INTERNATIONAL SECTION

"A KNOWLEDGE COMMUNITY FOR THE SOCIETY OF ACTUARIES"

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INTERNATIONAL NEWS

Ronaldo and His Actuarial Career

by Horacio Motta

There is nothing like a dream to create the future. (Victor Hugo)

Although all character and company names are fictitious, the story is based on facts. It is about aspirations, and how important it is to follow them.

Ronaldo is a young actuarial student who lives in a slum in São Paulo, Brazil, one of the five most populous metropolitan areas in the world, with just over 19 million people.

He works as a junior staff member at Corinthians Insurance Company in the city.

The context

Being the financial and industrial center of the fifth largest country in the world, São Paulo contains the headquarters of more American companies than any other city outside the United States. However, the city's disproportional wealth distribution tends to encourage the growth of poverty and crime rates.

In respect of the insurance industry, after 12 years of controlled inflation, economic growth and political stability,

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Exam P-1 Candidates, August 2006

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Actuaries
Risk is Opportunity.℠

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International Section of the Society of Actuaries
475 N. Martingale Road • Suite 600
Schaumburg, IL 60173

Phone: (847) 706-3500 • Fax: (847) 706-3599
Web site: www.soa.org

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Editor's Note

by Michelle John

I attended the Society of Actuaries (SOA) Annual Meeting in Chicago last October and came away with one sentence ringing in my ears.

Risk is opportunity.

I think this is of particular importance for actuaries operating internationally. Let's say you are an actuary in a large North American firm. You have been in your current position for five years, you haven't moved house for at least 10 years. You are in a relatively stable, comfortable position. You are asked to consider a secondment to your company's startup operation in China. The secondment is for a year (…at least to start). Being a clear-minded actuary, you weigh both sides.

In the risk column:

- Don't speak Mandarin
- Don't know if the startup will crash and burn
- Your family says "you want to do what?!"

But on the other side—what a glorious opportunity!

- Tremendous self satisfaction when that start up takes off
- Looks pretty good on the old resumé
- The chance to experience a new culture, cuisine and friends.

This is just looking at one example. Actuaries who are based internationally and are offered a position in a company in North America also face their own risk/opportunity trade-offs.

A number of articles in this edition illustrate that "risk is opportunity." The lead article by Horacio Motta, winner of International Section's Country Feature competition, talks about the challenges of becoming an actuary for a student from the slums of Sao Paulo. Many of us may not have faced as many challenges as he, yet we took a risk with those years of exam writing for the opportunity to have a challenging and rewarding career. I hope you all think it was worth it.

Two more articles in this edition feature Brazil. In "Brazil: A Better Business Beat," the authors tell us that the time may be opportune for rapid growth but there are no guarantees so you have to take a risk to realize this payoff. Paulo Hirai and Craig Reynolds discuss the frozen-entry-age term life product which was introduced more than 20 years ago in Brazil. With hindsight, this risk seems to have had only a short-term payoff.

In Iyad Hourani's and Marc Tarazi's article, they tell us that "The Middle-East is hot with great untapped opportunities." Antoni Forgues tells us why there is a "booming risk manage-

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Chairperson's Corner

by Frank Buck

This issue of *International News* represents not only the first issue of 2007, but also the first issue of my term as chairperson of the International Section Council. As such, I feel it is appropriate to update the readers on some of the recent and upcoming activities of the council.

Last year, along with the Financial Reporting Section, we put on a well-received seminar in Hong Kong on US GAAP accounting for international insurance companies. Needing 50 participants to break even, we had 110 paying attendees, with 70 on the waiting list. Following on from that successful event, we are planning similar seminars in 2007. We will repeat the seminar in Brazil in early April and hope to see many of our Latin American colleagues there. A European seminar is also in the early stages of development. Also, because of the demand in Asia, we will host a repeat in Hong Kong during the summer/fall.

The section continues efforts to consolidate data to perform experience studies in various parts of the world. In many jurisdictions, this represents the first serious attempt to analyze recent experience there. A study for Poland is near completion. Data gathering is well under way in the Caribbean. Future studies are planned for India and Chile.

The section council is reaching out to local SOA ambassadors to make sure activity is continuing at the local level. Three council members now serve as ambassador coordinators: Cathy Lyn for the Caribbean and Latin America, Alistair Cammidge for Europe and the Middle East, and, as I am now living in Hong Kong, I am looking after Asia. We are currently seeking ambassadors for a number of countries. This is potentially an excellent program that can provide a real benefit to our members overseas. Please contact Martha Sikaras (msikaras@soa.org) or any International Section Council member if you have an interest in becoming more involved with this valuable program.

As these activities illustrate, the leadership of the International Section is continually striving to meet the needs of its very diverse (both in terms of geography and practice areas) constituency. Please feel free to contact me or any of the other section council members if you have ideas to make your membership in the International Section more valuable. ☐

Frank Buck FSA, MAAA, FIA, is vice president & regional actuary at Met Life—Asia/Pacific Region in Hong Kong. He can be reached at fbuck@metlife.com.

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ment market" in the United Kingdom Padraic O'Malley discusses how the variable annuity market is extending to Europe via Ireland. He summarizes the risks in the products and gives strategies on how to manage them.

Bosco Chan presents the business model he employed in leading the Pacific Rim Actuaries, Club of Toronto. We have a write-up by Ed Robbins and Hubert Mueller on the Capital Efficiency Seminar held last September. The authors are eager to get ideas from our international audience on how this initiative can be improved. The U.S. GAAP Seminar held last October in Hong Kong is also featured. This article includes a tale of risk-taking with unfamiliar cuisine; for us it's an opportunity to enjoy a funny story.

We have a tell-all expose of the activities of the International Section in Chicago ... with pictures. The Caribbean Actuarial Association held their annual meeting in Suriname last December and we have the scoop for you here.

Our Announcements section has grown exponentially and that is thanks to you, our readers. Finally we offer you a great opportunity with low risk, sit back, put your feet up and enjoy the April edition of *International News*. ☐

Michelle John, FSA, FCIA, FIA, is assistant vice president and actuary at Sun Life Financial in Toronto, Ontario. She can be reached at michelle.john@sunlife.com.

the Brazilian market is the largest in Latin America and should be one of the fastest growing in the coming years. In 2005, the total property/casualty (P/C) premium was $9.5 billion USD, life insurance premium was $8.1 billion USD, health insurance premium was $3.5 billion USD, and contributions to open pension plans totaled $3.1 billion USD.

Foreign players include ACE, Allianz, AIG, Assurant, Berkley, Cardif, Chubb, CNP, Generali, Hartford, HDI, HSBC, ING, Liberty Mutual, Mapfre, MetLife, Mitsui Sumitomo, Principal Financial, Prudential, QBE, Royal & SunAlliance, Santander, Tokio Marine, XL, Yasuda and Zurich.

Let's Go Back to Our Story

Ronaldo wants to be a successful actuary like his namesake Ronald, FSA, MAAA, FIA, CFA.

Ronald currently works in Rio de Janeiro (250 miles from São Paulo) as the CFO of Flamengo Insurance Company.

Born in the Caribbean, Ronald studied actuarial science in England. He then worked in London in the consulting field and thereafter as chief actuary for several Caribbean insurance companies and then as managing director for Latin America of a major reinsurance company. He qualified as a Fellow of the Institute of Actuaries when he was only 25.

Young Ronaldo knows, however, that in Brazil there are just a few universities that offer high-quality actuarial programs. Moreover, such universities offer only undergraduate programs (most of them being very expensive), and the professional associations do not have post-university examinations.

On the other hand, the FSAs who have been based in Brazil (which we can easily count on one hand) have earned great respect with local professionals. Besides that, the Society of Actuaries, a long-standing organization with a history of more than 100 years, is very well known for producing extremely well-qualified, technical professionals.

Fortunately, since Brazil has qualified for the SOA's "Examination and Study Material Fee Discount Program," eligible Brazilian candidates benefit from this financial assistance. This makes the costs for taking all the SOA actuarial exams less than the total cost for an actuarial program offered by a local university.

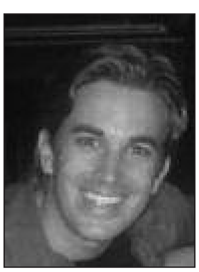
Having said all that, why don't any of our current 919 Brazilian actuaries have the SOA's credentials?

First of all we should mention that until very recently, the only way for a Brazilian actuary to effectively take SOA exams was to live abroad.

Secondly, in order to sign any official actuarial document in Brazil, it's necessary to have a local university's BSc in Actuarial Science. The SOA actuarial exams are presently not officially recognized here.

But the main reasons for the lack of SOA candidates are related to other aspects.

Students are not yet self-study oriented and insurance and actuarial consulting companies in Brazil (even the multinationals) still do not provide any regular study leave for exam preparation. English language proficiency is also a barrier for most of our students. All in all a "behavioral shock" is necessary to overcome these challenges.



Horacio Motta is an associate at Tillinghast in Brazil. He can be reached at horacio.motta@towersperrin.com.

Ronaldo needed the confidence to challenge the status quo and not follow the crowd. He could see silver linings in the dark clouds.

Ronaldo and the Brazilian Actuarial Study Group

Ronaldo works all day and attends his university's courses at night. There is a very long commute between the university and his company. His academic background is basic and there are no actuarial resources at any public library. His foreign language skills (specifically, his English knowledge) need to be improved. But he still has a dream: to graduate from Columbia's MSc program in actuarial science in New York City.

As well as Ronaldo, other entry-level actuaries were willing to undertake this new professional development approach. They know that the world is shrinking and that they should be prepared to compete in the global economy. Also, this economic and social phenomenon offers students possibilities beyond their wildest dreams.

At the same time, Mario, another entry-level actuary, working at the São Paulo office of a global consulting firm, was contemplating how to initiate the previously mentioned "behavioral shock" in his actuarial generation. Mario is one of the lucky ones in Brazil who has the fortune of being from, what is considered to be, a very privileged family in Brazil.

Mario had successfully completed the preliminary actuarial exams of the SOA. He had the opportunity to obtain a double major at two different Brazilian universities (one in actuarial science and the other in economics), as well as the chance to benefit from traveling; this included trips within Latin America, Europe, the United States and Canada. After meeting some very inspiring actuaries around the world (some of them FIAs and FSAs), he decided to fight for a better study and professional development plan for students like Ronaldo.

Mario realized that the line of least resistance to achieve his goal would be an internal company course focusing on the first SOA exam. He then convinced his buddy Robinho to work with him to make it happen.

Such aspiration, combined with hard work, drive, outstanding energy and determination, culminated with a presentation to almost 100 actuaries on the SOA exams.

One of the biggest Brazilian insurance companies (Santos Insurance Company) decided to provide all the infrastructure necessary to facilitate the course. Mario and Robinho, with strong support of Santos actuaries, managed to communicate the launch of the course to many Brazilian actuaries at an introductory presentation.

Mario realized that it was his great opportunity to initiate the "behavioral shock." Instead of designing a usual course, with traditional lectures, he proposed the creation of study groups. Guidance would be provided throughout the course, but emphasis would be given to independent self-study. There would be only one weekly three-hour meeting on Saturdays during which candidates would exchange experiences and solve problems. Guidelines and tips would be provided by Mario (who acted as the coordinator), but the formal presentation of the subject would be kept to a minimum.

The typical group session would also include a presentation of the topics that would be covered at the next group meeting. There would be an overview of the main topics with some discussion on the forthcoming exam (e.g., approved calculators, registration procedures, etc.). Based on a detailed action plan (which included the exact course content to be covered during the week ahead), group members could then exercise their self-study skills. After this "homework," the group members would meet again to solve a list of not previously attempted problems.

To Mario's surprise, the course was so much in demand that he had to apply a pre-qualification test in order to ensure that places were given to only the best prepared candidates. Ronaldo, our hero, was one of the 27 students that managed to qualify as a member of the study group. Some time thereafter, Mario and Robinho decided to contact both Actex and BPP regarding their study materials. They were pleased to learn that their study group could benefit from bulk orders and copyright agreements.

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"Mario realized that the line of least resistance to achieve his goal would be an internal company course focusing on the first SOA exam."

Integrity without Borders

by Bosco L. Chan

The Canadian Institute of Actuaries' (CIA) Rules of Professional Conduct states the following:

*"**Rule 1**—A member shall act honestly, with integrity and competence, and in a manner to fulfill the profession's responsibility to the public and to uphold the reputation of the actuarial profession."*

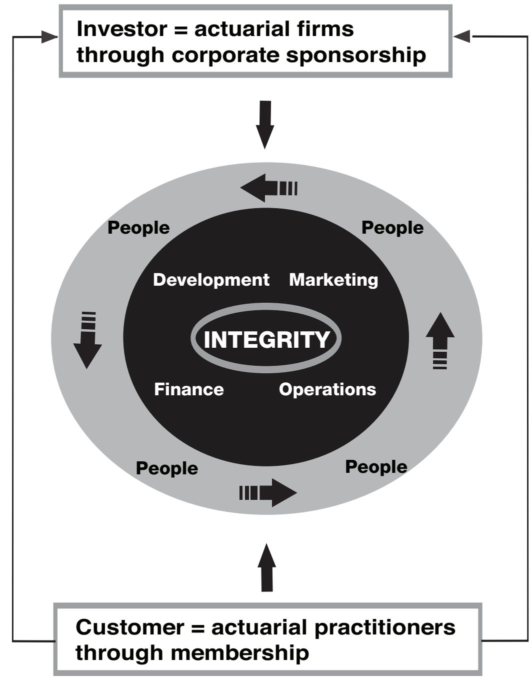
I believe that if a behavior is righteous, we should be able to apply such behavior in all circumstances. If we take it one step further and apply it in a business model, we develop good corporate culture. When the culture changes, the society changes. Over time we develop our characters and create a better environment for ourselves and future generations.

