislation.

He found an interesting ad with the simple heading “International Actuary Wanted.”

“The ad was addressed to actuaries who were disenchanted with their current position and wanted a faster-paced environment in an international setting,” Cooke says.

He got the Toronto-based job, which involved overseeing the pension and insurance programs of a major international manufacturing/retailing organization. Ninety-five percent of the employees worked outside Canada and the United States, according to Cooke.

“Very quickly I needed to change from being a technical actuary focused on U.S. pensions to someone who could manage all aspects of pensions and benefits, as well as property and casualty (P&C) programs, in many countries,” he shares. “It was my dream job as I loved to travel and was able to visit over 60 countries to address local issues while I was employed there.”

As a result of his experiences in the job, he subsequently relocated to the United Kingdom as an international consultant for a few years.

NEED TO BE CHALLENGED

Like Cooke, some actuaries choose the challenge of working overseas because of their love of travel and desire to be challenged. Some relocate for education and work and later return to their homeland.

Sebastian Carrillo, ASA, MAAA, Genghui Wu, FSA, FCIA, MAAA, and Mahasen Kunapuli, FSA, EA, FCA, are three such individuals.

Carrillo has been involved with international actuarial work since he became an actuarial analyst in his native country, Peru, in 2001.

“My first job as an actuary in Peru was with a major local insurance company. Thanks to a very good mentor, I was able to get exposure to a variety of actuarial roles, for insurance companies in different South American countries and in a wide range of business lines (including life and disability, annuities, health care, auto, and P&C). In 2005, I moved to the United States to pursue a[n] M.S. in actuarial science and to increase my work experience,” he says.

After receiving his master’s in actuarial science in 2006 from the University of Iowa, he worked for a Big Four audit firm in Chicago from 2007 to 2011. In 2011, he returned to Peru to work for the largest insurance company in the country. Since 2012, he has led the actuarial department overseeing all the company’s lines of business, which include life and health and property and casualty.

Wu was born in China, and studied and practiced as an actuary in Canada and the United States.

In 2004, his employer sent him back to China to strengthen the actuarial team and capability in a joint venture there. After moving back to the United States and joining another global insurance company, he quickly became involved in work in Western Europe, Eastern Europe, Southeast Asia, Latin America and the Middle East.





With over 15 years of experience, Kunapuli worked at one of the major consulting organizations in the United States.

"During the economic crisis of 2007-08," he says, "there was [a] lot of activity in the benefits consulting world. Some of the issues that ... the corporate pension plans' sponsors [were grappling with] included understanding the implications of [the] newly enacted Pension Protection Act of 2006, the economic crisis that resulted in huge pension asset losses, which, in turn, required millions of additional contributions to be funded into the pension plans, and the decisions to freeze/terminate pension plans to mitigate long-term costs and the volatility, etc. ... Once the 'dust settled' with regard to the economic crisis, I was pondering what's next for my career."

"One fine morning, I came across an opportunity to run the actuarial practice in India, which is the country I originally come from. Then I started researching more about this opportunity, doing the cost/benefit analysis. It's not an easy decision after spending 20 years in the United States. After much thought, I decided to take up this opportunity with a large global organization to run their actuarial practice in India," Kunapuli says. He found the first few months to be a challenge.

"I took some time to adjust to the 'new country,' understand the roles and responsibilities, etc. However, this is one of the best times of my professional career. There are tons of challenges and opportunities. Working in a place like India—supporting global operations as well as managing actuarial consulting opportunities in India and across the globe—required me to step outside of my comfort zone."

The challenges are many in working as an international actuary.

CHALLENGES

Randi Woods, FSA, CERA, MAAA, the international chief risk officer for Principal Financial Group, says, "The most important thing that I had to learn doing international work is that I could never be totally knowledgeable about the local business, regulations and environment sitting in the United States. I had to build relationships with, and rely upon, the local staff."

Cooke has found that "one of the challenges of an international career is that you need

firm and search for opportunities to do work overseas, says of the challenges, "There is a need to live and work in developing countries, with very different cultures, and infrastructure and support that is far less available than in the United States."

He has now worked extensively in eight countries—Kazakhstan, Thailand, Ukraine, Armenia, Macedonia, Indonesia, Timor-Leste and Vietnam—and been on assignment in eight more countries.

Other barriers, according to **Jill Hoffman, FSA, FCIA**, a Canadian who has worked in the Caribbean and is now living in Singapore,

One of my favorite networking events at the SOA annual meeting is the one hosted by the International Section.

to be somewhat of a generalist as well as a specialist to meet the needs of your clients. Mastering this balancing act enabled me to assist my clients in multiple ways."

LOVE OF LEARNING

Along the same lines, Carrillo says, "In many cases the work I am tasked to do is new both to me and the company I work for. This results in a demand of investing a significant amount of time in learning new things. It is also fairly common that the resources available (data, actuarial software, people, etc.) are not ideal but the need for results [is] almost immediate, so one has to be creative and come up with short-term solutions to meet the needs of the company."

Mitchell Wiener, FSA, who had become increasingly disenchanted with traditional actuarial work and decided to start his own

include "vocabulary ... 'skittles' to the British is something different than it is to Canadians, and pop culture references cannot be easily used."

She adds, "The biggest downside is being away from your family and friends back in your home country."

According to **Sue Blanck, FSA, MAAA**, a U.S.-based actuary at Aflac who relocated to Japan in 2012, "You are no longer the expert on regulations or internal operations and you likely won't have a list of people you can readily call to get the details."

However, this is "a great opportunity to expand your professional network within business, to gain exposure to various regulatory structures and business methodologies and to increase your overall professional knowledge," Blanck says.

Networking with those in your new environment helps with your business, and networking with professionals from other parts of the world can broaden your understanding of the global marketplace.

Timothy Gasaatura, FSA, MAAA, grew up in both the United States and Uganda. He works in Bermuda now, but he stays in touch with actuaries worldwide.

"I remain connected to the international actuarial activities through involvement in the International Section of the Society of Actuaries. One of my

tanks and others. International development work also requires branching out into fields far beyond actuarial science. It is important to understand the overall history, philosophy, institutions and macroeconomic framework of the country. I must also understand how government policies may impact poverty, capital markets, debt markets, labor markets, etc. It is also important to understand the political economy of the country at a detailed level, and to understand how government decisions are made and implemented. The policymaking process varies considerably from one country to the next depending on

"Being able to manage your time is also a key to success. Most international actuaries will face the issue of different time zones; my last assignment involved working in different continents, which brought additional complexity of better time management in order to ensure I met all the obligations that my job requires."

Despite all the challenges, the gains are many and they can be found on professional and personal levels.

Doug Andrews, FSA, FCIA, who became an actuary in the 1970s in the Canadian insurance and consulting environment and later went on to teach at the University of Waterloo, says, "We can all learn a tremendous amount by studying other countries' practices. But one's depth of understanding is increased when one lives in the country and experiences the culture on a daily basis. Moreover, international experience helps you appreciate many of the things that you have taken for granted that are part of your cultural baggage. An appreciation of how people in other countries think and act can be extremely helpful for actuaries, whose work often requires the making of assumptions regarding the future in a global context."

Cooke, who in retirement volunteers with Actuaries Without Borders and other actuarial organizations, has found that "having a knowledge of how other countries addressed their problems makes you a better domestic consultant."

Victor Chen, FSA, CERA, FCIA, moved from Canada to Hong Kong for his job at Manulife. He "decided to work internationally because of the opportunities I see for actuaries to take a leadership role in many countries that are undergoing

You need to focus on new skills in order to be effective. No. 1 on that list is effective listening and questioning.

favorite networking events at the SOA annual meeting is the one hosted by the International Section, which offers an opportunity to meet with a diverse group of professionals," he says. "In addition, whenever I travel to Uganda I make it a point to network with several of the professionals that are involved in the insurance field and get a better understanding of the insurance environment there."

He also recommends direct interaction with his U.S.-based co-workers.

"Despite all the advancements in technology, there is still no substitute for a handshake or a chat at the water cooler," Gasaatura says.

Beyond keeping your networking sharp, there are some other key skills needed.

According to Wiener, "In order to work successfully, it is very important to learn local languages, as this provides far greater access to government counterparts, academicians, think

history and form of government. Government capacity also varies considerably among countries and this significantly affects program design and administration."

LISTENING IS KEY

Blanck says, "You need to focus on new skills in order to be effective. No. 1 on that list is effective listening and questioning. Learning how to listen for what people mean by their words, not just what their words say. And, learning to ask questions in a way that will allow the other person to understand your meaning clearly in order to gain greater understanding."

"Not everything is the same as in your home country and home office. As matter of fact, most times, there are many differences, but [being] able to [keep] up your professionalism, adapt and adjust [to] the differences and turn it into a workable solution make such experience[s] very much unique and rewarding," Wu says.



extensive changes in their regulatory and social environment. I want to connect people, widen my exposure and have the experience to inspire and influence.”

According to Carrillo, “a shorter supply of qualified actuaries with country-specific experience (in comparison with the United States) generally translates into fairly generous compensation.”

MEETING NEW PEOPLE

For Wu, a major reward of working overseas is that “you have the luxury of meeting all kinds of neat people and senior executives who share the same vision as you [have], with even more energy and enthusiasm that could make your mind fly.”

With the international experience he is now gaining, Kunapuli is looking ahead. “How can I cherry pick the opportunities I want to go after?”

Wiener is proud to “have helped millions of people around the world to have secure retirement income. I have also deeply enriched my knowledge of the world, expanded my knowledge into areas I never expected to work in, made permanent friends in countries throughout the world who I remain in contact with on a regular basis, and provided my family with a rich background and experience that will serve them well throughout their lives in an increasingly global world.”

For Blanck, working overseas “allows you to grow in your view of the world. As an expat, you are not only developing friendships with people from your assigned country, but you have easy access to expats from all over the world who are all looking to establish connections and friendships in their new country. This provides a unique opportunity

to learn about other cultures and traditions. And, it gives you an opportunity to view your own country through the eyes of an outsider, which gives you new insight.”

Wiener also notes being an outsider.

“It is interesting that I am an insider and an outsider in the countries where I work,” he says. “I inevitably know and work with the top people in government, including the minister of finance, the minister of labor, the parliament, and even the vice president or prime minister and their staff. I do not know these people in the United States. At the same time, I am a foreigner and can never truly understand the country as deeply as a native.”

Carlos Arocha, FSA, who grew up and got his bachelor’s degree in Mexico before coming to the United States to work and take the SOA exams, has worked in Toronto and now Zurich. He is the chairperson of the International Section Council and the SOA ambassador in Switzerland. He has “visited 62 countries, a formidable experience that allows me now, as a partner in a consulting firm, to work on the implementation and advisory services related to Solvency II. My clients are European, but [also] Latin American, as solvency paradigms are either being implemented or overhauled on a worldwide basis.”

