



Questions from Hong Kong Abound on New PD Systems

by Patrick Cichy
Coordinator of Asian Services

Will the SOA offer more seminars in Asia that will qualify for professional development credit? What if I cannot fulfill the PD plan within the specified two-year period? These were just some of the questions answered at the SOA Professional Development Requirements meeting held in Hong Kong on April 14, 1999.

Former founding member of the China Region Committee and current member of the Professional Development Committee, August Chow, answered questions on the new PD system from over 70 students and members including FSAs planning to be advisors. Marta Holmberg, SOA

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A Social Security System for the 21st Century—Part One

by Chiu-Cheng Chang & Geraldine Chen

Editor's Note: The rest of this paper will be published in the next issue of "International Section News."

The financing of social security programs has been the subject of many studies in the social security literature. Much of the debate has focused on the relative advantages and drawbacks of pay-as-you-go and full funding, on the viability of public and/or occupational pensions as compared with personal saving schemes. In advocating one method of funding over another, many have based their arguments on past experience and projected demographic changes. No system, however, exists in a vacuum, and insufficient attention has been given to the broader international, social, political, cultural and economic trends that will govern the viability and sustainability of a social security system in the 21st century.

Section II of this paper reviews the major trends of the 21st century. Section III will focus on the drawbacks of the pay-as-you-go system of social security funding, particularly in the light of these trends. In Section IV, the key characteristics of the ideal social security system in the 21st century will be discussed. The Singapore social security system will be used as an example, as it has many of the attributes of the ideal

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Editor's Notes

by Kevin M. Law

Once again the *International Section News* is fortunate to include a wide variety of material of interest to actuaries working in the international arena.

Before proceeding to provide an overview of the lineup of material for this edition, I would like to encourage Section members to share their international experience and expertise by contributing an article to *International Section News*. As is typically the case, we have already begun attempting to acquire material for the subsequent issue, simultaneously with developing and finalizing this edition of the newsletter. While some progress has been made in obtaining articles and commitments for the next issue, plenty of space is still left for additional articles. So, if you might

be inclined to submit an article, but haven't done so thinking that it could be overlooked or not considered for publication, please don't be concerned about that possibility. While we commonly have a significant amount of very good material, we never have an excess of articles for the newsletter. We look forward to receiving your contribution!

Chiu-Cheng Chang and Geraldine Chen collaborated to contribute our lead article: "A Social Security System for the 21st Century." Their paper has been divided into two parts for newsletter publication, with the second half to appear in the subsequent issue. In this first installment, the authors describe a number of major trends that are expected to continue into the next century that will affect the viability of social security systems.

Section Council member Jim

Toole describes an initiative by the International Section in "Country Web Pages Take Shape" that has the potential to develop into a valuable resource for our members. The idea is to compile, with the assistance of our Ambassadors, pointers on the SOA website that lead to country-specific insurance industry information and statistical data of use to actuaries. This is a very positive development that I hope will be supported and utilized by the membership. It directly addresses what is frequently a difficult challenge in international actuarial work, which is obtaining



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pertinent data and information about other countries.

One aspect of actuarial involvement in the international financial services sector that differs from purely domestic actuarial roles is the requirement to periodically work with distinct currencies and to address financial issues that require currency conversions. Ken Mungan's insightful article "Valuation of Cross Border Insurance Ventures" presents, by way of a numerical example, the importance of properly matching currencies and discount rate assumptions in the process of computing actuarial present values.

Ronald Poon-Affat, also currently a Section Council member, continues his series of articles on Brazil (see page 18). Ronald presents the results of an interview with Stefan Keene, who is currently with CIGNA's Brazilian operations in the health field after working in the United States for a number of years. This article will be of interest to actuaries who have either previously worked overseas or are contemplating doing so in the future.

"Wing Walking in Russia" by Mark Mariska on page 13 presents a comprehensive overview of the private insurance industry in Russia during the decade of the '90s. The industry has grown rapidly in a period of significant political change and economic turmoil, having to adapt rapidly and face many challenges. I am confident that many of our members will find this article to be

interesting and informative reading.

One of our fellow SOA Sections, the Financial Reporting Section, sponsored a successful seminar last August in Buenos Aires, Argentina. A summary of this seminar, provided by Ed Robbins, is included in this issue. Incidentally, the International Section Council is considering the possibility of sponsoring a seminar in conjunction with the SOA annual meeting, as reported in the minutes of the 4/5/99 Section Council meeting published in this newsletter.

We have also taken the liberty, with permission of course, to borrow material from another SOA Section, the Investment Section. Nino Boezio presents in "The Euro Will Eventually Lead to Global Instability" a series of thought provoking analyses and conclusions.

The new SOA exam structure that will be implemented next January features a Professional Development (PD) component that is the final hurdle to be cleared in order to receive an invitation to attend the Fellowship Admission Course and acquire the FSA designation. The requirements and process for completing the PD plan are succinctly summarized in the article contributed by August Chow. According to my understanding, the PD aspect of the new SOA exam structure is advantageous for actuarial students working outside Canada and the United States, as it may be tailored to reflect the countries in which they work. Much of the detailed U.S. and Canadian exam material

that such students have previously been required to learn has not been relevant to their environment.

Angelica Michail is currently serving double duty as a member of both the International Section Council and the SOA Committee on International Issues (CII). Her "Clearinghouse Scholarship Program" article describes an initiative of the CII to assist students in low-income countries with the expenses associated with SOA exams.

The number of actuarial educational programs outside of North America has grown significantly in recent years. Michael Hubbart informs us in his article on page 23 of a program at Cairo University in Egypt that has just produced its first graduating class.

Finally, Patrick Cichy, SOA Coordinator of Asian Services based in Hong Kong, provides an update on two recent activities of the China Region Committee (CRC): the establishment of SOA Reference Centers at various universities and the results of a recent CRC membership survey.

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managing director of core studies and global initiatives, participated by phone to help answer questions on the spot.

Mr. Chow also met with the China Region Committee and members of the Southeast Asia Committee by conference call to discuss ways in which they can provide seminars in their respective regions to qualify for the professional development credit. Mo Chambers, director of SOA International Affairs, has

requested the SOA Board of Governors provide financial support for the presentation of professional actuarial educational programs outside North America that will count toward the PD requirement. The Board is sensitive to the appropriateness of this kind of support. Watch for announcements later in the year of PD programs slated to be presented in areas outside North America, particularly in the Asia region.

If you have any questions or comments on the PD program, you can contact the Professional Development Committee at (pdcomments@soa.org).

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A Social Security System for the 21st Century

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system. Section V will present some concluding remarks.

Major Trends of the 21st Century

Changing population structure

Changes in the population structure are determined by changes in fertility, mortality and international migration that manifest themselves through increases in longevity. According to the United Nations, the Gross Reproductive Rate for the world as a whole was 2.44 between 1950 and 1955, 1.67 for the period 1985-1990 and is projected to decline to 1.15 in 2020-2025. Fertility is projected to fall at a faster rate in the less developed areas, with the GRR declining by more than 60% over the period while that for the more developed regions is expected to fall by only 33%. Mortality rates have also declined. Life expectancy at birth in the developed countries increased from 66.0 years in 1950 to 73.7 years in 1990, while the corresponding increase was from 40.7 to 60.7 years for the less developed regions.

The impact of reduced fertility and mortality is reflected in the changing share of the aged population. In 1950, 5.1% of the world's population was aged 65 and over. This proportion is expected to increase to 9.7% in the year 2025. While the more developed regions currently exhibit a more severe case of population aging, the less developed countries are projected to have a higher rate of aging. Between 1950 and 1980, the share of the elderly in the total population in the more developed regions rose by 53% and is expected to increase a further 53% by the year 2025. However, in the less developed regions, while the share of the elderly grew by only 18% between 1950 and 1980, it is projected to rise by a staggering 78% between 1980 and 2025. The majority of the world's population will be residing in the less developed countries in the 21st century. The rapid rate of population aging has also raised the elderly dependency ratio, which is the ratio of the number of elderly persons to the number of persons in the working age group. The ratios for all the major

regions of the world are projected to increase: Asia will have the largest projected increase of 77.1% in the 1990-2025 period and Africa, the smallest of 16.1%.

At the same time, the growth of the share of the working population for all major regions is projected to decrease, with the exception of Africa. For Europe, North America and the former USSR, the proportion of the working age group is expected to shrink in absolute numbers by the end of the century. Europe is estimated to experience a working age population decline of 4.6% and North America, 3.5%. In addition, the labor force participation rates of men above and below the normal retirement age have fallen sharply over the last decade. Not only will there be a large population of the elderly, there will also be a smaller working population to support it.