A theory is meaningless unless people know how to apply it in real life. Practice makes perfect. In this article, I show by example how I use integrity in a business model. The model is used to lead a large actuarial club. What makes life fun is that solutions differ with time, location and people. There is no guarantee the model will work for you. But if you can understand the concept and test its practicality, you might be able to discover creative solutions that may be used in your situation.

At the end of two years as the president of the Pacific Rim Actuaries' Club of Toronto, I addressed our members during our fall meeting. I discussed the club's new business model and the central role integrity plays in that model. My first year provided me with good learning experiences on managing a non-profit organization and further developing my leadership skills. It also helped me to understand the operational challenges and the importance of aligning the star performers with the right positions in order to turn the organization in a growth direction. Our organization has evolved quickly in the last few years. This can be justified from the record high enrollment and increase in corporate sponsorship. To ensure our organization and reputation are sustainable, it is important to review the structure so that our operation continues to fit our objectives. The club has matured and it is an appropriate time to strengthen the infrastructure in the second year of my term. A possible business model would divide the club into four basic functions, which are finance, marketing, development and operations.

Bosco L. Chan, FSA, FCIA, FCA, M.Math., is the treasurer of the Society of Actuaries International Section Council and a consultant at Mercer Human Resource Consulting in Toronto, Ontario. He can be reached at bosco.chan@mercer.com.

Graph: Business Model for Pacific Rim Actuaries Club of Toronto



No organization can sustain itself without money. The Pacific Rim Actuaries' Club of Toronto does not. The annual expense of running our organization is around $25,000 (Canadian) which is covered from membership fees, event fees, job advertisement revenue and corporate sponsorships. It is definitely not a small amount for this type of organization. Good accounting, cost control and reserve management are important to us. With corporate sponsorship as a revenue channel, our members benefit from heavily subsidized activities.

Well established marketing strategies and comprehensive marketing channels help us to maintain market exposure and become even more well-known among the community. More marketing results in more sales. No marketing results in no sales. It is very simple. When we speak about sales, we cannot ignore pricing. Marketing can only be effective if the pricing is right.

The operation and product delivery function is the area that requires the most resources. It includes project management, work allocation and intellectual capital centralization. The quality of our products directly affects our reputation and reputation determines our success in the long-run.

To better service our members, we need to have a development function. It includes strategic market positioning, process re-engineering and infrastructure advancements. This is the function that establishes vision and challenges our existing process. People wonder why we reform the club continuously given that the club has been doing so well. Yes, we are doing well but only if we continue to seek advancements, we can then migrate from very good to near-perfection.

A solid infrastructure is necessary but not sufficient. The survivorship of our organization relies on two extremely important elements. They are people and integrity. On the people side, we regularly recruit potential actuarial practitioners who have a passion in wanting to make a difference. We rely on responsible individuals who want to have ownership of achievements. You can see from the graph that I surround the four functions by people. This is because our organization is heavily dependent on our human resource. Everything our members receive from the club is a result of the committee members' hard work behind the scenes. Without their efforts, there would be no results.

In the center of the graph, you will find integrity in the middle of the four functions. Integrity is an important virtue. By definition, integrity means honesty and the truth. There are many ways to achieve success so why not choose a path that will lead to success and pride in our work. A worthy leadership team rarely disappoints its customers. Never underestimate the customer's ability to make decisions. If integrity is the key component in all that we do, our customers will approach us. ☐

"On the people side, we regularly recruit potential actuarial practitioners who have a passion in wanting to make a difference."

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After almost one year of studying hard, including a six-week review period, 13 candidates took the Computer-Based Exam P/1 in August 2006. The results still need to be released, but Mario, in addition to other group members, is quietly confident.

Actually, Mario and two of the group members are now planning a study group for Course 2—Financial Mathematics. Botafogo and Palmeiras may be the insurance companies sponsoring the effort this time.

Mario believes that Ronaldo and his generation should receive support and encouragement by their employers to participate in the SOA exams. Mario is very proud of them and feels very optimistic: the next generation can complete the exams, gain appointments as chief actuaries within multinationals and have meaningful work experience abroad. The SOA training can play a significant part in advancing the Brazilian financial systems including social security, retirement plans and life & health insurance.

Mario dreams that Brazilian actuaries may be more prepared than ever to have an impact in solving our country's economic and social problems, because …

Capital Efficiency Seminar

by Ed Robbins and Hubert Mueller

On September 19-20, 2006 the Taxation, Financial Reporting and Risk Management Sections co-sponsored a seminar entitled, "Increasing Economic Value through Greater Capital Efficiency." The primary organizers of the seminar were Ed Robbins (Taxation) and Hubert Mueller (Risk Management), with assistance from Charles Gilbert and Dave Ingram. Other faculty members were Tim Gaule, Steve Blaske, Dominique Lebel, Chris DesRochers and Kory Olsen.

SOA President Edward L. Robbins, FSA, MAAA, FCA, is a director at SMART Business Advisory and Consulting in Chicago. He can be reached at erobbins@smartgrp.com.

Hubert Mueller, FSA, MAAA, is a principal with the Tillinghast business of Towers Perrin, located in the Hartford office. He can be reached at hubert.mueller@towersperrin.com.

This seminar was intended to be the rollout of a new Society of Actuaries (SOA) promotional initiative. This capital efficiency initiative intends to roll up several actuarial technical skill sets into a coherent whole, in such a way as to enable the company actuary to be a valued business partner at the senior management table. In that respect, it is well aligned with the Society of Actuaries, Marketing and Market Development Program for the profession, in its objective to increase the influence of actuaries in their organizations. Specifically, the program was intended to enable the actuary to measure capital efficiency, to communicate it and to assist in optimizing it.

Capital efficiency is best defined by example, as a relative term. An alternative that provides greater shareholder value or economic value (by some objective measure) is more "capital efficient." Shareholder value is a function of three drivers: pre-tax cash flows, taxes and balance sheet values, and the capital efficiency initiative concentrates on the latter two categories. The tools to measure capital efficiency are already in the public actuarial domain, but in the perception of the seminar coordinators those tools are not sufficiently used in our industry in the United States.[1] Shareholder value is of primary importance to senior management, as one of its primary objectives. Consequently, there is a need for actuaries and financial officers to be able to measure economic value and be familiar with the drivers of economic value, to produce the most capital-efficient courses of action for their organizations.

The tools covered by the seminar revolved around capital efficiency as measured by statutory accounting, not GAAP, inasmuch as statutory accounting determines the stream of distributable earnings to investors.

The four components of the seminar were embedded value, life insurance company taxation, asset liability management and risk management. The concept of the seminar was to roll all four topics together in a coordinated manner, in order to give the actuary some tools to communicate shareholder value and increments to economic value to senior management.

Traditional embedded value, together with its recent refinements, constitutes a convenient measuring tool for economic value of a life or health insurance enterprise. Not only can it give the value of the enterprise; it can also provide a metric for the incremental value of a management strategy—that is, whether it is accretive or erosive to economic value. Embedded value equals the value of future distributable earnings from the current in-force business, plus the post-tax market value of the free surplus of the enterprise. Future sales are not included in embedded value.

The seminar covered traditional embedded value. It discussed the limitations of traditional embedded value and then went on to cover European embedded value, market-consistent embedded value (MCEV), and stochastic embedded value. European multinationals, including their subsidiaries in the United States, have published on a European Embedded Value (EEV) basis since 2005. Increasingly, companies are showing EV results on a market-consistent basis, using MCEV reporting. Both EEV and MCEV require a stochastic calculation of the cost of options and guarantees. The presenters covered the implications of doing EV on a

[1] Embedded value was the metric chosen in our initiative as a metric for measuring capital efficiency. Unlike in the United States, all major insurance organizations in Western Europe publish embedded value results, and it is a required disclosure item in the United Kingdom.

stochastic basis, and recent changes in typical EV and EEV disclosures.

Taxation is an immensely important component of embedded value, and one that has received far too little attention from the actuarial profession, considering that tax reserves are a vitally important driver of life company taxation. As an example, $1,000,000 post-tax economic value added from a tax reserve planning strategy is typically not difficult to achieve in a medium-sized life insurance company. How much term insurance would a company have to produce in the current environment to generate that kind of economic value? Chances are that in most companies the required amount would be far greater than the production of the largest sales agency in the company.

The seminar discussed the basic rules of life insurance company taxation and provided convenient references for those who wished more in-depth education on this important issue. We then gave various illustrations of how to evaluate the effect of a tax planning strategy on embedded value. We also discussed the nature of statutory deferred taxes, and how a company can optimize its admissible deferred tax assets, thereby increasing embedded value.

Asset liability management and risk management are also important capital efficiency topics. The purpose of both topics is to reduce the volatility of the capital efficiency of the enterprise—at a bearable cost.

The seminar was well-attended (approximately 110 attendees). The evaluation forms gave it a much better than average score, indicating that this initiative generated significant interest and should be pursued.

The basic question was, "How should this initiative be further pursued?" The evaluation form responses to this question varied, as expected. However, some attendees desired more in-depth education on taxation, while some desired more in-depth education on embedded value and economic capital.

The question that this seminar begged was, "Are these four subjects sufficient for the actuary as a business partner?" Should we later include certain non-actuarial topics that might also be useful in this effort?

Techniques of environmental scanning would be a likely non-actuarial topic. The ability of an economic enterprise to "look down the road" and perceive future threats and opportunities is essential to its success. The ability to perceive future "inflexion points," major regime shifts, leading indicators, and the like, is possibly a teachable skill—and not a strictly actuarial skill. As Wayne Gretzky once said, when he was asked the secret of his success: "I skate to where the puck is going to be."

We would be happy to hear from our readers as to how to enrich the capital efficiency initiative and make it a part of the insurance company actuary's management tool kit. Please contact Ed Robbins at erobbins@smartgrp.com, or Hubert Mueller at hubert.mueller@towersperrin.com. ☐

"The presenters covered the implications of doing EV on a stochastic basis, and recent changes in typical EV and EEV disclosures."

Accounting Corner:

U.S. GAAP Seminar in Hong Kong

by R. Thomas Herget

Seminar Faculty

The International and Financial Reporting Sections collaborated to produce a three-day seminar on GAAP accounting. This seminar, held in the Kowloon part of Hong Kong, was coordinated by the Hong Kong staff office. Hats off to Pat Kum and assistants Sarah Hui and Christina Lai for running a well-organized meeting. The seminar took place on October 24, 25 and 26 of last year.

The topics addressed were a background of GAAP, principles of GAAP, expenses, product classification, non-par products (life and health), par products, fund-based products, payout annuities, investment contracts, investment accounting, shadow accounts, internal replacements, purchase accounting, reinsurance accounting, SoP 03-1, SoP 05-1 and emerging issues.

The faculty comprised Frank Buck of MetLife, Tom Herget of PolySystems, Bill Horbatt of Actuarial Consortium, Michael Lockerman of PricewaterhouseCoopers and Jonathan Zhao of Ernst & Young. Assisting on the third day were Simon Walpole of Deloitte and Cathy Lin of PwC.

The faculty lectured on their assigned topics the first two days, with a question and answer period at the end of each day. The third day was more interactive, as the attendees split into three groups and could devote their energy to addressing U.S. GAAP as it applied to their specific company and products.

To begin the first day, Bill Horbatt introduced the concepts and evolution of generally accepted accounting principles in the United States. He discussed its origins in the early 1970s and its emphasis on revenue /expense matching. He also lectured on its subsequent evolution, hierarchy of literature and materiality. Bill then instructed on the categorization and use of expenses.

Tom Herget then followed with a SFAS60 discourse on traditional life and health insurance. He focused on how benefit reserves are established, looking at assumptions and formulas. Tom also discussed expected patterns of profits and how to analyze earnings.

Frank Buck then addressed universal life and the origins of SFAS97. Frank distinguished universal life-type, investment-type and limited pay-type contracts. He addressed construction and amortization of DAC, the components of revenue and the impacts of SoP 03-1. Frank taught the participants about unearned revenue liabilities and shed light on estimated gross profits. The highlight was an illuminating example of how different historical events can generate the need to prospectively unlock.

Bill returned to the podium to teach accounting treatment for participating contracts. Michael Lockerman then instructed on payout annuities, differentiating between techniques needed for SFAS97 and SFAS91 products. Michael spiced up the presentation with interesting examples of reserve calculations and earnings emergence.

Frank retrieved the microphone to enlighten the registrants on investment accounting and shadow adjustments. He started with SFAS115 and investment classification. He then went on to the impact on the earnings statement, including shadow calculations, caused by unrealized gains and losses. Finally, he explained how the other comprehensive income account works.

Michael wrapped up day one with a presentation on investment contracts. He first discussed the byzantine process by which to

R. Thomas Herget, FSA, MAAA, is executive vice president with PolySystems, Inc. in Chicago, Ill. He can be reached at Therget@polysystems.com.

classify contracts, a very important concept. Sales inducements and loss recognition were important components of the talk.

The reception at the end of day one was well-attended and the participants got to know each other. One of the dignitaries attending was Henry Siegel, chair of the Financial Reporting Section. Of course the chair of the other co-sponsoring section, Bill Horbatt, could be easily seen and heard as well.

There were 110 attendees. The majority came from Hong Kong, while Taiwan, Thailand, Singapore, China and South Korea each supplied a bevy of participants. Still others came from Vietnam, India, Japan, Australia and the United Kingdom. Eighty-five percent of attendees came from multi-national companies, 5 percent from local companies and the rest from consultants or reinsurers. Representatives from about 20 employers attended.