He advises “younger actuaries to work at least once outside of their home country. The world is truly global—the experience gained becomes an invaluable career asset.”

Others agree.


A WIDER VIEW

“I would encourage younger actuaries to pursue international opportunities even before they are done with the fellowship

exams,” Gasaatura says. “It allows one a wider view of not only their career through the diverse nature of work assignments but also life experiences as well.”

Woods says, “I’d advise everyone to get a passport and use it. If you can’t find a job that will allow you to travel, then take as many personal trips as you can. See the world and learn that we’re all more alike than we are different.” And if you can’t get away, “participate in the meetings held by the International Actuarial Association, which brings one into contact with actuaries from around the world,” says Andrews, who has worked overseas in Serbia and the United Kingdom.

Deciding to work overseas can be a difficult, but exciting, decision. Even a short stint abroad can be beneficial. It can have advantages for career advancement and can expand cultural horizons. There are many challenges involved and skills needed to survive and succeed. The gains to be found in living abroad, however, are plentiful.

Read complete responses and see photos of article participants on *The Actuary* Web page at <http://bit.ly/1E8Sxj3>. 

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WHAT EVERY ACTU SHO KNOW



The New IFRS for Insurance

It is important that actuaries understand and be able to explain the financial statements of insurance companies that report under IFRS. Even actuaries who are in insurance companies that do not use IFRS will need to understand the financial statements of those who do. **BY JIM MILHOLLAND**



JARY ULD



"IFRS for insurance is just around the corner." I've been saying this for at least eight years. Now it appears that I may at last be right.

The International Accounting Standards Board (IASB) is entering the final phases of its deliberations on International Financial Reporting

Standard (IFRS) for insurance. The IASB website shows only that it has slated deliberations for 2015, but the chairman of the IASB, Hans Hoogervorst, has said that the IASB intends to issue a standard by the end of the year. The list of topics for deliberation is short, so finishing this year seems feasible notwithstanding the fact that the most difficult topic—

measuring liabilities for participating contracts—is still outstanding.

The chairman also said that reporting on the new basis would be no earlier than 2019. Three years for implementing the new standard may seem like a long time, but it is a significant departure from many current accounting regimes, especially for

long-duration contracts, and presents many accounting and actuarial challenges. Any shorter period might jeopardize effective implementation.

THE NEW IFRS FOR INSURANCE

It is important that actuaries understand and be able to explain the financial statements of insurance companies that report under IFRS. Even actuaries who are in insurance companies that do not use IFRS (those that use U.S. GAAP or mutual companies) will need to understand the financial statements of those who do. Financial statements provide valuable peer company information, even if the information is not directly comparable to their own.

Consider the following broad description of the proposed standard. This description is not comprehensive, but it addresses the most important concepts and challenges.

Current Measurement

The measurement of insurance liabilities is a current measurement, one that is refreshed at each reporting date. In short, the standard proposes the measurement of insurance liabilities as the sum of fulfillment cash flows and the customer service margin (CSM). The fulfillment cash flows are the present value of all cash inflows and cash outflows that relate directly to the fulfillment of the portfolio

of contracts (namely, premiums, payments to policyholders, claims-handling costs, directly attributable acquisition costs, policy administration costs, and premium taxes), together with an explicit provision for risk (the risk adjustment).

The CSM is the amount that—when added to the liability at contract inception—prevents profit at issue. It is amortized over the coverage period into profit and loss in relation to the services provided under the contract. Sometimes referred to as deferred profit, and sometimes as the value of future profits, the amortization of the CSM is key to reported profits, and it will be a focus of the attention of actuaries and others who are analyzing insurers' financial performance.

The liabilities are separated for presentation between liabilities for remaining coverage and liabilities for incurred claims. This is a useful distinction for discussion purposes as well.

The dynamic nature of the measurement by itself makes the standard different from the historic-cost, or locked-in, basis found in many countries for long-duration contracts. It also significantly increases the effort to complete periodic valuations.

Cash Flows

Projected future cash flows are expected values, hence not biased toward a conservative estimate. The term "expected value" implies that consideration of multiple scenarios may be necessary, although it is not specifically a requirement. It's up to the insurer to determine how much analysis is necessary to be able to assert that projected cash flows are expected values. Contracts with significant options, such as equity-based guarantees, may in fact require stochastic modeling.

Risk Adjustment

The risk adjustment represents the amount that the insurer would require as consideration for the uncertainty in the future cash flows. It is not market-based, but rather reflects the company's own

assessment of risk and its appetite for risk. One of the required disclosures is the confidence level that corresponds to the risk adjustment. The standard does not require use of a confidence level to set the risk margin, and in fact does not prescribe a technique at all, but it does require disclosure of the confidence level.

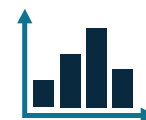
Discount Rate

The discount rate is the rate that reflects the characteristics of the insurance contract. It is based on current observable interest rates, with adjustments from the observable rates to align the rate to the characteristics of the insurance contract. The characteristics specifically mentioned are the timing, currency, and liquidity of cash flows. A common interpretation is that the appropriate rates for nonparticipating contracts are risk-free rates with an upward adjustment reflecting contract illiquidity. Rates for participating contracts will likely reflect the dependence of the participating features on investment results. The owner of a participating contract shares in the risk of changes in investment returns. The characteristics of the insurance contract include some investment risk and the discount rate reflecting that risk can be higher than for nonparticipating contracts, but still a bit less than the total expected return on the supporting assets if there are minimum guarantees. The level of the discount rate for participating contracts will depend on the strength of the guarantees.

Acquisition Costs

Acquisition costs are recognized in expenses over the coverage period of the contracts. The amortization follows the pattern of the amortization of CSM.





Simplified Approach

The approach described so far is commonly referred to as the building blocks approach. Insurers may measure short-duration charge contracts by a simplified approach. The simplified approach is essentially an earned premium approach. It is referred to as the “premium allocation approach.” The standard allows the premium allocation approach when it is a reasonable approximation to the building blocks approach or if the coverage period of the contract is one year or less.

Participating Contracts

Participating contracts are those for which performance, from the policyholder’s perspective, depends on investment or underwriting results. The IASB is looking for a model that works for traditional participating contracts, universal-life-type contracts, fixed deferred annuities and variable contracts, to name a few. At the time that this is being written, the measurement approach for participating contracts is the most significant issue outstanding. It has been the most intractable. Finding a single model that works across the range of product types, investment strategies and regulatory regimes is proving to be difficult. Industry input has been extensive, but also varied. Suggested solutions work well for products common in some parts of the world but not very well for products found in other parts of the world.

Claims Liabilities

Claims liabilities are measured as the present value of expected payments within an adjustment for risk; in other words, the fulfillment value under the building blocks. There is no CSM associated with claims liabilities.

Revenue Recognition and Presentation in the Performance Statement

For contracts that use the simplified approach, revenue is the premium earned in relation to coverage provided. It is not very different from current U.S. GAAP.

For long-duration contracts the proposal treats premiums as deposits. Revenue is the sum of:

- Amounts that are released from the liability for the period that are intended to provide for benefits and expenses
- Amortization of CSM

Finding a single model that works across the range of product types, investment strategies and regulatory regimes is proving to be difficult.

- The change in the risk adjustment
- Amounts allocated to the period to cover the amortization of acquisition costs.

An interesting ramification of this definition of revenue is the fact that the top-line number in the statement of profit and loss will come from actuarial models.

It is important to note that the benefits are insurance benefits. Payments of cash values and endowments are not benefits; rather they are returns to policyholders, again similar to the U.S. GAAP treatment for universal-life-type contracts. Excluding repayments to policyholders from profit and loss puts the investment components of insurance contracts on the same playing field as investment contracts, whether issued by insurance companies, banks or other deposit-taking institutions. Companies accustomed to reporting premiums as

revenue and cash surrenders as expenses will see a significant reduction in revenue and expense.

Experience Differences, Effects of Changes in Estimates of Expected Cash Flows, Re-Measurement of the Risk Margin, and Effects of Changes in Discount Rates

Experience differences are the differences between actual and expected benefits. These are reported in profit or loss when they occur.

The effects of changes in assumptions and of re-measurement of the risk adjustment are

offset by an equal and opposite change in the CSM. The IASB has concluded that changes in assumptions should not create profit or loss.

Companies have the option to report the effects of changes in discount rates in profit or loss or in other comprehensive income (OCI). The expectation is that insurers will take the option that best corresponds to the accounting for supporting assets.

Disclosures

There are a number of required disclosures. They provide additional information about the amounts recognized in the financial statements, the significant judgments—and changes in those judgments—made when applying the standard, and the nature and extent of the risks that arise from insurance contracts. One of the most important of these is a reconciliation of the measurement of contracts at the end of the reporting period to the measurement at the beginning of the period.



IFRS, IASB, FASB and More

FOR MORE INFORMATION on the IFRS, read “Are You Ready for the New Accounting Rules?” by Jim Milholland in the June 2013 issue of *The Financial Reporter*, the newsletter of the SOA’s Financial Reporting Section (<http://bit.ly/1L37KLL>). Also check out the article, “The Mini-Series Continues” by Henry Siegel, FSA, MAAA, in the June 2014 issue of *The Financial Reporter* (<http://bit.ly/1NPJKKZ>).

This reconciliation will present some items not found in profit and loss, such as premiums and surrender benefits. Interestingly, there is no prohibition on a net negative (debit balance) measurement of insurance contracts. Portfolios of insurance contracts that are in an asset position will be presented separately from those in a liability position.

HOW DIFFERENT IS THE PROPOSED NEW STANDARD FROM CURRENT PRACTICES?

How the proposals differ from current practices depends of course on which set of current practices one compares them to. In many parts of the world—notably Canada, Australia and South Africa—insurers already use a current measurement with an adjustment for risk. For these companies the measurement differs in relative respects; e.g., the definition of the risk adjustment and the amortization of the counterpart to CSM, if any. They will find the biggest difference in the revenue recognition and presentation in the performance statement.

Companies converting from U.S. GAAP will need much more complex and dynamic models for long-duration contracts than they currently use. The different principle for revenue recognition will affect long-duration traditional insurance products, but will be less pronounced for universal-life-type and investment contracts. For many insurers, especially property-casualty insurers, the biggest differences will be the effects of

discounting claims liabilities and adding an adjustment for risk.

But there may not be many companies converting from current U.S. GAAP to IFRS. The Financial Accounting Standards Board (FASB) in the United States had partnered with the IASB in a joint project for insurance contracts, but left the joint project and went in its own direction in 2013, when it became apparent that the two boards would not be able to reach agreement on some significant aspects of the standard.