These demographic changes will constrain the ability of economies to finance social expenditure. The shares of social security and health expenditures for many industrialized countries show sharp upward trends. In 1992/93, the expenditure shares ranged from 11.0% for the United States to 27.9% for the Netherlands. With annual growth rates averaging only about 1%, it is highly unlikely that these economies will be able to sustain social programs financed by the taxes and contributions of the working population.

It is true that female labor force participation rates have risen significantly in recent decades, especially in the OECD countries. However, given the average gender earnings differentials and the concentration of women in part-time employment, women's earnings are considerably lower than those of men. Therefore, while the number of women entering the labor force would more than counterbalance the number of older men withdrawing, this growth will not be able to provide a one-to-one offset for the decline in male participation in terms of the tax base for social expenditure contributions (OECD, 1988), implying a shrinking of the tax base.

The Information Revolution and the Global Electronic Village

The launch of the Russian "Sputnik" in 1957 marked the beginning of the era of global satellite communications and precipitated the information revolution. As a result, the information float collapsed. As information can now be shared simultaneously among countries, the "national economy" is now and will continue to be subsumed under the "global economy" or in Kenichi Ohmae's words, "The Borderless World."

Shift from Nation State to Business State

The globalization trend is exemplified by the global corporation. This will no longer be the colonial-style multinational company with a headquarter-subsidiary mentality but a network of downsized, outsourced and largely stateless web of cross-border corporate alliances (*Newsweek*, June 26, 1995). In the last decade, the world's 37,000 transnational companies— from 7,000 in the late 1960s— were responsible for more in sales than all the trade exports put together: US\$5.8 trillion in 1992. In the United States, 80% of the dollar goods sold abroad are not exported but sold under the governance of the transnational corporation, either by affiliates, intrafirm trade or through licensing or franchising agreements. These flows have been consolidated with the investment of capital overseas, which has led to the emergence of international production systems. Since 1983, foreign direct investment has grown five times faster than world trade and ten times faster than world output (*The Economist*, June 24, 1995). The production lines of Mitsubishi Motors, for instance, stretch from Thailand to Malaysia to Japan. Production sharing will be the prevailing form of international economic integration.

Business leaders are the politicians of the future. Conversely, politicians will run their governments like a corporation, promoting the country's comparative advantages for business. In the future, the international ties between business leaders and politicians will strengthen.

The power of the transnational corporations has grown to such an extent that governments are handing over tasks that once were under their sole purview. For instance, U.S. Congress has asked multinationals to take up some of the burden of foreign aid. Table 1 shows that foreign private investment outflows have registered much sharper increases than government foreign aid. Corporations have begun to develop their own human rights codes and increase pressure on countries which, in the eyes of the United States, have less than satisfactory human rights records. Many governments in the West have sought to impose their standards on the developing countries with whom they have economic and trade links to little or no avail, generating only hostility and resentment in the process.

Transnational corporations have begun to take over this role. They are adopting "politically correct" profiles and strict codes of business ethics. For example, Levi Strauss, an American clothing company cancels contracts with suppliers if they find that they employ child labor. Chemical companies are more vigilant in policing their industry and computer companies are advocating higher environmental standards. Many are signatories to international agreements such as the International Chamber of Commerce's Business Charter for Sustainable Development. And rightly or wrongly, the transnational companies impose these standards on their host countries. The transnational corporation

has now become and will continue to be the major agent of international integration. The increasing power of the business corporation means that business concerns will override politics. And business issues cut across all national boundaries and will help to build the global business state.

Shift from Fixed to Flexible, Responsive Systems

The strength of the traditional multinational lay in its size and ability to exploit economies of scale. Cost was dominant, and the variable cost of labor was the decisive factor. Now practices such as just-in-time production emphasize responsiveness and flexibility, factors that have downgraded the importance of size.

With increasing automation, the present day global corporation is operating in an increasingly fixed cost environment. Competitiveness and market share are built up and maintained through innovation, knowledge and development of brand consciousness in the consumer, all of which involve high fixed costs. In the old variable cost environment, companies focused on reducing the cost of materials, wages and labor hours. Now, companies will focus on maximizing the marginal contribution to fixed costs, i.e. maximizing sales, which explains the importance of a large market base and the motivation for globalization.

In the present quicksilver world of consumer tastes, companies have had to adapt and become increasingly flexible

and responsive to change. Big, over-staffed companies involving many bureaucratic layers are now anathema. Long hierarchies impede the flow of information, slow down the decision-making process and reduce the ability of the company to respond to changes in the marketplace. This responsiveness is especially visible in the retail sector. In the past, stores operated strictly according to office hours and were almost always closed on Sundays. Now shops, including beauty salons and medical clinics, are beginning to stay open into the night and sometimes are open round the clock. Even British stores, conservatism and Sunday trading laws notwithstanding, have responded to consumer demands by staying open into the early evening and opening their doors on Sundays.

Companies have also tried to adapt to the needs of employees. For instance, job-sharing has taken root in many organizations to accommodate demands of working parents. Shifts in thinking have also permeated social organizations like schools where some have adjusted hours and curricula, allowing students to arrive earlier and stay later, to accommodate their parents' work schedules.

Wage payments are beginning to move from fixed pay scale systems to flexible ones based on productivity that can respond quickly to changing economic circumstances. Benefits systems are also gradually evolving from fixed benefits systems to ones which recognize and accept individual preferences. One way this is manifested is in the increasingly popularity of "cafeteria benefits systems." While these require a greater initial capital outlay and are more demanding in terms of monitoring, firms are starting to tailor systems to suit individuals to maximize productivity and value for money.

Shift from Short-term to Long-term

This stress on flexibility has been accompanied by an increasingly long term outlook. The debate over the environment and non-renewable resources has focused attention on the long run sustainability of short-term actions. Many companies and countries, unfortunately, are managed with very short time

Table 1

	Foreign Investment Outflow to Developing Countries		Foreign Aid	
	1990	1993	1990	1993
United States	\$423.2	548.7	11.4	9.7
Japan	310.8	422.6	9.1	11.3
Germany	143.1	178.7	6.3	7.0
France	67.9	140.6	7.2	7.9
Britain	77.2	243.2	2.6	2.9

All figures in billions of US dollars

Source: *Newsweek*, June 26, 1995 p. 31

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horizons—this month, quarter, half year—and the problem is exacerbated by the political process of four or five yearly elections where expedience is the guiding principle.

Long-range strategic visions and planning are beginning to replace short-term goals. Managers and executives must abandon their preoccupation with short-term quantitative measures of performance and profit and give attention to the kinds of investments and behavior that will spur innovation and strengthen the firm and nation's capacity to create wealth.

Formation of Trade Blocs and Harmonization of Standards

While great strides have been made in the last decade to reduce barriers to trade and capital mobility, prospects for global trade liberalization remain guarded at best. If anything, the advent of the European Common Market in 1992 fueled fears that some markets, the lifeblood of companies, would become increasingly closed. The formation of the North American Free Trade Area (NAFTA) and the growing activity with the forum for Asia-Pacific Economic Cooperation (APEC) are seen to be responses to this ominous development and represent efforts to maintain and promote free trade at least within the regions. Many observers agree that the 21st century will see the world economy consisting of three main economic blocs: Europe, the Americas and Asia (however defined), bringing about greater intra-bloc flows of trade, investment and people.

Harmonization of standards within the bloc usually follows the creation of an economic zone. The European Community is at present trying to devise a common set of standards for everything from labor laws and minimum wages (envisaged in the Social Charter) to the beef content of sausages. The setting of common standards, processes and systems across countries reduces uncertainty and minimizes transaction costs, particularly for the global corporation operating in many different countries.

Increasing Labor Mobility

The degree of labor mobility at present differs widely across regions. In North America, labor mobility at least between Canada and the United States, is strongly encouraged and widely practiced. To a much lesser degree, Europeans are beginning to realize that people will have to move with and to a job, and not the other way around. In Asia, residents of Hong Kong and Taiwan with significant foreign investments overseas have long accepted the need for mobility. This trend is beginning to emerge even in Japan, one of the more closed Asian societies. Singapore, actively pushing the regionalization drive, is encouraging its citizens to work abroad. Increased labour mobility between countries and the advantages of a common set of standards will govern the type of social security system that will be workable and acceptable.

Development of a New and Global Lifestyle

Just as national economies will gradually merge into a greater world economy, the growth of transnational corporations will mean that people from vastly different cultures and climates will be eating the same foods, wearing the same kinds of clothes, sharing the same music, movies, magazines and television shows. Satellite technology, international travel and the spread of information will spawn an international culture.

Alongside this globalization of lifestyle, society will become more conservative and liberal at the same time. On the one hand, higher standards will be set for all aspects of business conduct, from adherence to a code of ethics to regulation. On the other hand, topics and issues which were once taboo such as sex, drug addiction, and mental illness will be discussed with greater openness. An alternative lifestyle will evolve. There will be a greater proportion of unmarried people, unmarried couples living together, and couples who may be married but have few or no children.