Day two kicked off with a presentation on purchase GAAP (PGAAP). Tom Herget instructed on the basic principles governing PGAAP and discussed the many methods that are used in practice. He also described the many steps in the merger and acquisition process that culminate in the need to do PGAAP.

Frank was next, presenting the complexities of SoP 05-1, accounting for internal replacements. Frank guided the audience through the complex maze of criteria to determine the correct accounting, including discussions of integrated features and the definition of "substantially changed."

Delegates at the seminar

Cathy Lin, speaker

SFAS113 and risk transfers were main topics in the reinsurance accounting session taught by Michael. He differentiated between short-and long-term treatment as well as put the spotlight on certain red-flag issues.

Frank presented a primer on how the balance sheet and income statement are presented and how they interact. Deferred taxes and the requirements of Sarbanes-Oxley (SOX) Section 404 followed. SOX focuses on identification of risks and evaluation of controls. Frank closed this session by educating the participants on SFAS133 and derivatives.

Michael then presented an in-depth analysis of SoP 03-1. He discussed separate account implications then proceeded to the valuation of liabilities. He addressed the significance of mortality and additional liability needs, illustrating concepts with four examples.

He stayed at the podium to discuss emerging issues. These included FASB's fair value project, finite reinsurance, IASB and FASB convergence, IAIS activity, the new SFAS 141R, the new SFAS 157 and reinsurance risk transfer. Jonathan Zhao presented the main concepts and principles underlying IASB's current thinking on insurance accounting. Michael then wrapped up the day with a comprehensive presentation on contract classification.

"Eight-five percent of attendees came from multi-national companies, 5 percent from local companies and the rest from consultants or reinsurers."

Even with a full schedule of technical topics, there was still time for socializing and sampling the local culinary culture.

One participant shared the story of his introduction to spicy food.

I stayed over one day and unwittingly went on an ethnic eating adventure.

I was looking for lunch and went into a restaurant where half the space was devoted to tables where you sit on the floor. I veered right to the familiar chair and table setup.

I waited for a menu, hoping they would have English or pictures. Well, there wasn't even a menu. They only served one thing, a fixed entrée—Korean selection.

There were six workers. I watched two grandma-types scrubbing pots on the floor in the clearly-visible kitchen. One of the four waitresses came over and lit the burner on my table. I hadn't noticed there were little gas lines running to every table.

Another waitress arrived with five vegetable-type dishes. She put a few into the boiling oil. I looked at other diners and saw that the remaining dishes could be eaten cold.

"Even with a full schedule of technical topics, there was still time for socializing and sampling the local culinary culture."

I tried the first one: Kimchi or spicy cabbage. The second one: spicy scallions. The third one: peppers with garlic. The fourth one: spicy rice. Then she poured a spicy hot concoction into a bowl.

Actually, I don't like spicy food. But it was too late to back out. They had a liter bottle of ice water on every table, for which I was very thankful.

I started eating. I got hot. My forehead glistened. I used a napkin to wipe off the sweat. I couldn't wipe fast enough. The sweat started to drip down my ears, then down my neck. Soon it was cascading off my forehead into the food.

I actually yelped out. All the waitresses looked and giggled. One of the grandmas saw my state. She came to the rescue and brought out a non-spicy bowl of cabbage. That tasted like dessert.

Next time I'll make sure they have sweet and sour pork on the menu before I go in.

Not wanting to be left out, a faculty member shared his restaurant story:

On my first day there, I wanted to try a local specialty but didn't want to be too adventuresome. I picked the seafood curry.

All went well until they served it without rice. I can't eat a curry dish without rice. So I asked for a bowl of rice. The waiter brought me salt and pepper. I said, "no, I need rice." He then brought me an ashtray. So I took him with me to another table where I found a diner eating from a bowl of rice and pointed to it. I got my rice.

The seafood curry was good, but what looked to be diced squid was really French fries in disguise. One fourth of my seafood curry turned out to be French fries. Where's the UN when you need them?

A survey of the session attendees revealed that the vast majority of people were there to learn or be refreshed on U.S. GAAP and not to fulfill a professional development or continuing education requirement. There were another 60 potential registrants that couldn't attend due to size constraints. We hope to get back to the area very soon to address their needs.

The U.S. GAAP seminar is obviously fulfilling a need, so we plan to address the Latin American and European markets as well. ☐

The International Section in Chicago

by Nian-Chih Yang and Cathy Lyn

The 2006 Society of Actuaries (SOA) Annual Meeting came to the Windy City, Chicago, with about 1,600 attendees. It was held at the Sheraton Hotel, a newer conference hotel right on the north bank overlooking the Chicago River, two blocks east of the famous Magnificent Mile. This account will tell *International News* readers about the activities of our International Section members at this meeting.

This was a joint meeting with the Canadian Institute of Actuaries (CIA), covering all practice areas and drawing actuaries from all parts of the globe. Countries represented outside of North America included Australia, China, Cyprus, England, Germany, Ireland, Japan, Mexico and Switzerland. The Board of Governors, section councils and clubs take this chance to have meetings in person when most of their committee members are gathered in one place.

The International Section sponsored or co-sponsored four sessions and held a reception as part of the program. The sessions were Long Term Care Insurance Outside the United States, Financial Reporting for Multinationals from a North American Perspective, Pandemics: What You Need to Know and Post Morris Review: What Has Changed.

The key ideas at this meeting were "Principle-Based Reserving" and "Risk Is Opportunity." There were seven sessions that had principle-based reserving in their titles. If this proposed reserving requirement is legislated in the United States, it will have significant impact on valuation, pricing, experience analysis, audit, peer review and tax. Some claim this regulation would increase the demand for actuaries. But at the same time, the need for protection, through professional liability insurance, may increase among actuaries.

Shirley Shao, the President of the Chinese Actuarial Club, had a very visible position as the chair of the Regulatory Interface Governance & Peer Review Work Group. This committee provides actuarial input to the principle-based reserving regulation and Shirley presided over many of the sessions at the meeting.

Nian-Chih Yang, FSA, MAAA, is a manager at Ernst & Young LLP, in the Chicago office. He can be reached at niahchih.yang@ ey.com.

Catherine D. Lyn, FSA, FIA, is a consulting actuary at Duggan Consulting Limited in Jamaica, W.I. She can be reached at clyn@sympatico.ca.

Reception Attendees


Nick Dumbreck


Shu-Yen Liu


Symeon Williams


John Robinson


Bosco Chan

It is not clear whether the appointed actuary, the PBA certifying actuary, the PBA review actuary or the auditor would have more say in setting up the new reserves. The proposed regulation removes the safe harbor of simplified reserving requirements for small insurers. Some delegates were not happy that small companies with simple products are not exempt from this additional analysis. If small companies sell products with big risks, they should probably adopt a PBA. The actuary can decide if a stochastic process is needed (small risks probably won't need it). But the implementation is still at the discretion of the state regulators. The new reserving requirements could be passed by the end of this year.

As a result of the regulation, two layers of independent review would be required for each determination. The reserves will be determined on a best estimate basis. Generally, these reserves would be lower than the current required amounts. This could result in new product designs, new profit margin norms and new pricing.

International Section Reception at the Chicago History Museum—October 16, 2006

We would like to thank our sponsors who helped to promote this event. They were: The Pacific Rim Actuaries, Club of Toronto (PRACT), The Chinese Actuarial Club (CAC), The Caribbean Actuarial Association (CAA) and The International Association of Black Actuaries (IABA). We hope to make more contact with more clubs and associations outside of North America in the coming year.

Over 50 persons signed up for the reception and there was a record turnout in spite of the rain and other events overlapping with this function. Five International Section council members and Michelle John, our editor, were there to host the reception. We welcomed Nick Dumbreck (president of the Institute of Actuaries, United Kingdom), Shu-Yen Liu (representing the Chinese Actuarial Club and just completing her term on the Board of Governors), John Robinson (vice president IABA), Stafford Thompson (a past president of IABA) and Bosco Chan (president of PRACT) among many others.

We had to delay announcing the winner of the Country Feature competition. All the entries were very interesting, telling a story of the author's homeland to an actuarial audience. All authors showed a talent for writing and you will see the entries printed in *International News*.

At the Chicago History Museum, we saw exhibits of the Chicago fire, architectural buildings, a replica of Fort Dearborn and one of the first "L Train" passenger cars.

The Chinese Actuarial Club

In March 2006, the Chicago chapter of the Chinese Actuarial Club (CAC) started enthusiastically planning a series of activities that would take place around the official SOA sessions. Somehow we managed to execute our plan and all the events went smoothly despite the busy schedule of all the volunteers. Yan Wang of Trustmark coordinated the professional development seminar. Peter Sun of Milliman organized the dinner reception. Jordan Ge of Towers Perrin arranged the karaoke reception. Carol Kocher of John Hancock secured the sponsorship for the karaoke reception. Mike Leung of PolySystems took charge of coordination with the SOA. Jennifer Lin of Metlife provided overall guidance from CAC headquarters in New York. Many other volunteers deserve thanks for helping out at all the events.

CAC Professional Development Seminar—October 16, 2006

This is the third year that the CAC has organized a professional development seminar for its members. The topic was "leadership customized for Asian Americans and the advantages of diversity in the workplace." We invited Marjanne Lyn to be the seminar presenter. She is director of quality control at Nelvana Limited in Toronto, has an MBA from Rutgers University and runs similar workshops for the Pacific Rim Actuaries' Club of Toronto (PRACT). The discussion at the end of the session was candid and stimulating. The SOA granted one PD credit for the seminar.

Marjanne has put together a report that will be posted on the CAC Web site. Diversity arising from different cultural backgrounds adds value by providing different perspectives. At the same time, we need to polish our delivery to showcase these perspectives effectively.

CAC Dinner—October 16, 2006

A grand total of 44 people showed up for the dinner at BenPao Restaurant. Cathy Lyn asked the bus driver to take a detour to the restaurant from the International Section Reception and 11 persons, representing many other non-Asian countries, were keen to try a Chinese dinner in Chicago and followed her. The restaurant was quick to set up two more tables.

BenPao is a popular hangout for young professionals. We had our own private dining room. The dishes were Asian American, light yet tasty. We sat six to a table and did the usual self-introductions around the room. When the 11 guests who followed Cathy came to introduce themselves, they all found some Chinese connection. Some had Chinese managers; some had Chinese relatives; and others talked about their work experience in China. Frank Buck, the newly elected section chair, had just taken a position with MetLife Hong Kong.

To keep up the tradition of having an outing after the dinner and despite the chilling rain, Nian-Chih offered to take us on a night drive to the Adler Planetarium. From that vantage point you can see the Chicago skyline as on the cover of this year's annual meeting brochure. It was raining hard when we got there. We took photos, and then everyone dashed back to the car.

Karaoke Reception—October 17, 2006

The idea to have a karaoke event surfaced last year at the SOA Annual Meeting in New York City, when the then SOA President-Elect Ed Robbins belted out song after song at the New York Actuarial Association's karaoke reception. We sent a special invitation to Ed noting his singing prowess and were very disappointed when he sent his regrets, saying he would be on a flight to Brazil on the night of our reception.

The three recruiting firms sponsoring this event were S.C. International, Inc., DW Simpson and Actuarial Careers, Inc.

The karaoke reception was held in the Mayfair Room of the hotel. There is a large bay picture window overlooking the Chicago River. But, there was so much excitement in the room that no one paid much attention to the beautiful scenery outside. To our relief, the reception was popular, drawing a crowd with many volunteers taking the microphones to sing.

We might have accidentally started the actuarial recruiting firms' new singing race as

Night Drive to the Adler Planetarium

Singing along to "YMCA""

"The SOA/CIA general session keynote speaker was Gerard Baker, who made a very thought-provoking presentation."

Karaoke Reception

many of those who sang at the reception were recruiters. Will the recruiting firms introduce singing skills as important attributes?

The songs selected were roughly equally distributed among Chinese, country, oldies and rock 'n' roll. When the always-popular "YMCA" came along, you can see from the pictures, many CAC members were not familiar with the hand movements but joyfully joined in with the singing.

Our first singer did a beautiful rendition of Louis Armstrong's "What a Wonderful World." The consensus was that Wing Wong of Milliman ("I did it my way") and Shu-Yen Liu of MetLife (a Chinese ballad) were the king and queen of the night.

Other Activities

The SOA/CIA Joint Reception was well attended. We had a selection of seafood, Chinese dim sum, Italian pasta and cutting stations. The organizers announced that they were serving "The Actuary," a specially blended drink for the SOA meeting, served in a special collector's glass.

The SOA/CIA general session keynote speaker was Gerard Baker, who made a very thought-provoking presentation. Tension heightened during the question and answer period as we discussed the United States' role in Iraq. This subject excited even the generally mild mannered actuaries.

Chicago is an important tourist destination. Many CAC members made special arrangements to see the King Tut exhibit at the Field Museum and the architectural river cruise among several other attractions.

The exhibit hall was a popular destination during the SOA meeting. Many of the exhibitors provided plastic bags for collecting goodies this year. PolySystems had done this exclusively for many years. We are waiting to see if they come up with another hit for next year. Ernst & Young's Beanie Bears were the most sought-after giveaway again. The orange bear had a pumpkin patch sewn on its chest and donned a pilgrim's hat.

See you at the National Mall in D.C. next year. ☐

FSA, CFA, FIA, ALM or NBA?

by Antoni Forgues

It all started on Friday the 5th of March 2006 in my parents' cozy house in Repentigny, a suburb of Montreal. It was only supposed to be a pit stop en route to my final destination, Stamford, another suburb, but of New York City.

I was about to transfer to the Towers Perrin Stamford office following a great work experience in London with the firm. After flying more than 6,000 miles I was less than 500 miles away from my new home. However, my destiny had decided I was not quite ready for Uncle Sam's country. That afternoon, around 2 o'clock, I received an e-mail with an official job offer sent by Miss Rocker, later to be renamed Mrs. Conigliaro after her marriage.