At about the same time that the IASB exposed its proposed standard for IFRS, the FASB exposed its proposal for a new U.S. GAAP standard. The FASB proposal, although different as mentioned, had much in common with the IASB’s proposal; namely, current estimates, discounting of loss reserves, and revenue recognized as amounts are released from the liability to provide for benefits and expenses.

The FASB received almost entirely negative comments on its exposure draft. Commenters did not see significant improvements to financial reporting resulting from the proposal, and believed that the shortcomings of U.S. GAAP could best be addressed by selective improvements rather than by a complete overhaul. In response to the comment letters, the FASB decided to no longer pursue the proposed new standard.

It affirmed the current accounting model for short-duration contracts and embarked on a new project to make targeted improvements to accounting for long-duration contracts.

Foreign companies that are registered with the Securities and Exchange Commission (SEC) can file required reports using IFRS. Domestic registrants must use U.S. GAAP. At one time the SEC seemed to be on track to allow domestic registrants to use IFRS, then backed away, and now seems open again to the idea. As reported by the *Wall Street Journal* in November 2014, the new chief accountant of the SEC has said that he hopes to make a recommendation in the next few months.¹

As things now stand, some actuaries in U.S. companies will be using U.S. GAAP, and others—in subsidiaries of foreign insurers, for example—will be using IFRS. The Society of Actuaries (SOA) may be confronted by the challenges of training actuaries in both sets of accounting rules.

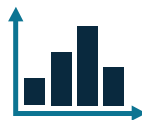
IS IT WORTH IT?

In the United States, the answer is in. The insurance industry has said “no” to the FASB’s proposal for a revised U.S. GAAP. Commenters to the exposure draft said that the benefits are not worth the cost; and in fact, the consensus view is that the proposals wouldn’t bring a net improvement to financial reporting at all. As already noted, the FASB is exploring targeted improvements to U.S. GAAP.

In other parts of the world, the jury is still out. The real answer will come when companies begin to report under the new IFRS and feedback from preparers and users of financial statements becomes available.

Clearly, having a global standard to replace the multiplicity of reporting bases is a point





in favor of a new standard. Capital markets in Europe and elsewhere will benefit from having insurers provide financial statements that are comparable.

More important than comparability is the usefulness of financial reports. Insurance accounting in the United States and in Europe is generally regarded as opaque for long-duration contracts. In Europe the response to the shortcomings of the various GAAPs has been to provide supplemental information in the form of embedded values. In the United States, users bemoan the opacity of U.S. GAAP, but have made their peace with it. There has not been an outcry for embedded values or other supplemental information.

An important test of IFRS in Europe will be whether it obviates supplemental reporting information. I believe that it will and that the usefulness of IFRS will quickly become apparent.

Here is why I think IFRS will prove to be useful:

The balance sheet will have current values. Insurers will report the value of expected cash flows, and they will separately display their quantification of the risk associated with the uncertainty in the estimates. No longer will users have to guess about how much the insurer thinks it really needs and how much conservatism is in the measurement. As experience develops, the differences to expected claims and expenses will reveal any bias in the estimates, something that is already apparent for short-duration contracts. Updated assumptions and the

corresponding change in CSM will reveal trends, positive or negative, in experience, and may reflect as well on the insurer's ability to make realistic estimates. Profit or loss will show if capital is growing, and OCI will give insights into the effectiveness of asset/liability management.

Profit and loss will be more understandable. Underwriting profits for long-duration contracts will be the excess of insurance revenue over benefits and expenses, just like it already is for short-duration contracts. Users will find the definition of revenue much more rational than premiums as revenue, and the underwriting results will be transparent. The financial contribution to profit or loss, the excess of investment income over interest accredited on liabilities, will also be more transparent. No longer will users have to puzzle over the mysterious "change in reserves" that comes from the actuary's black box, and be left wondering what's driving profits.

The CSM will become a focus of attention, and for good reason. An analysis of the change in the CSM is a required disclosure. Users can see if the CSM is growing and why. Already some actuaries are referring to CSM as the value of future profits. The statement of profit or loss will show the current results, which will be driven in large part by the amortization of the CSM. The CSM on the balance sheet will show the prospects for the future (a sort of embedded value!). Additions to the CSM from new business will indicate if margins are being maintained.

The risk adjustment will be seen as another source of future profit, although

not as assured and likely more volatile. The amount of risk adjustment will indicate the perceived uncertainty in the cash flows. The change in the adjustment risk will provide insight into the insurers' changing perspective on risk or changing appetite for risk.

In short, I believe that the information provided by the new IFRS for insurance will be a significant improvement over the information provided by most current accounting regimes. The challenge to insurers will be managing the message that the information sends. Input from actuaries will be critical to communicating and explaining the results. The challenge starts long before the first report under IFRS. As soon as the accounting standard is adopted, directors of insurers will start to ask what the effects of the conversion to the new standard will be. Not long after that, shareholders will want to be informed about what's coming. So the word to the wise is "it's just around the corner," and the demands will come quickly. **A**

END NOTE

¹ *Wall Street Journal*, Nov. 6, 2014.

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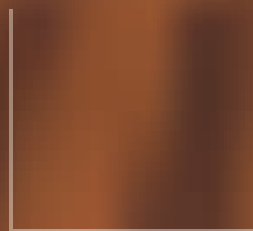


Farm



AGRICULTURE INSURANCE

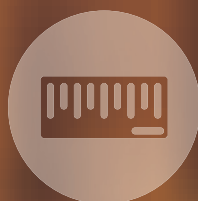
MORE ROOM





Fresh

CULTURAL FINANCE TO GROW?



Agricultural insurance—and other risk management approaches—can contribute to improving the productivity of agriculture, through helping producers invest in more productive, but potentially riskier, agricultural practices.

By Lysa Porth and Ken Seng Tan

AGRICULTURE, THE WORLD'S LARGEST INDUSTRY

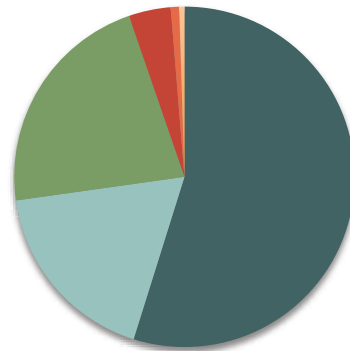


griculture is often recognized as the world's largest

industry, and is of major social and economic significance. As populations continue to grow, a substantial global transformation must take place in order to increase food production by 70 percent by 2050, the estimated figure needed to feed the future population (FAO, 2009). In developing countries agriculture is of special importance, as it is a main source of economic growth and food security, and it can be one of the most effective approaches to reducing poverty (compared to nonagricultural gross domestic product (GDP) growth) (World Bank, 2008). In Africa, about 30 to 40 percent of GDP is due to agriculture, and almost 60 percent of total export earnings (Fan, 2009). Comparatively, in Canada the Agriculture and Agri-Food System (AAFS) accounts for approximately 6.7 percent of GDP. Improving the productivity of the agricultural sector, therefore, is a key goal for both developing and developed nations.

Agricultural insurance (and other risk management approaches) can contribute to improving the productivity of agriculture, through helping producers invest in more productive, but potentially riskier, agricultural practices. Adverse weather events are the primary driver of crop loss, and in the case of extreme events, such as drought and floods, producers face the prospect of entire crop failure. Coupled with an environment that is rapidly changing, due to a more complex agri-supply chain, climatic changes that may be increasing the frequency and severity of natural disasters, and increased price volatility due to changes in market structure

SHARE OF AGRICULTURAL INSURANCE PREMIUM (2011)



Source: Adapted from Swiss Re, 2013.

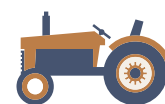
and sensitivity, this causes concern for farmers, governments, insurers and reinsurers alike. Therefore, agricultural insurance is an important part of ensuring long-term stability and growth of the agriculture sector, and facilitating access to credit, helping to reduce the negative impacts of natural catastrophes, and encouraging investment in improved production technology.

Global agricultural insurance premiums have increased considerably over the past decade. The increased market size can partially be attributed to increases in commodity prices, and in the last five years a major driver has been emerging markets. Direct global agricultural insurance premiums written in 2011 were US\$23.5 billion (Swiss Re, 2013), and in 2013 estimates were almost US\$30 billion (Schneider and Roth, 2013). This is a substantial increase from 2005, where agricultural insurance premiums worldwide were US\$8 billion. While emerging markets account for approximately 70 percent of food production worldwide (Baez and Wong, 2007), in 2005 only 13.4 percent of global agricultural insurance premiums were from

emerging markets. Since 2005, however, the share of emerging market premiums has increased, and in 2011 they were 22 percent, driven largely by major growth in Brazil, China and India (Swiss Re, 2013). The figure above shows the share of agricultural insurance premiums worldwide.

As shown in the figure above, North America accounts for the majority of global agricultural insurance premium written. The agricultural insurance program in the United States is the largest in the world, and in 2012 the U.S. Federal Crop Insurance Corporation (FCIC) reported total premiums of US\$11.7 billion with an insured value of US\$117 billion (Shields, 2013). Comparatively, crop insurance premiums in Canada in 2011 were about CA\$1.6 billion, and payouts to farmers were CA\$1.3 billion.

Given that systemic risk can be very difficult for an insurer to manage when severe weather scenarios occur, reinsurance is often an important risk transfer mechanism for insurers. In 2013, Q-Re examined the role of reinsurance in global agricultural insurance,



and reported that the total downside risk for agricultural insurance was more than US\$20 billion, and almost 80 percent of this was reinsured. North America alone accounted for downside of more than US\$12 billion. As an example, severe drought in the U.S. Midwest in 2012 led to near-record crop insurance indemnity payments in excess of US\$14.2 billion, and much of this loss was paid by the reinsurance sector.

remainder. The insurance companies' losses are reinsured by the U.S. Department of Agriculture (USDA), and administration and operating costs are also fully reimbursed by the federal government.

Adverse weather events tend to be infrequent, yet severe, and at times correlated across geographic regions. This can make insurability more difficult, as losses cannot be easily

the vast majority tend to be smallholder farmers that cultivate less than two hectares of land. As a result, another difficulty with indemnity-based insurance contracts can be relatively high administration and underwriting costs, particularly in developing countries with primarily small-scale farmers, which makes associated costs prohibitively high relative to the insurance benefit in many cases.

THE POTENTIAL OF INDEX-BASED INSURANCE (IBI)

In response to many of the shortcomings of traditional indemnity-based insurance, where indemnities are paid according to a farmer's actual losses, the concept of IBI was first introduced by Halcrow (1948) and Dandekar (1977). In more recent years IBI has received a renewed interest, largely driven by advances in infrastructure (i.e., weather stations), technology (i.e., remote sensing and satellites), as well as computing power, which has enabled the development of new statistical and mathematical models. With an IBI contract, indemnities are paid based on some index level, which is highly correlated to actual losses. Possible indices include rainfall, yields, or vegetation levels measured by satellites. When an index exceeds a certain predetermined threshold, farmers receive a fast, efficient payout, in some cases delivered via mobile phones. Administration costs are low since there is no need to measure actual losses, and this may be a key benefit of IBI for developing countries with smallholder farmers. Additionally, there is significantly less adverse selection and moral hazard since farmers are unlikely to be more informed about the index than the insurer, and have no control over the outcome of the underlying index. Moreover, since IBI is derived from an independently verifiable index, insurers can efficiently transfer their risk to reinsurers in international markets.

