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"A KNOWLEDGE COMMUNITY FOR THE SOCIETY OF ACTUARIES"

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INTERNATIONAL NEWS

Walk on Water—Riding the Globalization Wave

by Bosco L. Chan

How far is Tokyo from Toronto? This question came up when I learned that Mr. Les Lohmann would be traveling from Tokyo to Toronto to speak about Japanese pension issues to my actuarial club in September 2005. Although this question sounds simple, there could be many answers. From a geographical perspective, as actuaries, we can easily calculate a numerical answer. However, if we ponder the question, we might better understand and manage the business environment.

One possible answer to this question is that there is no single answer—because the correct answer depends on the time the question is asked. In the old days, when commuting between Tokyo and Toronto relied on ships, it would take weeks to travel between the two cities. Since the invention of airplanes, traveling time has been reduced to half a day for a direct flight connecting the two cities. With the advent of high-speed Internet access in the 21st century, we can transmit documents within seconds or arrange video conferencing with business partners located on the other side of the world instantaneously. The world is now smaller and countries are more interconnected. Technology has dramatically changed the way we live. Changes in our lifestyles alter the way we run our businesses. If we want to get a cup of coffee in South Korea, we can go to Starbucks. If we want to grab a quick bite in Russia, there are McDonalds there. If we (those who live in North America) want to buy everyday low priced items manufactured in China, we don't need to fly to China, simply go to Wal-Mart located around the corner.

Business boundaries are not as rigid as they used to be. Cultural gaps are also closing with people learning from and doing business with others whom we would have called foreigners in the past. Now, we simply call them friends. Although the way our business is

continued on page 4

contents

Walk on Water—Riding the Globalization Wave
by Bosco L. Chan 1

Editor's Note
by Catherine D. Lyn 2

Chairperson's Corner
by William R. Horbatt 3

Malaysia Update
by Hassan Scott Odierno 5

Educating Actuaries with a Business Orientation
by Dr. Elisabeth M. Goodwin....................6

Fertility Projections for Social Insurance Symposium at the SOA Annual Meeting
by Sari Harrel....................8

Life Insurance in China
by Synthia Kwan....................10

Every Seven Years ...
by Dr. Geraldine Kaye....................15

An Eclectic Gathering
by Nian-Chih Yang and John Robinson 16

Brazil Update
by Ronald Poon-Affat 18

SOA International Experience Study Update
by Ronora Stryker and William R. Horbatt.......21

"Trust" in North American Qualified Retirement Plans
by Leslie John Lohmann 22

The Actuarial Profession: Announcing the Launch of a New Actuarial Journal....................25

Social Security Systems in the English-Speaking Caribbean
by Derek M. Osborne 26

Recent Changes to U.K. Pensions Legislation
by Paul Geeson 28

Mind the Gap ... and how to bridge it
by Laura Brown and Neil Wharmby 32

The Caribbean Actuarial Association's 15th Annual Conference
by Tesi Johnson....................36

IABA – Coming of Age
by John Robinson 38

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Editor's Note

by Catherine D. Lyn

We are starting off 2006 with the first of a three-part series on communication, one of the important skills that is becoming more and more visible for the members of this profession. This continues the communication theme started by Michael Pomery in the last issue.

The editorial team has contacted our 27 ambassadors to ask them to submit their annual reports for publication. Last year 10 ambassadors responded. In this issue we have country updates for Brazil and Malaysia. We hope to bring you many more this year.

The International Section members have a wide range across the traditional practice areas and more. On the technical side we have articles on pensions from the United Kingdom and Japan, life insurance in China and social security systems in the Caribbean. We have two articles on business and another on education, to touch on non-technical topics. On the lighter side, we cover the International Section reception in New York City and the Caribbean Actuarial Association's 15th annual conference in Jamaica. We have a new item: notices to invite companies to participate in the SOA experience study and authors to contribute to the Annals of Actuarial Science.

Last but not least, we would like to welcome Carol Tom who joins Michelle John as assistant editor. Please feel free to contact the editorial team with your contributions to *International News*. ☐

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Chairperson's Corner

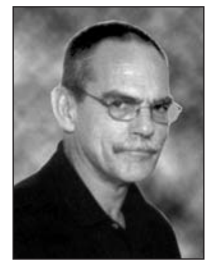
by William R. Horbatt

Welcome to the first 2006 issue of *International News*! If you are like me, the first piece of mail you open is *International News* (after checks and governmental letters of course!). I especially enjoy reading about current events around the world and how fellow actuaries continuously deal with challenges. The Society of Actuaries' ambassadors continuously "outdo themselves" by taking the time to write articles, especially when English may not be their native language.

The International Section is unique in that it defines itself not by professional specialty or organization, but by geography. Our membership has elected a council that represents a wide geographical span with council members working in Asia, the Caribbean, Europe, Latin America and, of course, the United States. They also represent a wide range of actuarial practices such as financial reporting, health insurance, life insurance, pensions and reinsurance. I hope that our members will feel free to call upon them (or send an e-mail) to make suggestions, offer assistance to the section or just talk.

The International Section should meet the needs of its members, wherever they may be located. During 2005 the section supported a health insurance program in China and later repeated a successful SOA Spring Meeting session on International Mergers & Acquisitions as a webcast, in order to permit foreign actuaries to profit from it as well. The section continues its support for the SOA's International Experience Study and will be looking for other opportunities to serve its members outside North America as the year progresses.

As customary, the council met in November 2005 in New York in conjunction with the SOA Annual Meeting. We are pleased to announce that we approved Mr. Iyad Hourani as the SOA ambassador for the Middle East region. Below, there's a photo of the council members who were able to attend this meeting in person. ☐



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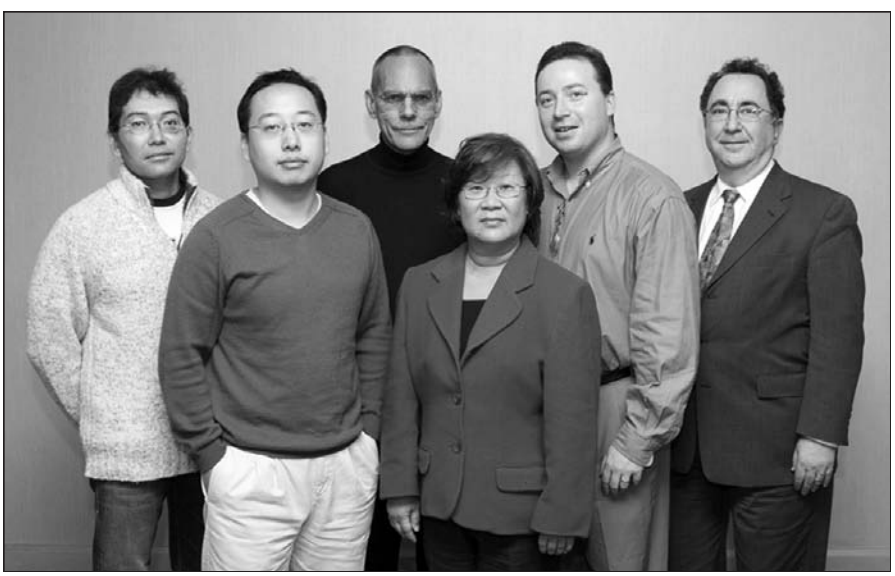
International Section Council Gathers at the Annual Meeting



Members of the International Section Council pose for a shot together during the Annual Meeting.

From left to right: Ronald Poon-Affat, Jason Liang Zhang, incoming chair Bill Horbatt, Cathy Lyn, Alex Kogan and outgoing chair Marc Slutzky.

managed has changed profoundly, the key to the growth of a successful global corporation remains unchanged—it is business ethics. All companies have certain written or unwritten ethical standards. But good business ethics are more than a set of game rules that are developed to filter out problem players. Good business ethics should be a set of standards that are adoptable without cultural boundary. They can be accepted by different countries and agreed on by people from different backgrounds. There should be a set of high standards that no one can find any reasonable excuse not to follow. Ethics are the foundation of a successful enterprise. Good business ethical standards attract talent, reduce negative competition, reward employees fairly, create a level playing field for employees and minimize illegal activities. As the world is changing rapidly, running a business without good ethical standards is similar to drinking and driving. You may be able to arrive home safely for the first few times. But only the non-educated believe that they can walk away from a crash unharmed. And not only may you hurt yourself, your actions may lead to dreadful consequences that can ruin other people's lives. Be responsible as a professional!

Once we develop ethical standards, we need leaders to implement them effectively. Who can be a good leader in the 21st century? What characteristics are required for someone to succeed as a good leader? I believe globalization creates a greater demand on men and women to be effective leaders. There is no doubt that we have benefited from technological advances as they bring more convenience to everyday life. Without stepping out of the house, we can listen to radios, watch television or read through the Internet instant news from around the globe. The Blackberry also helps us to receive and send e-mail wherever we go. Media and every kind of information are accessible within arm's length. We are living in an information-overflow era. The challenge is not how to gain more, but how to identify true versus false, and useful versus junk information. Without good judgment, convincing arguments could be developed from questionable observations. Without good judgment, we could end up further away rather than closer to a successful outcome. Good judgment requires knowledge as a foundation. Leaders need wisdom to set the right long-term path as mistakes often carry an expensive price tag.

After we develop high standards and recruit exceptional staff, what else can we do? We need to remember that the world is a much bigger place than we think. The most common mistake made when investing in a foreign country is that we assume whatever we did at home is right and can be transplanted without any modifications to the foreign land. Let me illustrate my message with a story. A relative of mine, who did not know how to drive, came to Toronto to visit me. I volunteered to drive her around. After an exciting tour, we decided to head back home. Since it was cold and snowing, she quickly opened the left side door and jumped into the car. What went wrong? Didn't I just say she did not have a driver's license? Her action was natural because drivers sit on the right side of vehicles in Hong Kong; thus, passengers take the left side. It is the opposite in North America. The point I would like to make from this example is that, even though we are physically situated in a foreign place, we still retain habits from home. If we assume that the lifestyle, the traditions and the customs in the foreign land are exactly the same as what we had at home, then what we do abroad can become a joke. The world is not inside our brain; but indeed, we are living inside the world. We don't necessarily have knowledge of everything beyond our normal habitat. Local practices and local experiences may not be completely transferable when we work on overseas assignments. It is we who need to adjust, not the locals.

In summary, success is not only about achieving our goals, but achieving our goals through the right path. Taking shortcuts may lead to short-term happiness, but only the right things can stand the test of time. To walk on water in the information flood and the foreseeable globalization wave, we need the highest business ethical standards, the wisdom to make informed decisions, and the willingness to have an open-mind with patience to accept and handle differences. All of these can be summarized in these qualities: responsible, caring and respectful. We need to be responsible in our decisions; take good care of our workers and customers; and respect the fact that all people have an equal right to earn a living and contribute to this beautiful world. □

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Malaysia Update

by Hassan Scott Odierno

Over the last year, risk-based capital (RBC) has continued to be a hot topic in Malaysia. The strategy for the future has been discussed extensively, and continues to be discussed. The current valuation basis for liabilities can be characterized as conservative, with a conservative mortality table and conservative investment return assumption, with no recognition of lapsation or bonuses (i.e., a net premium valuation method is used). The current solvency margin calculation can be characterized as one-size-fits-all with 4 percent of reserves and 0.2 percent of the sum at risk being the main components. The new basis for valuation and solvency margin is expected to be more company specific, with liabilities calculated on a best-estimate basis with pads and solvency margin based on the particular assets held, as well as the liabilities currently in force. Discussions on details of the calculation, as well as the level of actuarial judgment the appointed actuary will have, are ongoing.

Another issue affecting actuaries in Malaysia is the decision by Bank Negara (our regulators) to issue four new Takaful licenses. Takaful insurance, or Islamic insurance, works similar to conventional insurance, but has some inherent differences. All Takaful products are designed with profit sharing for the policyholder, and certain investments are not allowed. The structure of the products is slightly different in order to adhere to certain core principles. Also, all aspects of the insurers' operations and products must be approved by their Shariah council (religious council). Actuaries have been involved with developing an initial set of products that are both actuarially sound and accepted by Islam. They have also been busy with the development of cashflow projections for the new Takaful company and explanation of the products and pricing to the Shariah council. □

With a height of 1,453 feet, one of the world's tallest buildings rise above the skyline of Kuala Lumpur. They are called the Petronas Towers, and, inevitably, they have become the symbols for the astounding growth that has taken place in Malaysia over the last two decades.

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Educating Actuaries with a Business Orientation

by Dr. Elisabeth M. Goodwin

A seminar was held in Berlin, Germany at the end of 2003 bringing together actuarial educators from around the world. The seminar was run jointly under the auspices of the International Actuarial Association and the Groupe Consultatif in Europe. The theme was entitled "educating actuaries with a business orientation." However, a sub-theme was how actuarial education might be changing in the future. The title came from a paper given by Cathy Lyn, Teresa Palandra and Chris Daykin at the International Congress of Actuaries in Cancun, Mexico in 2002.

One part of the seminar addressed the skills that employers looked for in actuaries. These included: technical actuarial skills, data collection and cleansing, modelling skills, professional values and ethics, decision making, judgment, international language and cultural awareness, communication skills, IT and computer skills, time management skills, project management skills, team work both in actuarial and multi-discipline teams, leadership skills, negotiation skills, influencing skills, confidence and competence, creativity, legal awareness, the need to understand the business and self motivation.

Many of these skills are not exclusively actuarial, but it is the combination of skills that a good actuary possesses that makes the actuary useful. Not all employers will require the full range of skills, but it is clear that few employers today need many people who are only good at the technical actuarial skills and cannot communicate with others in the company or with external people. The actuary provides the bridge between the technical modelling and the implications for the business.

Another part of the seminar concentrated on how these wider business skills might be acquired. Here there was more variation in how this might be done. It is clear that wider business skills will be acquired over the whole working life of the actuary. Continuing Professional Development/Education (CPD/E), therefore, has an important part to play in this respect. Some associations think that some introduction to these skills should form part of the initial training process pre-qualification. Others prefer that this is left until after initial qualification. One reason for starting as part of the initial qualification process is that the attention to these wider business skills then forms part of the compulsory syllabus. The need to undertake CPD/E is voluntary in many associations. There is thus less pressure from the professional body for the acquisition of these skills although many employers will demand them as part of a regular employee review process. In some associations CPD/E is becoming compulsory for a wider group of actuaries, many of whom will include development of wider business skills as part of their annual CPD/E planning record.