After weeks of deliberation, including an interview with an actuary who had a beard as only seen in Hollywood productions, Aon offered me a position with their ALM team. It took another two months of hard work to be granted full rights to work in the United Kingdom, the land in which I had been living and working for the past four years.

For all my time spent working in the British pension market, I realized I knew little about what was really happening. In the last few years there had been a large number of changes in both legislation and practice. With my new work, I was about to experience, full-blown, the scope and extent of the new playground for British pension actuaries. These changes have materially changed the role of the pension actuary.

During the 1990s, strong equity returns allowed U.K. pension schemes to enjoy contribution holidays, as was the case in the United States. Things were going so well that when Gordon Brown, the U.K. chancellor, decided to abolish the exemption from tax on dividends for pension schemes, even actuaries had not really complained. This decision is thought to have cost £5 billion to pension schemes overall. It should be mentioned that this is an annual amount and that it compares with a current balance sheet deficit for the FTSE 100 companies of around £40 billion.

Ironically, this was in 1997—only a few years before the stock markets entered a long bearish period, which led to the pension crisis that is now blooming over the great island. At about the same time actuaries woke up to the bold conclusion that the population was living much longer than anticipated. This increase in longevity is so controversial and sizeable that it is not yet fully recognized in company accounts and formal actuarial valuations.

Recently the CMI (the research committee responsible for mortality studies across the U.K. industry) published its latest set of mortality tables. The CMI decided to leave the projection of improvement in mortality rates to actuarial firms. This shows how unsure they are about future improvements. As a positive, this has created opportunities for actuaries who are now regularly commissioned to provide mortality studies.

The accounting profession was quick to react to the increase in value and uncertainties surrounding pension obligations. To replace an outdated and much abused SSAP24 standard, it introduced FRS17. The new standard made it more difficult to manipulate pension liabilities. FRS17 is similar to FAS87, but goes a step further by recognizing the full change in deficit/surplus on the balance sheet, although the impact is not taken entirely through the income statement.

For many financial directors (FDs), the new accounting standard is to blame for worsening the pension crisis (FDs are the equivalent of CFOs in the United States). Despite differing opinions on FRS17, most people agree that it has been the catalyst for the creation of a very dynamic "risk management market." If FRS17 is the father of this market, then John Ralfe is certainly the mother who gave birth to it. In 2002 John Ralfe, former FD of Boots, the U.K. retailer, orchestrated the transaction that made him famous. He

Antoni Forgues, FSA, CFA, FIA, is an ALM consultant at Aon Consulting in London. He can be reached at antoni.forgues@aon.co.uk.

changed the entire asset allocation of the company scheme fund into corporate bonds. Since then he has become a public figure and an independent pension advisor.

Following Ralfe's transaction and a strong marketing campaign of the type of McDonald's, LDI has taken off and become synonymous with interest rate and inflation hedging (LDI stands for Liability Driven Investment). Very often this is done via swaps by using complex financial instruments. However, this is only one of the techniques that a pension scheme can use to adopt LDI. At the risk of stating the obvious, LDI is simply a framework within which the liabilities drive the investment strategy.

Another source of change is the Pension Act 2005 (PA). The PA introduced a new regulator with greater powers than ever. The new regulator's mandate is to get involved in reshaping the pension landscape by being more pro-active than its predecessor. Its mission is to suggest, and encourage, behavior that is seen as beneficial for the various stakeholders of the pension schemes.

"Maersk is a famous or infamous Scandinavian company that decided to walk away from its pension obligations in the United Kingdom, only leaving the assets corresponding to the MFR reserve."

Prior to enacting the PA, the British government introduced the Pension Protection Fund (PPF). This was done on the sly while it was still undergoing a public consultation on pensions in general. The PPF acts as an insurance net, providing security to pension scheme members across the United Kingdom (similar to the PBGC in the United States). The PPF has created a lot of work for actuaries due to its requirement for annual PPF liability and risk-based levy calculations.

The PA also brought about a new funding requirement. The newly introduced Scheme Specific Funding (SSF) requirement is gradually replacing an inadequate Minimum Funding Requirement (MFR). MFR was only introduced in 1995 following the Maxwell scandal. It could be argued that the SSF requirement follows from another scandal—the Maersk one. Maersk is a famous or infamous Scandinavian company that decided to walk away from its pension obligations in the United Kingdom, only leaving the assets corresponding to the MFR reserve. This was a legal action that led to benefit cuts for most members of the scheme. It has proven to be detrimental to the image of the company, who since then backtracked and "voluntarily" injected funds into the plan.

For the first time, a solvent employer decided to walk away from its pension obligations purely for economic motives. This made businesses look bad and hypocritical, especially since many had benefited from contribution holidays for the major part of the 1990s. It should be said that the Maersk affair certainly contributed to the introduction of the PPF and a new wind-up regime mandating solvent companies to settle liabilities at the full insurance buyout cost.

As for companies that became insolvent before the PPF began, there are now around 100,000 members lobbying the government to obtain compensation. This is estimated to be worth more than £2 billion. The members argue they were misled by the government into believing their pensions were guaranteed and that the MFR requirement did not protect them appropriately. To date the government has committed much of this amount.

On April 6, 2006, the government introduced a new simplified tax regime. This covers both the accumulation and distribution of pension provisions. Ironically, this has made the life of pension administrators more complex, especially in managing the transition. It has, however, the merit of making the pension system clear and transparent. Along the same lines, the government has announced its plans to introduce a national pension and savings scheme of a defined contribution nature. These changes have the merit of engaging the population in the important process of retirement planning.

Some of these events occurred simultaneously. Therefore it is difficult to put a finger on the causes of the various changes or to put them in chronological order. However, one thing is for certain: the playground in which actuaries are playing has massively changed over the last five years. Challenging and exciting new opportunities will prove rewarding for those of us who are keen.

A few of such opportunities are company modeling and pension settlement solution analysis—two interrelated areas. More and more companies want and need to understand the impact of pension schemes on their operations. An obvious starting point in this analysis is the balance sheet and the income statement. At Aon we are currently developing an integrated model that assesses the impact of pension liabilities on company accounts.

If companies had unlimited budgets they could simply buy out pension liabilities with insurers. Unfortunately, this route is very expensive and the insurance market in the United Kingdom has limited depth. However, new investors interested in taking on these liabilities believe there is a way to structure a transaction that will be beneficial to both parties. This requires sophisticated modeling of asset and liability developments in the future.

To my great pleasure, these projects allow me to make good use of the skills learned whilst acquiring the CFA designation. If you wonder what NBA is doing in the title of an actuarial article, well, sometimes I feel my work is similar to one of a basketball player. In other words, I feel I am being paid for doing the thing I love most—financial mathematics!

The new dynamic and challenging environment requires a greater level of commitment and will prove to be rewarding for those ready to rise to the challenge. At the risk of sounding alarmist, I believe that accountants, bankers and other risk mitigation experts will reap the rewards if actuaries are too slow to react. In fact, it is public knowledge that U.K. investment banks and fund managers have hired many good actuaries and are taking the lead in this booming risk management market (worth hundreds of millions of pounds). To counteract the trend I welcome and encourage SOA initiatives like the creation of an Enterprise Risk Management Section.

When I recently attended my Fellowship Admission Course in Hong Kong, I was lucky to meet the then leader of our profession, Bob Beuerlein. I was very pleased to discover that a highly motivated and passionate individual was taking the actuarial profession to another level. He is the kind of individual that could make all the difference between a highly regarded profession and the most prestigious and exciting profession in the world. Globalization is happening right before our eyes—let's ensure the survival of the human race by taking a very active role in this process. As actuaries, we are in prime position to accomplish this! □

"The new dynamic and challenging environment requires a greater level of commitment and will prove to be rewarding for those ready to rise to the challenge."

Brazil: A Better Business Beat

by Alda Fassbender and Michael Bayard Smith

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After 10 years of controlling inflation, Brazil's economy is poised for high growth—and so is the country's insurance business.

For many, Brazil calls to mind images of Carnival—a glittery, samba beat-driven, celebration of life. In fact, after many years of crippling inflation, Brazil is now celebrating over a decade of economic growth and political stability. As a result, insurance markets have begun to catch up with developed market levels of insurance premium per capita, and insurers are enjoying significant growth.

Alda Fassbender has an M.S. degree in business administration and is a member of the Brazilian Institute of Actuaries. She is a consultant in Tillinghast's São Paulo office. She can be reached at alda.fassbender@towersperrin.com.

Prospects for rapid growth in the future also look promising. Real interest rates—which are still high—appear to be receding, and the government is going ahead with plans to de-monopolize the national reinsurance facility. A combination of strong local companies with new and existing foreign entrants is expected to introduce new products, more efficient operating methods and more aggressive competition. Insurance regulators are working on bringing Brazil's regulatory system up to global standards, including upgrades in reserving methods and solvency measures.

With so much going on in Brazil, and the prospect of more opportunities on the horizon, domestic and foreign insurers need to take steps now to defend and enhance their market positions—or start making plans to step in.

Michael Bayard Smith is a Fellow of the Casualty Actuarial Society and a member of the American Academy of Actuaries. He is a consulting actuary in Tillinghast's Atlanta Office. He can be reached at michael.smith@towersperrin.com.

The Largest in Latin America

With a population of nearly 200 million, Brazil is the largest Latin American economy. Despite periodic difficulties since the introduction of economic stabilization with the Real Plan in 1994, the country has made huge strides in controlling inflation, largely due to a tough policy on interest rates.

Today, the nominal interest rate remains near 15 percent, and the interest rate on the real is among the highest in the world.

Nominal interest rates are driven in part by significant government budget deficits. Some expect that even with lower inflation, the current deficits will keep the real interest rate around 8 percent. The projected annual growth in GDP through 2010 is in the 3 to 4 percent range, and inflation is projected to remain at 4 to 5 percent for the same period. Thus, we can anticipate nominal interest rates of 12 to 13 percent unless there's a breakthrough on the budget front. Still, the country is continuing to attract foreign investment which, along with the political stability, is helping to fuel economic growth.

The Insurance Market

The Brazilian insurance industry is the largest in Latin America. Reinsurance is mostly controlled by a government monopoly reinsurer known as the IRB (Instituto de Resseguros do Brasil). The reinsurance market is expected to be opened to private competition in the near future, although the process of legislation and regulatory change to achieve this has had many ups and downs in the last seven years, leaving much uncertainty as to timing.

In 2005, the total property/casualty (P/C) premium was $9.5 billion USD (or $23.0 billion BRL, assuming an average annual 2005 exchange rate of 2.42). Automobile insurance was about 53 percent of this premium, of which about 80 percent came from auto physical damage coverage. The remainder of the P/C premium was distributed among several lines of business, such as fire, marine and liability.

The 2005 life insurance premium was $8.1 billion USD ($19.6 billion BRL). About 60 percent of this came from the VGBL (Vida Gerador de Benefício Livre), a flexible premium deferred annuity product launched in 2002. Given its pension characteristics, VGBL is usually analyzed together with the open pension business (previdência aberta), which includes group and individual pension products that are private supplements to the state social security system.

Group life premium was about $2.5 billion USD, or 31 percent, of the life premium. Individual life is a very small market in Brazil, reflecting low levels of consumer interest and low savings rates. The total 2005 premium was $0.2 billion USD.

In 2005, contributions to open pension plans totaled $3.1 billion USD. This includes $1.4 billion USD in contributions to the traditional plans. These plans, usually offering significant investment and mortality guarantees, were abandoned by providers as interest rates fell. Almost all traditional plans are no longer accepting new sales but do accept additional contributions.

Another $1.7 billion USD in contributions went to PGBL (Plano Gerador de Benefício Livre), a flexible premium deferred annuity kind of product, similar to the VGBL. The distinction between PGBL and VGBL relates to the tax treatment of contributions and benefits. Contributions to PGBL products are tax deductible, up to a limit, and the benefits are taxable. VGBL contributions are not tax deductible, but only the investment return component of any benefit is taxable.

The health insurance market has a separate supervisory agency, ANS (Agência Nacional de Saúde Suplementar), under the Health Ministry. ANS is responsible for the private health industry, which includes business from insurance companies and health providers. The 2005 premium from insurance companies was $3.5 billion USD.

Finally, there is the Capitalização business, which is also supervised by the insurance superintendency, SUSEP (Superintendência de Seguros Privados). Capitalização is a kind of lottery business with a savings component. Its total 2005 premium was $2.9 billion USD.

Evolution of Insurance Premium

The insurance market has grown more rapidly than the economy. The exception was 2002, a difficult year due to the presidential election and the concerns about a change of ruling party. Exhibit 1 shows the insurance growth above inflation and real GDP growth. It depicts activity including and excluding VGBL, as VGBL was launched in 2002 and better fits the open pension statistics. The health premium (from 2000 to 2002) was excluded from the amounts, as it has not been part of SUSEP statistics since 2003.

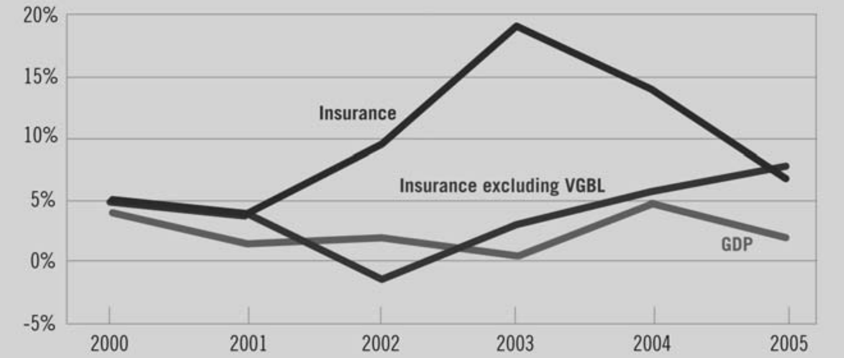
Growth has been particularly strong in the auto and group life lines of business in 2004 and 2005; in these lines of business, the market is becoming more sophisticated in terms of pricing. Technically oriented insurers with a clear understanding of their line-of-business and customer market segments will benefit from the increased regulatory scrutiny compared to more traditional market-driven insurers.