Shift from Reliance on Institutional Help to Self Help

In the industrial countries, particularly after the Depression, there was a heavy reliance on large institutions to provide for the basic needs, from food to shelter to jobs. Over the past two decades however, people have been moving away from this reliance to new habits of self-care. Many are taking responsibility for their own health by exercising, reducing consumption of less healthful foods and reducing smoking. The concept of health has been redefined from the mere absence of disease to the existence of a positive state of wellness. On another level, self-help will manifest itself by increasing independence from large companies through self-employment and small business entrepreneurship.

Shift from Complacency to Accountability

Alongside this greater self-reliance, there will develop a greater awareness of the need for accountability. The average citizen will demand that both individuals and businesses be accountable for their actions, and this accountability will go beyond criminal and insurance liabilities. Grandparents of children born to unmarried mothers may be held liable for child support. Employers and doctors, stockbrokers and politicians, all who are in any position of duty and obligation, will be expected to take responsibility for not only their own actions, but also the actions of others.

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Ambassador Program Update: Country Web Pages Take Shape

by Jim Toole

Alluded to in the previous Ambassador Program update in the last issue of the newsletter, an exciting new program initiative is now underway, harnessing the boundless energy, remarkable skill, and unwavering dedication of our Ambassadors, all for the benefit of you, the international actuarial community. Ambassadors in 26 countries have united for a single purpose: to assemble country-specific market information and identify useful Web pages to serve as the backbone of an international insurance resource center that is located at www.soa.org/links/amb.html.

The Problem

You have been asked by your team to do some background research on the insurance market in Country X. Fine, you say. I speak the language; I'll just fly down for the week, visit the insurance department, conduct some interviews with local professionals, write my report and that will be that.

Problem solved? Well, budget issues aside, say you need to make the presentation at the strategy meeting mañana. Although surfing the Web is undoubtedly a big step forward from visiting your local library, it can still be pretty frustrating when you are trying to find information as specific as capital requirements, doubly so when you are dealing with a foreign country. And when it is all said and done, how confident can you be in the reliability of your sources?

The Solution—Country Web Pages

I had the opportunity to “speak” via e-mail with program architect and page designer, New Zealand Ambassador Richard Geisler. All quotes included in

this article are his. What he has to say gets right to the point of what the International Section and Country Web Pages are all about:

The International Section is always looking for ways to provide service and information to actuaries practicing around the globe. Not only are more SOA members transferred to other countries, but also there are increasing numbers of new members qualifying from outside North America. The Section recognizes that the Internet is a universal tool for information dissemination, and it is really our duty to find ways to use that tool.

The Process

In envisioning the page content, we had some simple guiding principles in mind: to provide relevant and reliable country-specific information that does not substantially duplicate links found on the SOA or other commonly used actuarial Web sites. Ultimately, we set out to collect on one page the basic information needed to open a window into the condition and practice of insurance in the specific country. With these objectives in mind, the design team constructed an information survey that was then forwarded to all Ambassadors.

Actuarial practices vary from region to region, which increasingly requires actuaries to bridge those differences for the sake of communicating within either their own organization or with others in the profession. Whether it is valuation of liabilities, product pricing, or investment strategies, the terminology and practices of one's home country are often merged with operations in other countries requiring broader understanding of both. The ability to network and find information worldwide has become vital



for most SOA members, particularly those operating outside North America.

The Ambassadors research and assemble the information and send the completed surveys to Debbie Jay, SOA Web development coordinator, for inclusion on the SOA site. They are encouraged to select “best in class” examples when multiple sites are available. Although the most reliable information generally comes from local pages in the local language, external sites are encouraged if the Ambassador feels they contain the most reliable information.

As with any web site, it has to be up-to-date, easy to use and provide a service. I think the Country Web Site has the potential to meet those criteria and is designed to be reviewed regularly by each Ambassador.

The survey as conceived was not intended to be an exhaustive treatment of the subject or unduly onerous for the Ambassador. Ambassadors were encouraged to have some fun, to show off a little and add links to sites showing some of the flavor of their host country (potentially as important as reserve requirements in making an investment decision). For Brazil, it had to be football and beaches...

I enjoyed filling in the survey as I discovered that pride could be taken in what New Zealand has done with the Internet. In just a short time, I was able to locate the types of sites the Country Web Page was designed for that will be useful, I think, to anyone needing a starting point for information about New Zealand. The Country

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Ambassador Program Update: Country Web Pages Take Shape

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Web Pages are flexible, allowing hot buttons to addresses that present unique differences important for the region. In the case of New Zealand, being a small country, there is a Web site that searches only New Zealand Web sites so the user can easily surf the Land of the Long White Cloud.

The Pages

We are proud of what we have accomplished so far. By the end of this year, we hope to have more than 15 active Country Web Pages from our 26 Ambassadors. But we need your help to do more. We are currently recruiting Ambassadors for a number of countries including



England, France, Germany, Ireland, Mexico, The Netherlands, Pakistan, South Korea, Switzerland and Scotland. If you are interested in learning more about the Country Web Pages or the Ambassador program, please contact Jeanette Selin at jselin@soa.org or Jim Toole at Jim.Toole@milliman.com.

I think it's right on target. The objective of the project was to provide country-specific pointers to insurance and statistical related sites. It is an easy site for starting a search and gives some personal addresses for further contact that could be useful. I am sure most Ambassadors would welcome the chance to give guidance to any visitor to the site if requested. I look forward to the feedback from members and direct contact from anyone using the site. Come and surf New Zealand!

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Valuation of Cross-Border Insurance Ventures

by Ken Mungan

Editor's Note: This article is reprinted with permission from the winter 1999 edition of "Woodrow Milliman Insurance International."

Insurance companies around the world are expanding to achieve a global presence. To become international firms, insurers are establishing cross-border subsidiaries and forming partnerships with foreign firms. As the pace of this activity quickens, insurers need a financial framework for evaluating potential ventures and for monitoring the performance of existing ventures. Moreover, any useful framework must account for the unique features of the insurance industry. Namely, evaluation techniques should account for the long-term, predictable nature of insurance company liabilities.

In this article, I will show how blending two well-known financial techniques can help insurers evaluate cross-border transactions. An analysis of a cross-border insurance transaction should use both actuarial projections and the no-arbitrage approach used to price securities. When each technique is used in its appropriate context, one can form a clear understanding of the value of a cross border transaction.

Actuarial projections are commonly used to analyze the expected earnings, which will be generated by an insurance enterprise. These projections account for the fact that insurance company customers are willing to pay for the valuable services provided by the company. For example, customers value the advice offered for financial planning, the financial security offered by insurance products, and access to the financial markets. Actuarial projections account for the value which the company realizes through its expertise in the financial markets, its long time horizon, and its ability to benefit from risk sharing and pooling. A purely domestic transaction,

such as a merger or block acquisition, will rely heavily on actuarial projections.

Security pricing techniques that rely on the no-arbitrage approach are used in a different context. These techniques are used in the realm of sophisticated financial competitors who constantly analyze security prices. These competitors will exploit any possible advantage by simultaneously trading multiple financial instruments. In this world, opportunities for riskless profit quickly vanish. This process of eliminating arbitrage opportunities is used to price financial instruments.

Actuarial projections and security pricing techniques can be used together to value cross-border insurance transactions. For an insurer evaluating a transaction in a foreign country, actuarial projections can be used to project annual earnings in the foreign currency. Security pricing techniques can then be used to translate those earnings to the insurers home currency. Finally, this stream of translated earnings can be discounted at an appropriate hurdle rate. This rate should account for the risk of the investment and be appropriate for the economic conditions of the insurer's home country.

To understand this process, I will outline each of the major steps. First, actuarial projections will be produced to evaluate the transaction in the foreign currency. To create the projections, one starts with a set of assumptions. Liability assumptions such as mortality, morbidity, and reserving basis will determine the liability cash flows and the development of the reserves. Also, one needs assumptions that will determine asset performance. Asset assumptions include an interest rate scenario, fixed income asset spreads, an investment strategy for the new venture, and the cost of expected asset defaults for this strategy. With the assumptions in place, it is possible to project the year-by-year distributable earnings for the venture. Distributable

earnings include the net income and any required capital that is released. At this point, we have a stream of distributable earnings denominated in a foreign currency. The main question for an insurer evaluating a cross-border transaction is, "What should be done with this stream of distributable earnings to produce a final valuation?"

In my work on cross-border transactions, I have seen these foreign currency distributable earnings discounted at an interest rate appropriate for the insurer's home country. The present value is then converted to the insurer's home currency at the current spot exchange rate. However, this approach may lead to inappropriate results depending on the circumstances of a particular situation. The economic conditions in the two countries are not the same. This difference should be accounted for in determining a valuation.