REGION	DOWNSIDE RISK (US\$, BILLIONS)	REINSURED (%)
North America	12.3	74
Europe	3.6	76
Asia	4.2	81
Latin America	0.7	92
Africa	0.3	89
Total/weighted average	US\$21.1 billion	76%

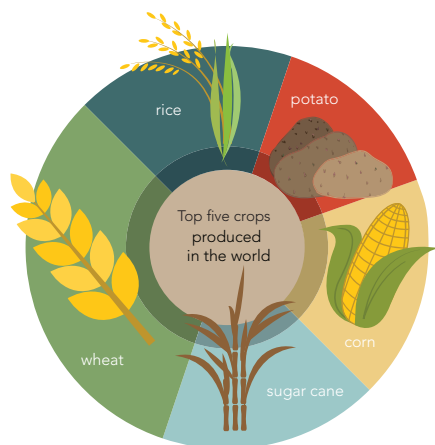
Source: Adapted from Schneider and Roth, 2013.

UNIQUENESS OF AGRICULTURAL INSURANCE AND CHALLENGES OF INSURABILITY

Agriculture is faced with a number of challenges related to insurability (Porth, Zhu and Tan, 2014), and often a public-private partnership (PPP) approach is necessary. In Canada, for example, provincial crop insurance companies deliver crop insurance, and premiums are cost-shared at 24 percent and 36 percent with provincial and federal governments, respectively, with farmers responsible for the remaining 40 percent of premiums. In addition, crop insurance delivery costs are 100 percent subsidized by provincial and federal governments proportionately. Comparatively, crop insurance in the United States is serviced through 18 approved private insurance companies, and premiums are subsidized on average 62 percent by the federal government, with farmers paying the

pooled and diversified (Porth, Pai and Boyd, 2014). Further, adverse selection and moral hazard are often cited as major causes of private insurance market difficulties. Adverse selection refers to higher-risk farmers that are more inclined to seek insurance, while moral hazard is a tendency to take on greater risk once insured. In developing countries, reinsurance capacity tends to be more limited, primarily due to insufficient market infrastructure, lower producer risk awareness, lack of insurance culture, and other regulatory impediments. In most countries, crop insurance contracts tend to be indemnity-based, where farmers are paid an indemnity according to the actual loss experienced on the farm. Often, however, farm characteristics differ substantially across developed and developing countries. For example, in developed markets farms tend to be quite large and specialized, and in developing markets

IBI is still primarily in development or pilot stages, rather than widespread commercial stages, and has been attempted in some markets around the world, including Canada, Mexico, Morocco, India, Rwanda, Tanzania, the United States, etc. India's Weather Based Crop Insurance Scheme (WBCIS) provides a strong example of the potential of IBI, sold by a commercial insurer, ICICI Lombard. The WBCIS in India covered more than 9 million farmers from 2010 to 2011, with premium of US\$258 million and total liabilities of US\$3.17 billion (World Bank, 2012).



papers (Turvey, 2001; Brockett et al., 2005). Basis risk refers to the situation when the underlying risk is not perfectly correlated to the actual loss. This may lead to circumstances where farmers are not indemnified for an actual loss, or, conversely, are paid an indemnity despite having no actual loss.

When developing agricultural indices, historical data must be available, objective and reliable. In addition, the relationship between the loss exposure and the peril (in many cases a weather factor) is often

The top five crops produced in the world are sugar cane, corn, wheat, rice and potatoes with annual production of 1.8 billion, 8.8 million, 7.2 million, 7.0 million and 3.7 million tons, respectively, in 2012.

Source: Food and Agricultural Organization. <http://faostat.fao.org/site/339/default.aspx>. Accessed March 5, 2015.

EXPERIENCE WITH IBI AND THE SHORTCOMINGS OF BASIS RISK

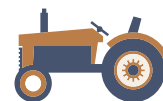
While promising, IBI faces a number of challenges, and in practice demand for this type of insurance product has been low. While there are a number of possible explanations for low demand for IBI contracts, such as the farmers' lack of understanding or trust, the most prevalent is likely attributed to the exposure faced in terms of basis risk (Chantararat et al., 2013; Deng et al., 2007). Basis risk has also been cited as a primary concern for the implementation of weather hedges and examined in several research

complex and must be carefully explored. For agricultural production, this relationship is not always straightforward since many factors, such as variance in crops, growth phases, soil textures, etc., to some extent, can cause a variance in responses to the same weather factor. In order to be successful and reduce basis risk, the index must be able to explain a very high portion of the variability in production. Therefore, minimizing basis risk is critical because evidence suggests that farmers will not fully insure if basis risk is present even when rates are actuarially sound (Mobarak and Rosenzweig, 2012).

In general, there are three main categories of basis risk.

1. Variable basis risk: when the relationship between the loss and the indexed weather peril is not straightforward, due to the presence of other important risks. For example, yield loss may be more due to wind speed during flowering rather than quantity of rainfall or relative humidity.
2. Spatial basis risk: when the outcome at the farm differs from the measure based on the index. In this case there is low sensitivity between the farm yield and the weather data generated from meteorological stations, which may be situated at considerable distances from the farm.
3. Temporal basis risk: when there is low correlation between the weather index and crop yield due to the timing of the occurrence of the insured event. The temporal component of the basis risk is related to the fact that the sensitivity of yield to the insured peril often varies over the crops' stages of growth. Factors such as changes in planting dates, where planting decisions are made based on the onset of rains, for example, can have a substantial impact on correlation as they can shift critical growth stages, which then do not align with the critical periods of risk assumed when the crop insurance product was designed.

It is impossible to completely eliminate basis risk. Given that IBI policies cover multiple farmers in a region, and these farmers likely have different losses to some degree, there will always be some level of mismatch between the measured peril and the actual losses on a farm. As a result, farmers must assess the limitations of the insurance



contract, and the value the farmer places on the product will largely depend on the perception on basis risk. In the case where the farmer experiences significant negative shock, yet, the IBI product does not trigger and pay the farmer for the loss suffered, then the farmer will find this situation too uncertain and likely would not buy insurance. Following the idea of compound risk or ambiguity aversion (Ellsberg, 1961; Elabed and Carter, 2014), the farmer may actually find himself worse off in this situation, as he suffered a loss without receiving an indemnity, and paid the premium.

CURRENT RESEARCH: AN EXAMPLE FROM CANADA ON FORAGE IBI

Ontario designed and offered one of the first forage rainfall derivative plans, beginning with a pilot from 2000 to 2002, and launching a full-scale program in 2005. This product has since been modified and adopted by other provinces in Canada. In general, national participation in forage insurance plans is low with only 20 percent of all forage acres, and 12 percent of pasture acres, being insured. This low take-up is despite premium subsidy of approximately 60 percent, and a number of different insurance schemes offered. For example, the provinces of Manitoba, Saskatchewan and British Columbia offer indemnity-based forage yield coverage at the farm level, and in Quebec insurance is offered via a simulated forage plan.

Under the forage IBI scheme in Ontario, farmers can insure against insufficient and/or excess rainfall with several options. Customers identify their crop in proportions of hay and pastureland and value accordingly. A given contract payout is based on weather data professionally collected from one of 350 stations across the province. Customers must

select a station located in their township or one adjacent. Despite the flexibility of the program and several choices available, only 10 percent of forage acres are insured in Ontario, compared to 90 percent of annual crop acres insured. Of those who insure, the average customer selects about 80 percent of available coverage.

In addition to forage being the basis of Canada's livestock industry, where 80 percent of Canada's beef production and 60 percent of a dairy cow diet depend on forages, it is also very important in soil conservation, as they are used in crop rotation to improve soil structure and add nitrogen to the soil (AAFC, 2014). Forages are produced across all agricultural regions of Canada, and represent about 44 percent of Canada's total farm area (Sask Forage Council, 2010). Forage is a non-traded or semi-traded commodity. Crop management tends to be more complex with forages compared to many other crops, for several reasons:

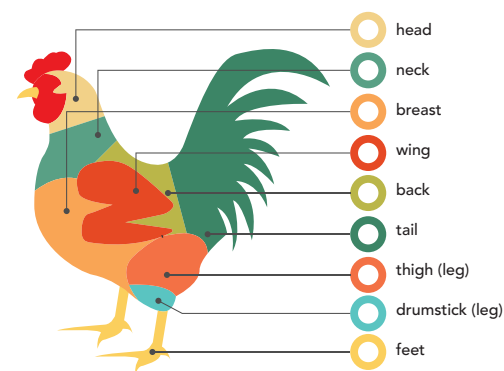
- Forage usually consists of a mixture of different species.
- Forage may be used as either stored feed or pasture.
- There is a wide range of harvest and storage systems used.
- Perennial crops require management to ensure over-winter survival.

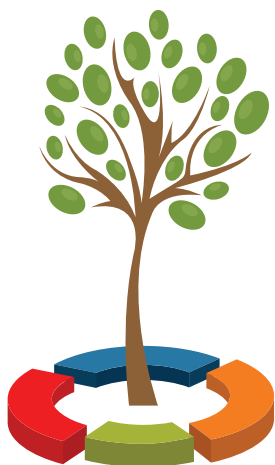
Some farmers may self-insure (e.g., save forage or change cutting times) rather than participate in IBI coverage, as premiums may be higher than the perceived cost of self-insurance. The intended use of a farmer's forage (hay vs. pasture) may make a difference in demand. Other factors such as cultural and behavioral issues may explain some of the variations in forage insurance demand. One possibility is that some farmers may be culturally averse to the idea of forage insurance. Nationally, forage remains a focus of production insurance discussions due to lower participation rates (compared to other crops such as grains and oilseeds) and requests for ad hoc support, demonstrating the need for an insurance product.

Given the low uptake of the forage IBI plan in Ontario, the objective of our research was to better understand the possible issues contributing to the low demand. Particularly, the study considers the concept of ambiguity/compound-risk aversion, which is tested using the smooth model of ambiguity aversion developed by Klibanoff et al. (2005), which is used to express how much farmers are willing to pay (WTP) to reduce basis risk. The WTP measure is estimated empirically using framed field experiments with farmers in Ontario, revealing the prevalence and

Livestock farming feeds billions of people and employs 1.3 billion people. That means about 1 in 5 people on Earth work in some aspect of livestock farming.