Assessment of these wider business skills will not be through traditional time constrained examinations. In many cases the assessment aspects will be done mainly through the employer. As another example, in several associations attention to professionalism skills is the responsibility of the association and each new actuary is asked to attend and actively participate in a compulsory course. Different methods of delivery and assessment could be considered for several of these wider skills if they are to be encouraged. The need for actuaries to have practical work experience before they undertake certain roles in some associations is also a relevant factor.

In another session, the seminar participants discussed what contextual studies could be useful for actuaries. These included: Corporate Finance, Accounting, Law, Economics, Genetics, Medicine, Management, Demography and Social Policy. The key considerations here are firstly that the need for some of these studies will vary from actuary to actuary although some, like Economics, are core to both the IAA Education Guidelines and the Groupe Consultatif Core Syllabus. Secondly, the main purpose for studying in contextual areas is that actuaries need the ability to ask the right question, access data and understand the interpretation of the results. Actuaries do not need all the details, but they must be able to talk with specialists in these contextual areas.

In the United Kingdom the training requirements for actuaries for Fellowship qualification were revised for those entering the profession after June 30, 2004. The Institute and Faculty have addressed the need for educating actuaries with a business orientation in a number of different ways.

First, a student now has to take as one of the early stage assessments a Business Awareness module. This requires some Internet-based study, attendance at a two-day course and an Internet-based assessment after the course. The course looks at the business environment in which a student will be working, including the related challenges and how to tackle business-related problems. A business game is included as one of the activities. The module also addresses professionalism and the need for lifelong learning.

Secondly, each student has to take a double subject called Core Applications Concepts. This subject aims to help students understand how an actuary approaches problem solving in a generic sense. The need to understand the business context and look for appropriate business solutions is stressed. The student also has to pass an examination in Communications that has been a requirement in the United Kingdom since the 1994 examinations.

Thirdly, at the Specialist Technical Stage a student has to choose two subjects in which to specialize. These are chosen from a list and include traditional application areas such as life insurance, general insurance, pensions and investment. However, if a student has a qualification in another discipline, which the Education Committee considers is at an appropriate level, then an exemption may be given from one of these Specialist Technical subjects. Several students who have MBAs have used these as a qualification leading to exemption. This was felt by the education strategy design group as a more appropriate way of widening the examination structure to allow more room for business topics without going to the more difficult option of offering examinations through the profession in business areas.

The other key way in which the acquisition of business skills has been addressed is through the compulsory requirement for work experience during which time the actuarial student is gaining work-based skills. A three-year work experience period had been required in the Institute for many years, but the new scheme pays more attention to the outcomes and skills gained. Students are required to keep a logbook of work-based skills addressed. The framework for work-based skills has seven key dimensions: technical application of actuarial skills, judgement, professional and ethical, communication, commercial, information communications technology and management (personal and/or people).

Students are expected to have regular meetings, typically at six-month intervals, with their work-based skills supervisor and in each six-month period they are expected to plan to develop skills in at least one of these dimensions. Progress is reviewed by the supervisor at the end of each six-month period by discussion both in general terms and by using a review question that the students have been given to prepare as part of the preliminary work before the review session. By the time the student has qualified there should be evidence of skill development in all seven key dimensions. It is expected that for most students entering employment straight from university, that the time to acquire these skills will typically be three years. However, if the student has previous work experience, the time taken on work-based skills acquisition may be shorter. This process puts more responsibility on the employer in contributing to the qualification process. However, consultation with employers showed that the logbook that the profession required to see before qualification was linked to career development activity within the companies. Guidelines have been given as to typical skills coming under each of the seven key dimensions, but the employer is free to use any competency matrix that they already have with appropriate mapping. It is hoped that the logbook will help young actuaries become used to the process of development needs identification and evaluation and will be an important record to take forward into CPD/E regimes.

This paper has looked at the broad agreements that were reached in Berlin by representatives of actuarial associations around the world on business skills for actuaries and has also looked at how these ideas are developing in the United Kingdom. The final session in Berlin suggested that more emphasis on business skills might be put into education guidelines both in Europe and worldwide. These would refer to the need for actuaries to look at the following skills: communications, professionalism, business skills, project management and problem solving. The descriptions may differ, but the need to educate actuaries in a business context is one that is definitely being recognized. □

Progress is reviewed by the supervisor at the end of each six-month period by discussion both in general terms and by using a review question.

Dr. Elisabeth Goodwin was the Education and CPD director for the U.K. Actuarial profession until April 2005. She is now retired but undertakes some consultancy. She can be reached at lisgoodwin@btinternet.com.

Fertility Projections for Social Insurance Symposium at the SOA Annual Meeting

by Sari Harrel

The first "Fertility Projections for Social Insurance Symposium" was held on Nov. 14 to 15, 2005 as part of the Annual Meeting of the Society of Actuaries in New York City. The symposium originated from a call for papers (by the Committee on Social Security of the SOA) on fertility and immigration factors affecting social insurance projections. The purpose of the symposium was to discuss fertility rate projections and their relative importance compared to other assumptions for social insurance projections. The focus of the symposium was mainly on the United States and Canada; however, perspectives were also presented on the United Kingdom and the Czech Republic.

The panelists and audience included leading social insurance actuaries, students, academics, demographers and statisticians. Chief and deputy chief social insurance actuaries who presented were Stephen Goss, Chief Actuary of the U.S. Social Security Administration, Alice Wade, Deputy Chief Actuary for Long-Range Actuarial Estimates of the Social Security Administration; Jean-Claude Ménard; Chief Actuary of the Canada Pension Plan; Pierre Plamondon, Chief Actuary of the Québec Pension Plan; and Chris Daykin, Government Actuary of the U.K. Government Actuary's Department. The symposium comprised five sessions and covered historical overviews, projections, drivers, methodologies and alternative approaches to fertility rate projections.

The first session introduced attendees to a primer on fertility rates with a focus on experience in Canada and the United States and a comparison with other countries. The historical experience presented for Canada and the U.S. emphasized the significant declines in total fertility rates that have occurred in both countries since the baby boom to current levels of about 1.5 and 2.0 children per female, respectively. (The typical summary fertility rate index, the total fertility rate is the sum of the age-specific fertility rates experienced in a specific calendar year; this contrasts with a cohort fertility rate that refers to a cohort of females born in the same year.) In addition, both countries have seen increases in the age at motherhood as fertility rates for those above age 30 have risen. International comparisons of fertility rates showed that the U.S. has a relatively high fertility rate compared to other developed countries. The current projections were discussed for the Canada Pension Plan and the U.S. Old-Age, Survivors and Disability Insurance Program. Sensitivity tests performed on demographic and economic assumptions were discussed, and the resulting beneficiary dependency ratios and financial impacts were shown. The aim of these tests was to show the relative demographic and financial impacts of varying one assumption compared to another. Over the long term, fertility rates were highly significant.

The second session described in detail the drivers of fertility rates. A wave theory of fertility was explained, whereby small cohorts and large cohorts follow each other in succession and are driven by relative economic advantages or disadvantages. Material wealth of a cohort relative to its parents was explained as affecting marriage, fertility, female labor force participation and higher education. The historical shift in perception of children as being economic assets to being economic liabilities was noted as affecting fertility. Next, a comparison was presented of recent trends in fertility rates between Canada and the United States. Notable differences between the two countries include differences between teenage pregnancy rates, abortion rates, marriage versus common-law unions, religious observance and levels of unemployment. It was indicated that the majority of the difference in the total fertility rate is attributed to the much lower Canadian rates for women aged 15 to 29. Comparisons were also presented between foreign-born versus Canadian-born women, immigrant generations and ethno-racial groups. The increasing importance of immigration to Canada for its population growth was shown, as natural increase is projected to turn negative after the year 2020. This session ended with an analysis of the effect of childbearing age on Social Security projections in the United States. It was observed that the average age at first-time motherhood has increased in the United States and that this trend is present across racial groups and in other countries. In addition to causes already mentioned, another cause cited was the increased use of assisted reproductive technologies. It was also noted that the delay in childbearing could increase the generational period length, and thus old-age dependency ratios and finally, the financial costs to Social Security.

Projection methodologies were described next for social insurance schemes in Québec, the United States and the United Kingdom. The difficulty in projecting fertility rates was illustrated by actual versus expected experience for the United Kingdom. Approaches presented included a combination of run-off triangle techniques, analysis of underlying drivers and historical trends, projection of trends using interpolation to ultimate rates, comparisons with number of intended births, and birth parity modeling. The variability of projections was illustrated by deterministic variants and stochastic modeling. Methodologies were also explained in terms of their components, namely measurement, modeling, judgment and level of detail. One view expressed was that deterministic variants tend either to overstate or understate fertility for extended periods of time, and as such, a better way to incorporate variability would be by a model using a stochastic renewal process. Random scenarios generated by stochastic models without renewal processes were thought to have some of the same drawbacks as deterministic variants.

The fourth session covered alternative approaches, measurement and uncertainty for the future. Sources of uncertainty were identified as accuracy and reliability of data, types of drivers and relationships between them, and duration and shifts in trends. It was noted that uncertainty may also apply to population characteristics, ultimate fertility rates, and distributions of total and age-specific rates over time. An estimate was given of the total U.S. cohort fertility rates for females born in the 1980s as 2.15 per female. An illustrative example was given in the form of a case study of the U.S. Hispanic population and the associated sources of uncertainty. As well, current and alternative approaches to presenting uncertainty for social insurance projections were discussed. One approach discussed was based on the probability of birth order, that is, the probability of having a second birth given a first birth, and so on. Another presentation covered various models that have been proposed for fertility projections. It was noted that all developed countries have followed a similar development in fertility (the demographic transition) due to similar structural, cultural and technological changes.

The fifth and last session consisted of additional financial projections for the Canada Pension Plan followed by an open discussion between the panelists and the audience. Various topics were discussed through questions and answers. The results of a questionnaire handed out earlier in the symposium were also discussed. The questionnaire asked what the ultimate total fertility rate (TFR) might be for Canada and the United States, whether the probability distribution surrounding the value was balanced or skewed, and in what year the ultimate rate would be reached. The results indicated that the attendees thought that the current estimates of the chief actuaries of the SSA and the CPP were quite reasonable, with the average ultimate TFR surveyed of 1.94 (range of 1.6 to 2.1) and 1.69 (range of 1.4 to 2.0) for the U.S. and Canada, respectively. While for the U.S. the general feeling was that the TFR distribution was symmetric, for Canada two-thirds felt that the fertility distribution was more likely to be skewed high (a fatter tail to the right). A consensus was that the average time until the ultimate TFR would be achieved was about 10 years. Evaluations of the symposium and suggestions for future symposia regarding social insurance were also sought.

The questionnaire asked what the ultimate total fertility rate (TFR) might be for Canada and the United States, whether the probability distribution surrounding the value was balanced or skewed, and in what year the ultimate rate would be reached.

The symposium provided a great opportunity to share knowledge and exchange ideas about the fertility assumptions for social insurance projections. If you have any suggestions for future symposia or would just like to get involved with the Committee on Social Security, please contact Sam Gutterman at: *sam.gutterman@us.pwc.com*.

All of the presentations are available in .pdf format from the archived continuing education presentations/handouts page of the SOA's website: *http://handouts.soa.org/conted/cearchive/ce_archivedlist.htm*. The sessions were also audio-recorded, and both the presentations and recordings are available on CD-ROM for purchase from Netsymposium. Purchase information for the CD-ROMs of the Annual Meeting may be found at: *http://www.netsymposium.com/index.php?select=association&data=88*. ☐

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Life Insurance in China

by Synthia Kwan

This article provides an update on China's life insurance industry, with emphasis on international companies and issues.

Life Insurance in China

The potential of life insurance in China is huge.[1] China has adopted an open policy to foreign participation; international life insurance companies have been operating in China since 1992. From a state/regulatory perspective, life insurance is regarded as an important ingredient in promoting economic and regional development as well as growth and stability in the society.

Mr. Wu Dingfu, Chairman of the China Insurance Regulatory Commission (CIRC), has recently summarized the focus of direction in China's policy on insurance as follows:

1. Accelerate the pace of internalization, raise the opening of the industry to a new level.
2. Improve the industry's structure by: (a) promoting international participation in the major areas of insurance development, viz. pension, health, agriculture and liability insurance, (b) supporting domestic/foreign companies in business development in China's Central and Western regions, (c) encouraging domestic companies to form strategic partnerships with international companies.
3. Strengthen insurance regulation, raising the standard to international levels.
4. Ensure risk management as a safeguard to financial and insurance security in China.

New Mortality Table

A new life table was introduced in China in November, 2005 and an international symposium was held in early December in Beijing. This is the second experience life table in China; the first table was introduced in 1995, and was based on data from China Life from 1990 to 1993. Preparation work for the new life table started in August, 2003. Going forward, CIRC intends to update the life table every 10 years.

Compared to the old table, the new life table shows an increase in life expectancy, 4.8 years for retirement annuitants and 3.1 years for others. The new life table is based on experience data from six companies (China Life, Ping An, China Pacific, New China, TaiKang and AIA) that account for 98 percent of life insurance in force in China, thus representing a major improvement compared to the old table.

A technical implication of the new life table is a decrease in premium for protection products, and increase in premium for annuity and old-age insurance products. In practice, the change in premium is expected to be small as most insurance products now on the market that have a significant savings/investment component.

With the introduction of the new life table, CIRC has adopted a more open policy to insurance product pricing. Insurance companies can now determine their mortality basis in pricing and have more discretion in reflecting mortality differentials amongst different social groups (such as urban versus rural) and/or across geographical regions (such as east/coastal versus west). For reserving and solvency calculations, the new life table will

[1] According to a McKinsey report in October, China's share in the world life insurance market is 1.6 percent. In comparison, China accounts for 25 percent of the total population in the world.

become the regulatory standard to be used by all insurance companies.

Product Development

Universal life products were popular in China last year. This is partly attributed to the stock market's poor performance; as people look for better returns in other financial products. Participating products offered by some companies have also been selling well; in particular, the single premium endowment participating product makes up a considerable proportion in bancassurance sales.

Several companies have launched comprehensive products by packaging coverages such as term, critical illness, medical and personal accident into one product. With heightened concern about Asian flu, some companies have offered specific Asian flu policies, while other companies have offered such coverage as an enhancement under their existing products.

Embedded Value

EV has arrived in China. Insurers are required to file reports on 2005 embedded value to CIRC by July, 2006. Starting in 2007, annual filing on embedded value is required by April 30 of the following year. Supported by an actuarial task force and after a consultative process, CIRC published an "EV Compilation Guideline for Life Insurance" in September. After defining the three components of embedded value, viz. free surplus, required capital and insurance business value, the Guideline discusses: projection assumptions, risk discount rate, earnings rate, new and renewal business, expenses, taxation and legal considerations, expenses and inflation, mortality, lapse, morbidity rates, reinsurance and debts, financial options and guarantees, future premiums for flexible premium products, participating business, and asset valuation.