To understand this, let's consider a simple example. Consider a U.S. insurance company evaluating a potential partnership with a Japanese insurer. Through a process of collaboration and negotiation, the two parties have agreed on a set of baseline assumptions for a 20 year actuarial projection of the profits of the partnership. Assume that the results of the projection show annual distributable earnings starting at 6 billion yen after 1 year and rising to 12 billion yen per year by year 20. At this point the U.S. insurer needs to use the yen-denominated stream of distributable earnings to determine a valuation of the partnership.

It is tempting to jump directly to a valuation by discounting these earnings and translating the present value to dollars at the current exchange rate. For example, the U.S. insurance executive might believe that 12% would be an appropriate discount rate if this were a purely domestic transaction of similar risk. Assume that the current spot exchange rate is 120 yen to the dollar. The present value of the distributable earnings at 12% is 59.02 billion yen. Translating this to dollars at the current exchange rate produces a valuation of 491.8 million dollars.

The problem with this analysis lies in applying a 12% discount rate which is appropriate for the U.S. environment to a stream of Japanese yen. This rate was

determined as an appropriate rate for a U.S. transaction of similar risk. However, this is not a U.S. transaction. The problems created by this technique are due to the extremely different interest rate environments in the two countries.

Luckily, we can overcome these problems very easily. Rather than discounting a stream of yen-based distributable earnings, we can translate these distributable earnings to dollars and take the present value of the dollar-based values. To do this, we can look to the capital markets to determine the appropriate exchange rates. At this point, security pricing techniques are used to determine the exchange rates.

Let's continue working with our simplified example. The following chart shows the projected distributable earnings for years 1, 5, 10, 15, and 20 in millions of yen.

Year	Distributable Earnings (Millions of Yen)
1	6.000
5	7.263
10	8.842
15	10.421
20	12.00

To translate the 6 billion yen earned 1 year from now to dollars, we can use the exchange rate currently available for such a transaction in the derivatives markets. This rate is called the 1-year-forward exchange rate. This is the rate available to exchange yen for dollars one year from today.

Here is a sample of forward exchange rates available at the beginning of December 1998.

Years Forward	Yen / Dollar Exchange Rate
0	119.98
1	114.45
5	95.91
10	75.88
15	55.86
20	35.73

119.98 is the spot exchange rate. This is the rate available for an immediate exchange of yen for dollars. However, if you would like to lock in a rate today for an exchange of currency in the future, 119.98 is not the appropriate rate. For example, if you would like to lock in a rate to translate the 6 billion yen earned 1

year from now, 114.45 is the appropriate rate. Similarly, if you would like to lock in a rate to translate the 7.263 billion yen earned five years from now, the appropriate exchange rate is 95.91.

Maturity - Years	US (%)	Japan (%)
1	4.41	0.22
2	4.35	0.39
5	4.32	0.83
10	4.58	1.21

The most obvious question is, "Why are the forward exchange rates so much lower than the spot exchange rate of 119.98?" This is due to the dramatically different interest rate environments in the United States and Japan. To see this, examine the following table of government bond interest rates at the beginning of December 1998.

As you can see, Japanese interest rates are at extremely low levels. Assume you could lock in today's exchange rate of 119.98 for an exchange of currency to take place in 10 years. If this were the case, no one would buy the 10-year Japanese government bond. Anyone who needed an assured supply of yen 10 years from now would buy the 10-year U.S. government bond. When the bond matures, they would use the locked in rate of 119.98 to change the dollars to yen.

The forward exchange rates outlined in the table above are the only rates that allow the foreign currency markets and the U.S. and Japanese government bond markets to remain in balance. Any other rates would present an opportunity for riskless profit.

With this insight, we can create a table (see page 10) of distributable earnings denominated in U.S. dollars.

The column shows distributable earnings in U.S. dollars. It is this stream of earnings which should be discounted at the 12% rate. This 12% rate was determined as an appropriate discount rate, which would be used for a venture of similar risk in the U.S. This results in a valuation of the partnership of 769.6 million dollars. This is substantially different from the 491.8 million-dollar valuation produced previously.

It is very important to understand that the forward exchange rates serve only as

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Valuation of Cross Border Insurance Ventures

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Year	Distributable Earnings (Millions of Yen)	Forward Exchange Rate	Distributable Earnings (Millions of Dollars)
1	6.00	114.45	52.42
5	7.263	95.91	75.73
10	8.842	75.88	116.53
15	10.421	55.86	186.56
20	12.000	35.73	335.85

a tool to determine the correct valuation. The U.S. insurer does not actually need to enter into forward exchange contracts to accept the valuation. The U.S. dollar valuation of the partnership, which is calculated using the currently available forward exchange rates to produce the expected present value, is the same whether or not the U.S. insurer actually uses forward exchange contracts.

At the start of the venture, the forward exchange contracts have a market value of zero. They are simply agreements in which two parties agree to lock in an exchange rate today for a transaction in the future. If the U.S. insurer has a right to the distributable earnings from the partnership, the insurer cannot change the value of these earnings by including some derivative contracts which have a market value of zero.

Once a final projection is completed and the valuation is determined, the U.S. insurer needs to decide whether or not to actually use the forward contracts. If these contracts are obtained, the insurer will lock into the valuation amount regardless of deviations in the future between today's projected exchange rates and the rates that later actually materialize. Conversely, if the forward exchange contracts are not obtained, the actual value realized by the insurer from the partnership will differ from the original estimate due to future differences between the actual and expected exchange rates.

In a recent survey of 400 large U.S. companies, one-third engage in some form of foreign currency hedging. The motivation for this hedging is to reduce volatility in earnings and cash flows. Insurers have an additional motivation to hedge. Given the long term nature of their liabilities, they can enter into forward contracts with a very long maturity. The exchange rates available in these

“In a recent survey of 400 large U.S. companies, one-third engage in some form of foreign currency hedging.”

contracts can be very different from one's intuitive expectation for actual exchange rates.

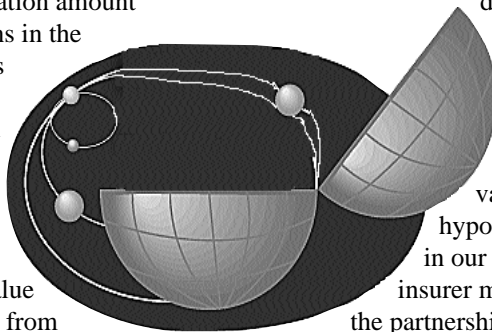
For example, in the forward rate chart above, the yen /dollar rate for a transaction 20 years in the future is 35.73. This rate is very different from the current exchange rate, and it is driven by large differences in rates in the U.S. and Japanese government bond markets. Let's consider the motivations for the hypothetical partnership in our example. The U.S. insurer may be entering into the partnership because management believes the long-term outlook for Japan is good. They may believe that economic conditions in Japan will stabilize and that the economic health of

Japan and the U.S. will be approximately equal in the long term. There may be a long-term expectation for the exchange rate to fluctuate in the 100 to 130 yen / dollar range.

If this were the case, the U.S. insurer would expect to benefit from entering into the forward contracts. If the U.S. insurer expected declining interest rates, they may see no benefit from entering into the forward contracts. In general, an insurance company should make its decision to use forward contracts in light of its overall risk management program and philosophy towards currency risk. However, the important point to stress is that the valuation of the partnership is not affected by the insurer's decision to use forward contracts.

Cross-border insurance ventures have outstanding potential to add value for insurance firms. They are an excellent hedge against adverse conditions in an insurer's home country. Also, they create access to new distribution outlets to support continued growth. Given the potential of these transactions, it is important to have an appropriate framework to produce a valuation. The approach of combining a baseline actuarial projection, forward exchange rates, and an appropriate domestic discount rate serves this purpose.

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The Euro Will Eventually Lead to Global Instability

by Nino Boezio

Editor's Note: This article is reprinted from the March 1999 issue of Risks and Rewards, the Investment Section Newsletter.

The single European currency, once a distant dream, has become a reality. In time, it can significantly change the way the world does business, and will have some important implications on the ability of the United States and its currency to dominate the world's political and financial system.

The Euro is expected to foster greater intra-European cooperation and economic growth on that continent. However, the ECU can also damage the economic health of North America as the United States' fiscal problems including its debt and trade deficits will no longer be masked by the U.S. economy's dominance in the world. It will also encourage Europe even more to guide its own destiny, even if its vision for the world widely differs from that of non-European nations.