Exhibit 2 shows the annual insurance direct premium and open pension contribution growth for the past three years.

Since its introduction, VGBL has been the preferred accumulation product. The low growth of the pension business in 2005, including the VGBL, can be partially explained by problems the insurance industry had in communicating changes in the income-tax legislation to customers. The initial numbers for 2006 show a recovery of the growth for pension.

These growth rates are attractive to current participants and should encourage interest in entering the market.

EXHIBIT 1
Insurance versus GDP growth



Source: SUSEP, Bacen

EXHIBIT 2
Brazilian insurance premium and open pension contribution growth
R$ billion

	2003	2004	2005	2005 GWP
Automobile	8.9%	17.7%	15.1%	12.1
Life	8.4%	15.2%	15.8%	7.9
VGBL	176.4%	50.3%	10.8%	11.7
Other	18.6%	9.1%	12.5%	10.8
Total insurance	29.9%	22.2%	13.4%	42.6
Total insurance excluding VGBL	12.2%	13.9%	14.4%	30.8
Total open pension	8.9%	2.8%	-3.3%	7.7
Total open pension plus VGBL	53.0%	25.4%	4.7%	19.5
GDP growth	0.1%	5.1%	2.4%	
Inflation (IPCA)	9.3%	7.5%	5.7%	

Source: SUSEP, Bacen

Insurance Players

The Brazilian insurance industry is highly concentrated. Most of the larger players belong to bank groups. Banks such as ABN Amro, Banco do Brasil, Bradesco, Caixa Econômica, HSBC, Itau, Santander and Unibanco have very good reputations and active insurance operations.

More than 60 percent of the life and non-life insurance premium comes from six players: Bradesco, Itau, Porto Seguro, Sul América ING, Tokio Marine/ABN Amro and Unibanco AIG. Bradesco's market share is greater than 20 percent. About 85 percent of the premium is from 15 players.

"It is important to determine, when analyzing administrative expense ratios, if there are intergroup arrangements affecting expenses, such as in the case of bank-related companies."

Ten players are responsible for about 90 percent of the open pension contributions. Bradesco has almost 30 percent, followed by Brasilprev (joint venture of Banco do Brasil and Principal Financial), Unibanco AIG and Itau. In 2005, Bradesco had 42 percent of the $20 billion USD of open pension funds and 47 percent of the $28 billion USD of VGBL funds.

Many foreign players are also present in the market, with or without a joint venture with local or other foreign players. Foreign players operating in the country include ACE, AGF (Allianz), AIG (joint venture with Unibanco), Assurant, Berkley, Cardif, Chubb, CNP (joint venture with Caixa Econômica), Generali, Hartford (joint venture with Icatu), HDI (distribution agreement with HSBC), HSBC, ING (joint venture with Sul América), Liberty Mutual, Mapfre, MetLife, Mitsui Sumitomo, Principal Financial (joint venture with Banco do Brasil), Prudential, QBE, Royal & SunAlliance, Santander, Tokio Marine (joint venture and distribution agreement with ABN Amro), XL (joint venture with Itau for commercial risks), Yasuda and Zurich. AXA has recently announced a commercial agreement with Sul América for commercial risks.

Although there is high degree of market concentration and a number of foreign participants, there is still room in the market for the right company, particularly once market conditions support higher growth levels.

Distribution

There are two main insurance distribution channels in Brazil: independent brokers and banks. Banks are the preferred choice of consumers wishing to acquire pension products, given the similarity of these products with mutual funds and bank savings products, as well as simple retail products such as personal accident and homeowners. With enhanced analysis of the customer base, there is further opportunity to increase sales of auto insurance through banks.

Other personal P/C products and commercial insurance are sold through brokers. Insurer dependence on this channel has allowed brokers to maintain high commission rates when compared with other countries. The cost of bank distribution is less than that for brokers, and the reduced distribution cost can lead to lower prices for insureds or higher profits for insurers. Other lower-cost distribution systems, such as affinity or employer groups, are being developed at this point.

Profitability

The average administrative expense ratio has been on the order of 19 percent (plus or minus 3 percent) for P/C predominant companies. It is important to determine, when analyzing administrative expense ratios, if there are intergroup arrangements affecting expenses, such as in the case of bank-related companies.

Combining a 19 percent expense ratio with a loss ratio around 70 percent and a commission ratio of 19 percent, auto insurance average combined ratios are approximately 108 percent. Thus, on average, an insurer can make a reasonable return only if it achieves enough investment income, potentially enhanced further by additional return from premium financing.

Group life loss ratios range around 55 percent, but commission ratios are usually higher, around 25 percent. The range of loss and commission ratios in the market is large, depending on underwriting and distribution plans. This business can be profitable for companies that have sufficient size to keep administrative expenses at about 10 percent, although even companies with annual premiums close to $200 million BRL can have expense ratios close to 30 percent. For smaller companies, the ratios can be much higher.

Personal accident is usually a very profitable line, with loss ratios below 30 percent and commission ratios on the order of 20 percent. However, the sales of this product are usually more successful through banks, primarily using a push strategy. The market is not sizable.

The main fire/multirisk coverages are classified by SUSEP into three categories: homeowners, condominium and small commercial. The 2005 total direct premium for the three lines together was $1.7 billion BRL, with homeowners accounting for 39 percent, condominium 7 percent and small commercial the remaining 55 percent. The best performance of these three lines is in homeowners, with an average loss ratio around 35 percent and an average commission ratio of less than 30 percent. Given the current profitability of the line, and a limited tradition of acquiring this type of insurance, there is room to reduce prices to stimulate market growth.

Loss ratios for small commercial and condominium have been in the 60 percent to 65 percent range, with commission ratios on the order of 30 percent. These are competitive markets with low profitability.

The large commercial risks at this point are very dependent on IRB rates; the smaller the company, the more its retail rates are determined by the reinsurance rate IRB charges. The opening of the reinsurance market is expected to change the profile of this market, but the timing and process are not clear at this point. Some opening is occurring in the wake of IRB permission to use external facultative and some treaty reinsurance. This may be the pattern of a gradual opening of the market.

Competition in open pension is strong and significantly influenced by the mutual fund investment market. Administrative fees need to be reduced, and only large companies can be profitable in this market. This is the reason why some foreign players with small operations in the country, such as Nationwide and Canada Life, left recently.

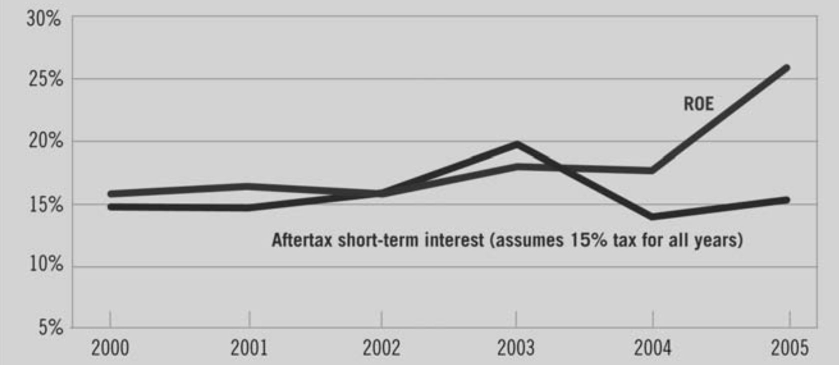
Profitability varies not only according to line of business but is also highly influenced by the company's size, due to expense scale gains and the level of independence of IRB. Recently, the industry has shown profits well above the after-tax risk-free investment rate in the country, as evidenced by Exhibit 3. In 2002 and 2003, the results were not as good due to political and economic instability as the country experienced elections and made a transition to a new party in the government. In the graph, we excluded the returns due to investment in other companies. We also assumed a 15 percent income-tax rate for investments for all years, which is a conservative assumption.

The graph does not reflect the profits of either Capitalização or the health insurance business. Capitalização has been a very profitable business, given the low guarantees offered and the high interest rates in the country. Health insurance is subject to severe regulatory limits on price adjustments. Health insurance policies sold before the 1998 change in legislation represent the main concern at this point.

Investments

Currently, insurance investments are practically all in bonds issued by the government or in mutual funds invested in government bonds. Investments in the stock market are allowed, with restrictions, but are very limited nowadays. Lower yields on bonds will force insurers to consider investing elsewhere, despite the risks, to optimize their returns. The current low-risk, high-return environment is not likely to persist much longer. Any rapid decline in real interest rates will require insurers to respond with major changes in their investment portfolios, as well as sharp reductions in loss and expense ratios.

EXHIBIT 3
Insurance return on equity



Source: SUSEP, Bacen

Regulation

SUSEP has recently been very active in improving the supervision of the market to be more in line with global standards. Emphasis has been put on the protection of consumer rights, and insurance companies are expected to provide much more information. Although the requirements and supervision of technical reserves have been improving, there is still work to be done in this area. Improvements in this respect will favor a more leveled competition. Available data of good quality for analysis will reward the companies that have such data.

Looking Forward

The expectation of falling interest rates in Brazil will have profound influences on insurance market competition. It will provide conditions for higher growth and will require insurers to upgrade significantly their technical abilities and to reduce loss and expense ratios. The opening of the reinsurance market will also give a new face to the large risk segment. The country's GDP growth, accompanied by improving social, political and economic conditions, will stimulate growth in demand for insurance, especially in some particularly underdeveloped segments.

Given the size of the country, the level of resources and the government's strong commitment to democracy, Brazil should be one of the chief targets for foreign investors in the coming years. The insurance industry will be one of the main growth sectors. ☐

"The large commercial risks at this point are very dependent on IRB rates; the smaller the company the more its retail rates are determined by the reinsurance rate IRB changes."

Caribbean Actuarial Association (CAA):
16th Annual Conference in Suriname

by Marcia Tam-Marks

Rishie Parbhudayal, Petty Mahabiersingh, Stephen Smit, Mario Merhai and Saskia Monsels-Holtuin

After months of planning and numerous e-mails regarding visa and flight arrangements, the Caribbean actuaries were off to uncharted territory. The venues for the annual Caribbean Actuarial Association (CAA) conferences for the past 15 years had been Barbados, Jamaica or Trinidad and Tobago. In 2006 we broke with tradition and accepted an invitation from our Suriname colleagues to host the 16th annual conference in Paramaribo, Suriname on December 7-9.

A huge banner exhibiting the lush green flora of Suriname greeted delegates at the airport. On hand to welcome the majority of delegates at 1 a.m. were our Suriname colleagues Stephen Smit, Mario Merhai and Rishie Parbhudayal.

The theme for this year's conference was "Building Bridges—Facing the Challenges Together." The conference was held at the Torarica Hotel and Casino located in the heart of the city centre. Conference proceedings began on Thursday and delegates were welcomed by the president of the CAA, Derek Osborne from Bahamas and Stephen Smit, chairman of the Local Organizing Committee and CEO of Assuria in Suriname. We were honored to have the conference opened by the president of Suriname, H.E. Drs Runaldo R. Venetiaan, whose daughter Ilemele Venetiaan is an actuary in Suriname and who coincidentally was two days overdue with her first child when she attended the opening session of the conference.

The keynote speaker was Pari Kandhai from the Netherlands. Pari is the actuarial advisor to DSM, a global specialty chemical company. He also serves as advisor to its Pension Board. Being the architect of the international DSM pension strategy, he is responsible for implementing, guarding and maintaining this strategy. Pari gave a very interesting practical case study of how he goes about developing and managing this strategy for the DSM Pension Board.

Derek Osborne then spoke on Caribbean Single Market and Economy (CSME) and its possible impact on the Caribbean's social security systems. He illustrated how the portability of benefits would affect benefit and contribution levels as well as the current funding status of the various Caribbean countries.

The afternoon session began with a presentation on the Capital Requirements for Life Companies in the United Kingdom, presented by Nick Dumbreck, president of the Institute of Actuaries. This was followed by a "members only" session to discuss the proposed disciplinary process and the possible paths that the CAA could follow. We had the benefit of having Normand Gendron, the president of the Canadian Institute of Actuaries (CIA), and Ken Clark, a former CIA president, share their knowledge with us. Janet Sharp, the chair of the CAA Disciplinary Process (DP) committee, presented the proposed process that was developed and the rationale that had gone into its development. Other members of the panel who were part of the DP committee were Astor Duggan and Winston St. Elmo Whyte, both from Jamaica.

Dinner at the Indonesian Restaurant JAWA was delicious and we were treated to two traditional Indonesian dances.

Friday morning's session began with presentations on the regulation of the insurance industry of Jamaica, Barbados and Trinidad and Tobago, focusing mainly on life insurance. All three countries are at various stages of regulatory review with Jamaica having already implemented new legislation a few years ago. Presentations were made by Leon Anderson of the Financial Services Commission (FSC) in Jamaica, Simone Thompson of Barbados, and Marcia Tam-Marks spoke about the developments in Trinidad.

Being in Suriname for the first time gave us an opportunity to learn about the life and pensions industry in Suriname and the Netherlands Antilles. This was articulated by

Marcia Tam-Marks, FSA, is a consulting actuary at Analytics Ltd. in Trinidad, W.I. She can be reached at marciatammarks@analytics.co.tt.