The EV reporting requirement by CIRC indicates that China's insurance market is moving toward a measurement of a sound, profitable and sustainable basis rather than a pure premium basis.

Standardization of Policy Provisions

Insurance companies and regulators have given much attention to the policy contract—focusing first on simplification and popularization of the language in specific provisions, then on standardization of the policy provisions in the entire contract.

Early in 2005, insurance companies took steps to simplify language used in insurance policies, making the contract provisions easier for applicants to understand. In November, CIRC issued guidelines on standardization of insurance policies. Insurance companies are required to comply with requirements relating to the content (illustrations are based on assumptions on investment returns for participating policies, etc.) as well as format (minimum font size, spacing of paragraphs) of the policy contract. Feedback from industry participants and the academic community about the guideline has generally been positive.

China has undertaken a review of its insurance law. CIRC is said to have prepared draft recommendations on revisions. The legislative process to revise the insurance law is expected to be completed by 2007.

Pension Insurance

With an aging demographic structure and substantial financial burdens on government social security, China has encouraged commercial participation in retirement arrangements for its working population. In May 2004, framework regulations were promulgated, giving rise to a new retirement industry, Enterprise Annuity (EA). Basically EA is a defined contribution plan offered on a voluntary basis by employers who have fulfilled their obligations under Tier 1 or Basic Old-Age Insurance, to their employees. There are some tax incentives for employers to offer EA plans to employees, but the rules are not very clear yet.

With an aging demographic structure and substantial financial burdens on government social security, China has encouraged commercial participation in retirement arrangements for its working population.

Insurance companies can participate in EA business; formal approval is required by applying to the Ministry of Labor and Social Securities for an EA provider license. CIRC has also promoted specific subsidiaries for pension insurance business and has approved three pension insurance companies so far. Of the four EA provider roles, insurance companies/pension insurance companies are eligible to apply for three—account administrator, trustee and investment management. For the remaining role of EA custodian, only banks are eligible to apply. In the first batch of EA licenses handed out in August 2005, two pension insurance companies were licensed as both trustee and investment manager, while four insurance companies were licensed as account administrator.

Employers are required to file their EA plans with the Ministry of Labor and Social Securities. The filing rules and procedures

continued on page 12

have not been announced yet and are expected soon. While technically no EA business has been written, companies have been active in developing clients and alliances with other providers. It is generally expected that EA will play an important role in China's insurance market in the next few years.

Market Share

As of October 2005, a total of 34 life insurance companies were operating in China. Table 1 summarizes the market shares for the top 20 companies. The market is still dominated by the three large domestic companies, with China Life capturing a 51 percent market share. Despite earlier excitement for Chinese companies to invest in the insurance industry, only a few have started operation; the newest is GW (Great-Wall) Life. In many cases, projects to form new domestic companies were closed due to shareholder and/or capital issues.

As of October 2005, the combined market share of foreign companies in China's total life insurance premium is just under 10 percent (about 3 percent if the huge policy purchased by the domestic partner from Generali is excluded; Generali jumped to fourth place in the market share league with this huge policy).

Table 1: Market Share (Top 20 Companies) in Life Insurance in China, October 2005

Rank	Company	Market Share
1	China Life	51.2%
2	Ping An Life	15.9%
3	Pacific Life	10.2%
4	Generalie-CNPC	6.7%
5	New China Life	5.3%
6	Tai Kang	4.5%
7	Tai Ping	1.9%
8	AIA	1.7%
9	Sino Life	0.8%
10	CITIC-Prudential	0.3%
11	AVIVA-COFCO	0.2%
12	Pacific-Aetna	0.2%
13	Manulife-Sinochem	0.2%
14	Min Sheng	0.2%
15	He Zhong Life	0.1%
16	AXA-Minmentals	0.1%
17	Aegon-CNOOC	0.1%
18	Allianz Dazhong	0.1%
19	China Life CMG	0.1%
20	New York-Haier	0.1%
Total market share for the Top 20 companies		99.7%
Total market share for other companies		0.3%
All companies		100.0%
Total premium in RMB million		303,728

It is said that several big domestic banks intend to enter the insurance industry. If so, there could be major implications to sales and market share, especially bancassurance (similar to many other countries, banks in China have profound distribution power; the big domestic banks are particularly strong in retail reach).

Foreign Participation

Currently, 23 foreign companies are participating in China's life insurance industry, as summarized in Table 2 below.

continued on page 14

Table 2: Foreign Life Insurance Companies in China

Company	Established[1]	Preparing/ Submitted[2]	Remark
1. Manulife	8	6	
2. Prudential	8	3	Registered capital increased to RMB 700 million
3. ING	8	3	
4. AIA	8	0	
5. AVIVA	5	3	
6. Generali	4	2	
7. Aegon	4	0	
8. Metlife	3	1	
9. AXA	3	3	
10. CIGNA	3	1	
11. Sun Life	3	1	Nanjing
12. New York Life	3	0	Qingdao
13. Standard Life	2	1	
14. Allianz	2	1	Domestic partner changed from Dazhong, a P&C insurer to CITIC
15. Skandia	2	0	Entered Shanghai in December
16. Cathay Life	1	1	
17. CMG	1	0	Sales of domestic shares being finalized
18. John Hancock	1	0	Manulife selling its stake in the JV
19. Nippon Life	1	0	
20. ACE	1	0	ACE is strategic partner of Huatai Life, domestic company
21. Samsung Life	1	0	
22. Great Eastern	0	1	Headquartered in Chongqing, said to be leveraging its domestic partner, a major real estate company in Chongqing
23. CNP	0	1	Domestic partner is China Post. The JV has been formed for some time without commencing operation

1 'Established' refers to the number of cities in which the company has set up branch offices.

2 'Preparing/Submitted' refers to the number of cities for which the company is preparing (with permission granted by CIRC) for entry or has submitted application for entry.

Above: One of the Sun Life Everbright Buildings in Tianjin, China.

Outlook for 2006

We'll end this article by including a top eight list for insurance industry development in 2006 from the Chinese press (the last one is more on property & casualty insurance):

1. State-owned enterprises to withdraw from domestic partnership of joint venture insurance companies. (A policy directive has been issued for state-owned enterprises to focus on their primary business and reduce or adjust their capital engagement in non-core businesses. Currently, the domestic partner of many joint venture life companies are state-owned enterprises with primary business in non-insurance industries. The implementation of the said policy directive may result in withdrawal/transfer on the part of the domestic partner. It may be difficult for the foreign partner to form an appropriate replacement partnership to fulfill the regulatory requirement and desired company growth in the short term).
2. Foreign companies to switch investment focus to existing insurance companies.
3 Regular premium products to become popular at the expense of single premium products.
4. Group business to compete on services (in addition to product and price).
5. Insurance companies to repair reputation on integrity (strategic restructuring and quality agency training seem inevitable).
6. Re-vamp of insurance intermediaries (regulators and the industry to create and promote a healthier environment for development).
7. Strengthening of solvency standards (the debate is to recognize it by either moving to an economic capital base or continuing to broaden and strengthen the existing factor-based standards).
8. Focus on liability insurance.

Author's Note: This article was written by Synthia Kwan with input from Genghui Wu and Smith Zou. ☐

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Every Seven Years ...

by Dr. Geraldine Kaye

You are often told that it is a good idea to move offices every seven years as it prevents rubbish from accumulating. I should have heeded this advice! I set GAAPS up in the early '90s, and after being in one place for almost 15 years, we have just completed our first office move.

We used to work in the trendy West End of London, very close to the infamous Piccadilly Circus. As a business decision, we thought a move to the City beneficial as it would mean being closer to many of our clients. The move, originally instigated because our old offices were under plans for renovation, meant a change to bright, white offices in the heart of the city, looking out at the great Gherkin.

Knowing that at some point we would need to move, I began sifting through my filing systems several years ago. The procedure in place was one that had seemed eminently sensible when it was suggested to me by my operations manager. That procedure was simply to make and file a copy of all documents going in and out of the office. At the time I knew that I had a large admin department and even though I was not entirely sure what they were all working on, my admin manager assured me that they were all needed.

As I started to check what was being filed, I discovered that the aforementioned procedure was being taken rather too literally, with take-away menus (received weekly) being beautifully copied and filed! The universal lessons that I learned from this were a) what is meant by 'an empire builder' and b) that if you are told that as Managing Director it is not appropriate for you to get involved in more junior work, it is a sure sign that you should! I think this lesson is applicable to anyone considering an executive role. Consequently my requirements for admin staff fell sharply, and I thought that my sifting had left me well placed for the move when the time came.

How to find new premises? The main criterion was to find a location that would maximize staff retention, and in reality, for us this meant a move to the city. After viewing a number of different possibilities, we found what we were looking for.

Having achieved this seemingly crucial goal, I soon realized that this was the first in the line of many. How to keep the same telephone number? Apparently this meant having to move within a two-block radius! Any further, and our telephone providers declared that the number needed to change. Phone problems were encountered because of our international offices and subsidiaries. For example, in South Africa, we had a phone line forwarded to UK offices. When we asked to transfer it, we discovered that they no longer forward numbers outside the country (presumably this was recently introduced as a fraud protection measure.) On advice, we deliberately delayed notifying our clients and candidates of our change of address, as it was hailed that no move ever goes smoothly. How true! Despite having everything in writing from the phone company, they were still unable to provide us with a fax line for over a month.

There were also, of course, health and safety issues to deal with in compliance with the considerable workplace legislation. I found that there are numerous training courses available to learn about occupational safety and health.

From stationery and filing cabinets to dishwashers and sentimental memoirs—it all has to be packed. But do remember that you have to check that everything has been actually taken by the removal people—when we were looking around for the last time, we found a box that had been left behind! At the same time, I saw a lovely joke which said that people packing to move house throw away so much rubbish that it negates the need for a larger house! People say moving house is tough, but believe me, moving offices is tougher!

It has taken some time and it has definitely been a challenge, but we are now settled and in full working swing. I am proud of the new offices, the location, and above all, the team who has worked with me. Moving offices is beneficial in that it allows you to highlight any cracks in your working system and clearly once these are identified, it allows the company to run a lot more efficiently! However early you start planning, because of negotiations constantly taking place, you invariably do end up in a rush.

continued on page 17

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An Eclectic Gathering

by Nian-Chih Yang and John Robinson

On the evening of November 15, the International Section held a reception at the Firebird Russian Restaurant as a session at the SOA 2005 Annual Meeting in New York City. Before the event, our editor Cathy Lyn invited me to tell the tale about the gathering. I was noncommittal and hoped she would write it herself. As it turned out, Cathy fell ill and could not attend the reception. She probably caught a chill the night before when she joined us to walk around midtown to see the nightlife after the Chinese Actuarial Club's banquet dinner. The duty fell to me. I could only provide Cathy with this account based on the mental notes I took at the Firebird.

At 5 p.m., about 20 people gathered in the Hilton lobby. The SOA staff partner for the International Section, Martha Sikaras, led the group through the busy streets with crowds of office workers going home. There was a very light drizzle—it had rained all afternoon—and there were puddles along the way. It did not take us too long to start imitating the other pedestrians zigzagging and rushing to beat the light changes at the intersections. However, we still could not match the fast pace of the locals.

Our reception was in a medium-sized room, with heavy curtains and large golden tassels. Padded benches/sofas hugged the whole room. Gold-tinted paintings of young dancing girls hung on all the walls. When we stepped into the reception room, a gentleman was already playing the piano. He continued entertaining us for the full 100 minutes. The waiters were in red tops, black pants and high boots, the typical Russian attire. The waitresses were in starched white shirts.

There was a long line of bottles with different brands of vodka at the bar and one bartender. Since there were only a few of us, everyone got their drinks without waiting. The crowd's favorite was the house vodka. It was a mixture of herbs, honey and vodka that been chilled overnight, according to the bartender. Five different kinds of appetizers were served. One of the appetizers was shrimp cocktail, piled high on trays served by the waiters circling the room.

Let me tell you about who was in the room that night.

Bill Horbatt, from New Jersey, who succeeds Marc Slutzky as the new chairman of the International Section council was our host.

Jennifer is an actuary from Texas. She currently does pricing for products sold in Korea, Japan and several other countries in Asia and also Central and South America. She has also priced products for the European market.

One regulator from Britain was there. He and another attendee discussed the pros and cons of federal versus state-based insurance regulation.

There was a recruiter who spoke Russian. Despite her professed love for vodka, she was careful not to have any alcohol because she was expecting.

Yoshihisa was the lone Japanese actuary. He works for the only domestic Japanese reinsurer. With his assistance, I was able to recognize his family name as "Stone River" from his business card.

Steve is the marketing actuary for an international reinsurer. He was explaining to the recruiter that he had no problem paying an expatriate up to 10 times what he paid the locals, but the highly compensated employee would have to quickly justify his/her worth.

There was also a lady who spoke fluent Japanese, worked in Japan for six years and recently returned to the United States. When she talked to the Japanese actuary, she spoke only Japanese.

A trim, gray-haired gentleman told stories of how he led his U.S. employer's marketing drive into many East Asian insurance markets. He has high admiration for the Korean people, noting that they are able to prosper through hard work without many natural resources.

One man was happy because of all the different choices of vodka available. To measure his own sobriety he counted from one to 10 and backward in Hungarian, Yiddish, Chinese, Korean and Japanese. Regardless of the tests, he must have been just over the limit: after we left the restaurant, he had to go back for his umbrella.

Another SOA-related group was having a party in the same restaurant. A couple from that party came into our room and stood by the heavy curtain, checking out our event. I invited them to sample the vodka, but they declined.

Another gentleman used to work at a New York City based company. Last year he moved with his department when it was relocated to North Carolina. He said he had always wanted to come to this restaurant and finally got the chance to do so.

A third gentleman had been in Southeast Asia for many years. He worked in Japan for six years, learned to speak the language and married a lady from the Philippines. He wanted to find another employment opportunity to go back to Asia. He said when he was visiting his wife's family in Manila, the travel time from their East Coast home to Tokyo was about the same as from Tokyo to Manila. Since the United States has a better transportation infrastructure, people can travel much faster and more easily here.

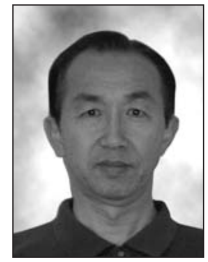
My friend John from Jamaica has worked in two countries and in five different product lines. He now works in the Midwest. He has an air of Sidney Poitier.