Source: Lynette, Rachel. 2013. *Producing Meat: The Technology of Farming*. Chicago, IL: Heinemann Library.





Despite the fact that agriculture employs over one-third of the world's population, agricultural production accounts for less than 5 percent of the gross world product (an aggregate of all gross domestic products).

Source: Food and Agricultural Organization. <http://faostat.fao.org/site/339/default.aspx>. Accessed March 5, 2015.

degrees of compound risk aversion present. The distribution of compound risk aversion is then used to simulate the impact of basis risk on demand for an IBI contract structure that mimics the actual IBI contract distributed in Ontario.

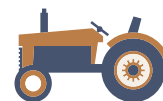
Given that different growth stages have different needs, it is possible to assume that a simple cumulative index might not completely frame the relationship between the growth and weather factor. Therefore, this research also examines approaches to reduce basis risk, with a focus on temporal basis risk, an area of research that has received considerably less focus relative to spatial and variable basis risk. Using farm-level forage data from Ontario, including forage yield, soil zone, descriptive farm statistics and weather station data, a detailed analysis of crop cycles is conducted with the intent of designing an improved multi-trigger forage IBI product for Ontario. Using weighted optimization to reflect different growth phases, and considering planting techniques and personal crop cycle information of farmers through surveys, preliminary results find that significant improvement in tracking the weather factor-

yield relationship can be achieved.

Designing contracts that minimize basis risk under an assumption of compound-risk aversion would not only enhance the value of IBI, but would also help to ensure that the contracts are popular and have the anticipated impacts. This research would set a framework for further testing in Canada and other countries, including developing countries, in order to determine model transferability. The IBI model developed in this research may also be useful for other crop and livestock insurance applications and weather-linked derivative securities where basis risk is a concern. **A**

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NEW DIRECTIONS

THE SOA IN CHINA

With the guiding principles in place to expand SOA services in China, the strategy will focus on professional development for members, university visits, practice research, and building relationships with local partners.

BY JOAN BARRETT AND EMILY KESSLER

The Society of Actuaries (SOA) is a member association. As a member association, we're best known for providing pre-qualification education, and our credentials are a mark of actuarial excellence around the globe. But our services to members don't stop once they earn their credential: The SOA, through its member volunteers, provides insight and education long after a member earns an ASA, CERA or FSA: through publications, special interest sections, continuing professional development opportunities and research.

That may sound straightforward, but when you consider that the SOA has over 26,000 members spread across 78 countries,

that gets a bit more complicated. What does it mean to provide insight and education to members who may be practicing outside of North America, the SOA's traditional home base?

ESTABLISHING FIRST PRINCIPLES

The SOA's International Committee and Board of Directors have put into place specific strategies for ensuring that all of our members and other stakeholders—including candidates, employers and others who rely on actuarial services—are well served by the SOA, no matter where they live. In 2013, the board and the International Committee decided to develop strategies for the SOA in mainland China,¹ Asia excluding mainland China, and Latin America. Most of our members who

are not in the United States or Canada are in Asia; Hong Kong and mainland China are the third and fourth largest countries/regions, respectively, for members. Because of its size (i.e., population and economy) and political and economic structure, the International Committee recommended that a separate strategy be developed for mainland China versus the rest of Asia.

In 2014, the International Committee developed, and the board approved, a plan to expand the services we're able to provide members and other stakeholders in China and to support the growth of the profession there. In developing services for members, candidates and other stakeholders, the SOA and its volunteers will be driven by three principles:

1. **Tailoring services to members' needs.** Almost all of our content (e.g., professional development sessions, research papers, newsletter articles) is generated by volunteers (or, in the case of many research projects, contractors hired by the SOA and overseen by volunteers). With most of our volunteers based in the United States

Did you know?

- In 2014, the SOA had 748 members in mainland China (excluding Hong Kong and Macau), about 2.9 percent of total members.
- In 2014, we had 866 serious candidates in China (candidates who already had at least two exams), about 6.6 percent of the total number of serious candidates.
- Beijing is one of the 10 largest SOA exam centers.
- Most SOA members in China are located in one of three cities: Beijing, Shanghai or Shenzhen.
- The SOA's formal role in China goes back to 1987 when we first partnered with Nankai University to develop a master's degree program in actuarial science.

and Canada, that means most of our content is developed by these members and for these members. But, that's not necessarily of much value to members outside the United States and Canada. So, a key part of the China strategy will be to make sure that members, candidates and other stakeholders have access to information that is focused on their needs. The best way to do this will be to get members in China creating content.

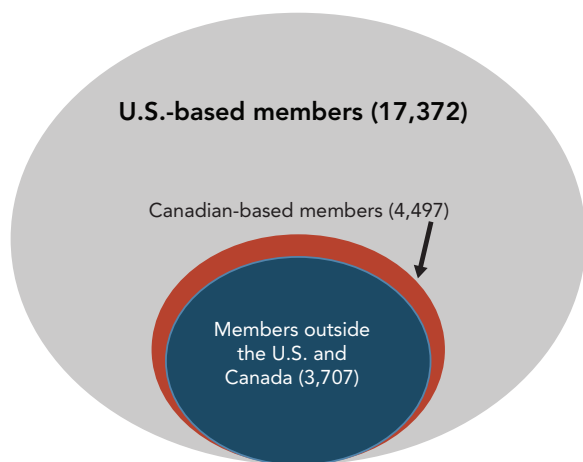
2. **Create collaborative, respectful, mutually beneficial and productive relationships with our partners.**

One of our most important partners will be the China Association of Actuaries (CAA), the national association that qualifies actuaries in China, sets practice standards and professional discipline, and works to provide continuing education and research to support actuaries in China. The CAA has just under 1,000 member actuaries (it also has about 100 institutional members). We want

to work with the CAA in a variety of ways to build the actuarial profession. As the profession continues to develop in China, we will identify other communities that share our interest in developing strong financial security systems.

3. **Promote and enhance the profession.** Our work in China should highlight and demonstrate the value of actuaries (and the SOA). One way we do this today in North America—and we hope to do in China—is through research that shows the value actuaries can bring to the measurement and management of risk. We also provide high-quality professional development programs—developed by members for members—to ensure that all actuaries continue to provide high-quality professional services.

With these three principles in place, the strategy will, for the first few years, focus on four specific tactics: professional





development for members, university visits, practice research, and building relationships with local partners, particularly the CAA. Key to getting all of these activities underway will be to build a group of volunteers in China who can respond to the needs of members, candidates, employers and other organizations. A full program of services in China will need to be created by members in China—a committee of members based in China who can speak the local language, are up-to-date on local developments, and can be the face of the SOA in China. Member volunteers in North America are the face of the SOA in the United States and Canada and drive much of the content that we provide to members and candidates. SOA members in China need to have the same opportunities—and the same responsibility—for helping their fellow members in China grow and develop.

We also know that we need to learn more about what members, candidates, employers and other organizations need from the SOA in China. The Chinese insurance market, for example, is growing rapidly (see chart). In 2005, China was the seventh-largest life insurance market (\$48 billion). By 2020, it is projected to be the

in China to help actuaries adjust to this rapidly growing market. This information will provide volunteers in China and the SOA board insight on what the SOA can do to best strengthen the profession in China. This local feedback is critical. SOA leaders have been regularly visiting China and the greater Asia region for over a decade. When

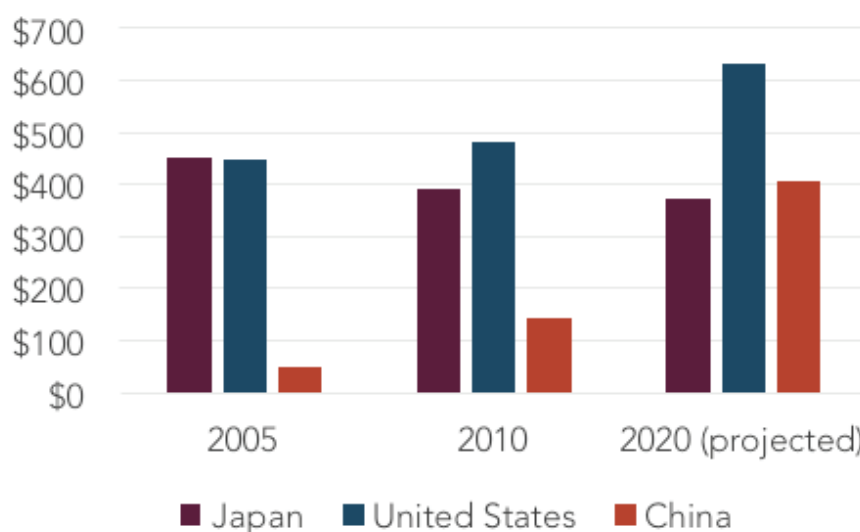
SOA members in China need to have the same opportunities—and the same responsibility—for helping their fellow members in China grow and develop.

second-largest life insurance market, after an eightfold increase in expected gross premiums. By providing more services in China, on a more regular basis, led by local members, we hope to learn more directly about member and other stakeholder needs

they do, they get an opportunity to visit with members and candidates and gather feedback. In today's fast-paced world, we need more frequent and organized feedback loops. Today our member volunteers gather feedback constantly, either through formal mechanisms overseen by SOA staff—such as surveys on professional development seminars—or informally by talking to their colleagues about newsletter articles or research papers. We need the same formal and informal mechanisms in China to learn more about what to do to serve members, candidates, employers and other stakeholders there.

TOP 10 LIFE INSURANCE MARKETS (EXCERPT)

Gross premiums, US\$ billions



Source: *Life Insurance in Asia* (2013), Figure 2.1

SOA SERVICES IN CHINA

Providing professional development tailored to members in China. We've been providing professional development to members in China and throughout Asia for years, such as our Asia Pacific Symposium, now entering its fifth year, and the SOA has also become a regular presence at other major events such as the East Asian Actuarial Conference and the CAA's annual



SOA MEMBERS OUTSIDE THE UNITED STATES AND CANADA (3,707)



- Mainland China ■ Hong Kong & Macau ■ Rest of Asia
- Africa, Europe, Rest of North America, Oceania, and South America

meeting. But we need to provide more content, more frequently, to members in China. What will this mean?

- **Events where members live and work.** China is a very big country, but with members concentrated in three cities (Beijing, Shanghai and Shenzhen) we hope to have events more frequently in those cities. While we will continue to have regional seminars, we will supplement these with events in these cities to provide more options for members who are not able to travel around Asia.
- **Events at a time convenient to members in China.** Today, most of the SOA's 70+ annual webcasts are offered at a time that's convenient to actuaries in North America—but the middle of the night in China. As more webcasts are developed by members in China for members in China, they can be offered at a time convenient to members in China.