Dr. Herman Couperus who is currently the actuarial manager at ENNIA Caribe in Curacao and Dr. Arthur Lo Fo Wong, an actuary from Suriname, who consults on pensions in both the private and public sectors.

Pieter Bouwknegt from the Netherlands spoke on the topic of fair value and asset liability modeling. Pieter heads the ALM department at Nationale-Nederlanden/ING in Rotterdam, Netherlands. Following on this topic, three of our members—Neil Dingwall and Marcus Bosland, both from Guardian Life of the Caribbean and Mario Merhai from Assuria in Suriname—spoke about the life insurance markets in Jamaica, Trinidad and Suriname, including the products, customer behavior and the investment environment and instruments available to the companies.

Cathy Lyn presented on the topic "Professionalism within the Business Context." Cathy, who is from Jamaica, has a special interest in developing the actuary's skill sets in a business context and she shared her views and expertise in this area. Cathy is the features editor of the SOA *International News*.

The final presentation for the conference was on "Hurricane Modelling and Pricing for General Insurance in the Caribbean," which was done by John Duda from the Benfield Group in Canada. John illustrated some of the prediction models used in catastrophe risk modeling and how these are used in developing pricing models.

The CAA's annual general meeting is always held on the last day of the conference and this year was no different. Constitutional amendments were adopted and the CAA's proposed disciplinary process was exposed for comment in the hope of adopting it at the next AGM. We also welcomed 12 new members to the CAA.

On Friday night we were treated to a sumptuous dinner at the Bayside restaurant and an unforgettable performance by an ensemble playing drums and other indigenous instruments. Throughout the conference we were treated to delicious Javanese, Indian, Chinese, Indonesian and Surinamese food and lots of it!

On Saturday we took a bus ride into the interior of Suriname to the Overbridge Resort where we boarded small boats carrying us to ancient ruins of an old city about half an hour along the river. We had lunch at the resort and the one and only Richard Nunez took a refreshing river bath (we have pictures to prove it).

Saturday night was a free night and delegates explored the different restaurants and night clubs along the city centre located just outside the hotel.

Thanks must go to Stephen Smit and his team in Suriname for the warm reception and well organized conference. We also wish to say thanks to Lisa Wade and her committee in Barbados who were responsible for the conference program. Thanks also to Nick Dumbreck, president of the Institute of Actuaries, and Normand Gendron, president of the Canadian Institute of Actuaries, for giving their time and expertise. Thanks to all the delegates for making this conference possible.

We would also like to express our gratitude to our sponsors without whose support this conference would not be possible, namely, from Canada, Munich Re Group, Swiss Re, GGY (AXIS) and Valani Consulting; from Barbados, Sagicor Life Inc; and from Suriname, Assuria N.V., Consolidated Industries Corporation N.V., N.V. Hotelmaatschappij Torarica, Suriname Alcohol Beverages N.V. and Telesur.

Sessions at this year's conference were eligible for Continuing Professional Development (CPD) credits from the Institute of Actuaries. An application has been made to the Society of Actuaries for credit under their Professional Development program.

Actuaries from around the world are invited to the CAA's 17th Annual Conference which will be held in The Bahamas, December 6-7, 2007. Mark your calendars now!!

Further details may be found on our Web site—www.caa.com.bb □

"The final presentation for the conference was on "Hurricane Modelling and Pricing for General Insurance in the Caribbean ..."

Astor Duggan, Lisa Wade, Stephanie Banfield, Ryan Griffith, Shubhash Gosine, Marcus Bosland and Neil Dingwall

Frozen-Entry-Age Term Life Policies in Brazil:

Learning to Deal with Long-Term Risk the Hard Way

by Craig Reynolds and Paulo Hirai

Craig Reynolds, FSA, MAAA, is a consulting actuary with Milliman in Seattle, Wash. He can be reached at craig.reynolds@milliman.com.

Paulo Hirai, MBA, is a consultant with Milliman in Sao Paulo, Brazil. He can be reached at paulo.hirai@milliman.com.

Background

More than 20 years ago, life insurers in Brazil discovered an ostensibly great product to quickly increase their profits. Term life policies known as "frozen-entry-age" policies were attractive to insurers because of the apparently high profit margin and attractive to consumers because of the prospect of maintaining a level premium throughout their lives. Brokers were also happy because the product apparently had a healthy profit margin and insurers could afford to pay nice commissions.

Frozen-entry-age term life is a one-year renewable term policy, with a level premium determined based on the issue age of the insured. The only adjustment allowed is an annual premium and face amount increase to offset the prior year's inflation. For many years the renewal was automatic, making policyholders believe they had a policy for life. With recent changes in regulations, all term insurance policies can be automatically renewed only once. The issue, however, regardless of the renewal process, is the right of the policyholder to keep renewing the policy, or the right of the insurer to stop renewing it.

Two decades ago, there were limited regulatory requirements for reserves, as incurred but not reported (IBNR) liabilities were not yet required and the premium deficiency reserve was only part of the academic discussions and not yet legally required. An actuary's view of product risk back then was based on the assumption that the average policyholder age would remain stable due to the offset of lapses and new entries. As the product proved to be a sales success, many other insurers launched similar products.

The Problem

Over the years, the population aged and the average age of the in-force block increased. Unlike the original basic assumption, adverse risk selection occurred. Younger policyholders lapsed at a much faster rate than the older groups. The risk level increased sharply and some portfolios are now deep in the red. For most companies and portfolios, future projections show fast profit deterioration and negative results within a few more years. In one acute case analyzed by Milliman, the negative present values of profits on these policies were six times the company's reported net worth on a local regulatory basis!

It is difficult to estimate the total number of outstanding policies of this nature in the market. According to some estimates, there were more than 2 million four years ago and now there are still more than 1 million policies in force. Lapses and insurer-driven migrations to other policies have reduced the number of outstanding policies.

If we assume an average insured amount of U.S. $20,000 per policy, the total insured amount might still be in the range of $20 billion, a huge sum compared to the size of the overall life business in Brazil.

Loss ratios for the older groups vary, but it is not uncommon to find 200 percent or even 400 percent in the worst cases. Some portfolios with this type of policy are already showing net losses overall.

Lapse rates have dropped dramatically for higher age policyholders, in some cases down to 2 percent per year, while the younger groups show double-digit lapses. This adds to the fast aging of the entire policyholder population.

Actuaries' Point of View

Twenty years ago, Brazil already had many competent actuaries. However, when overwhelming pressure from sales departments combined with top management's desire to have a product that was selling well at competing firms, many companies ended up following the same path and adopted the term life policies in question. Common thinking at the time also held that the average policyholder age would remain the same over the years due to new entrants and the total company risk would not change. Some actuaries even followed this train of thought, perhaps as a way to excuse themselves for accepting something they knew they should not.

But even when the issue became apparent, no reserve was typically set for this product. It is probably difficult for an outsider to understand the behavior of local actuaries, especially since the "prudent man rule" is used in the United Kingdom and United States. Under this rule, it would be obvious that the actuary should create reserves, even if there were no regulatory requirement for it. However, countries like Brazil are under a strong influence of the Napoleonic Code, and laws and regulations are required before any action is taken, regardless of the needs. Premium deficiency reserve is new to Brazil and the first regulatory act was passed only five years ago.

The rules for calculating premium deficiency reserves allow insurers some flexibility in their assumptions, and therefore some flexibility to control the level of reported reserves. Some conscientious insurers eventually started setting appropriate premium deficiency reserves, while many others delayed their decision and are still setting the minimum required by the regulations.

Brazil's Institute of Actuaries (IBA) has a scope similar to that of the Society of Actuaries in the United States, but with far less influence. Even today in Brazil, an actuary's activities are not well understood and actuarial duties must often compete with other unrelated corporate objectives. IBA is developing efforts to better support its professionals, and the national insurance regulator is also fostering the "Responsible Actuary" concept by passing regulations that define actuaries' responsibilities at an insurance company.

Premium deficiency reserve is now required by the insurance regulator, but companies are allowed to use their lapse experience. Although the lapse rate experience at most companies clearly shows that lapse rates decline with age, some companies are using the past overall average rate. Typical lapses for ages above 50 years are around 3 percent, while the overall lapses for all ages is still near 10 percent. The younger groups bring more profit but their number is declining quickly, while the money-losing older groups remain loyal.

It is crucial that actuaries be respected as professionals and that any company forcing any practice outside the limits of good actuarial standards is disciplined with rigor. The aforementioned efforts are good news, but Brazil still has much to improve upon compared to the achievements in the United States and Europe.

Initial Actions

Recently, some life insurers carrying policies with level premiums have been frantically trying to solve the problem.

Initial attempts aimed to migrate these policies to a new term life policy with premium adjustments according to age brackets, as currently required by recent regulations for new products. However, the problem is that the price difference between the old and new policy is tremendous for older policyholders. Premiums can easily go four times higher. Companies that decided to migrate policies regardless of the policyholders' will are facing lawsuits. Product migrations completed up to a year ago generated a few lawsuits, but not enough to prompt serious corporate concern. Clients felt betrayed when they were treated so poorly, but the majority quietly swallowed the higher premiums.

Recent Developments

Recent migration movements are facing tougher reactions. Consumer rights organizations are bringing lawsuits under consumer law, and insurers' initial victories under the civil code are now being overwhelmed by these consumer lawsuits.

It is too early to say what the final outcome will be, as the issue will likely be decided in the upper courts of Brazil's judiciary system. State attorneys are watching these cases closely and are advising companies to halt any forced migration attempts.

One company decided not to migrate to a new policy but instead to increase premium levels regardless of the policy's promise of a leveled premium, dividing it in small yearly increments. The initial price increase was presented to the policyholders along with a good explanation of the problem and what was being done to solve it. As the initial small price increase alone was insufficient, a yearly price increase was scheduled and communicated to the policyholders. This particular company has experienced few lawsuits thus far, but as prices continue to increase, new legal challenges are likely.

A second company is taking a different approach and is preparing to negotiate with all policyholders—one by one, if necessary. Existing law requires an insurance company to have three-quarters of the clients agree to a policy change before it is enacted. That requirement may seem an impossible mission to many, but this company's commitment and willingness to seek consensus has an undeniable merit and may set a new standard of action.

"Some conscientious insurers eventually started setting appropriate premium deficiency reserves, while many others delayed their decision and are still setting the minimum required by the regulations."

Another company decided to take full responsibility for the problem and set a full premium deficiency reserve, calculated according to the best actuarial practice. Although the decision has much merit (at least from the consumer point of view), it was "inspired" by the bank that sold the insurance company's life product to its clients.

Merit

Should a company honor its obligations and liabilities, even if this poses a risk to its solvency? Was the product sold a de facto "whole life" product and should a whole life reserve be set from the beginning? Was the insurance company a victim of a group of smart policyholders that generated an adverse risk selection?

There is no easy answer.

Consciously assuming short- and long-term risks and keeping promises are key to the future of the entire industry. The foundation of the insurance industry lies in a trusting relationship with the clients. If a client starts believing that the insurer is not going to deliver, he will certainly stop buying.

"Cumbersome spreadsheets can serve as a barrier to effective action, and are in many cases the true reason for not doing proper analysis."

To what extent the level premium policies are going to harm the relationship with the consumers will depend more on the insurance companies' behavior than on the judiciary's decisions. Legal decisions will only recognize that the insurers did something they should not. Or, less likely, recognize that a poor pricing decision was made in the past and that the insurers have the right to fix it.

Implications for Insurers and Actuaries

These products are bringing pain to many insurers but are also shedding light on the basic foundation of the insurance business. Many insurers and executives are reviewing their concepts. As stated by a technical vice president of a life insurance company, "Being an insurer is far more difficult than just working in an insurance company."

Many professionals must now think about what went wrong and determine what should be done to prevent future problems and to properly fix the current one. The conventional one-sided approach generates poor results because it harms the consumer relationship and often results in negative judiciary rulings. Any attempt to hide, disguise and selfishly pass the liability solely to the consumer will only generate distrust, and the court will probably rule against the company. In the long run, everyone loses.

Working in the shareholder's best interest is a worthy obligation, but the exact definition of "best interest" is not always obvious, even if a representative expresses the shareholder's short-term desires. Maximizing profit in the short term can endanger the long-term solvency of the company or alienate the customer base. Insurance is a long-term business, and insurance company management must recognize this and act accordingly.

Actuaries clearly need the protection to fully exercise their profession. Even so, there are limits on what is an acceptable actuarial practice. IBA or other regulators should play a more decisive role in protecting quality actuaries.

Actuaries are also learning that they need to have a better grasp on risk management and need appropriate tools for long-term risk analysis. Cumbersome spreadsheets can serve as a barrier to effective action, and are in many cases the true reason for not doing proper analysis. "What if" analyses cannot be conveyed very well with spreadsheets.

We have worked with a number of companies to develop financial models to measure the true embedded losses in these blocks and to analyze options for mitigating the losses.

Regulators are learning that they need to understand and supervise insurance companies in their long-term liabilities and also that the current tools and evaluation system are not adequate for the timely identification of future problems.

Conclusion

Brazil is facing many changes in its marketplace. A few micro-economic reforms are under way as part of the country's modernization process. The insurance sector is being affected by these reforms and is undergoing many changes itself. The frozen-entry-age term life problem, regardless of the pain it has caused, has taught a useful lesson to insurers and insurance professionals, who are now much more aware of other potential liabilities that may appear in the future. ☐

Feedback from SOA Members in China

Samuel Zhou, SOA ambassador for China, carried out an informal survey of SOA members in China in December 2006. The results of the survey were distributed to the International Section council members in January 2007.

SOA Members in China

As of the end of 2006, there were 135 Fellows and 192 Associates of the Society of Actuaries. More than 19 universities or colleges provide actuarial science education.