One group included two actuaries from Poland, one from Australia, one from England and one from Jamaica. The Englishman offered an interesting alternative perspective on the Equitable debacle, disagreeing with the court's decision. The actuaries from Poland and Jamaica discussed the up-coming World Cup (soccer). The Australian gave the Jamaican a few travel tips for his forthcoming trip to Melbourne.

I joined the International Section just for personal interest. My employment has nothing to do with international business. It was rather interesting that even though the night was supposed to be just for fun, many topics of conversation in the room still revolved around the insurance markets and products. I found that much of the same information at various levels of detail was presented the next morning in Session 124 on "Product Innovation Around the World."

Eight of us stayed until the very end. After giving the pianist a big round of applause, we left as a group. We took a slightly different path on our walk back to the Hilton. I, the aspiring tour guide, pointed out the fire station at 48th Street and 8th Avenue—more than 10 firemen from this station perished on 9/11. As we passed Broadway at 50th Street, we saw all the neon signs surrounding Times Square to our right, and the single lighted time/temperature sign on top of the old MONY building to the left. I told the group the story of the 1968 hit song "MONY, MONY"—how the songwriter got inspiration from the sign. (*http://www.bobshannon.com/stories/Mony2.htm*)

I hope that I and my seven new friends will be walking together again along the Magnificent Mile when the Annual Meeting goes to Chicago in 2006. ☐



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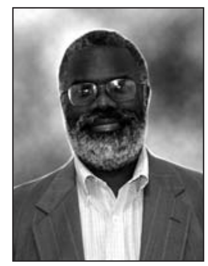

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Every Seven Years | from page 15

However, I do have to say that the move gave me both reason and opportunity to contact a lot of people that I hadn't spoken to for a long time; I was able to notify them of our change of address and introduce them to our lovely new offices! My advice to anyone preparing such a move, would of course be to plan thoroughly, but just don't be surprised when unpredictable hiccups arise! I myself have learned a huge amount in the past few months and hopefully I will be much more prepared for a move in 2012!

I have definitely found that when it comes down to it, reacting rather than planning is what pulls you through. In the operations management industry, they like to call it: "last minute fire-fighting" and that is exactly what it is: you do everything possible to prevent a fire, but if one does break out, you need to be ready to overcome it. Reacting to unforeseen situations and the endless changes that a move entails allows you to see the hidden talent and ability in your staff.

The move has consolidated us and has engendered the spirit of regeneration of our company's fortunes. Since the move, our productivity has doubled, and the future is looking bright. ☐

Brazil Update

by Ronald Poon-Affat

Editor's Note: The opinions expressed in this article are personal and do not necessarily reflect those of the author's employer.

Brazil is considered to be one of the major economic powerhouses within the emerging markets. Its economy is compared with Russia, India and China; together these four make up the BRIC countries. Brazil is presently the 11th largest economy in the world and is expected to be again listed within the top 10 during the next two years.

Facts and Figures

The first box (below) shows the main financial indicators relating to the exchange rate, stock market indices, trade surplus and risk classification. The second box shows up-to-date GDP and population figures. The first graph shows the monthly development in the main stock index (over 20 percent this year and presently at its all-time high). The second graph shows the development of the short-term interest rates (annualized) … and yes, they are that high! The present rate is 18 percent per annum, but the general outlook is that rates will decline to 16.1 percent, 14.7 percent and 13.7 percent at the end of 2006, 2007 and 2008 respectively. Inflation is expected to run at around 5 percent, thus providing very high real rates.

Indicators	Nov-05	2004 YE
Exchange Rate	R$ 2.21	R$ 2.65
Ibovespa (Index)	31.916	26.196
IBX	10.195	7.796
Trade Surplus (Million)	US$ 40.440	US$ 33.664
Brazil Rating (Moody's)	Ba3	B1
Brazil Risk (J.P. Morgan)	342	382

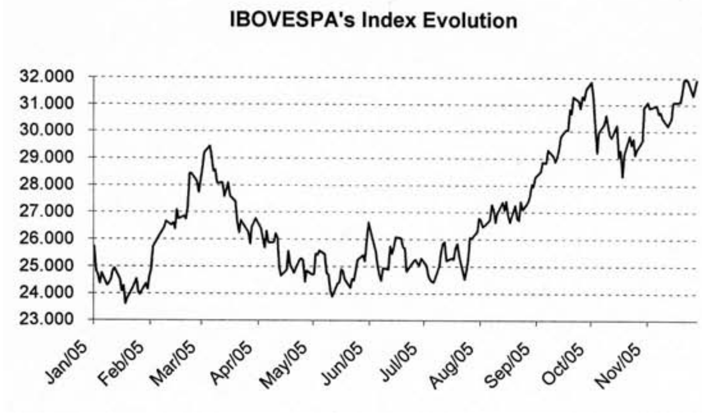
BRAZIL'S PROFILE	
GDP (purchasing power parity)	US$ 1,492 trillion
GDP per capita (purchasing power parity)	US$ 8,100
GDP growth rate	5.1%
Population	186.1 million

Major Events

Let us first start off with the major event that never happened, the opening of the Brazilian reinsurance market. Brazil is in the company of countries like Cuba, North Korea, Iraq and Iran when one considers which countries still have a monopoly on reinsurance. The promise of the market opening (always within the next two years) reached a high point around 1995, but it never was realized. Even though the ruling party at the time (PSDB whose leader was Fernando Henrique Cardoso) very much wanted this to happen, the opposition (PT, the Workers Party, which is now in power) was always able to successfully block the opening. Of course when PT assumed power in 2002, the opening was not at the top of their agenda. Brazil is presently in the midst of a torrid political scandal that includes serious allegations of corruption. This scandal includes the local reinsurance company (IRB) and this may be the most significant event that may force the opening of the market. My best guess (and this is a very personal view) is that this opening depends on who wins the presidential elections in October 2006. If PT wins the election, then they will continue with their plan of opening the market and it may open as early as 2007. If PT loses (and political scientists expect that PT will lose), then the new government will need to appoint a new team to be responsible for the opening and this could be delayed until 2008. In any event, whomever wins, there is now the political will of both major parties for opening the reinsurance market. It's not a matter of if, but when, the reinsurance market will open.

Exit of Many Players

In spite of globalization and the fact that Brazil is definitely embracing all that the world has to offer, as far as insurance goes Brazil is quite unique as many foreign companies have discovered. Over the last 24 months, we have seen a significant reduction of many multinational's insurance portfolios. The major insurance transactions include:



ABN Amro	Sold life, pensions and P&C company (Real Seguros) to Tokyo Marine. Exited Brazil.
AGF/Allianz	Sold life and pensions portfolio to local company, Itau. Still writes P&C and health.
AXA	Sold life and P&C company to local company, Porto Seguros. Exited Brazil.
BBV	Sold life and pensions portfolio to local company, Bradesco. Exited Brazil.
Canada Life	Sold life and pensions portfolio to Icatu-Hartford (author's company). Exited Brazil.
CIGNA	Sold life and pensions portfolio to AIG/Unibanco and their health portfolio to a local company (AMIL). Exited Brazil.
CitiInsurance	Sold portfolio to MetLife (worldwide deal with the exception of Mexico)
Combined Insurance	Exited Brazil.
Generali	Sold health portfolio to HSBC. Still writes life and P&C.
HSBC	Sold health portfolio to Sul America/ING. Sold its motor portfolio to Hannover.
Nationwide	Sold pensions portfolio to Icatu-Hartford, life portfolio had a management buy out. Exited Brazil.
Zurich	Sold life and pensions portfolio to MetLife. Still writing P&C.

It has also been reported in an influential magazine (*Veja*) that ING will be selling its interests in Sul America to a private equity group. However the respective groups are not commenting further on this transaction.

While each of these exits will have their own particular reasons (negative profitability, difficulty in establishing distribution channels, unpredictable regulation especially in the case of health, closed reinsurance market, lack of underwriting professionalism within the market, transfer of resources to China and India), it does show a worrying trend. In addition to which, until four years ago there were around 16 reinsurers which had representative offices (author used to represent Gen Re Life & Health). Now there are only five.

Brazil is still dominated by very few Insurance companies. The four major players, Bradesco, Sul America, Porto Seguros and Itau account for 51 percent of the market share. Another way of looking at Brazil is the distribution of insurance between those companies that have a banking distribution channel (62 percent) and those that don't, the independent companies (38 percent).

Change in Pensions Legislation

During 2005, legislation was changed to make investing in private pensions one of the most attractive investment options. A tax benefit always existed that made up to 12 percent of clients' annual taxable revenues, which was eligible for tax credits when applied to a personal private pension fund.

The change that was made was that clients can now choose under which tax regime they would like to be classified in the event that they choose to withdraw funds before vesting. The first (and new option) allows clients to pay a declining tax penalty that starts off at 35 percent in the first year and then gradually declines to 10 percent after 10 years. Please bear in mind that the highest tax rate applied to income is 27.5 percent.

continued on page 20

Brazil is still dominated by very few Insurance companies. The four major players, Bradesco, Sul America, Porto Seguros and Itau account for 51 percent of the market share.

Tax liability declining rate	Years after inception
35 percent	First two years
30 percent	2 - 4
25 percent	4 - 6
20 percent	6 - 8
15 percent	8 - 10
10 percent	> 10

By choosing the "declining tax table under the 1st option" clients are allowed to pay income tax under a declining tax rate schedule. Therefore for long-term investors, they can get an initial tax credit of 27.5 percent and then pay a tax penalty of only 10 percent after 10 years. For a short-term investor, this first option is not attractive since if withdrawal is made in the first four years, the tax penalty would exceed the initial tax credit (27.5 percent). The second tax option that is referred to as the "progressive tax table" was always in place: it basically reverses the tax credit upon withdrawal, i.e., if you received a tax credit of 27.5 percent (highest tax bracket) then you would be penalized for this exact tax credit upon early withdrawal before vesting.

Other Legislative Changes

There were two major changes that affected the life market. First, the elimination of the 'any occupation' disability rider. The regulators have suggested that the market should consider offering replacements of either an 'own occupation' disability (which I think is a really bad idea) or a benefit that is payable contingent upon the certain loss of Activities of Daily Living functions. Many players are either thinking about completely canceling all disability riders or offering a Critical Illness type of policy.

The second change was the elimination of flat unit-rate premium structures for group life schemes. Now companies will have to offer premium rates that are in increasing five-year age bands. These two changes demonstrate how the Brazilian regulators are prone to decide what's best for the market rather than letting brokers/consumers decide for themselves.

Listing on the Ibovespa

Porto Seguros is the only insurance company to get listed on the local stock market. It now has 28 percent of its shares on the stock market. It listed on November 2004 at R$18.75 and as of Dec. 8, 2005, it was quoted at R$25: a 33 percent increase. It should be noted that the Ibovespa increased 35 percent during this same period. Even though the Ibovespa is at its historical high, when comparing price to book value, the *Economist* magazine confirms that Brazil is still the cheapest stock market amongst the major emerging markets. Porto Seguros has a market cap of US$854 million, a PE of 9.98 and an ROE of 17.43 percent. It enjoys coverage from five major analysts, including Bradesco, CSFB, Pactual, Safra and UBS. Porto Seguros' portfolio consists of 63 percent auto, 16 percent health and 6 percent life.

Opportunities in Brazil

The main opportunities include products that allow companies to earn significant interest spread (capitalization business and defined benefit pensions products) or those products that can be sold on a mass-marketing basis in large volumes: this will almost always imply a strategic alliance with a bank or an institution that has developed a private-label affinity card for its clientele.

Health insurance is very problematic, but there are companies who are only selling group health products and they are making money. The sale of individual health products is very complicated, since terms and conditions and price increases are strictly controlled by government agencies.

The Private Individual Pension market (PGBL, VGBL) is a very attractive niche (no guarantees to the client), but please bear in mind that it provides about a 1 percent margin to cover fixed expenses so one needs to get up to at least R$1.5 billion in reserves to start making money. More so, the expenses and effort associated with getting to R$1.5 billion of PGBL reserves should not be underestimated. ☐

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SOA International Experience Study Update

New Experience Study "Tool" Available

by Ronora Stryker and Bill Horbatt

The SOA has developed a new "tool" using Microsoft Access/Excel for international actuaries to conduct mortality and persistency studies in conjunction with the SOA's international experience study initiative. Professionally programmed, this new tool facilitates the work of international actuaries.

- Company policy data, contained in an Access file, is easily input into the tool.
- The tool helps the actuary validate the quality of company data.
- The tool outputs persistency study and mortality studies in Excel spreadsheets.
- Data can be subdivided into meaningful categories for either company or international experience study purposes.

The tool was "beta" tested in Argentina, Brazil, Italy and Poland during the summer of 2005 and the first production version is now available (free of charge) to actuaries participating in the SOA's international experience study. Comments made by users include:

> "The tool was even able to find a few inconsistencies we had in the original data. The graphs and tables output looked very useful; we were able to compare it with the tables we had developed last year."

> "In our opinion, the interaction with Excel spreadsheets makes the tool practical and easy to use, and the validation screen makes it safe."

The SOA intends to assist local actuaries conduct experience studies during the winter of 2006 in:

- Argentina
- Brazil
- Chile
- Guatemala
- Mexico
- Poland
- South Korea
- Taiwan

More countries will be added to the experience study as additional contributing companies are recruited. Please contact Ronora Stryker (*rstryker@soa.org*) or Bill Horbatt (*Horbatt@ActuarialConsortium.com*) for more information on either the SOA's international experience study or the new IES tool. Additional information about the initiative can also be found on the SOA Web site at: *http://www.soa.org/ccm/content/areas-of-practice/life-insurance/experience-studies/2004-intl-exp-survey-report/* ☐

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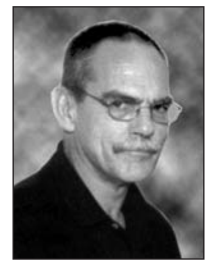

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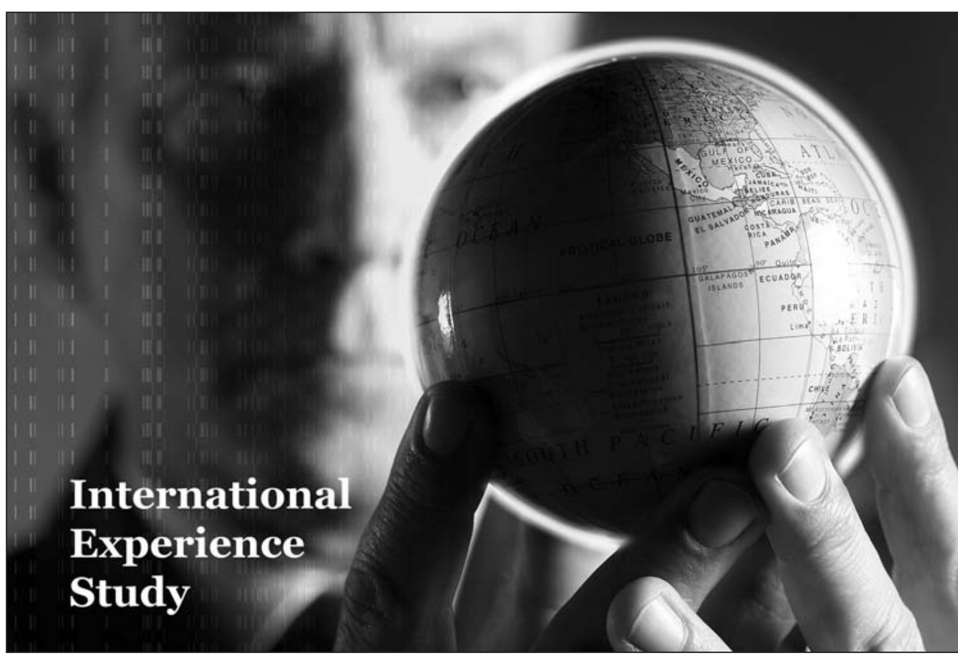


"Trust" in North American Qualified Retirement Plans

by Leslie John Lohmann

English law is not worldwide. An obvious statement, perhaps, but much ignored in the field of retirement plans. In fact, the importance of trust law is pretty much ignored in North America where trusts form the primary vehicles of delivering qualified retirement plan benefits. It is also ignored, to their own peril, in other countries when comparing their own retirement systems against the systems in countries that follow English legal tradition.