Understanding Europe

Unlike the relative peace and prosperity enjoyed by most North Americans the past two centuries, Europe has not been so lucky. The nations of Europe have historically been plagued by distrust, envy, competition and strife. Warfare has been a regular part of its turbulent history. Even though that continent cannot afford another world war on its territory, especially since the weapons of mass destruction today have become so powerful, it does not mean that the European psyche has changed to one predominated by a desire for peaceful coexistence with its world neighbors.

Being confined to a small continent with a large population, and where much of its resources must come from without, it can easily be seen how European politicians can become "nervous" and

want to exert some sort of political/military muscle, which continental Europe currently does not have but the United States does. Yet the United States has largely determined its own foreign policy independent of input of Europe.

Also unlike the United States which is hedged by very large oceans and peaceful neighbors, Europe has the always dangerous Middle East nearby, and an unstable Russia and turbulent Asia within striking distance. Problems with any of its foreign neighbors can easily land on its doorstep, and yet still not be of much concern to a relatively isolated United States.

The Soon-Fading Dominance of the U.S. Dollar

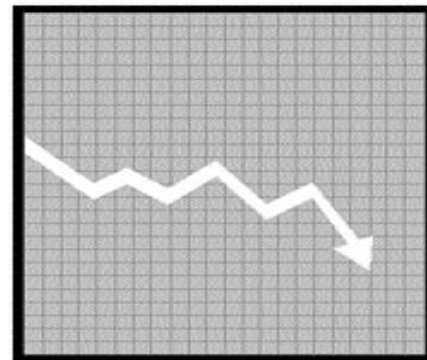
Until recently, gold was the reserve currency of choice for central banks. With inflation, gold maintained its value and appreciated relative to the average currency. It was relatively easy to convert to another currency if the need ever arose, and it was well-accepted worldwide as a trading medium. The last few years however, with the cooperative attack by central banks on inflation, have diminished gold's usefulness.

Central banks have opted instead for the U.S. currency and U.S. denominated assets such as bonds rather than gold, since these are even more liquid (the latter provided an attractive yield) and inflation has been perceived to be relatively dead, hurting gold's major appeal. Even though new gold demand has exceeded new supply since the early 1990s, this was not sufficient to maintain interest in gold, inciting central banks to liquidate their gold reserves.

If there ever is renewed concerns about inflation or the strength of a currency such as the \$US, then there may be some exodus back to gold.

The ECU is being perceived by some to be the most viable threat down the road to the \$US. Even though it will be a

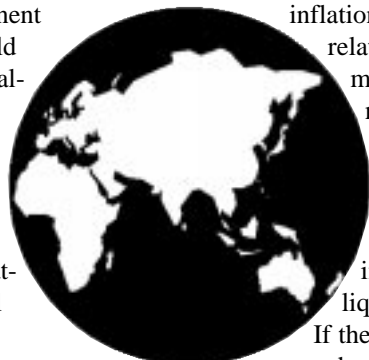
new medium of exchange, its acceptance and use by a large continent may quickly establish it as an important currency. And if relative yields on US stocks, bonds, real estate and other assets fall relative to



those achievable in Europe (which can occur if the European economies strengthen and the U.S. economy weakens or falls into recession) the dominance of the \$US dollar will quickly be undermined. Currently, trade deficits in the United States have been paid for through the acquisition of U.S. assets such as bonds by foreigners. If central banks decide to liquidate some of their U.S. assets and U.S. currency in favor of the ECU, we may find a severe depreciation in the U.S. currency worldwide and possibly U.S. inflation triggered not by robust economic activity but by too much currency with no place to go but back to the United States. The currency depreciation will help to alleviate the U.S. trade deficit but in the meantime, could destabilize the world's financial system.

The World's Dynamics Will Change

If the ECU proves to be a dramatic success, or at least achieves a position of importance comparable to the \$US, we may find that the world will no longer be dominated by the United States in non-financial matters as well. We note that Europe and the United States have often had widely differing views on foreign policy, including reactions towards events in the Middle East and Asia.



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The Euro Will Eventually Lead to Global Instability

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The United States has had different international interests, is not always perceived as a source of world stability from the European standpoint, does not understand Europe or its problems, and is too far away from the hot spots. For example, it is expected that oil demand will once again outstrip supply in the next 3-5 years. Any instability in the region will impact Europe much more than it would the United States, as over 50% of its oil is imported. Will the United States come to the rescue (after all, its military has been

substantially cut back, even since the Persian Gulf War)?

We will likely find that any success in European financial endeavors will likely precipitate into political, military and social pursuits. This will certainly contest the United States' role as the peacemaker and peacekeeper (the "PAX Romana" of today). Unlike the United States, European countries may not be considered to be less diplomatic or sensible, and may perhaps shoot first and ask questions later.

The concerns raised as part of the

European 1992 initiative will once again be discussed. The prior initiative most likely failed because Europe fell into recession and various issues including excessive debt, could not be resolved quickly. The next 10 years could be quite interesting to watch.

Nino J. Boezio, FSA, FCIA, is a Principal at Matheis Associates in Pickering, Ontario, and is co-editor of Risks and Rewards.

The Clearinghouse Scholarship Program

by Angelica Michail

The Society of Actuaries has been administering exams in many parts of the world. However, for aspiring actuaries who live, work, and/or study in developing countries with very low per capita income, those exams are out of reach. For years, the SOA tried to find ways to make the exams more accessible in those countries and assist in raising those countries' awareness, knowledge, and expertise in actuarial concepts and practices. Now the search is over with the implementation of two SOA strategies. The first, removal of surplus charges on exams administered in foreign countries, was implemented two years ago. The second, a Clearinghouse Scholarship Program (CSP), was launched recently with the release of the CSP brochure as an insert to a recent issue of *The Actuary*.

The CSP brochure gives a comprehensive description of the program. Below is a summary of its significant features.

Purpose of the CSP

The purpose of the CSP is to match low-income candidates in developing countries where SOA exams are administered with potential corporate or individual sponsors. Sponsors pay for examination study materials and fees.

Sponsors may support an individual for a three-year commitment, donate to a specific country, or allocate funds for general use.

Eligible Candidates

Candidates must live in a country where the annual per capita income as reported by the World Bank is less than US \$1,000 and where SOA exams are administered. Candidate eligibility requirements include completed application forms, letters of recommendation, minimum credits to attempt, and exam success criteria. Currently, there are 11 qualified countries:

Asia—Bangladesh, China (except Taiwan and Hong Kong), India, Indonesia, Pakistan, Sri Lanka
Africa—Ghana, Kenya, Nigeria, Zimbabwe
Middle East—Egypt

Administration

A small committee consisting of one SOA staff member, one volunteer from the Committee on International Issues and one volunteer from the E & E Committee will review applications, select candidates to be funded and advise the sponsors of candidate success. The current members of the committee are



Jeannette Selin, Angelica Michail, and Darrel Knapp.

Funding Goals

The current fundraising goal is US \$150,000 annually. This amount will support approximately 50 candidates per year. Members of the SOA Committee on International Issues are currently soliciting funds. If sufficient support levels are achieved by June 1999, the candidate solicitation process will start with the November 1999 exams.

For years, the SOA has recognized the importance and necessity of assisting the development of the actuarial profession globally. Through this scholarship program, the SOA can help improve the developing countries' access to actuarial expertise and help enhance their economic future. Today, we are all too aware that the economic success or failure of a single country can have significant global impact. The Clearinghouse Scholarship Program was a great idea for many years. It is now a reality.

Angelica Michail, FSA, is a consulting actuary at National Actuarial Network, Inc. in Rowland Heights, Calif. She is also a member of the International Section Council.

“Wing Walking” in Russia

by Mark D. Mariska, F.L.M.I.

Editor's Note: This article is reprinted with permission by National Underwriter. It ran in two parts: March 15 and March 29, 1999.

When big problems are encountered, nimble resolutions are sometimes attributed to people of undeniable talent—to those “wing walkers” who are able, in effect, to repair aircraft engines while in flight. Russian insurance executives have become especially skilled in the management of complex organizations in an uncertain economic and political environment, and they could be considered the “wing walkers” of the Russian Federation.

Russia has been undergoing an energetic and highly publicized transition to democracy and a functioning market economy since former President Mikhail Gorbachev launched “glasnost” (openness) and “perestroika” (restructuring) in the 1980s.

President Boris Yeltsin’s government has continued the reform process although the results have been uneven and somewhat slower than expected. Many of the reports about Russia in the past decade have concentrated on the fallout associated with economic, political and social change and the evening news is still festooned with the difficulties encountered in this country’s efforts to embrace the freedoms that we accept as routine.

Traditional news coverage often overlooks real progress, especially in the growth of the insurance sector in Russia. Insurance development began during the 1991-1993 time frame and Russia has since moved forward with enviable speed to do what took the United States most of this century to accomplish.