- **More information about what's changing in China today.** While much of the content we've prepared to date has focused on international developments, we hope to be able to also provide more information about what specifically is happening in China—just like we do for members in the United States and Canada.

Building a program of university visits.

Today, SOA presidents regularly visit universities whenever they go to China. But until SOA members elect our first China-resident president, the distance is too far for the president to make many trips. Our plans include regularly visiting universities in China. Volunteers, resident in China, can then meet with university students and faculty. These volunteers will be able to answer questions about the profession and the SOA. These relationships are important as we work to ensure a vibrant pipeline of talent into the profession.

Developing practice research. In 2014, the SOA completed the study "Understanding the Changing Middle Market for Life Insurance in China." Our goal is to find more projects like this that SOA members can do in China that will be of value to those in the region.

Building relationships with the CAA.

Finally, the SOA will look for partnership opportunities with the CAA, particularly for professional development programs and research. This will allow both organizations to better serve actuaries in China—be they SOA or CAA members—to benefit the profession in China.

We are excited to be able to develop a wider range of opportunities—services for members, candidates and other stakeholders to take advantage of, and opportunities for members to volunteer to strengthen the profession in China. **A**

END NOTE

¹ Mainland China excludes the special administrative regions of Hong Kong and Macau. "China" will refer to mainland China unless otherwise noted.

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The Canadian Institute of Actuaries

FIFTY YEARS YOUNG, WITH A RICH FUTURE AHEAD

BY JACQUES TREMBLAY

1965 WAS A very interesting year. The Beatles' "Eight Days a Week" topped Billboard's Hot 100 in March. The most popular movie was "The Sound of Music." Sean Connery was still James Bond. Actuaries used slide rules (and slide rule holsters!) as the microchip revolution was years away. Lester B. Pearson was Canada's prime minister and introduced the country's controversial new flag. *The Source* by James Michener was the best-selling book that year.

Not exciting enough? On March 18, 1965, federal Senate Bill S-45 was given Royal Assent, thus creating the Canadian Institute of Actuaries (CIA). The bill was sponsored by lawyer and actuary Senator Wallace McCutcheon, ASA. He was one of the founders of Argus Corporation, a large investment firm that controlled companies like Canadian Breweries, Dominion Stores, Standard Broadcasting and Massey Ferguson. Once the bill became law, the CIA started its next phase.

While we proudly celebrate our 50th anniversary this year, the profession's roots run far more deeply into the past. For an organization driving hard into the future, this is the perfect moment to recognize highlights from our past:



Actuarial thought and practice have a long history in Canada. The beginning of the actuarial profession in Canada can be dated in 1847, when the Canada Life Insurance Company was founded in Hamilton, Ontario, by Hugh Baker, who became a Fellow of the Institute of Actuaries in 1852. The federal Department of Insurance was established in 1875 and shortly thereafter recruited actuaries to its staff. The first actuarial organization in North America was the Actuarial Society of America, which was founded in 1889 in New York and included four Canadians among its 38 Charter Members.¹

In 1907, the Actuaries Club was founded in Toronto, with 24 charter members. Other clubs were formed in Winnipeg and Montreal, and their members formed the core of the Canadian Association of Actuaries, launched in 1946. Today there are more than 10 actuarial clubs operating in Canada, and a vibrant Actuarial Students National Association (ASNA).

While Senator McCutcheon's bill was being debated, there were approximately 300 fellows and 150 associates in Canada. The vast majority of these professionals were trained through the educational facilities of American actuarial organizations. Today more than 4,800 members are proud to hold the FCIA and ACIA designations. In terms of the Society of Actuaries (SOA), 4,377 FCIA and ACIA holders also carry SOA designations: ACIA and ASA, 939; ACIA and FSA, 140; FCIA and ASA, 77; and FCIA and FSA, 3,221.

Over the past 50 years, the Institute has grown to become the voice of the actuarial profession in Canada. We are proud to be a bilingual organization and to serve both the public interest and the profession in English and French. All of our publications are issued in both official languages simultaneously, and this extends to virtually all joint research projects with the SOA, Casualty Actuarial Society, and North American Actuarial Council.

Members of the CIA enjoy the benefits of a comprehensive education syllabus, robust

continuing professional development (CPD), thought-provoking and leading-edge research, and world-class principle-based standards of practice and guidance materials.

The Institute is a self-regulating professional body with its own rules of professional conduct and a comprehensive discipline process. The CIA and its members play an advocacy role with provincial, territorial, and federal governments on issues affecting Canadian society and its financial future.

While the Institute used to be responsible for the development and maintenance of actuarial standards of practice, in 2007 this work was handed over to an arm's-length body, the Actuarial Standards Board (ASB). In addition, the independent Actuarial Standards Oversight Council was established to serve the public interest by providing oversight of and input to the work of the ASB. While these two bodies are independent, the CIA Head Office provides administrative support to both.

The work and responsibilities of actuaries have been part of government legislation and regulations for many years. The Criminal Code of Canada, the Income Tax Act, the Insurance Companies Act, and pension benefits regulations in many provinces all reference the work of actuaries, and most define the term "actuary" as a fellow of the CIA.

In 1991, the new federal Insurance Companies Act enshrined the role of the Appointed Actuary. This role includes a formal designation from boards of directors of all insurers, and involves: access to management information; a report in writing of any transactions or conditions which, in the actuary's opinion, have a significant

adverse effect on the financial condition of the company; an annual report to boards of directors; and a report by the Appointed Actuary accompanying the published financial statements of companies.

As 2015 gets underway, the CIA is excited to begin celebrating 50 years of actuarial excellence in Canada. The largest gathering of actuarial professionals in the country will take place on June 17-18 in Ottawa, Ontario, during our 50th Anniversary Annual Meeting and Gala celebration. A comprehensive program will offer valuable information spanning all practice areas, and will give attendees the chance to network with Canada's premier actuarial community and gain CPD hours.

Iconic Canadians will be the keynote speakers at this year's annual meeting. The trusted face and voice of social commentator and editorialist Rex Murphy are sure to inspire great actuarial debate. More thought-provoking ideas will be presented by Jeff Rubin and David Suzuki as they join forces to discuss sustainability and economic growth.

No celebration would be complete without a gala event. Celebrating the 50th anniversary theme, *Actuaries: Professionals of the Future*, the gala on June 17 will take attendees on a journey through our past before looking to the horizon to see what is in store.

We hope you can join in.


Expanding on the anniversary theme, the CIA is proud to be deeply involved in the work of the International Actuarial Association (IAA) and we look forward to welcoming IAA members to Vancouver and hosting the association's Official Dinner on

Oct. 16. A gathering of international professionals gives us the opportunity to share experiences about what other



Jacques Tremblay

actuarial associations are working on, and helps foster relationships with our global partners.

Canadian actuaries are proud of their profession and the progress that has been made in the last five years, much less 50! As part of a vibrant, volunteer-driven organization, they are directing the CIA to being, doing and offering more in the next phase of our history. Our committees, councils and board are ready for this type and level of engagement. 

END NOTE

¹ From "Our History," CIA website www.cia-ica.ca.

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Education

WE ARE LIFELONG LEARNERS

BY JENNIE MCGINNIS AND JUDY POWILLS

YOU LEARN SOMETHING NEW EVERY DAY—It's true, whether we intend to or not, making each of us lifelong learners. Many days it may not feel like we're learning, even when we are—albeit informally. Take, for example, scanning the news headlines; “googling” a topic that you're interested in; talking with a colleague about a project just wrapped up.

Often, learning is much more formal. As students aspiring to become actuaries this included our education, training and the credentialing process. In these cases the learning path was largely set for us once we selected our track, with only a few electives allowed in comparison to the list of mandatory educational components to complete and examinations to pass to earn our designations.

Upon earning our ultimate designation (be it ASA, CERA or FSA), the floodgates are opened. We must satisfy our profession's continuing professional development requirements, which include a minimum number of hours to complete and certain targets related to specific topics (such as professionalism). However, there is no one saying exactly which paper to read, which

webcast to join or which meeting to attend.

So how do you decide which educational opportunities will meet your formal and informal learning needs and requirements?

Anecdotally, it seems that for many this is rather haphazard. The Society of Actuaries' (SOA's) Competency Framework (and related Self-Assessment Tool) is designed to help address this, and is useful whether you are seeking to learn a topic in more depth or to broaden your horizons.

Delving deeper into a subject area is natural for many of us. Once we know we're good at something, or that we enjoy doing a certain type of work, we're happy to continue developing skills in that area. We want to demonstrate or enhance our mastery of that subject. The SOA offers many ways to dive into relevant topics—whether through meetings, seminars, e-learning courses, webcasts or section newsletter articles.

Another source for deepening your knowledge is the current pre-qualification study materials. Reviewing these materials will help you understand how the field has developed over time and also give insight into what is required to become an actuary today. Consider flipping through a syllabus,

picking up a textbook, or working through an e-learning module to further develop in your area of practice.

It's natural to think about broadening your horizons when considering a job change. However, there is much to be learned from each other that can be applied in day-to-day situations whether or not you are seeking out new opportunities. Key to stretching one's learnings to a broader range of topics is an interest in translating solutions, bridging techniques and stepping away from your routine to look at things from a different perspective.

The SOA supports members who are interested in broadening their horizons in a number of ways, many of which require minimal time or financial commitment. For example, when at a meeting such as the annual meeting, select a session or two that are outside your current job focus. Following the meeting, view and listen to the slide/audio sync recordings for sessions of your choice. Or, review the pre-qualification education syllabus and learning materials for a track other than yours. Other options available include e-learning courses, live or recorded webcasts, and podcasts.

Always Learning—Quotable Quotes

"Anyone who stops learning is old, whether at twenty or eighty. Anyone who keeps learning stays young."—Henry Ford

"Intellectual growth should commence at birth and cease only at death."—Albert Einstein

"You'll never know everything about anything, especially something you love."—Julia Child

"All the world is my school and all humanity is my teacher."—George Whitman

"Always walk through life as if you have something new to learn and you will."—Vernon Howard

"I am learning all the time. The tombstone will be my diploma."—Eartha Kitt

"It's what you learn after you know it all that counts."—Harry S. Truman

"That is what learning is. You suddenly understand something you've understood all your life, but in a new way."—Doris Lessing

"Learning is not a spectator sport."—D. Blocher

"Learning is not attained by chance. It must be sought for with ardor and attended to with diligence."—Abigail Adams

"Live as if you were to die tomorrow. Learn as if you were to live forever."—Gandhi



Jennie McGinnis



Judy Powells

The SOA regularly reflects on how it can best support both candidates and members in their learning goals. It has recently established a Learning Strategy Task Force to aid in this process. The task force is considering several learning trends in the course of this effort, including Massive Open Online Courses (MOOCs), flipped classrooms (listening to lectures on your own time while focusing in-person sessions on practice and exercises), badges (an update to the scouting version, which can be displayed online as evidence of mastery), wikis, compressed learning, competency-based learning, as well as coaching and mentoring. Emerging topics, such as business analytics, are also being monitored to ensure that new educational offerings are developed as needed.