First, in order to avoid sophisticated arguments about the topic; a retirement plan is the systematic provision of money benefits at or after retirement. A pension plan is the systematic provision of an annuity following retirement. ERISA requires all qualified retirement plans to be pension plans; benefits must be defined in terms of annuities. Canada's laws are similar. The methods and vehicles used to provide the benefits at or after retirement are not retirement plans.

In Japan, most private plans are not pension plans. They are retirement plans: they systematically provide money (a lump sum) at or after retirement. Externally funded retirement plans must provide a roughly equivalent annuity giving them pension qualities, but the benefit form itself is defined as a lump sum.

Without additional argument, I will assert that many plans (called pension plans) sold today in North America are not even retirement plans. Single Premium Deferred Annuities have seldom been sold for the guaranteed annuity available at maturity; fewer have even been held to maturity. No defined contribution plan, regardless of qualification, is a pension plan. Prior to strict legislation limiting the owner's access to his/her own money, they were not even retirement plans. Japan also limits the rights of owners of defined contribution retirement plans to have access to their own money prior to a predefined older age, artificially changing a thrift plan to a retirement plan.

Returning to the subject, qualified North American retirement plans use the legal concept of a trust in order to make the plan sponsor's contributions to the plan complete for tax purposes and to assure the members that contributions once made cannot be taken back "until all the liabilities of the trust have been satisfied." This last requirement of a trust has caused enormous headaches due to sponsors' desire to use (or take) plan surplus.

Note the traditional use of the word contributions. Along with the words member and sponsor, these words have no employment meaning outside the legal domain of trusts.

While we call these vehicles funds, they are not—they are trusts. The trust, in order to handle the accumulation of funds in excess of immediate cash flow needs to the beneficiaries of the trust (the members), establishes a fund. Other than being the grantor, the plan sponsor has no legal relationship to the fund, not even when management provides most of the trustees, as is often the case.

Japan, until recently, achieved a similar result without the need to resort to English legal tradition—the employer contracted with a provider (usually an insurance company or a trust bank) to buy a product that required premiums and, in return, promised benefits to the participants. Unlike insured benefits, however, the insurer guaranteed nothing beyond the accumulated premiums to pay those benefits. In a sense, the insurance product is a fund. Japanese sponsors also have a small probability of getting at any plan surplus—but for different legalities.

And Japan, like North America, tends to call the money accumulated in these products pension funds.

What are the liabilities? Whose liabilities are they?

In Japan, the issue rests on whether the plan sponsor has included the benefits expected from the purchased insurance product in the Rules of Employment—the working regulations or, also, the work rules.

Work rules have an appearance of company policy as used by North American companies. Unlike the United States (and, to a lesser degree, Canada), these rules are contractual. When the company maintains a retirement plan that is a Book Reserve System plan—a plan funded on the balance sheet (North Americans culturally consider these unfunded), a portion of the future promised benefit, already earned and accrued, has priority in corporate insolvency. When the company has purchased an insurance product and the rules of employment still refer to the benefits of the retirement allowance plan, the rules in insolvency are murkier. When the rules only refer to the purchased contract, it is clearer that the benefits promised by the purchased plan are not benefits promised by the company. Most companies behave as if none of these promised future benefits would be honored in corporate insolvency if not already funded by the purchased product regardless of what the work rules say.

As mentioned, in North America, especially in the United States, company policy is not contractual. The protections attempted by ERISA were, and are being, enacted precisely to mitigate the problems arising from the failure of a plan sponsor to fully honor the apparent promises of earned and accrued funds, yet unfunded benefits not yet paid from the trust. Benefits to be earned in the future or increases in benefits in the future that have already been accrued due to the operation of the formula (final pay plans) are totally outside the scope of these protections.[1]

North American trusts, having the primary purpose of protecting the beneficiaries of the trust, also protect the grantor of the trust—the plan sponsor. To the extent permitted by law, the grantor can decide to stop funding the trust at any time without any residual liabilities. In the absence of any laws, the grantor could pay whatever (s)he wanted to the trust.[2] None of non-bargaining based benefits are contractual in a typical qualified retirement plan. Those benefits that can be met by already committed funds must be paid, since the benefits are the most important obligation of the trust.

An interesting decision recently came up in Canada that reemphasizes the legal separation of the sponsor from the trust.

The basic question explored, in my words, was, does the sponsor have an obligation to indemnify the trust from all risks, including theft? The particular facts were a situation where the trust had been robbed and the plan members sought to indemnify their position by attaching the surviving assets of the plan sponsor who was in receivership. The court found against the members; to the extent that the employer had funded the plan in accordance with law and the losses were not related to the investment performance of the assets, the sponsor did not have a duty to the members of the plan that exceeded the duty to the creditors.

The article describing the ruling in the Toronto newspaper, the *Globe and Mail*, stated, "And as all good insolvency lawyers know, pension trusts are supposed to trump even the most sacrosanct of secured creditors."[3] Once again reaffirming the advantages of little knowledge.

While such a finding is infuriating, it reflects the characteristics of trusts. The promises of a trust are not the promises of the grantor, even when those promises appear to be related to pay for performance and the grantor of the trust is the employer. In Japan as in North America, retirement benefits are not pay for performance, regardless of how employees feel about that or how much the accountants want a liability described in those terms to appear on the balance sheet.

continued on page 24

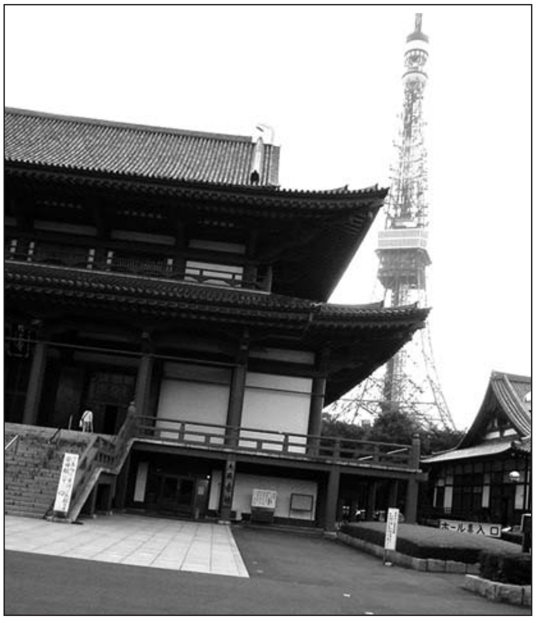
The promises of a trust are not the promises of the grantor, even when those promises appear to be related to pay for performance

1 This forms the basis of my objections to the rules of IAS 19 that require balance sheet recognition of the liability due to increases in the accrued benefits based on future increases in pay.

2 Pre-ERISA funding rules arose from the desire of companies to get a tax deduction for the obvious business expense incurred in providing retirement benefits.

3 "Technically, pension funds don't really exist: ruling," *The Globe and Mail*, 12/14/2005.

"Trust" ... | from page 23



In Japan, I have regularly emphasized that the most important shortcoming of retirement plan security both here (Japan) and in North America is the failure to amend corporate insolvency laws to recognize the belief of the public that retirement benefits are deferred pay as summarized by the accountants:

"The Board's conclusions in this Statement derive from the basic idea that a defined benefit pension is an exchange between the employer and the employee. In exchange for services provided by the employee, the employer promises to provide, in addition to current wages and other benefits, an amount of retirement income. It follows from that basic view that pension benefits are not gratuities, but instead are part of an employee's compensation, and since payment is deferred, the pension is a type of deferred compensation. It also follows that the employer's obligation for that compensation is incurred when the services are rendered."[4]

My Japanese colleagues assured me that getting the Justice Ministry involved would take just too much political capital. Many admire the now discredited (in some camps) PBGC, not realizing that Japanese law, not permitting the formation of trusts, does not have the same kind of social obligation. If the Japanese wanted to insure unfunded benefits, products would be developed to do so.

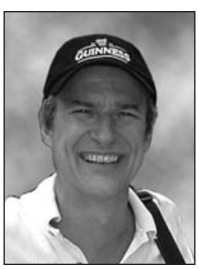
In conclusion, it is precisely the vehicle of the trust, derived from English law, that makes the establishment of a social guarantee of the promises contained in a trust both reasonable and necessary. A social guarantee is not necessary where an employer is unable to assign the risks of future benefits to a non-related third party—a trust. Japan, in particular, does not need a social guarantor of private retirement plan benefits.

If the law in every jurisdiction where defined benefit plans are permitted would be the same as the basic idea asserted by the accountants, promised benefits would be more secure and the PBGC would not be in crisis. Japan, not having a legal tradition that permits trusts, needs only two baby steps to significantly improve the security of defined benefit "promises." They are:

1. Require the retirement plan promise to be included as a promise of deferred pay in the working regulations as part of the contractual relationship.
2. Improve the position of the deferred pay represented by these promises in corporate insolvency to the same position as all earned, but unpaid, salary.

Western jurisdictions that follow English legal tradition simply need to redefine defined-benefit retirement benefits as pay, earned and unpaid, putting the employer first in line to meet those promises, then the trust, then society. Of course, the employee would be first in line at insolvency.

Making those changes would suddenly make the opinions of employees, the accountants and the members of the plan mentioned in the *Globe and Mail* article align with the actual law. ☐



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4 Financial Accounting Standards Board Statement of Financial Accounting Standard No. 87, Paragraph 79.

The Actuarial Profession

Announcing the launch of a new actuarial journal

The Faculty of Actuaries and the Institute of Actuaries are launching a new international actuarial research journal this year. ***The Annals of Actuarial Science*** will publish research papers in any area of actuarial science. It will be published twice yearly; in the spring and the autumn. All papers will be subject to a rigorous process of peer-review.

The UK actuarial profession will continue to publish the *British Actuarial Journal* which will contain the papers presented to sessional meetings of the Faculty and Institute along with transcripts of the discussions and debates.

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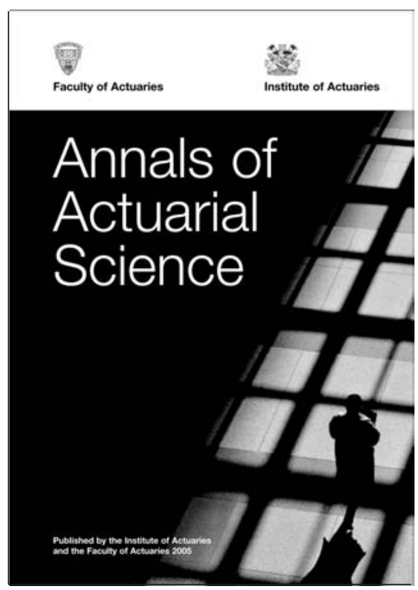


Social Security Systems in the English-Speaking Caribbean

by Derek M. Osbourne

The Caribbean is comprised of islands and countries that are in or border the Caribbean Sea. These countries and islands are located to the south east of Florida, USA, and to the north of Venezuela, South America. They are organized into 25 territories including sovereign states and overseas departments/dependencies of Great Britain, France and the Netherlands.

Sixteen of the English-speaking countries have social security systems that are known as either National Insurance or Social Security Schemes. These systems range in size from 1,600 contributors and 283 pensioners to 326,000 contributors and 80,000 pensioners and provide financial support through various types of benefits, pensions and lump sum grants to current and former workers and self-employed persons. Protection for dependants is also provided by way of survivors' benefits that may be paid following the death of an insured person. The systems are similar in design with each having its own governance and administrative structures, contribution and benefit rules and a mandate to provide various social benefits to its residents partial. These social security programs, therefore, touch the lives of the majority of the region's 6.2 million people.

The benefits offered by most systems are:

Short-term benefits: Sickness, Maternity, Funeral.

Long-term benefits (pensions): Old-age/Retirement, Invalidity, Survivors.

Employment injury benefits: Injury, Medical Care, Disablement, Death and Funeral.

The two main short-term benefits are income replacement in nature and are paid during periods of sickness and maternity. Two single-sum payments are also usually offered—maternity grant paid following the delivery of a live baby, and funeral grant paid following the death of an insured person or, in some cases, a near relative.

Pensions that fall under the long-term benefits or pensions category are defined benefit pensions based on final average insured wages and the number of contributions that were made. For 30 to 35 years of contributions, pensions range from 50 percent to 65 percent of final average insurable wages. All systems have a minimum pension ensuring a certain basic standard of living to all pensioners. Where the insured fails to meet the minimum contribution requirements for a pension, most schemes make a lump sum payment.

Employment injury benefits could be temporary or permanent, total or partial, and in most instances are very similar to the short-term and long-term benefits described earlier. However, the payment of employment injury benefits is restricted to cases where an accident has occurred, or a disease has developed, in the course of employment.

Although many schemes and governments are now considering them, unemployment benefits are only offered in Barbados. Many schemes also pay assistance or non-contributory pensions to the elderly and, in some cases, invalids and survivors, whose incomes are low.

Although the benefits packages offered by Caribbean social security schemes are more similar than they are different, there is wide variance in contribution rates. As shown in Figure 1, combined employer-employee contribution rates in December 2005 ranged from 5 percent in Jamaica to 17¼ percent in Barbados. For most systems, these rates have existed since inception. The insured wages of each system are limited by a wage ceiling that ranges from 1.3 to 3.4 times average insured earnings.