During the Soviet era, insurance was a state monopoly. Domestic programs were provided by the Gosstrakh Insurance Company while international coverages were the domain of Ingosstrakh. There had been little need for insurance in Soviet times and the state, in effect, had become an all-embracing insurance organization through the implementation

of its political and social philosophy.

The Soviet state, with its comprehensive social programs, granted various insurance-type benefits to its citizens (pensions, disability insurance, health care and survivor benefits) and there was little need for individually purchased policies. Small life insurance endowment policies were traditionally purchased for young children while automobile and property ownership was rare.

After the 1991 coup d’état attempt and the dismemberment of the U.S.S.R. that followed, and with Boris Yeltsin’s ascendancy as president, the Russian Federation started to change dramatically as it struggled to become more like a market economy. The state began to reduce government-supported insurance programs and, at the same time, the privatization of the economy and new laws allowing private property ownership created a need for personal insurance.

The first Insurance Code for Russia was approved in January 1993 and capital requirements were such that more than 2500 companies were licensed to operate. Many companies were organized with an insufficient financial base and with little practical knowledge of the business of insurance while a smaller number of insurers were more focused on specific markets and product opportunities. Early growth occurred in several life insurance variants which became popular because they reduced tax liabilities on payroll compensation and in commercial lines and property insurance.

During the period from 1993 to 1997, the inflation rate reached 840% per year before falling to 11%. As a result, the more successful Russian insurance companies became operationally proficient within an unpredictable economic environment, with its volatile currency fluctuations, and in providing products and services which had to be quickly adapted to the marketplace. In many cases, Russian insurance companies received premium in older, more valuable rubles while benefits were paid in newer, inflated rubles.

During the mid-1990’s, the All Russian Insurance Association became

the most influential industry trade group and Moscow State University developed into the predominant insurance



education center for the country while forming links with the European Union (E.U.). The Insurance Subcommittee in the Duma (Russian Parliament) began consideration of modifications to the Insurance Code in order to comply with both E.U. and the World Trade Organization (W.T.O.) standards for insurance regulation and an open market.

Premium production in the Russian Federation grew quickly during the 1990s, growing from \$1.35 billion in 1993 to a total of \$5.91 billion in 1997. Despite political and economic problems, domestic companies began to grow and offered a range of products. The companies began to advertise and to educate potential customers about the general benefits of insurance and risk management.

While insurance penetration in Russian (insurance premium as a percentage of gross national product) was 0.77% in 1993, it had grown to 1.32% in 1997, but it was still below Poland, the Czech Republic, Hungary and Western Europe. Russian companies, however, recognized that they had discovered a motherlode and became concerned about international competitors in their home territory as some of the larger international insurance groups began to take notice of the potential market beginning to emerge in Russia.

Foreign interest in the Russian insurance industry has continued to attract attention among domestic insurers who look to the Insurance Code as an interim protective screen. Some companies are concerned that their industry could be exposed to an overwhelming application

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“Wing Walking” in Russia

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of capital and technology that would smother domestic development. Modified in 1998 and undergoing an intensive review in the Russian Parliament, the Code currently prohibits foreign companies from owning more than 49% of a Russian insurance company.

Over the past three years, an open debate has continued within the Russian insurance industry about W.T.O. and E.U. compliance and continuing protection, of some sort, for the domestic companies relative to the perceived capital strength and the capital availability of (primarily) foreign investors. The larger companies are less concerned and view foreign investment in positive terms.

Recently proposed Code changes provide for ownership in excess of 49%

to delay entry until some more convenient point in the future.

The principal impact of the revised Insurance Code would be (1) to encourage investment before the quota is reached, (2) to increase the implicit value of equity stakes in Russian insurance companies as the quota limits are reached, (3) to increase the competitive advantage that would inure to early investors in the Russian insurance marketplace, (4) to allow Russian insurance companies, with less than a 49% equity stake held by foreign investors, not to be subject to increased requirements or additional limitations and (5) to require foreign insurers, attempting to operate independently in Russia, to comply with the additional financial standards.

a variety of ways, over the past ten years, and Russia, regardless of its political composition, has no alternative to privately-owned insurance companies for the delivery and administration of social insurance programs, state health care benefits, mandatory insurance coverage and certain financial services.

The Russian insurance industry is responding rapidly to the unwelcome economic and financial burdens visited on it in August 1998. Despite this recent crisis, the insurance industry in the Russian Federation remains fundamental to social and economic progress.

Domestic insurance companies are set on becoming more effective. The more capable domestic companies have been acquiring books-of-business and orphan policyholders while, at the same time, developing new policies which emphasize competitive value, safety and security. They are concentrating on customer service and business retention. Learning from the recent default and devaluation, they are adapting more conservative investment portfolio management. Companies have started to control acquisition costs and operating expenses and to expand distribution.

Geography has made it difficult for insurance carriers to expand beyond the urban centers of European Russia. The Russian Federation with more than 147 million people living across a territory of 6.5 million square miles is wrapped into 11 time zones.

Russia's immense territory creates challenges for communications, transportation and management control that can be daunting, but many Moscow-based companies now envision an opportunity to acquire regional companies and sales networks and then expand into the Russian provinces where the opportunities are greater and operating costs and market penetration are lower.

Distribution can now be expanded at a marginal cost allowing companies to extend their marketing territories. Companies are reducing acquisition costs through new techniques and as group and affinity marketing, direct marketing and sales points become widespread. Sales

“Companies are reducing acquisition costs through new techniques and as group and affinity marketing, direct marketing, and sales points become widespread.”

by foreign investors, but do require certain security deposits with the Central Bank and do not allow for a 49%+ foreign-owned insurance company to engage in life insurance, obligatory insurance or property insurance for State owned enterprises. Importantly, the proposed Code changes do not place restrictions on Russian insurance companies with less than 49% foreign ownership. The Duma has not set a specific date for further review of the Code amendments, but plans to consider them before the end of 1999.

One of the main features of the Code proposals is a quota standard by which foreign capital will be limited to somewhere between 12% and 20% of the authorized capital of all insurance companies operating in Russia. The quota, in effect, would place a franchise value on most Russian companies in that foreign investor groups, concluding partnership agreements before the Code is modified, will gain a competitive and absolute advantage over those choosing

This is an interesting period in the young life of the Russian insurance industry. This is not to say that effective business combinations cannot be achieved and become extremely successful. On the contrary, Russian companies have the market knowledge and are aware of customer sensitivities that will not soon be understood by Western organizations. Western groups have the capital for expansion and the capacity to conduct insurance technology transfer necessary to propel the Russian industry into the next century at an accelerating rate. The challenge will be to match the two into effective and enduring business combinations.

The Russian Federation and its people have experienced change of a variety and intensity that would be a fatal blow to most nations. Despite troubling times, Russian consumers continue to acquire private property and they are, in turn, purchasing a variety of insurance products.

Domestic insurers have been tested, in

points are a particularly effective distribution tool which brings home office convenience to the marketplace. They are also devoting much closer attention to expense control, data automation and professional education and development.

Russian insurers now consider the customer to be one of their most important assets. Business retention programs are receiving more emphasis while customer convenience and customer service are moving to become a significant component for successful company marketing programs. Cross-selling to existing clients will reduce acquisition costs and encourage business persistency. Follow-on insurance and investment services and repeat purchases are being incorporated into the marketing lexicon for Russian insurers.

Russian insurers are carefully responding to the challenges that often flow from economic uncertainty in their country. Insurance penetration is gradually increasing as consumers seek to protect assets, create pension supplements or plan for wealth transfer and as Russian businesses become more committed to risk management, either to reduce loss exposure or because of investor requirements.

Russian banks have suffered severe financial losses since the recent economic crisis. More importantly, banks and the banking system have lost consumer confidence as the population struggled to recover their deposits from commercial banks and transfer them to the State Savings Bank. There are continuing indications that the Russian consumer has not lost confidence in insurance companies. They recognize that insurers were not responsible for the crisis and the insurance industry is now in a more prominent position.

The Russian insurance industry is rapidly coming into its own and is the leading component in the emerging financial services sector. Insurance offerings range from traditional life and disability policies, annuities and tax-advantaged products to property, liability and health care coverage and to more complex commercial packages, space vehicle and satellite risks and reinsurance.

While approximately 1400 Russian insurance companies remain licensed,

that number will probably decrease to no more than 500 to 600 companies in the next 18 months as the less competitive companies are acquired and as weaker insurers fail to meet recently enacted capital requirements. About 100 of the surviving companies will generate more than two-thirds of the premium volume in Russia and the top 25 companies will effectively control the marketplace.

Russia is not a weak insurance market—it is only an underrated one. The

While substantial problems have been experienced, and some may continue in the near term, some observers manage, quite incorrectly, to attach the same degree of economic and financial malaise to the insurance sector as elsewhere in the Russian Federation.