Lifelong learning is up to you. So to all of you lifelong learners, we hope this article sheds light on how to do so in a more intentional manner. The SOA looks

forward to continuing the journey with you, developing offerings in line with your needs that take advantage of new methodologies being employed across industries. We hope you'll also look outside the actuarial box to broaden your knowledge. How could learning another language, traveling, taking up painting, or participating in your PTA lead you to be a better actuary?

HOW DO MEMBERS PERCEIVE LIFELONG LEARNING? WE ASKED!

The SOA administered a survey to the Member Advisory Panel. Panel members receive a number of surveys over the course of a year designed to gather insights on important topics. Input from panelists has been used to inform SOA leadership's decisions on a broad range of issues.

We heard from more than 250 members mainly from North America but from other regions as well.

What does the term "lifelong learning" mean to you? Respondents' comments reflected several themes—continuous education; never-ending; increasing knowledge, skills and experience; staying up-to-date.

- Regardless of how much a person knows, and regardless of age, there are always opportunities to learn more. Lifelong learning means to me that I should grasp these opportunities whenever they occur. And they occur every day.
- Exactly that. A process for continuing to learn and expand on your knowledge base throughout your life.
- A continuous desire to learn.
- In general, lifelong learning is what you do to adapt to the world before you die.
- If your eyes and ears are open, you should always be learning.
- That I never stop trying to educate

myself. That I am always acquiring new knowledge (and hopefully new skills) which enhance my professional abilities.

- A process of continual self-improvement.
- Never becoming complacent with your level of knowledge or skillset.
- Learning for a purpose other than attaining a degree, credential, designation, etc.
- Lifelong learning is to “simply keep up” and “enjoy keeping up.”
- Constantly staying abreast of changes in current events (global and local) as well as developing new skills based on new technologies and/or topics that are new to me.
- As an actuary, I don’t just learn about actuarial development. I also study accounting, economics, finance, computer programming, etc. Extending the circle, I study pedagogical psychology, history, philosophy, physics, etc.

About half of the respondents strongly agreed that:

- They recognize the need to constantly obtain new actuarial knowledge.
- They would fall behind if they did not continue learning about new developments in the actuarial profession.
- All actuaries have a professional responsibility to pursue lifelong learning.
- Swift changes in the actuarial profession require continuous learning and development of new professional skills.

More than three-quarters of the respondents strongly agreed or agreed that:

- They take an opportunity to acquire new knowledge/skills that are important to their profession.
- They routinely attend professional development seminars offered in person or via the Web.

And, over half agreed that they conduct Internet searches to learn about new developments in their practice area, attend professional development programs regardless of whether CPD credit is offered, and have a preferred approach to finding an answer to a question by searching the appropriate database or website.

Nine out of 10 respondents utilized a national or global actuarial organization or self-study for professional development during the last 12 months. Examples of other activities that contribute to lifelong learning are attending annual SOA meetings, networking, participating in employer training, taking MOOCs, presenting at professional meetings, conducting and/or reviewing actuarial or other research, reading books and magazines, publishing articles, volunteering, taking on new responsibilities in the workplace, stretching and broadening.

- Life experience, volunteering, trial and error.
- Teaching ... internal and external presentations ... peer review.
- Meeting and working with new colleagues and clients is one of the most enriching activities. Getting another person’s perspective is invaluable. You can always learn something from a new experience.
- Sharing of ideas and practices and the observations of things that have gone well and not so well are a critical portion of my learning experience....

I should never be afraid of making a mistake but should never make the same mistake twice.

- Reading books or generic news magazines on current economic hot topics.
- [Having] intellectual pursuits which are unrelated to one’s profession. For example, ... master’s degree in psychology and I play jazz piano.

Lifelong learning is continuing ... because you want to ... because you’re interested ... and YOU take the initiative. So now we ask: What kind of lifelong learner are you? Where will lifelong learning take you this year? **A**

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BUILDING SUCCESSFUL INTERNATIONAL RELATIONSHIPS

BY GREG HEIDRICH

A year ago, in one of these articles, I wrote about the importance of the Society of Actuaries (SOA) working to help build vibrant actuarial communities around the world. A great deal of the SOA's focus then, and now, is on building and supporting actuarial communities in North America and around the world.

Actuarial practice, insurance market development and risk management practice continue to develop all over the world and those of us living and working primarily in North America have much to learn from our colleagues elsewhere.

I ended that piece saying that we'll be working toward the following outreach efforts:

- Deepening our relationship with our members in China.
- Strengthening our ties in Hong Kong, Taiwan and elsewhere.
- Serving aspiring actuarial students and a growing community of actuaries in Latin America.

We're making significant strides in each of these areas, which I'll outline here.

The SOA's relationship with China dates back to 1987 when we first partnered with Nankai University to develop a master's degree program in actuarial science. We've come a very long way since then, as has

the profession in China. In 2014, the SOA's International Committee developed—with the Board's approval—a plan to expand the services we're able to provide members and other stakeholders in China and to support the growth of the profession there. Three principles drive this effort:

- Ensure that our members, candidates and other stakeholders in China have access to information that is focused on their needs locally.
- Create collaborative, respectful, mutually beneficial and productive relationships with local partners. We're excited to be reaching out to work with others, especially the China Association of Actuaries (CAA), in this effort. We also hope to initiate efforts that solidify and grow our relationships with Chinese universities.
- Promote and enhance the profession to employers, policymakers, regulators and the public by demonstrating the value actuaries bring as business leaders who measure and manage risk.

As we provide services to our members and candidates in China—spearheaded by local members—we will also be learning more about member and other stakeholder needs in the region. Be sure to read, "New Directions: The SOA in China," by Joan Barrett and Emily Kessler in this issue of the magazine. This article focuses on our current and future plans for China.



We're planning on hosting more events where members live and work, especially where we have the highest concentration of members (Beijing, Shanghai and Shenzhen).

We plan to assemble a China Committee comprised of members in mainland China and recruit international staff there to support our efforts.

Our plans for China are developing well. Because we also have members and candidates in other parts of Asia, we're looking at how we can serve them too.


A working group will assess the SOA's current presence in Greater Asia as well as identify the needs of stakeholders in this region. This group will develop a description of the environment in the region, examining, for example, our member and candidate populations there, the major employers, activities that have been undertaken by the

SOA, the International Actuarial Association (IAA), and others, and possible market research that will help us find the best ways to build relationships and learning opportunities. The group will also look for ways we can partner with others, develop strong working relationships, and preserve and promote the role of actuaries in the region. We will keep you apprised of the progress we make, so please watch the SOA website and *The Actuary* magazine for updates.

Finally, we've also been studying how we can help build the profession in Latin America. We have ideas we'd like to explore with

actuaries and actuarial organizations there and look forward to beginning that dialogue soon.

We all know that forging relationships is a critical component of professional work anywhere, but especially internationally. Successful relationships require a knowledge of the culture, current issues and future interests to build a foundation of trust, friendship and understanding. Our goal is to support the growth of the actuarial profession by establishing an atmosphere of collaboration, offering our assistance where desired and needed, and working with others in an environment of good will.

I encourage you to read this issue of *The Actuary*. There is a wealth of information about the globalization of the actuarial profession and skill set from the perspective of members in the United States and abroad, researchers, SOA leadership and the Canadian Institute of Actuaries. It is a pleasure to preview all the important content this international issue has brought together. Enjoy! 

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

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RESEARCH INSIGHTS ON SEVERE CLIMATE AND HEALTH CARE UTILIZATION

BY R. DALE HALL



The Society of Actuaries (SOA), as you may know, has been working closely with data providers and actuarial partner organizations on a wide range of topics, including on the health care and general insurance fields. In February I had the opportunity to attend and present at the National Tornado Summit in Oklahoma City on Midwest climate research, and also the intersection of health care utilization and severe weather.

This meeting was a unique opportunity to discuss the joint research work from the SOA, the American Academy of Actuaries, the Canadian Institute of Actuaries and the Casualty Actuarial Society on the forthcoming Actuaries Climate Index. This joint actuarial research project brings together not only actuarial insights, but

also a combination of data analyses to understand severe weather and its impact on regions. The index will be available in the near future, and it examines six climate indicators: temperature highs and lows, precipitation, drought, wind and sea level. The index uses data supplied from the National Oceanic and Atmospheric Administration (NOAA). Since the summit covered tornado zones, we discussed the seasonal wind power and average daily wind speed for the Midwest regions, comparing data from the Actuaries Climate Index base period prior to 1990 to more recent observations since 1990. Stay tuned for more insights when the joint Actuaries Climate Index is released.

On the topic of severe weather, I also presented on post-catastrophe health

care utilization. Health care utilization can change following a windstorm, which means an increase in ER emergent visits for injuries, post-event viral and fungal infections, and behavioral health treatment, and also fewer routine health visits and non-emergency visits to the ER. We conducted an initial part of a growing study on 2012-2013 Kansas health care utilization following the windstorms in that region. Non-emergent visits declined by 6 percent in the Kansas health system, while emergent ER visits remained substantially the same. The analysis also indicated the emergence of septicemia and fungal infections in the days following windstorm events, with health visits increasing by 15 percent. NOAA provided helpful insights in understanding these usage trends in relation to severe weather events. Actuaries and others working with health systems and multiple lines of insurance can benefit from understanding the potential changes due to extreme weather events.

We are continuing to study these types of data points to help our members, and the industry, understand the challenges, patterns and solutions related to severe weather. **A**

R. Dale Hall, FSA, CERA, MAAA, is managing director of Research at the Society of Actuaries. He can be reached at dhall@soa.org.

E-COURSES: GROWING YOUR KNOWLEDGE

THE SOA IS PROUD to offer 20 e-courses worth more than a combined 80.00 CPD. 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.

ADVANCED TOPICS IN CORPORATE FINANCE AND ERM

Three applications of Extreme Value Theory (EVT) are covered to put the theory to work in a business context in this e-course. The candidate will learn about the factors that affect strategic thinking (external forces, environmental analysis), the organizational characteristics that influence strategic decision-making (strategy, structure, controls, leadership) and how senior management uses these to evaluate and benchmark progress toward strategic goals.