Members by city of work:

City	Fellows	Associates
Shanghai	69	88
Beijing	42	49
Shenzhen	10	14
Guangzhou	7	10
Other*	7	31
Total	135	192

**Other includes Chengdu, Dalian, Nanjing, Tianjin, Xi'an, Zhuhai and Hangzhou.*

Members by employment category:

Employment Category	Fellows	Associates
Direct Insurer	113	132
Reinsurer	10	4
Regulator	1	3
Consultant	6	13
University	0	7
Fund	0	1
Not available	5	32
Total	135	192

What Are Members Saying?

SOA Examination Centers: The establishment of an examination center at Dalian University has been a success over the past two years. It bodes well for the future of the actuarial and insurance industries in China. The Fu Dan University center is sponsored jointly by the university and by AIA Shanghai. This has also been a success.

SOA Publications: Some members are concerned about the late delivery of SOA magazines. One member would welcome seeing a Chinese version of the *North American Actuarial Journal*. This would increase readability for Chinese members.

Practice Committees: Given the size of the membership in China, a suggestion was made to establish Chinese Practice Committees e.g., Life, Health, P&C, Regulatory, Education and Investment.

SOA Seminars: Given the growth in the membership, they would like to see more seminars hosted locally. It would provide more opportunities for participation by the Chinese members.

Exam Fees: Some members would like the SOA to reconsider how the exam fee discount program is being carried over into the new exam system. They would prefer to see a fresh start of the three times limit on the new exams. Another respondent is generally concerned that the high cost of SOA exams is forcing students to go into other areas. New financial system exams are being introduced in China and they may attract prospective SOA candidates.

Impact of SOA Entry into China: There was a suggestion that the SOA, in partnership with Chinese members, should collect and publish statistics to demonstrate the impact that the SOA entry has had on the profession and the industry over the last 10 years. More and more people would then realize the importance of this profession and understand more about its development. ☐

Untapped Opportunities in the Middle East

by Iyad Hourani and Marc Tarazi

The insurance industry is one amongst many sectors that offers tremendous opportunities in the Middle East. Low penetration rates, rapid population growth, significant economic development and GDP growth are some of the reasons why many experts foresee a blossoming future for this industry.

In recent years, the rise of compulsory insurance and the efforts of governments to open the health and pension fields to private sector involvement have also contributed to the growth of the insurance sector.

Many Middle Eastern countries have also witnessed important changes in their insurance regulatory and supervision framework. The region would benefit greatly from sharing best practices with advanced insurance markets, in particular with regards to supervision, reinsurance optimization, and actuarial expertise.

Before getting back to the insurance sector, we want to present an overview of the actuarial profession in this region of the world.

The Actuarial Profession in the Middle East

According to Ibrahim E. Muhanna, current president of the Lebanese Association of Actuaries (LAA), for each million of population, there are about 16 actuaries in the Western countries, around four actuaries in developing countries, and only 0.2 of an actuary in the Arab world!

There are currently fewer than 45 actuaries practicing in the Middle East region (associates and fellows of local and/or international actuarial associations), many of whom are well beyond their 60s. Of this number, around 20 are expatriates. Finally, a small number of actuarial students are in the process of taking actuarial exams or are enrolled in local actuarial programs.

The LAA, founded in 2001, and the Egyptian Society of Actuaries, founded in 1999, are full member associations of the IAA. Three universities in Lebanon, two in Egypt and recently one in Jordan offer actuarial courses within their mathematics program.

There is indeed an increasing awareness about the role of the actuary in these economies. However, due to the extremely small size of the profession, fresh graduates often encounter difficulties in finding adequate training opportunities that would lead them to successful careers and acute actuarial proficiency.

The Muhanna Foundation based in Beirut, Lebanon is a key player in promoting actuarial education as well as the profession itself in the region. The foundation organizes conferences, seminars and workshops on a regular basis in the Arab world, and runs a diploma program in actuarial science.

No specific mortality or morbidity table has been built for a particular Middle Eastern country or for the Arab world in general. The common practice is to use a standard foreign mortality table subject to adequate loadings. Global reinsurers have usually filled the gap for actuarial expertise by setting price levels in this region characterized by relatively high reinsurance cession rates.

Booming Economies & Insurance Industry on the Move

Getting back to our subject matter…

With a few exceptions, particularly in the case of conflict-stricken Lebanon, the economies of the Middle East have consistently posted annual GDP growth over 4 percent in recent years, with Qatar showing GDP growth nearing the two-digit marks. **See Table 1.**

One of the main factors that contributed to this rush is the surge in oil prices to record levels at more than $70 USD a barrel in 2006, up from an average of $26 USD in 2002. The

Iyad Hourani, FSA, FCIA, FLAA, is a consultant and senior actuary at i.e. Muhanna & Co. (Lebanon, Middle East). He can be reached at iyad@muhanna.com.

Marc Tarazi, M.Sc., is an actuarial assistant at i.e. Muhanna & Co. (Lebanon, Middle East). He can be reached at marc@muhanna.com.

important budget surpluses resulting from this have further enabled Arabian Gulf countries, the main oil exporting players in the region, to enter into and finance major construction and infrastructure development projects that are reshaping the Middle East economies.

Moreover, in addition to the development and growth of local companies and institutions, many multinational corporations are establishing regional offices in Dubai (UAE), Doha (Qatar), Amman (Jordan), Manama (Bahrain) and other important cities, looking to participate in the blossoming of the region.

This thriving economy along with the introduction of compulsory medical and TPL insurance in some countries, and other factors mentioned above, have inevitably triggered insurance growth. Insurance gross written premiums (GWP) have been steadily increasing: more than 18 percent between 2004 and 2005 in the Kingdom of Saudi Arabia (KSA), one of the most important markets in the region. **See Table 2.**

Each market will grow at its own pace. But insurance industry players around the world are unanimous in their expectations about the sustainable potential growth in the Middle East. Recent examples of important changes in the region include the KSA, where health insurance premiums will increase to $1.33 billion USD in the coming year up from $266,700 USD in 2004 due to the newly established compulsory private health insurance for expatriate workers. We are witnessing a slow but on-course process of privatization of health insurance coverage for expatriate workers in the Gulf States, bearing in mind that the number of expatriates almost exceeds the number of nationals in these countries. Another area where growth is expected is the enforcement of new compulsory liability motor coverage such as in KSA and the UAE.

In the region, unlike in the North American or European markets, the business of pension and life insurance lags behind that of P&C. Most life policies are linked to mortgage loans because of bank requirements. That is due in part to the generous pension schemes in the social security system, restrictive investment rules and most importantly because the notion of insurance (life insurance in particular) is contradictory to the Islamic faith.

Many insurance companies are increasingly developing Takaful products for their life insurance lines of business, where such products are designed to be compliant with Islamic law. Takaful is an emerging part of the insurance business and yet another factor of market growth in the region. Actuaries are getting more and more involved in developing such products.

Table 1

Country	GDP Growth 2003	2004	2005
Qatar	8.6%	9.3%	8.1%
Jordan	3.7%	7.7%	7.1%
Kingdom of Saudi Arabia	3.0%	5.2%	6.5%
United Arab Emirates (UAE)	6.3%	7.4%	6.0%
Bahrain	4.9%	5.6%	5.9%
Oman	3.3%	4.5%	3.9%
Kuwait	1.6%	7.3%	3.3%
Lebanon	1.0%	6.0%	0.5%

Source: Muhanna & Co. Rating Services

Table 2

Country	Gross Written Premium (million USD) 2004	2005	Growth
UAE	1,493	1,862	24.7%
KSA	1,408	1,667	18.4%
Lebanon	577	628	8.8%
Kuwait	393	483	22.9%
Qatar	283	406	43.5%
Jordan	273	314	15.0%
Oman	274	292	6.6%
Bahrain	243	267	10.0%

Source: Muhanna & Co. Rating Services

One of the reasons for the historically slow development of the Takaful sector is that it needed to be matched by the expansion of a Takaful reinsurance capacity, which remains limited. Recently two major companies were launched in the region. Takaful Re based in the UAE will reinsure Takaful insurance companies; it has an authorized capital of $500 million USD and paid-up capital of $125 million USD. Also, Solidarity, with $100 million USD paid-up capital is gearing up to become the largest Takaful insurer in Bahrain and the largest Islamic insurance company in the world. These Takaful companies capitalize on product innovation, overcoming social and religious insurance barriers and meeting the growing demand for this line of business.

"... insurance industry players around the world are unanimous in their expectations about the sustainable potential growth in the Middle East."

Table 3 Country	Stock Market Index Growth 2003	2004	2005	half 2006
Oman	42%	24%	44%	-1%
Bahrain	29%	33%	24%	-7%
Kuwait	102%	34%	79%	-13%
KSA	76%	85%	104%	-21%
Jordan	54%	62%	93%	-26%
Qatar	70%	65%	70%	-31%
UAE	26%	82%	68%	-35%

Source: Muhanna & Co. Rating Services

Insurance Regulations and Market Challenges

Spurred on by robust global economic growth, financial markets witnessed favorable performance from 2003 to 2005, although to varying degrees across different sectors. Some regional insurance companies have therefore invested heavily in equities, and investment revenues became a significant portion of their annual profits. Moreover, some of them built their business plans on the assumption of continued dazzling equity market returns. When 2006 witnessed the inevitable market correction, the illusions of many faded away and profits dropped tremendously! **See Table 3.**

"Jordan, Bahrain, Dubai and Saudi Arabia have all put in place proper insurance laws and supervision frameworks."

This small example, anodyne maybe, illustrates just how important the need for adequate and enforced insurance regulation is in this part of the world.

Don't get me wrong! There have been important changes and major steps taken in the past decade in this regard. Jordan, Bahrain, Dubai and Saudi Arabia have all put in place proper insurance laws and supervision frameworks. As examples, the Dubai Financial Services Authority (DFSA) and the Bahrain Monetary Agency (BMA) are both full members of the International Association of Insurance Supervisors (IAIS). Other countries lag behind and we see many of their insurance companies going about their business more as "glorified brokers" than insurers.

Actuaries have been and still are involved in drafting and implementing regulations. Their role and expertise are being increasingly recognized, appreciated and sought out.

Although there is an essential need for tougher regulations, higher corporate governance standards, training local talent and profiting from international experts in the industry, things are moving forward, on the inescapable route of change.

The Middle East is hot with great untapped opportunities. □

GMXBs: The Next Generation of Guaranteed Products

by Padraic O'Malley

Recently there has been a noticeable increase in Irish life assurance companies offering GMXB products. These products were first developed in the U.S. market and are also known as variable annuity products with guaranteed benefits. The market for this product has grown significantly in the United States over the last 10 years (with sales of $155 billion forecast for 2006) and companies are now seriously examining the possibilities of selling similar products in the European market.

Three new companies have been set up in Ireland in the last year to write these products and another established company has also launched a GMXB product. This article provides an explanation of what GMXBs are, looks at the techniques that are used to manage the underlying risks and gives an overview of the recent surge in companies selling these products from Ireland.

What Are GMXBs?

GMXBs refer to the guaranteed living and death benefits associated with variable annuity business in the United States. The guarantees that are usually seen include:

It is also common to see products which offer combinations of these guarantees. Sometimes the guarantees are offered as riders to the base product but in either case the charges for these guarantees are normally explicitly identified. The policyholder is typically given a limited choice of funds with varying proportions invested in equities (up to levels typical for aggressively managed funds). The charge will also probably vary in line with the equity proportion. A ratchet is another feature that is often seen on these products. If the fund value is above the guaranteed benefit on the policy anniversary, then the ratchet would increase the guaranteed benefit to this level.

These products are attractive to policyholders as they offer the opportunity to participate in investment markets with the safety net of the guarantees to fall back on in the event of market downturns or interest rate movements. Policyholders pay an explicit charge for the guarantees and can decide which guarantees are valuable to them. The products are attractive to the life assurance industry because they offer the possibility of replacing some of the traditional guaranteed products which are increasingly under threat either because of the introduction of market-consistent accounting

Guaranteed Minimum Accumulation Benefit (GMAB)

The GMAB guarantees that the policy surrender value will be a minimum amount at a given point in time. For example, the guarantee might be a roll-up rate of 2 percent per annum which can be accessed at the 10th anniversary.

Guaranteed Minimum Income Benefit (GMIB)

The GMIB guarantees a minimum roll-up rate which can be converted into a guaranteed annuity. The policyholder might be guaranteed a minimum roll-up of 3 percent per annum and guaranteed annuity rates based on 3 percent per annum. At maturity, the policyholder can choose between the guaranteed annuity and using the fund value to purchase a market annuity.

Guaranteed Minimum Withdrawal Benefit (GMWB)

The GMWB guarantees minimum periodic withdrawals. For example, it might guarantee that the policyholder will receive 5 percent of their initial premium each year for the duration of their life, otherwise referred to in the U.S. market as "5 for life."

Guaranteed Minimum Death Benefit (GMDB)

The GMDB pays a guaranteed minimum lump sum on death. This could either be a return of the premium paid on death or a more valuable guarantee that provides a guaranteed death benefit equal to the initial premium paid rolled up at 2 percent per annum (for example), or the product might have an annual ratchet feature.

Padraic O'Malley, BAFS, FIA, FSA, is a consulting actuary with Life Strategies in Dublin, Ireland. He can be reached at Padraic.omalley@lifestrategies.ie.

methodologies or because of their lack of transparency to policyholders, such as traditional with-profits business in the United Kingdom.

What Are the Risks?

These guarantees expose the life company to a range of risks. These include:

Market Risks

Various market assumptions are required to value the embedded optionality in these products.