During 2003, social security contributions totalling US$650 million were made by and on behalf of an estimated 1.2 million workers and self-employed persons, and approximately US$450 million was paid out in various benefits and pensions. An estimated 260,000 people received regular monthly or fortnightly pension payments.

With contribution rates initially set to produce more revenue than required to meet expenditure in early years, all schemes have enjoyed cash flow surpluses each year and thus have built up large pools of funds. As at the end of 2003, combined social security reserves totalled US$5.9 billion or 19 percent of regional GDP. These funds have been invested in various public and private sector instruments, both locally and throughout the region, expanding the pool of funds available for investment, facilitating the improvement of physical and other infrastructure, and spurring the development of local economies.

In addition to the collection of contributions, adjudication and payment of benefits, maintenance of wage records and investment of funds, national insurance and social security schemes issue unique personal and employer numbers that have become a respected national identifier in most countries. Also, the extensive wage and employment information gathered is a useful source of labor market information that is used for tracking changes in employment patterns, wages and worker mobility.

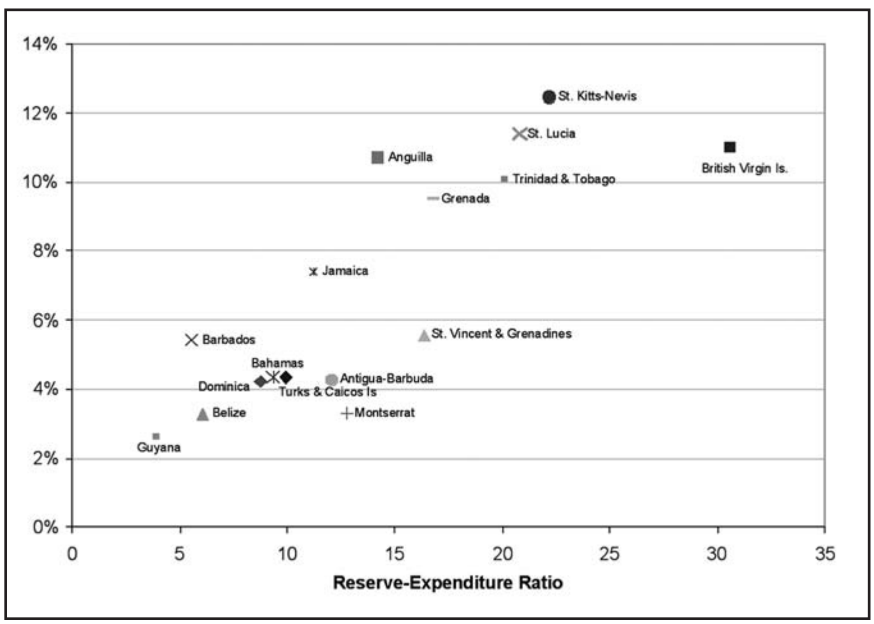
For decades, Caribbean people have left their homeland to reside and work elsewhere within and outside the region, and quite often may not have made sufficient contributions to qualify for benefits in one or more countries.

Figure 1: Country & Social Security Scheme Data

	Population (in 000's)	GDP (millions of US$'s)	Total Cont. Rate	Benefits as % of GDP	Reserves as % of GDP
Anguilla	12	92	10.0%	1.7%	45.0%
Antigua-Barbuda	70	744	8.0%	1.7%	26.4%
Bahamas	320	5,257	8.8%	2.0%	23.3%
Barbados	270	2,702	17.3%	5.0%	30.7%
Belize	275	963	8.0%	1.7%	14.7%
Bristish Virgin Is.	24	848	8.5%	0.5%	23.6%
Dominica	71	214	9.8%	4.3%	44.3%
Grenada	104	414	9.0%	1.6%	34.6%
Guyana	740	731	13.0%	3.3%	15.4%
Jamaica	2,640	7,353	5.0%	0.4%	5.7%
Montserrat	5	35	9.0%	1.6%	34.3%
St. Kitts-Nevis	48	312	11.0%	2.5%	73.1%
St. Lucia	160	693	10.0%	1.5%	39.8%
St. Vincent	110	311	6.0%	1.6%	33.4%
Trinidad & Tobago	1,280	10,831	8.7%	0.6%	14.2%
Turks & Caicos Is.	21	251	8.0%	1.1%	22.0%

Note: SS contribution rates – December 2005. All other data relate to 2003.

Figure 2: Comparative Current Financial Status, 2003



Therefore, to avoid gaps in benefit protection for such persons, two regional social security reciprocal agreements are in place. With these agreements, mobile workers are protected wherever they work, and where contributions in a particular country are not sufficient to qualify for a pension, contributions made in

continued on page 39

Recent Changes to U.K. Pensions Legislation

by Paul Geeson

Recent years have seen pensions rise steadily up the political agenda in the United Kingdom. The trend started in the 1990s with the collapse of the Mirror Group Pension Scheme, when it emerged that the late Robert Maxwell had walked off with a substantial proportion of the pension fund. Measures to protect members of occupational pension schemes were introduced in the 1995 Pensions Act which created a new regulator for occupational pension schemes and required all defined benefit schemes to meet the Minimum Funding Requirement (MFR).

Unfortunately, over time, the measures introduced by the 1995 Act proved inadequate to address the problems in defined benefit schemes. The assumptions on which the MFR was based proved increasingly unrealistic, and most schemes are now in deficit on an ongoing basis. (The total deficit in FTSE100 companies on the FRS17 accounting basis has been estimated at £130 billion with the total deficit in all UK schemes likely to be around double that). Opra, the regulatory body introduced by the 1995 Act, turned out to be a toothless box-ticker.

There were also concerns about what happened to members' benefits when a defined benefit scheme went into wind-up: a debt was levied on the employer, but only based on MFR for non-pensioner members, meaning that many members received only a fraction of their benefits when secured by annuity policies. Even worse, in many cases the employer was insolvent and no debt at all could be recovered, leaving many non-pensioner members with practically no benefits once pensioner liabilities had been secured.

The first key step in remedying this situation was that, from June 11, 2003, a solvent employer winding up a pension scheme was required to pay a debt to enable the scheme to buy out all liabilities (pensioner and non-pensioner) in full. The 2004 Pensions Act has then built on this foundation to increase the security of the defined benefit promise to members. Many of the changes in the 2004 Pensions Act also derived from a need to comply with the EU Directive on Occupational Retirement Provision.

Pensions Act 2004

The three key areas covered by the Act are:

- The introduction of a new Pensions Regulator with much wider powers to intervene in the running of pension schemes.
- A compensation scheme called the Pension Protection Fund (PPF) to provide a certain minimum level of benefits to members of defined benefit schemes, which are under-funded following the insolvency of their sponsoring employer.
- A new Statutory Funding Objective to replace the existing MFR.

Pensions Regulator

The Pensions Regulator came into being on April 6, 2005, taking on all the existing powers of Opra, but with a much wider set of powers keyed to three main objectives:

- To protect the benefits of members of "work-based" pension schemes (i.e. occupational pension schemes and other pension schemes to which employers contribute).
- To reduce the risk of situations that may result in claims on the PPF.
- To promote good administration of work-based pension schemes.

The Regulator has indicated that it aims to use its powers sparingly. Rather than impose solutions, it wants to bring about a sea change in the way that trustees and employers view their defined benefit pension schemes and to encourage a change in their behavior. In particular, it has indicated that trustees should view a scheme in deficit as a material unsecured creditor of the employer, and should therefore learn from the way that a bank that has issued a large loan to the employer. Trustees should monitor the employer covenant, i.e., the employer's willingness and ability to support the scheme. This new approach can be seen in two areas in particular: clearance and scheme funding.

Clearance

The Regulator has the power to issue contribution notices to an employer where there is an action (or failure to act) to avoid the debt due to the scheme in the event of it winding up. This could require the employer to pay up to the full value of the debt (based on the cost of securing benefits with annuities) into the pension scheme.

It can also issue *financial support directions* where the sponsoring employer has insufficient resources to meet at least half of the winding up debt and where there is another company in the group that does have the resources or where the sponsoring employer is classed as a 'service company.' The employer must make proposals for other companies in the group to back all or part of the pension liabilities and the Regulator will then approve these proposals. If the employer does not comply, then the Regulator can issue a contribution notice.

These new powers caused considerable alarm when first proposed. While the aim is clearly to avoid the moral hazard of employers trying to 'beat the system' by manipulating corporate structures to avoid becoming liable for the pension scheme debt, many people were concerned that apparently innocent corporate transactions could later fall foul of a contribution notice or financial support direction. In order to allay such fears, the concept of *clearance* was introduced.

The Regulator has the power to issue *clearance statements*. The idea is that those who may be carrying out transactions involving companies with defined benefit schemes can have greater security by obtaining clearance from the Regulator before the transaction takes place. Clearance means that the Regulator agrees that the main aim of the transaction is not to avoid pension liabilities and so the employer should then not be liable to either a contribution notice or financial support direction.

Applying for clearance is optional and the Regulator has issued guidance to indicate the sort of situations where it thinks it may be appropriate to seek clearance. These are when one of the following events occurs, where a scheme is in deficit on a FRS17 or IAS19 basis:

- A change in priority—a change in the security given to creditors, e.g., the granting of a fixed or floating charge.
- A material return of capital—a reduction in the overall assets of the company, which could be used to fund a pension deficit, e.g., dividends, share buy backs, demergers.
- A change in control structure—a change in the group structure of an employer, which reduces the overall employer covenant, e.g., change of employer or participating employer.

In addition, the employer must try to obtain trustee agreement to their proposals. The trustees are expected to be able to negotiate with the employer in the same way as any material unsecured creditor and should seek to obtain additional security for the scheme where appropriate.

It has been observed that, while contribution notices and financial support directions are likely to be rare in practice, the Regulator is using the clearance process as a way of drawing trustees' attention to the possible implications of corporate transactions to the scheme and employers' attention to the fact that they cannot ignore the pension scheme deficit when making corporate decisions.

Scheme funding

The new Statutory Funding Objective (SFO) will be phased in over the next three years. Schemes will be required to have sufficient and appropriate assets to meet their liabilities; however, whereas the MFR was a set basis that applied to all schemes, it will now be up to the trustees to decide how this applies to their scheme. In so doing, trustees

continued on page 30

will need to take actuarial advice and, in most cases, obtain the employer's agreement to their decisions on scheme funding. For many schemes, this represents a shift in the balance of power towards the trustees, with the trustees setting the funding agenda rather than the employer. The actuarial role has in turn shifted from recommending a contribution rate to providing appropriate advice to the trustees to enable them to make a decision. For many trustees, it means that they will need a much better understanding of the basic principles of scheme funding than is currently the case.

Once again, the Regulator has issued guidance (at present in draft) to attempt to influence behavior, indicating its views on what it sees as appropriate funding targets and deficit recovery periods. While these are not legal requirements, the expectation is that many schemes and employers will attempt to follow them in order to avoid possible regulatory intervention. The Regulator indicates that it may intervene where schemes have a funding target below 70 percent to 80 percent of the cost of securing annuities (which is roughly equivalent for typical schemes to full funding on FRS17) or where the deficit recovery period is more than 10 years. However, it has also confirmed that it will take the affordability of contributions into account, and will not necessarily intervene where trustees have a longer recovery period or weaker funding target where they can demonstrate that they have taken appropriate advice about what the employer can afford.

Pension Protection Fund

The clearance and scheme funding measures described above are aimed at ensuring that defined benefit schemes will be better and more securely funded in the future. The Pension Protection Fund (PPF) is primarily there for those schemes for which these measures are too late. The PPF opened for business on April 6, 2005 and, by December 2005, there were 29 schemes in the assessment period. Once schemes have successfully completed the assessment period, the assets of the scheme will be transferred to the PPF, which will then take over the responsibility for paying out compensation to affected members. The compensation is set at providing 100 percent of pensions for members over normal pension age, with 90 percent of pensions subject to a cap for those under normal pension age.

PPF compensation will be funded partly by the assets received from schemes transferred into it and partly by a levy on all defined benefit schemes potentially eligible for the PPF. This levy aims to raise £575m across the United Kingdom in the 2006/7 year, and consists of a scheme-based and a risk-based element. The former is based on the value of the scheme's liabilities on a prescribed basis and the latter on the level of underfunding in the scheme and the probability of insolvency of the sponsoring employer. For many schemes where there is serious underfunding or where the employer insolvency risk is high, the risk-based element will be a very significant amount that could in itself add to the scheme deficit or to the increased likelihood of insolvency if the employer meets the cost of the levy. The PPF has reduced the impact by announcing that the risk-based element will not exceed 0.5 percent of the scheme's liabilities.

The government has stated that it does not intend to act as guarantor for the PPF, despite calls from many organizations for it to do so. This means that it is unclear what would happen should the fund become technically insolvent as has the Pension Benefit Guaranty Corporation the United States. There is, however, scope for the PPF benefits to be reduced and also for the PPF to borrow money on a short-term basis.

Compensation will not be retrospective. This has resulted in the Financial Assistance

Scheme (FAS) to provide some assistance (considerably less than that from the PPF) to members of underfunded schemes which commenced wind up between Jan. 1, 1997 and April 5, 2005 and so are not eligible for compensation from the PPF. So far the scope of the FAS is extremely limited, with payments only being promised to members within three years of retirement as of May 2004.

Tax Simplification

Alongside these major reforms to defined benefit occupational pension schemes, the United Kingdom is also about to see sweeping changes to the taxation regime applying to all non-state pension schemes, which are due to come into force on April 6, 2006 (known as A-Day). The intention is to simplify the existing complex arrangements for taxation of pension schemes and introduce one unified set of tax rules for all pension schemes. The basic outlines of the new regime are simpler and should provide greater scope for most individuals to contribute more to their pension schemes in a more flexible manner; however, there are many complications in areas of detail, and further changes continue to be announced even though A-Day is now very close.

After A-Day, there will be a single lifetime allowance of tax-privileged savings at retirement (set at a capital value of £1.5m per annum at A-Day and increasing annually thereafter). Funds in excess of the lifetime allowance are subject to a recovery charge of 25 percent in addition to income tax at 40 percent. For defined benefit schemes, the capital value will be calculated by multiplying the annual pension by a factor of 20, irrespective of the member's sex or age. Individuals who already have benefits in excess of this value at A-Day will be able to apply for transitional protection. There will also be a restriction on the amount of additional tax-privileged savings that can be made in any year (set at £215,000 initially). For the vast majority of people in the United Kingdom, these allowances will leave individuals free to pay as much as they can afford into their pension schemes.