In the last five years insurance premium has grown at a faster rate than gross national product. While it is certain that inflation and other economic factors influence insurance activity, we should

Development Phases in Russian Insurance

Phase One	1993-1994	Industry sector building process
Phase Two	1995-1997	Limited investment by the West
Phase Three	1998-2000	Market potential recognized
Phase Four	2000-2001	Open market and faster growth
Phase Five	2002+	Significant Western participation

Russian Federation produced total 1997 premium of almost \$6.0 billion, of which about \$1.5 billion was life insurance and annuity premium. It can be estimated that about the same level of premium was achieved in 1998, considering the effect of the August 1998 financial crisis and its lingering impact. Internal factors alone, without consideration for economic improvement in Russia, should produce an annual growth rate within the insurance sector approaching more than 15% to 20% over the next five years.

China, on the other hand, is often considered to be a lucrative target for expansion and has become a popular venue for insurance development. With a population of more than 1.2 billion people, China produced \$15 billion in premium in 1998—yet with only 12% of China's population, Russia produced more than 39% of China's premium. Per capita insurance premium has reached at least \$41.00 in Russia while China registered \$12.50 per person, indicating Russia is more advanced than generally appreciated.

Russia's difficulties with economic transition are often misread in the West.

recognize that the business of insurance in Russia has developed its own momentum and has sustained this outstanding record of growth despite the turbulence we have seen.

The Russian insurance sector has grown more rapidly than other industries. With a start-up phase that became entangled in an attempted coup and the collapse of communism, insurance development required a consumer education process that paralleled marketing and sales activities. To compound this new market experience, Russian insurance companies were forced to live with and to survive during a period of hyper-inflation. While insurers strengthen their financial condition to accommodate changing market parameters, they have entered the next development.

Russia's growth, to date, has been generated primarily from internal resources and with limited access to public markets or foreign investment. Expansion capital is required to improve



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New SOA Professional Development (PD) Requirement for Candidates Working toward Fellowship in 2000

by August Chow

Under the new SOA education and examination system being implemented on January 1, 2000, a candidate must establish and complete a Professional Development (PD) plan consisting of 50 units of credit after passing Courses 1-8. Within the PD plan, a minimum of 20 units must come from SOA-approved formal professional programs (e.g., seminars, courses, meetings), 15 units from non SOA-approved programs and the remaining 15 units from a research project.

To complete the PD requirement, the following steps are required:

1. The candidate must recruit an advisor or an advisory panel.
2. The advisor and candidate sign a Professional Development Letter of Commitment (format provided by the SOA), and file the letter with the SOA.
3. Candidate's PD plan is constructed by the candidate and advisor.
4. Once a plan has been developed, the candidate and the advisor sign the plan and file it with the SOA. The SOA PD Committee reviews the plan and, within 3-4 weeks of receipt, informs whether the plan is approved.
5. Candidate completely executes PD plan with continued guidance and review from the advisor.
6. Advisor declares plan executed and provides sign-off.
7. Candidate and advisor submit a brief report to the SOA E&E Committee attesting to the plan's completion and provide a copy of the project report.
8. The SOA determines if the candidate has successfully completed the PD requirement. If confirmed, the SOA will notify the candidate of his/her qualification to participate in the Fellowship Admissions Course (FAC) as the final step to attain Fellowship.

In constructing the PD plan, the candidate should keep in mind the overall objective of the PD program that:

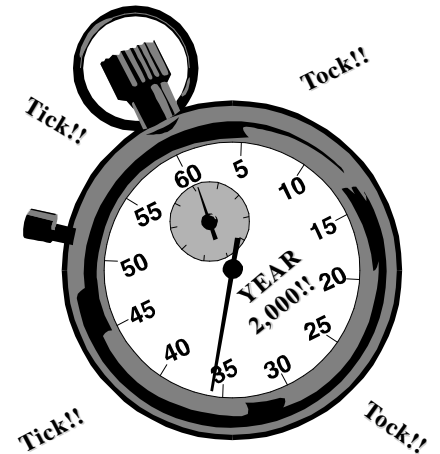
"Upon completion of the Professional Development component, the candidate will have a deeper understanding of the technical, legal, ethical, cultural, professional and practical parameters that apply to the chosen practice area, within the geographical territory or jurisdiction of the practice of the candidate.

"This understanding will be demonstrated through:

- Completion of suitable professional development programs relevant to the chosen practice area,
- Completion of a project demonstrating effective application of professional skills relative to a legitimate issue within the chosen practice area."

The SOA has also produced a document: *Guidelines for Advisors* to assist the advisor in fulfilling his or her role. The advisor will be responsible for assisting the candidate in assessing whether a particular program is appropriate to include in the candidate's overall Professional Development plan. Plans might include 20 units from SOA-approved elements, but still not meet the professional development needs of a particular candidate. Conversely, a program may not be SOA-approved, but may be well suited for a candidate's Professional Development plan based upon the interest, experience, long-term goals, or educational gaps of that candidate. Advisors should evaluate the appropriateness of any one program within the context of the candidate's entire Professional Development plan, the candidate's specific professional development needs, and the educational objectives of the Professional Development requirement as outlined by the SOA.

Most seminars sponsored by the SOA after July 1, 1999, are expected to qualify for PD credit. The PD credit earned for any seminar will depend upon several considerations, including the length of the seminar and its content. Typically, a day-long professional seminar is worth 6



units. If a student wishes to have a program or seminar offered by an organization or an internationally recognized actuarial body to qualify for the SOA-approved status, a request would normally come from the professional organization or international actuarial body offering the program. Alternatively, a candidate may submit a letter to the SOA requesting such approval, along with documentation, such as a full program description and published information on the organization offering the program.

PD plans may be submitted to the SOA office beginning October 1, 1999, but no plans will be processed prior to January 1, 2000. Candidates must have sufficient conversion exam credits to meet Course 1-8 requirements of the new educational system before submitting their plans.

If you wish to know more about the PD requirement, please refer to the following PD documents that have been posted to the SOA Website <http://www.soa.org>. These documents will be updated and new articles will appear, as they become available.

- September 1998 Proposal of the Task Force on Professional Development
- Professional Development Requirement Update - February 1999
- Professional Development - Sample Project Outline

- Professional Development - Guidelines for Advisors
- Professional Development - Letter of Commitment
- Professional Development - Frequently Asked Questions (FAQ)

A list of the SOA seminars that have been approved as eligible for PD credit is located on the SOA Website. For example, you can determine which sessions of

the 1999 SOA meetings (May 24-25 in Atlanta, June 16-18 in Seattle and October 18-20 in San Francisco), and the CIA meeting (June 17-18), are eligible for PD credit.

Questions on the PD programs or comments regarding any of the PD documents may be directed to the Professional Development Committee at *pdcomments@soa.org*. International students residing in Asia may contact Patrick Cichy, the

Coordinator of Asian Services in Hong Kong, e-mail address: *patrickcichy@compuserve.com*.

August Chow, a consulting actuary at William M. Mercer Limited in Toronto, Canada, is a member of the SOA Professional Development Committee

“Wing Walking” in Russia

continued from page 15

the financial strength and competitive position of Russian insurance companies. Additional capital, along with contemporary insurance technique and technology, would benefit both Russian insurance companies and the marketplace. This capital would provide for the acquisition or development of an even more modern range of products and services to accommodate the requirements of a sophisticated population and business environment.

Additional capital investment would allow select and qualified insurers to exploit and service the many opportunities within the Russian Federation, to conduct insurance education and publicity programs as well as to

capture market share, reduce operating expenses on a per-policy basis and to sell and cross-sell more products to a larger customer base.

The better Russian insurance companies have already seized a commanding market position and enjoy a respected identity and image. These companies



have professional management, emerging market operating experience and positive earnings, all of which would be extraordinarily expensive for a Western strategic investor to duplicate.

The Russian insurance industry has been visited with a variety of subtle though substantial opportunities while, at the same time, it is little understood and often quite routinely

ignored by more mature economies. Russian insurance professionals, the “wing walkers,” have been tested in more ways than we can imagine and they have quickly become a national treasure.

* * *

Mark D. Mariska, F.L.M.I., of Stamford, CT, is a former Chief Deputy Insurance Commissioner for California with 27 years insurance industry experience. He has been engaged in insurance company development in the Russian Federation since 1988.

Cast Your Ballots in the Section Elections

Ballots for the Section elections will be mailed the first week in July. Take an active role in the election process. Review the list of candidates and their biographies to determine whom you would like to represent you.



Ballots must arrive in the SOA office no later than August 6. If you are a Section member and do not receive the election mailing by July 23, contact Jeanette Selin at the SOA office: phone: (847) 706-3533; fax: (847) 706-3599; or by e-mail: *jselin@soa.org*.