Actuarial Risks

Actuarial risks include lapse rates, mortality rates and the take-up of options. These risks can normally not be hedged, unlike the financial market risks. Therefore, they can only be managed through prudent design, reasonable assumptions and constant monitoring/revising of the assumptions.

Operational Risks

Depending upon the methods used to manage these risks, operational risk can be a significant issue.

Credit Risks

There can often be significant exposures to third parties.

"The reinsurance that is available will normally contain various restrictions as the reinsurer might not want to take on risks over which they have no control..."

Risk Management

There are a number of different possible strategies for managing these risks. These include:

Taking on the Risks Naked

Significant capital would be required for this possibility and companies are increasingly coming under pressure by both regulators and rating agencies to quantify and monitor the exposure.

Reinsurance

The reinsurance that is available will normally contain various restrictions as the reinsurer might not want to take on risks over which they have no control such as lapse risk and the take-up rate on options. There might also be limits on claims or finite capacity.

Static Hedging

This strategy involves purchasing long-dated OTC options from investment banks. The life company will probably be exposed to some movements in market conditions as it is very difficult to perfectly replicate these complex options.

Dynamic Hedging

This strategy involves the use of liquid instruments like futures, equity options, swaps and swaptions. If the hedge portfolio is sufficiently rebalanced frequently then it should be possible to closely match the value of the embedded options. The majority of U.S. providers use dynamic hedging to manage this business in the U.S. market.

The option value is exposed to a number of sensitivities, often referred to as the Greeks. These are:

- Delta—the sensitivity to the underlying price
- Rho—the sensitivity to interest rates
- Vega—the sensitivity to volatility
- Gamma—the second order sensitivity to the underlying price
- Theta—the sensitivity to time

Hedging attempts to construct asset portfolios that have the same sensitivities as the option value. By doing so, the life assurance company can lock in the cost of the guarantee. The simplest and most common form of hedging is Delta hedging. Rho hedging is also common depending upon the guarantees offered. A more sophisticated hedging program will also attempt to protect against volatility risk by matching Vega, although this is rare.

While hedging is probably the most desirable solution, it does require sophisticated systems for monitoring the exposure and executing the hedging strategy. Hedge asset and liability values must be calculated frequently, the Greeks calculated and the portfolio rebalanced to ensure that the hedge is effective.

Recent Developments in Ireland

A number of major global companies have recently set up life assurance companies in Ireland in order to sell GMXBs into other European countries (the reasons for doing so apply equally to the domestic Irish market). These companies have committed significant capital and resources to their new operations as they see Ireland as providing an excellent base from which to pursue opportunities in Europe:

- Hartford Europe, selling into the United Kingdom

- MetLife Europe, selling into the United Kingdom
- AXA Life Europe, selling into Germany

AEGON Scottish Equitable International, an established company which is part of the AEGON group, has also recently started selling a GMXB product from Ireland into the United Kingdom. Hartford, MetLife, AXA and Aegon are among the largest providers of variable annuity products in the United States.

There are a number of reasons for these companies choosing Ireland as their base, some of which are specific to the products in question and some more generic reasons. The generic reasons are well known at this stage and include:

- An effective and responsive regulatory regime
- A developed and efficient life assurance infrastructure
- One of the lowest rates of corporation tax rate in the world at 12.5 percent
- The availability of gross roll-up tax for policyholders
- A member of the EU.

The specific reasons include:

- Ireland's principles-based regulatory regime
- The possibility of using derivatives as admissible assets.[1]

The principles-based regulatory regime is vital as, subject to certain constraints, it is possible to allow for the impact of dynamic hedging when calculating capital requirements and reserves in Ireland. This means that companies can hold a level of capital appropriate to the risks under consideration. The implementation of Solvency II should hopefully achieve a similar result across Europe, but Ireland offers this possibility in the interim. It should be noted that allowing for dynamic hedging in calculating capital requirements is a complex process requiring stochastic-on-stochastic projections.

Summary

In summary, GMXB business has grown enormously in the United States over the last 10 years and we believe that this will become a major growth area in Europe over the next five to 10 years.

Ireland has already established itself as a centre of excellence for GMXB business for the general reasons that have led to Ireland become a leading international financial services centre as well as some additional reasons that are pertinent to GMXB business.

Life Strategies has worked with all of the above companies, either in the application process, product design stage or in developing the reserving methodology for these products. ☐

"The implementation of Solvency II should hopefully achieve a similar result across Europe, but Ireland offers this possibility in the interim."

[1] Subject to certain constraints.

SOA Expands Global Risk Management Training Program

Since the first course was conducted in 2003, Asset Liability Management Techniques and Practices has received international acclaim. The 2007 edition features an expanded five-day, on-site program. Initially designed with a focus on insurance companies, the 2007 edition now offers a pension track and brings two of the world's leading pension experts, Jeremy Gold and Stuart Jarvis to the faculty. The core course, "Techniques and Practices for Insurance and Pensions," along with two new, one-day master classes on dynamic hedging and interest rate models are conducted in a classroom setting with case studies, application exercises and formal lectures, providing an intensive hands-on experience.

The ALM seminar convenes the world's leading risk practitioners and industry experts and offers an extraordinary networking opportunity for buy-side and sell-side professionals. A five-week, e-learning course, available for early registrants, covers ALM essentials and prepares participants for the intense on-site experience.

ALM Techniques and Practices is presented by the Society of Actuaries (SOA) and Nexus Risk Management and co-sponsored with Standard & Poor's, the International Actuarial Association, the Czech Society of Actuaries and the Singapore Actuarial Association.

Register soon for these upcoming events by going to www.nexusriskmanagement.com/courses/.
Course dates: Prague, April 23-27 | Singapore, Sept. 3-7 | Phoenix, Dec. 3-7

SOA Life Spring Meeting—May 9-11 Phoenix, Ariz.

SOA Life Spring Meeting will be held at the JW Marriott Desert Ridge in Phoenix, Ariz. from May 9-11, 2007.

The International Section will be co-hosting the following sessions at the meeting:

Update on the International Experience Study—Session 32
Moderator: William Horbatt
Presenters: Charles Carroll, Dieter Gaubatz
The SOA Research Department and the International Section are sponsoring international experience studies outside North America. The objective of these studies is the development of credible experience data when none existed previously. The speakers will discuss two separate initiatives, the annual compilation of worldwide embedded value financial assumptions and ongoing country specific mortality and persistency studies in Asia, Central Europe and Latin America. Included with the discussions will be a demonstration of the SOA's international experience study tool that is being provided to actuaries contributing to experience studies outside North America.

The Actuary's Role in the Development of Economic Capital—Session 71
Moderator/Presenter: Marc Slutzky
Presenter: Matthew P. Clark
Economic capital is currently a hot topic in the insurance industry. It provides insurance companies with valuable information with respect to the optimal uses of capital, the differentiation between required capital and free capital, and the pricing of insurance products. In this informative session, top-notch panelists will review the latest developments in the topic of economic capital from an insurance company perspective. Companies in the EU and other parts of the world are developing economic capital models to enhance the effectiveness of their enterprise risk

management processes. The panelists will address the advantages and disadvantages of various approaches that you can weight and integrate into your practice.

Global Products—Session 20
Today's consumers of financial services are taking increasingly global views of the world's financial products. The session will provide a summary from an international perspective of current life insurance and annuity product types, product trends and key opportunities for the future. The impacts of the various regulatory, economic and demographic differences will be explored.

Change—The Only Constant—IAAHS Colloquium, South Africa, May 13-17, 2007

The Actuarial Society of South Africa (ASSA) will be hosting the second International Actuarial Association Health Section (IAAHS) Colloquium in Cape Town, South Africa, May 13-17, 2007. The theme for the event is "Change—The Only Constant."

An organizing committee comprising ASSA members and IAAHS Committee members have taken great care to provide a solid scientific basis for the event. Daily keynote speakers and in-depth panel discussions and presentations will explore issues that are relevant and important to health care practitioners. In addition, social and cultural activities, networking opportunities and partners' programs will ensure that attending the colloquium will truly be worthwhile.

The scientific program was developed in conjunction with the various IAAHS Topic Teams, but includes discussions and presentations that will be of interest to actuaries who are not very active in the health care field. The program may be found at www.iaahs2007.com/glance.php.

State-of-the-art technology and facilities created with the end user in mind makes Cape Town's International Convention Centre an ideal location for this event.

The Arabella Sheraton Hotel is linked to the Convention Centre, and accommodation in various price categories is available around the Centre. More details are available on the colloquium Web site, www.iaahs2007.com.

All of the above will happen in Cape Town, which, according to IAAHS chair Howard Bolnick, is one of the most beautiful cities on earth. So, if you haven't registered yet, pack your bags and your family—see you in Cape Town!

The Pacific Rim Actuaries' Club of Toronto Calendar of Events

The Pacific Rim Actuaries' Club of Toronto is an international club for actuaries to discuss financial issues related to the Pacific Rim countries in Asia. The club holds two dinner meetings per year, along with a social event in the summer. In addition, a couple of business workshops are held each year (in June and November) to help develop management skills for club members.

The March 2007 dinner meeting featured K.C. Chan, vice president and actuary in the corporate actuarial department at Sun Life. K.C. worked for 10 years in China and he shared with us his experience as an actuary in Asia. He also shared with us the different opportunities for actuaries in Asia as well as the pros and cons of relocating to Asia.

Our next event will be a barbecue in July 2007, featuring great food and a good opportunity to network with other club members in a social setting.

Our next dinner meeting will be in September 2007 and we plan to have a money manager from the investment department of Manulife Financial speak to us about investing in China and other Asian countries.

Details of our event and workshops are announced on our Web site, www.pacificrimactuaries.com. All actuaries in Toronto or visiting Toronto are welcome to join our events.

14th Annual Meeting—International Association of Black Actuaries (IABA)

Mark your calendar!
IABA is holding their 14th Annual Meeting in Chicago, Ill., August 3-4, 2007.
Attendees can look forward to:
Professional development workshops
Networking sessions
Noteworthy speakers
Awards and Recognition Ceremony.
Look out for more details on the Web site! http://www.blackactuaries.org/.

17th Annual Conference—Caribbean Actuarial Association (CAA)

Actuaries from around the world are invited to the CAA's 17th Annual Conference which will be held in the Bahamas, Dec. 6-7, 2007. Mark your calendars now!! Further details may be found on our Web site—www.caa.com.bb.

Institute of Actuaries of Australia—Biennial Conference

The 2007 Biennial Convention will be held in Christchurch, New Zealand, Sept. 23-26, 2007.

This is the "must attend" event for the actuarial community. Thinking of writing a paper? Make sure you let the committee know now. Details are contained in the call for papers link below.
Call for Papers Link: www.actuaries.asn.au/events/conv07deadlines?eventID=927.
Event Link: www.actuaries.asn.au/Events/Conv07intro?eventID=927.

Singapore Actuarial Society—South East Asia Health Insurance Conference

The Singapore Actuarial Society (SAS) is organizing a South East Asia Health Insurance Conference, to be held in Singapore, July 30-Aug. 3, 2007.

Theme: The Role of Health Insurance in Health Care Provision in Asia

Structure: The main conference will be held Aug. 1-3, 2007 with a two-day technical seminar preceding it (July 30-31, 2007). The technical seminar will be provided by Howard Bolnick, FSA. The conference language will be English.

The SAS is looking to make this conference a truly regional one, with contributions from practitioners in South East Asia and further afield.

If you would like to share your experience and ideas with a wider audience, please respond to the SAS's call for papers: www.actuaries.org.sg/documents/Health%20Conference%202007%20%20CALL%20FOR%20PAPERS%20final.pdf.

Upcoming Events in China

The China Society of Actuaries used to be part of the China Insurance Association. Approval has been granted to start on the preparatory work to set it up as a separate legal entity. The official event will be marked with a celebration possibly in May/June of 2007. This shows that the insurance business in China is getting a great deal of attention, and has become one of the important players in the financial sector.

The 8th annual China Actuarial Conference will be held at the end of September as usual.

Letters

Dear International News readers,

The American University in Cairo (AUC) is looking to expand its actuarial science program within the mathematics department. They are seeking candidates to fill a distinguished visiting professor position. Appointment will be made for one or two years commencing Sept. 1, 2007. Screening will start on April 1, but the position will remain open until filled.

For further information please visit http://www.aucegypt.edu/facstaff/positions/vpositions.html#actuarial or contact Ali Hadiatahadi@aucegypt.edu.

This will give a big boost to the actuarial profession in Egypt!

Sincerely,

M.F. Amer
SOA Ambassador for Egypt

Country Feature Competition

Thank you to all who participated in the 2006 International Section Country Feature Competition. We knew there was talent out there, and you did not disappoint. In all, there were 15 entries. The countries or regions featured were:

Brazil, Central Eastern Europe, China, Egypt, Hong Kong, Jamaica, Japan, Middle East, New Zealand, Singapore, South Africa and the United Kingdom.

As with any competition, there must be a winner. The first prize of $2,000 USD goes to Horacio Motta who wrote "Ronaldo and his Actuarial Career." The ambassador prize of $500 USD goes to Ronald Poon-Affat. On hearing of his win, Horacio said "I'd like to reinforce how important this award is for actuaries like me and my fellows here in Brazil. I insist: it is all about aspirations, and how important it is to follow them. Thank you very much! Thanks also to the Society of Actuaries' International Section Council. And thanks, of course, to Ronald, for being our inspiration."

Horacio's article is presented as our cover feature for this edition. Some of the country feature articles were already published in the July and November 2006 editions of *International News*. We include three entries, in addition to the winning feature, in this edition. Just so you have something to look forward to, we've held back a few to be published later in 2007.

Horacio and Ronald enjoying a night out after winning the Country Feature Competition.

This initiative was a real success and the International Section has agreed to run it again. Stay tuned for more details.

Horacio Motta victory picture.