The Pensions Commission

While the Pensions Act attempts to address some of the legacy problems of defined benefit pension scheme provision and the new tax regime hopes to provide simpler and more flexible opportunities for members to save for retirement, there remain deep problems within the U.K. pensions system as a whole. A government-sponsored pensions commission has just produced its recommendations for reform. The key proposals are an increase in state provision partly paid for by a rise in state pension age and a low-cost savings scheme into which employees will be automatically enrolled. The government is expected to indicate in spring 2006 which of these proposals they plan to adopt. Whatever the government says, it looks likely that the pace of change to the U.K. pensions scheme is not set to slow down just yet. □

The basic outlines of the new regime are simpler and should provide greater scope for most individuals to contribute more to their pension schemes in a more flexible manner...

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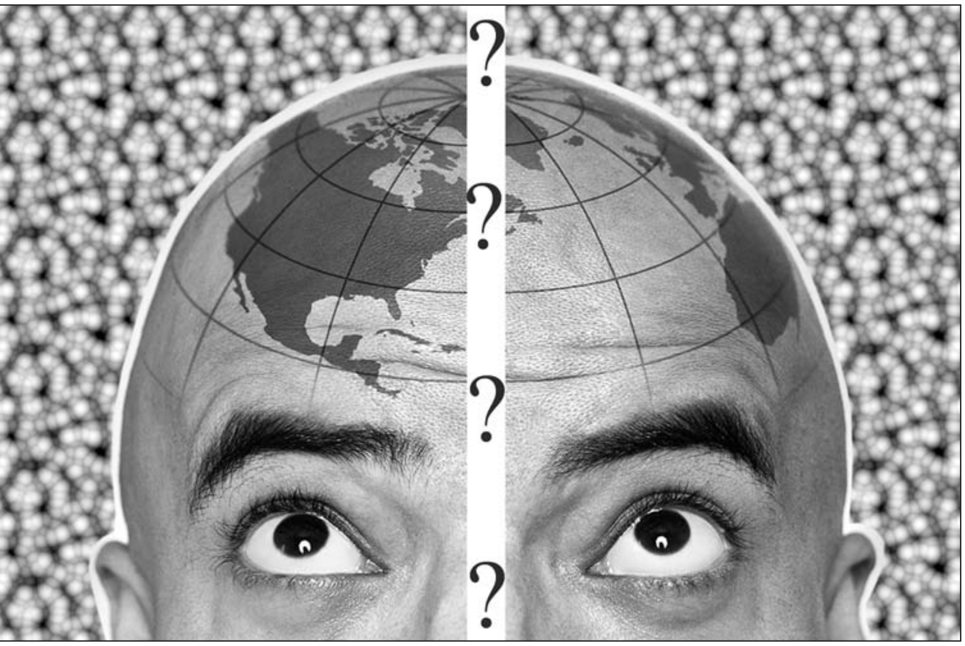
Mind the gap...
...and how to bridge it

by Laura Brown and Neil Wharmby



Editor's Note: The paper reflects the views of either or both of the authors and does not necessarily reflect the views of Watson Wyatt LLP. It is reprinted with permission by the Staple Inn Actuarial Society, May 3, 2005. This is the first of a three-part series.

The paper is meant to encourage jovial, but perhaps, thought provoking debate. As both the authors work in the retirement benefits field, it is inevitable that this paper will be flavored by pensions. However, we would hope that this will not prevent non-pensions actuaries from joining the debate. We would like to make it clear that in presenting this paper, we do not intend to be critical of any particular actuary, firm or professional body.

Chapter One

Certainty Out of Uncertainties?

We think that the subject of communication will resonate with many within the profession. Although we believe that many actuaries can, and do, communicate very effectively, is there more we can do, individually and collectively, to get the message right?

Steps have already been taken in this area. For example, the Institute motto, "certum ex incertis" ("certainty out of uncertainties") thankfully now seldom quoted, once provided comfort to others that actuarial mathematics could provide a definitive platform for future financial planning. However, in the modern world the promise, no matter how qualified, of certainty will send shivers down the spines of professional indemnity insurers and internal risk management teams everywhere. Actuaries now draw more attention to the uncertainty of future events and often describe more fully the range of possible outcomes. The new catchphrase of the profession, "making financial sense of the future," is a definite improvement, being a better reflection of modern actuarial advice. But do you make sense when providing advice to others?

Sir Derek Morris, in his review of the actuarial profession, sets out his belief that there is an understanding gap between actuaries and the users of their advice. However, we suspect that it goes further than that in that there are many members of the public who, even after the extensive press coverage given to actuaries recently, still have absolutely no appreciation of what we do and why.

The aim of this paper is to raise the awareness of actuaries, particularly the younger members of the profession, to the importance of good communication skills in the hope that this will lead to the users of our advice, the public and the press, having a better understanding of matters relating to finance and risk.

We recognize that the paper is not a long one. We did not want to say any more than was needed to encourage the members of the profession to think about what they are communicating to non-actuaries, both explicitly and implicitly.

Chapter Two

It's Life, Actuaries, But Not As We Knew It

A new dawn breaks

Consider a typical day in the life of a typical actuary arriving at his typical office on a typical morning, sitting down at his desk ready to face a day of typical actuarial activity. And let's say, for argument's sake, that this typical actuary is the traditional outsiders' perception of what a typical actuary might be—perhaps even the type of actuary that Sir Derek had in mind—one who has trouble communicating complex actuarial information to his clients.

Now, this actuary isn't a bad guy. He is keen to advise his clients as well as he can. He looks around him wondering where to start. He sees the phone, the e-mail, the paper and the pen, the fax and the train sitting in the station ready to whisk him to a meeting. He lives in a world with a startling number of communication options. Not only that, but he now lives in the Brave New Post-Morris Actuarial World. Forget choosing an appropriate funding method. Forget complying with professional guidance. The most pressing problem for this actuary is deciding how best to present his advice to his clients. All that expertise on Ito integrals and attained age rates will mean nothing if his clients are unable to make sensible decisions based on what he is telling them.

We are spoiled for choice on how to get the message across, more than ever before, but is this extensive range of choices actually spoiling our attempts to advise our clients in the most effective way?

Do actuaries speak louder than words?

Is new technology friend or foe of the typical actuary? We can run beautiful stochastic models, but with them comes the need to explain a new and even more complicated technical concept. We could produce pretty pictures in PowerPoint and project them onto screens, but do we have the creativity to make the most of the possibilities?

It is widely thought that different people absorb information in different ways. Some like pictures (visual), some like to hear things (auditory), some like to move around (kinaesthetic) and some can only process information delivered in limerick form. As a profession of technicians and mathematicians, are we overweight in a particular learning class? How can we cater for people who don't think like actuaries, who don't have our innate familiarity with numbers and formulae? To many of our clients, actuarial jargon and terminology might as well be hieroglyphics. To bridge the gap, we must find ways to translate this to the language of the layman. We challenge readers to identify their Rosetta Stone[1] and so the key to unlocking clients' understanding of the advice that we give.

How should we interact with clients?

Risk management or just plain boring?

With the increasing focus on risk management, there is a natural tendency to shy away from anything other than setting out every option, unequivocally and in writing. All angles are covered, all risks are mentioned, the caveats are out in force, our posteriors are protected and our in-house legal team can sleep at night. But they are not the only ones—our clients are also asleep. They got bored from reading our great missive and didn't understand the terminology anyway. They are no better off.

A similar principle arises when you phone up to buy car insurance and have a long statement read robotically from a card. Do you listen? No. Have you understood what the message was designed to say? No. Indeed, the more you say when writing a letter of advice, the more the reader can get confused as to what the message really is. Although the long formal report or letter may have its uses—perhaps to satisfy actuarial Guidance Note 9 (GN9) or to record formally the advice given and the decisions reached—we believe that as

Get the point across and don't confuse compliance with advice.

continued on page 34

1 The Rosetta Stone is a stone carved in 196BC and found in Egypt in 1799. It has writing on it in two languages (Egyptian and Greek) using three scripts (hieroglyphic–the scripts used for important or religious documents, demotic–the common script, and Greek–used by the rulers of Egypt at that time). By comparing the demotic and Greek scripts, the anthropologist Francois Champollian was able to decipher hieroglyphics for the first time.

Your advice has to be conveyed in a substantially shorter time than it took you to formulate it. Take it in small bite sized chunks and use simplified models.

Teach as well as advise.

Give an opinion when appropriate.

Beware of the hidden.

an educational tool, it is dead. In fact, a single GN9-compliant document will not do the job that GN9 wants it to do. Is it time to separate compliance and advice? Is the current GN9 in need of a rethink?

Are pictures better than a thousand words?

More use is being made of the technology we have available. PowerPoint presentations are becoming more prevalent and, with carefully selected diagrams and limited (and significantly fewer than a thousand) words, can get across complex issues with so much less effort than lengthy technical letters. However, two-hour presentations given in a dull monotone, simply reading words directly off the slides, are less powerful. Why listen when you can read twice as quickly? What's the value of having the actuary read to you? Is it really good value? "Why not leave the actuary at home and read the slides yourself?" asks the client.

There is also the instinctive suspicion that, although pictures can be easier to grasp, they are also easier to misinterpret and should therefore be replaced with lengthy tomes. We would contend that written advice can be just as easily misunderstood without proper explanation.

But what of the noble art of conversation?

After all, wouldn't dramatic speech make us seem so much more exciting? Even more so if we dispense with the grey suit and invest in a technicolored dreamcoat. The colors (visual), the noise (auditory), the whirling dervish of the presenter (kinaesthetic), these are the ultimate antidote to allegations of the antiquated, overcomplicating, boring actuary.

The Pension Regulator's draft "Code of Practice no 4: Funding Defined Benefit Schemes," which was published recently, stresses the need for trustees to understand the advice given. How is this to be done? The title of one SIAS paper (Taylor, 2000) suggested making actuaries less human. We believe that if we are to address our communication difficulties, the opposite is true.

The draft code itself asks trustees to consider whether or not a face-to-face meeting would be effective. We would argue that it is essential, not only for the trustees' benefit, but also for the actuary. It enables any misunderstandings to be addressed before they are firmly fixed in the mind of a client and gives the actuary an opportunity to adjust the complexity of the advice and explanations given to suit the comprehension of the non-actuary. How about combining spoken advice with real-time picture drawing on good, old-fashioned blackboards? Yes, we need to be an actuary, an actor (see section 4) and now a teacher as well. But at least this would enable us to move at the same speed as our clients, increasing the level of complexity that they can take one step at a time. It may also increase the opportunity to simplify otherwise detailed concepts. Introducing simplifications may be more acceptable in that format as the aim would be to educate and explain the concept, increasing the overall understanding before hitting the audience with the more complex detail of the situation in hand (if this is indeed at any stage deemed necessary).

Stepping up to the plate

Given the inherent subjectivity in the issues we consider, should we climb off the fence and drum up the courage to provide a positive steer in our advice? Or, are we right to explain the options and leave trustees in charge of their own destiny? After all, when it comes to the biggest decision of all, it is still George Bush who decides whether or not to press that big red button. He relies heavily on his advisers. Would we have it any other way?

We mentioned above the long missive that covers every possible option. This reminded us of a story once told to us by a senior member of the profession, the story of the even-handed actuary. You know the even-handed actuary—we all do. ("Is it me?" I hear you ask.)

Well, the even-handed actuary met an unpleasant fate at the hands of one particularly exasperated client. Are you sitting comfortably? Then, let's tell you the tale …

Once upon a time this particular actuary went to see his client at the enchanted castle of

Trusteeland. He presented his work to the Elders of Trusteeland who had limited knowledge of complex finance, but had yet another significant decision to make. His advice was of a familiar form: 'well, on the one hand you could do this, but, on the other hand you could do that.' He came to a close and, all of a sudden, the Earl of Trusteeland chopped off his hand. 'Now,' said the Earl, 'What does your one remaining hand suggest I do?'

The moral of the story is that providing 'complete' advice may actually get in the way of providing good, easily understood, advice. Have we got to the stage where we are too afraid of doing anything other than spelling out every option—to avoid being criticized for not warning about the possible downsides—but then by not suggesting a sensible way forward for our clients, we miss the point totally? Yes, it's their decision as to what they should do, but should we be afraid of saying what we really think?

Research into decision making where risks must be assessed suggests that advisers might be most effective through asking simple questions about their client's preferences and objectives and then translating their expressed preferences into the appropriate course of action (see Alan Goodman's summary report on Consumer Understanding of Risk). This would require a shift of focus where actuaries make clearer recommendations rather than providing information and leaving the client to decide. However, it would also require a greater degree of understanding from clients as to what we need to know from them, so that the suggested way forward does indeed reflect their circumstances.

Inadvertent or deliberate presentational influence?

Disturbingly, even in the absence of our explicit recommendations, further lessons from behavioral finance show that we can often influence clients' decisions significantly by the way we present information and the range of options we show. So, for example, clients might prefer the results of a valuation on a basis that delivers a surplus. Do they understand that changing the assumptions does not necessarily change the true funding position, which is of course unknown until future events have unfolded? Another example is where decisions are based on choosing an outcome within a range of options. More often than not, experiments show that the middle course of action is followed.

This feature is obviously a useful tool when trying to justify a biased approach in a negotiating situation, but we should be aware that we may be doing this inadvertently. For example, scheme actuaries presenting results as an independent expert to both trustees and sponsoring employer (see paragraph 22 of the draft Code of practice) may unintentionally influence the debate one way or another depending on the content of the advice and how it is presented.

This concept doesn't just extend to how numbers are presented. It is quite possible to prepare written advice that taken literally says one thing, but the tone of the advice could imply something rather different. How many of us realize what might be read into our advice in normal circumstances? What happens when our hieroglyphics cannot be read by our Greek-speaking clients?