APPLICATIONS OF STATISTICAL TECHNIQUES FOR PROFESSIONAL DEVELOPMENT

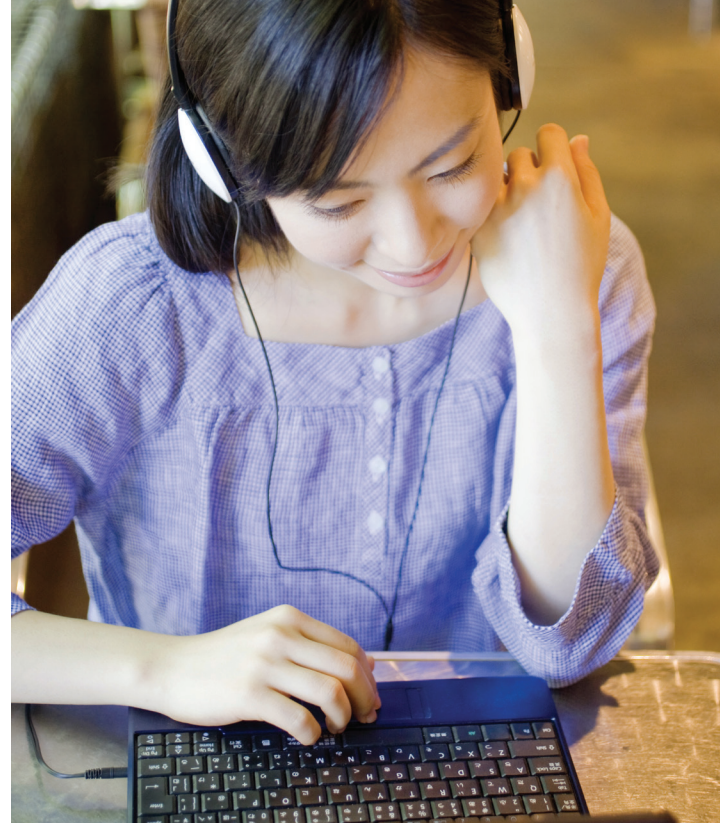
This e-course will introduce you to a set of advanced business analytic techniques. Advanced business analytics as a set of tools and techniques to assist in key business decisions are defined.

APPLYING PROFESSIONALISM WORLDWIDE

The Applying Professionalism Worldwide course focuses on situations where actuaries live and/or work outside of North America. This e-course covers the Code of Professional Conduct and provides opportunities to determine how the precepts may be applied in various scenarios.

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. 

GOOD RESEARCH READS

COMPLETED EXPERIENCE STUDIES

LONG-TERM CARE AGGREGATED DATABASES RELEASED

The SOA has released aggregated long-term-care (LTC) intercompany experience study databases for 2000-2011. The aggregated databases include rates for claim incidence, claim termination and claim utilization. The report serves as a user guide for the databases, describing the development of each aggregated database and providing definitions of the data elements. The information is designed to help actuaries interpret experience data and develop model assumptions for LTC products.

TWO NEW RESOURCES AVAILABLE ON GROUP LIFE INSURANCE EXPERIENCE

The SOA's Group Life Insurance Experience Committee released two supplements to the 2013 Group Term Life Experience Study. The committee developed an experience report on group life waiver incidence rates, focusing on individually-billed results. The committee also released a supplement on mortality change from the 2006 and 2013 studies.

VBT RECOMMENDATION RELEASED ON MORTALITY IMPROVEMENT RATES

The SOA released a recommendation from the Preferred Mortality Project Oversight Group's Valuation Basic Table (VBT) Team for a set of improvement factors that vary by gender and attained age to be used in conjunction with the 2008 VBT for AG-38 purposes for year-end 2014. Excel files are available on the smoothed rates and the

mortality improvement rates smoothed and rounded.

INDIVIDUAL ANNUITIES AGGREGATED DATABASES RELEASED

The SOA has made available aggregated databases on individual annuities to accompany the 2014 experience report on individual payout annuities. The 2005-08 database includes analysis with respect to the 2012 IAM Table beyond that presented in the report.

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

COMPLETED RESEARCH STUDIES

DOWNLOAD COLLECTION OF PREDICTIVE ANALYTICS ARTICLES

Actuaries have actively been advancing the use of predictive analytics methods in their work. Learn more about how actuarial predictive modeling methods are influencing business decisions, through a new SOA article collection. The articles cover predictive modeling applications for managing health care costs and utilization, quantifying mortality risk, and enhancing traditional insurance risk segmentation and underwriting practices.

REPORT EXAMINES PENSION RISK TRANSFER

The SOA released a new report on pension risk transfer from the employer's perspective. The report examines de-risking measures, barriers, alternatives and triggers that impact pension risk transfer strategies. The report also provides a forward-looking perspective on pension risk transfer.



MONOGRAPH FOCUSES ON IMPACT OF LONG-TERM CARE ON RETIREMENT SECURITY

The SOA released a collection of papers on managing the impact of long-term care (LTC) needs and expenses on retirement security. The papers in the monograph examine topics including caregiving, family support, health, societal considerations, LTC insurance, international perspectives and ideas for the future.

NEW REPORT RELEASED ON FINANCIAL ADVICE

The SOA's Committee on Post Retirement Needs and Risks issued a new report on the considerations of available approaches to providing financial advice, as part of employer-sponsored employee benefits. The report provides a comprehensive overview of the professional financial advice industry and explores issues for plan sponsors.

PAPERS WANTED FOR 2017 LIVING TO 100 SYMPOSIUM

The SOA has released the first call for papers for potential presenters to get an early start on paper development for the sixth triennial Living to 100 Symposium, an international gathering on longevity. The SOA seeks papers that define and develop new methodologies, theories and practices on longevity and its consequences.

Submission details and other pertinent information will be announced in spring 2015. The symposium will take place in January 2017 in Florida.

RESOURCES AVAILABLE FOR PENSION MORTALITY TABLES


The SOA's Retirement Plans Experience Committee (RPEC) has released new resources related to the RP-2014 Mortality Tables and Mortality Improvement Scale MP-2014 reports. RPEC has provided "headcount" weighted mortality rates for use by actuaries. These tables have been developed using the same

underlying datasets and method used to construct the RP-2014 tables, but with mortality rates weighted by headcount rather than by amount. The RPEC-2014 model, a new Excel-based tool, is available for actuaries to construct two-dimensional mortality improvement scales based on assumption sets other than that used by RPEC.

SOA AND LIMRA PUBLISH VARIABLE ANNUITIES STUDY

The SOA and LIMRA announce a new study of variable annuity guaranteed benefit options. The analysis is based on 2012 experience

and looks at how policyholders use these guaranteed options and exhibit other behaviors involving step-ups, cash flow and persistency. The study examined more than 4.6 million contracts with a guaranteed lifetime withdrawal benefit, guaranteed minimum withdrawal benefit, guaranteed minimum accumulation benefit, or guaranteed minimum income benefit option.

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

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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.

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

MEETINGS AND SEMINARS

LIFE & ANNUITY SYMPOSIUM

May 4–5

New York

The symposium is a can't-miss opportunity for those who design, engineer, construct, service and maintain life insurance products.

MANAGING THE BIG DATA OPPORTUNITIES SEMINAR

May 6

New York

Explore approaches to working the big data, evolving IT roles, processes for trusted and reliable results (CVAT) and more.

2015 ERM SYMPOSIUM

June 11–12

Washington, D.C.

Don't miss this opportunity to explore the latest risk topics and challenges across a broad spectrum of industries.

VIRTUAL SESSIONS

V30—UL PRODUCT UPDATE, May 4

V21—ANNUITY HOT TOPICS, May 4

V79—REGULATORY UPDATE, May 5

V69—SHARPENING THE PRICING PENCIL, May 5

PODCASTS

IF WE KNEW THEN WHAT WE KNOW NOW: ACA ENROLLMENT

Listen in as FSA Greg Fann discusses important details surrounding the ACA in his interview (Episode 14)—sponsored by the Health Section.

MARKETING AND DISTRIBUTION SECTION COUNCIL UPDATE FOR MEMBERS

FSA Scott Sheefel, chair, and FSA Jill Klivanov, secretary/treasurer, give an update on council activities and what's new for 2015 (Episode 01).

COMPREHENSIVE SALARY SURVEYS!

EzraPenland.com/salary

MIDWEST USA – HEALTH ASSOCIATE ACTUARY

Health insurer is searching for an ASA or near-ASA actuary for Position 62906. Ideal candidates will have 3 to 9 years of healthcare actuarial experience. Expertise with programming or modeling or financial reporting or pricing or reserve analysis ideal.

CALIFORNIA – HEALTH ACTUARIAL CONSULTANT

Health consulting actuary needed by California group for Position 62660. FSA or ASA preferred.

SOUTHEAST USA – HEALTH ASSOCIATE OR FELLOW

Client is looking to review the resumes of health actuaries for Position 62913. FSA or ASA credentials ideal. A strong understanding of healthcare reform preferred.

TEXAS – HEALTH ASSOCIATE ACTUARY

Texas insurer is seeking a health actuary in Dallas for Position 62938. ASA with SAS or SQL programming skills preferred.

FLORIDA – MEDICARE EXPERTISE

Florida insurer seeks healthcare actuary for Position 62657. FSA or ASA with management experience preferred. Pricing role. Medicare expertise ideal.

OHIO – HEALTH ASA OR ANALYST

Ohio client is searching for a senior health actuarial analyst or ASA actuary for Position 62902. Requires 3 to 9 years of experience. Client will move quickly for strong candidates.

ARIZONA – HEALTH ASSOCIATE OR FELLOW

For Position 62907, an Arizona insurer has asked Ezra Penland to review the resumes of health actuaries. FSA or ASA with 4 to 10 years of experience ideal.

OHIO – LIFE FSA/NEAR-FSA

Life actuary is needed with product development management experience by an Ohio insurer for Position 62617. FSA or near-FSA preferred.

SOUTHEAST USA – DERIVATIVES ACTUARY

FSA/near-FSA/ASA Life actuary sought by Southeast USA insurer to work on derivatives for Position 62599. Risk management experience ideal.

CONNECTICUT – FSA WITH MODELING EXPERIENCE

Hartford-area Client is looking to hire a Life FSA actuary with modeling experience for Position 62588. 5 to 15 years of life actuarial experience ideal.

NORTHEAST USA – LIFE FSA/NEAR-FSA

Boston client is now interviewing life actuaries with experience in MoSes, AXIS, ALFA, Prophet or similar software for Position 62589. FSA or near-FSA especially sought. Immediate need.

WEST COAST USA – LIFE ASSOCIATE ACTUARY

West Coast USA client seeks a life ASA actuary for Position 62635. Requires individual life financial reporting or product development experience. Broad career opportunity.

FLORIDA – RETIREMENT ACTUARIAL CONSULTANT

Growing Florida retirement consultancy has an immediate need for an EA or ASA or FSA actuary for Position 62738. 3 to 12 years of benefits consulting experience ideal.

NORTHEAST USA – DB/DC CONSULTING ACTUARY

Northeast USA defined benefits and defined contributions consultancy is looking to hire an actuary for Position 62737. This ASA/FSA should have four to fifteen years of retirement consulting experience. Immediate need. Position open due to growth.



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