However careful you are to ensure that the tone of the advice is as you intend, there is always scope for it to be received in a different way. Again, it seems to us that regular face-to-face communication with clients is essential to minimize this potential for misunderstanding. ☐

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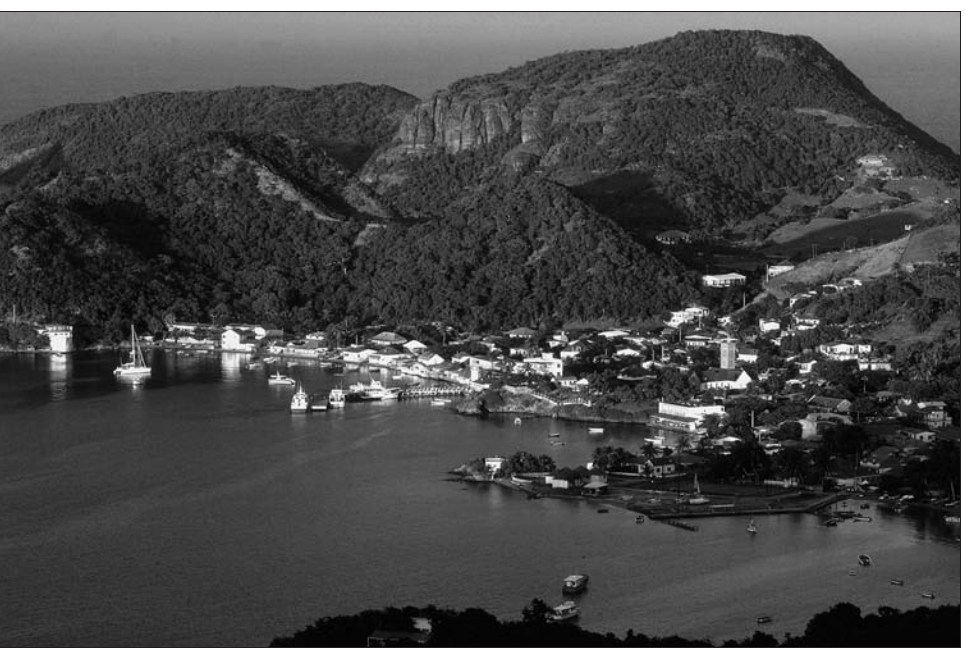
The Caribbean Actuarial Association's 15th Annual Conference

by Tesi Johnson

"Risks and Rewards—Challenges and Opportunities" was the theme for the Caribbean Actuarial Association's 15th annual conference, which was held at the Half Moon Hotel in Montego Bay, Jamaica, from Nov. 30 to Dec. 2, 2005. The location of the conference has rotated between Jamaica, Barbados and Trinidad to give more actuaries and students in each country the chance to attend when they are hosting. Actuaries, actuarial students and other participants in related disciplines from the Caribbean and other parts of the world travelled to this world-renowned resort city for the three-day summit.

The sessions were held in the Conference Centre on the Half Moon's extensive grounds. A distinguished group of speakers from Canada, Jamaica, Japan, United States and the United Kingdom gave presentations covering a variety of topics ranging across the main practice areas of the actuarial profession and more. "We hope to attract as wide an audience as possible, not only actuaries, but also persons from other related fields, particularly from the whole financial industry" said Catherine Allen, the conference co-chairperson, and a practicing actuary with Guardian Life. The subjects dealt with over the duration of the conference included banking, catastrophe, investment, health, pensions, life insurance, entrepreneurship and professional standards, as they relate to the actuarial profession.



The sessions on the first day were about professional matters, especially for members of the CAA. Shu-Yen Lui of MetLife International and W. St. Elmo Whyte, co-founder of FIRM Insurance Brokers Ltd. and senior lecturer at the University of the West Indies, conducted a question-and-answer session for the students. Afterwards Russell Greig spoke to the membership about enhancing the reputation of casualty actuaries.

On Thursday morning, Sir George Alleyne, the Chancellor of the University of the West Indies (UWI), special envoy of the secretary general for HIV/AIDS in the Caribbean, opened the conference officially as the keynote speaker. He addressed the state of the Caribbean with respect to the health issues of lifestyle diseases and HIV/AIDS. His speech was particularly well-timed since it fell on World AIDS Day. Sir George challenged the CAA, and other such professional bodies, to be champions for change in altering the landscape of these health issues in the Caribbean. After Sir George's presentation, Robyn Day, the president of the Caribbean Actuarial Association, presented a check of US$5000 to Sir George, as a gift to the University of the West Indies, which will go towards purchasing books for the actuarial science program. This was the second presentation made to the university at the conference. At the cocktail party, the president of the International Association of Black Actuaries, Stafford L. Thompson Jr., presented an award to UWI, which recognized it as the University of the Year for the performance of the their students in the professional actuarial exams. W. St. Elmo Whyte received the award on behalf of the University.

Following, Russell Greig addressed "Finite Reinsurance and Risk Transfer Issues" and delved into recent developments in this area. Next, Dr. Alan Punter, the CEO of Aon Capital

Service Limited in London and honorary visiting professor in insurance and risk finance at the Cass Business School in London, gave a thought-provoking presentation on the topic of catastrophes as they relate to the insurance industry and reinsurance in particular. He examined the global reinsurance industry prior to the 2005 hurricane season, and commented on the impact that hurricanes Katrina, Rita and Wilma had on the industry. After lunch, Andrew Wise, former partner of Watson Wyatt in London, presented "Trend Towards Bonds and Alternative Investments in Private Equity and Hedge Funds." Oscar Zimmerman, the president, CEO and board member of Scotia Life/Scotia General Insurance Companies was next on the agenda with, "A Return to Retail Relationship Banking." He pointed out the Bancassurance opportunities such an approach would provide. To close the second day, ambassador Richard Bernal spoke on the trade negotiation process in the World Trade Organization and the variety of ways consensus was applied. This was a refreshing change from technical matters.

The third day of the conference opened with a panel made up of Michael Pomery, the president of the Institute of Actuaries in the United Kingdom, Paul Timmins, a lawyer with the consulting firm Watson Wyatt in Canada, and Leslie Lohmann, the proprietor of Lohmann International Associates in Japan. They spoke on new developments in pensions practice. Mr. Lohmann's presentation was particularly controversial, as he questioned the role of the Trust in protecting employees from shortfalls in funding a retirement plan and challenged the traditional funding methods used to finance a pension scheme.

Also on the third day, Shu-Yen Liu spoke on "life insurance in emerging markets." After a lunch break, main speaker Aaron Hou, risk manager at Jamaica Money Market Brokers and supporting speaker Andrew Wise probed "derivatives in risk management." Following, José Nicolas, the regional director of Munich Re and June Chen of the Institute of Risk Management, together presented on "trends in living benefits." The final item on the agenda for the third day was the CAA's annual general meeting. Here the CAA formally adopted the life standard of practice (APS2) for actuaries practicing in the region as a mandatory standard following adoption last year of the pensions standard of practice (APS1).

There were two extra items offered on the fourth and final day of the conference for those interested. Michael Pomery updated the audience on the post-Morris events in the United Kingdom. Also, Les Lohmann facilitated a discussion on operating an actuarial business.

Naturally, the conference was serious business, but the attendees look forward to the entertainment. On Wednesday evening, everyone gathered for the welcome cocktail party. Dinner on Thursday night was an Indian buffet. On Friday night, we all went offsite to the Bellfield Great House for a tour, dinner in the garden under the tropical stars, and a limbo and fire eating show.

The conference was given extensive corporate support with sponsorship from Axis Actuarial Software, Eckler Partners Ltd., Guardian Holdings, Life of Jamaica Ltd., Munich Re, National Commercial Bank Jamaica Ltd, PricewaterhouseCoopers, Swiss Re and Valani Consulting. Their patronage supported this stimulating and fulfilling conference bringing current worldwide actuarial issues to Caribbean practitioners in their home territory.

The 2006 conference will be held Dec. 7-8 in Suriname and promises to be as first-rate as we, and our visitors, have come to expect in the Caribbean. For more information please visit our Web site at *www.caa.com.bb*. ☐

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IABA – Coming of Age

by John Robinson

"The world's premiere actuarial organization dedicated to shaping diversity by influencing industry and elevating the status of black actuaries."

This is the new Vision Statement of the International Association of Black Actuaries (IABA).

IABA was born in 1992 as the National Association of Black Actuaries, and renamed in 1994. The founding members included 35 credentialed black actuaries from the United States, Canada and the Caribbean.

IABA meets annually, in early August. The meeting has grown in all respects: quality, attendance and duration. In the early years, it was a one-day affair, held on a Sunday. It featured a keynote speaker, elections and a really nice brunch. In 1999, presentations—similar to those at SOA meetings—were introduced. In 2005, there were eight presentations, the meeting ran from Friday evening to Sunday noon, and attendance was 100. I am pleased to note that we have retained the really nice brunch.

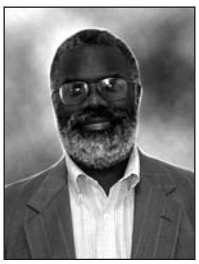
The leadership structure of IABA has grown in sophistication. In the early years, there was a small executive and four committees: Mentoring, Membership, Communications and Finance. Nowadays, in addition to that, it has a Board of Directors, an Advisory Board and a Foundation.

At the grassroots level, a number of Regional Affiliates have recently been formed. Their role is to provide opportunities for member support and involvement, as well as to reach out to collegians and high schoolers who can benefit from our presence as black actuaries, professionals, "math people" and role models. As with any new venture, some of these are off to a quicker start than others.

IABA offers scholarships to black college students in the United States and Canada who are pursuing undergraduate studies in Actuarial Science. A student who has passed one of the SOA/CAS exams can receive a substantial award.

Next year's meeting in Atlanta, Ga. promises to be bigger and better than ever. There will be one additional day, and we will likely surpass this year's eight presentations. One of our goals, which is of particular interest to this author, is to include presentations on topics of interest to black actuaries outside the United States. The meeting will be eligible for Continuing Education credit.

I invite you to visit our Web site, *www.blackactuaries.org*. ☐



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other participating states may be used to meet individual country requirements. Several countries have also entered into similar agreements with Canada, Quebec and the United Kingdom.

Across the Caribbean, social security and national insurance programs have earned the respect and confidence of their respective publics and are considered, in most countries, to be the crème de la crop of public sector institutions. Most programs, however, are plagued by high administrative costs, poorly diversified investment portfolios, political interference and lack of transparency, rules that do not allow the program to automatically adjust to economic changes, pensions that are only loosely tied to actual contributions and extremely low participation rates among the self-employed.

Actuaries have played an integral role in the development of Caribbean social security systems, having been involved in the design and initial projections of each scheme. They also conduct required periodic actuarial reviews at three to five-year intervals. In these reviews, long-term demographic and financial projections of up to 60 years are performed and the actuary is expected to provide policy advice on the relevance and adequacy of contributions and benefits for both the short and long terms.

The Future

With ageing populations in all countries, the 16 schemes will see a gradual decline in the number of contributors supporting each person drawing a pension. Today, each is adequately funded for the short and medium terms, but almost all are financially unsustainable for the long term at current contribution rates and level of pensions being promised. (Figure 2 on page 27 shows a comparison of the current financial states of each fund, as measured by pairs of values representing 2003 reserve-expenditure ratios and surplus relative to total insurable wages.) Timely and appropriate reforms, especially to pension provisions, will therefore be required to ensure that adequate benefits will be paid to current and future pensioners without requiring excessive contribution rates by tomorrow's employers and workers.

Other necessary elements to ensure long-term financial solvency are sustained positive economic growth and good governance. A final ingredient that could enhance system sustainability and compliment efforts toward a regional single market and economy is the partial or full integration of these 16 systems. Given the similarities of the schemes and their economies, their small size and the high cost of operations, a single Caribbean social security system should be the medium-term goal of regional policymakers. □

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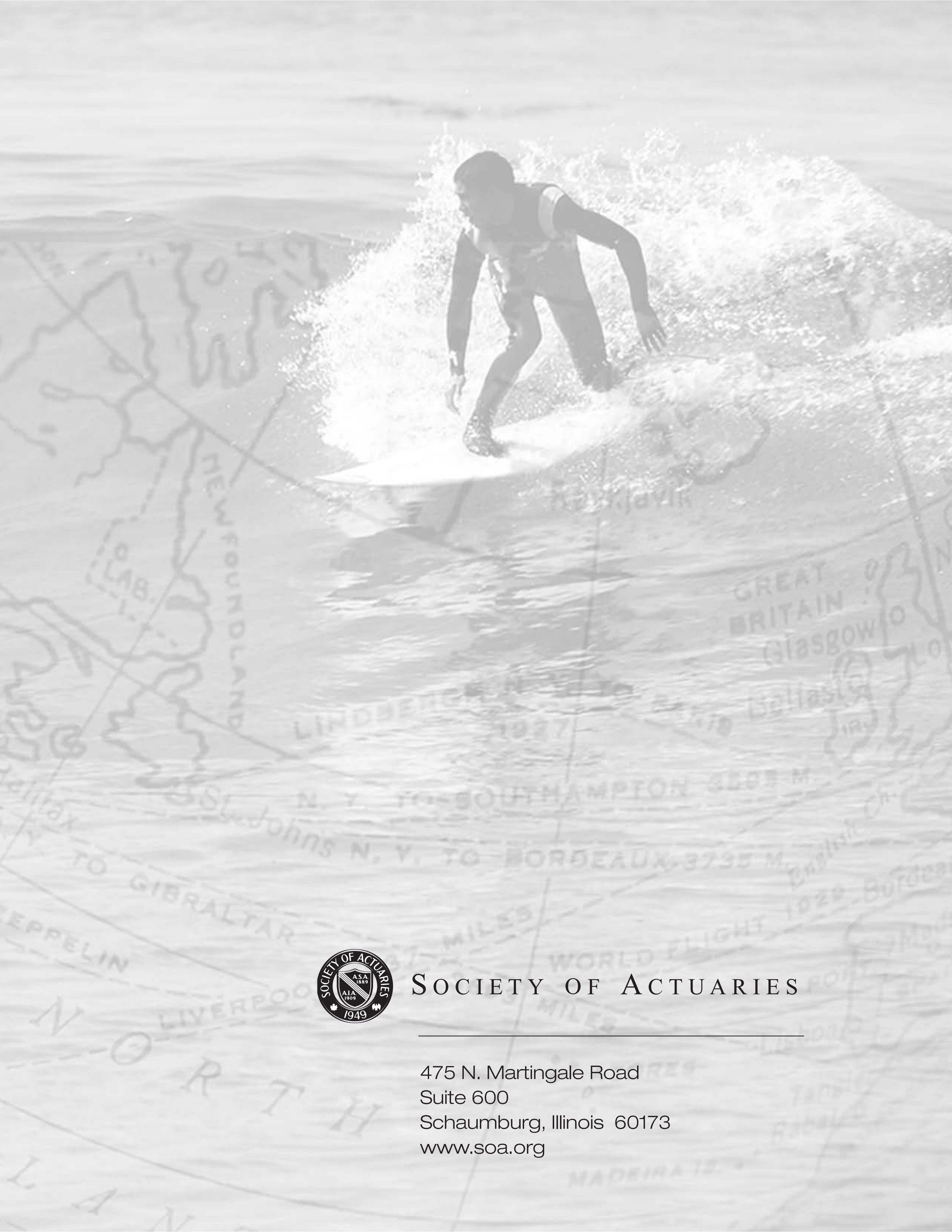

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