Impressions of a U.S. Health Actuary Working in Brazil

by Ronald Poon-Affiat

Continuing our series of newsletter articles on the Brazilian market, our Ambassador to Brazil interviewed Stefan Keene, FSA who is working in Rio de Janeiro with CIGNA. CIGNA is presently charged with the responsibility of managing Golden Cross, one of Brazil's largest health insurance companies. Golden Cross is the third largest health insurance company in Brazil writing approximately R\$ 900 million of health premium per annum (US\$ 529 million).

What is your position within CIGNA/Golden Cross?

I am responsible for underwriting, actuarial, and medical economics, plus I have interim responsibility for group sales.

How long have you been in Brazil?

Almost a year.

Have you worked out of the United State before?

No, I lived in the UK for a year while I was in school, but beyond that this is my first experience living outside the United States.

Married, kids?

Yes, I am married and have a son who is almost a year old now. My wife has lived all over the world (Philippines, Bolivia and Peru) so she is a lot more accustomed to this than I am.

What do you like most about living in Brazil?

I love Brazilians' attitudes towards children. Children are very welcome everywhere, more so than in the States.

What do you miss most about being away from the States?

Two things: Cheap merchandise, as Brazil is very expensive, especially electronics and household pharmaceuticals. Secondly, spicy food: Brazilians do not like spicy food, at least not Brazilians in Rio de Janeiro.

How do you compare expectations versus the reality of living in South America?

It has been surprisingly easy living here compared to what I was expecting. My wife's parents had lived in Bolivia and Peru and I think that life there was a lot more difficult and complicated than it is here. Rio is a very sophisticated city and we get to do most of the things that we enjoy.

How has it been interacting with your Brazilian colleagues in terms of management and actuarial matters?

The biggest challenge was blending American, Spanish, and Brazilian management styles, plus dealing with the mix of English, Spanish, and Portuguese spoken concurrently in the business environment.

And actuarial issues?

The biggest actuarial issue that I have struggled with here is a weak understanding of how medical trend works. People assumed that medical trend was the same as general inflation; there was no understanding of severity, utilization, and unit cost trends. I probably spent my first four months here trying to convince people that medical trend existed and that it should be included in the pricing of medical products. I still think that a lot of our competitors don't understand this concept. Even the regulators don't accept price increases based on utilization and severity increases, and I have spent a lot of time discussing these issues with regulators.

What has been your biggest challenge in general?

Dealing with uncertainty—Everything from the economy and regulation to "what's my job?" Due to the "fix-it" nature of my assignment, I have had to take on additional responsibilities and drop others as our business situation changes. It is very difficult at times, but I love it!

What did you find to be surprisingly easy?

When I got here I found that identifying priorities was relatively easy. There were very basic, fundamental requirements: reprice the portfolio, control medical costs, and reduce expenses. While those might be the same priorities for CIGNA HealthCare in the United States, the specific corrective actions would be more sophisticated. Here it is back to basics.

What do you think will be the impact of the Brazilian crisis on the health market?

I think the effect will be twofold. Firstly I believe that growth will be stalled for the short term. We are going to stop seeing the growth of the middle class who have the income necessary to buy health insurance plans, and employers will not have as much money to purchase group health plans. This will produce a decline in total medical plan membership and perhaps even premium.

Secondly it was a bad idea to have an economic crisis (small joke) at the same time as a major change in legislation (footnote 1). Even without the economic crisis, I was predicting a decline in the market due to the new legislation and now you have the crisis in addition.

How important is Brazil to CIGNA's overall worldwide strategy?

Critical—Brazil is probably one of our top 3 worldwide priorities. We believe the long-term opportunity in the Brazilian health care business is tremendous.

Is it right to think of Brazil as an emerging market?

Yes and no. If you compare Brazil to Peru or Bolivia, Brazil clearly is not an emerging country. On the other hand there are very high debt levels, interest rates and political uncertainty, plus a very small middle class. But Brazil is probably a lot higher on the scale of not being an emerging country than being an emerging country.

Do you think that the Brazilian health market is saturated?

In terms of saturation I'd say that there are lots of players but not many sophisticated players who have a large (greater than 10%) share of the market. My prediction is that there is going to be a lot of consolidations because of the new legislation. I think that there is a lot of room for consolidators.

Do you see the continuation of the rapid growth of the Brazilian health care market?

Long term, yes. Short term, no.

As an actuary accustomed to working in the U.S. markets, how have you adapted to working in the Brazilian environment?

Investment Markets: In the United States, in health care, no one pays much attention to investment income. Here it's totally different, Golden Cross and others made a lot of money in the days of hyperinflation. You took in \$100 of premium at the start of the month, you paid \$150 of benefits at the end of the month, but you earned 100% interest during the month. So you made a 50%

probably worse than in the United States. But we have a large enough volume of data to make pricing decisions. However I really dislike the local accounting system; it is very difficult to take apart and explain statutory financial results. CIGNA has a very strong relationship between our pricing and financials, but here drawing the link is very difficult because of the accounting system.

Legislative environment: This drives everything right now, more so than in the United States.

Products: Before the legislation, health care plans were very much a sold product and the market was quite manipulative. People often didn't know what they were buying—which is why we have a new law. We now have a mandated, very rich standard benefit package, which will make it more difficult for competitors to differentiate themselves in the market.

I also found it surprising that coparticipation by the insureds in the covered medical expenses in the form of copayments, deductibles, and coinsurance is nearly non-existent in Brazil.

Distribution Channels: These are very different. For instance, in the States we do not sell individual health products for all intents and purposes. Here individual

often, in my opinion, at the expense of profit margins.

Is Brazil a must for U.S. players who are already active in international markets?

No. I think it would be best if our competitors stayed out of Brazil.

And finally, in recruiting a U.S. health actuary to live and work in Brazil, what are the main qualities that you would be looking for?

First, a quick plug for CIGNA's actuarial program in the States: I am in an Actuarial Executive Development Program where I rotate jobs every couple of years. As a result, I've seen the health, pensions, and individual life businesses in both financial functions and non-financial roles. The rotation process has taught me how to move into a new situation and quickly understand the business drivers and identify and execute on key priorities.

In looking for a U.S. actuary to recruit to any overseas operation, my short list would be:

- 1) Flexibility and ability to thrive in ambiguous environments
- 2) Ability to quickly understand key business drivers
- 3) Proven track record of setting priorities and producing results
- 4) Language skills never hurt, even though I didn't have them before I came to Brazil.

“The biggest actuarial issue that I have struggled with here is a weak understanding of how medical trend works. People assumed that medical trend was the same as general inflation...”

margin with a loss ratio of 150%. Fundamentally, it was shocking for me to get used to. Today you can't make as much money on float but certainly more than in the United States.

Economic Environment: In the States there is no concern about the effect of currency movement on health costs, but here currency movements do impact health costs due to imported medical supplies.

Lack of Credibility of Data: We certainly have data quality issues, which are

plans exist and are sold aggressively using very expensive pyramid-style independent agent structures. The sales personnel are often part-timers or students; they are not sophisticated health care professionals. First year persistency is terrible—the industry norm appears to be 50%! Poor persistency mattered less in the past because of the interest spreads, the key was to get money in the door. Today persistency drives individual profitability.

Competition: I was surprised at how competitive the market was. Companies are fighting for market share today and

Footnote 1: The *International Section News* issue dated September 1998 contained an article regarding the impact of the new health legislation in Brazil introduced in December 1998.

Ronald Poon-Affat, ASA, is member of the International Section Council and works at General Cologne & Re Brazil Ltd. in San Paulo, Brazil.

Buenos Aires Seminar a Rousing Success

by Ed Robbins

Editor's Note: This is a reprint from the May 1999 Financial Reporter, the newsletter of the Financial Reporting Section.

Until 1997 the Society of Actuaries had never held seminars outside the United States. Shirley Shao broke fresh ground in that year with four very successful—and well-attended—seminars in Asia. On her enthusiastic return (is she ever anything but enthusiastic?), the Financial Reporting Section Council began thinking of other parts of the world in which two items in particular were present:

“The seminar was put together primarily because the Financial Reporting Section felt there was a need to speak to several subject areas of interest to actuaries practicing in Latin America.”

significant interest in North American actuarial financial reporting developments and emerging significant insurance markets. It all culminated in a two-day seminar on August 18 and 19, 1998 in one of the world's most beautiful cities, Buenos Aires, Argentina. The Council sponsored the seminar and invited the actuarial communities of Argentina, Chile, and Brazil to attend. Much to our pleasant surprise, we had over 200 registrants from those countries, and the seminar was a great success. In addition, there were about 20 attendees from the United States.

The seminar was put together primarily because the Financial Reporting Section felt that there was a need to

speak to several subject areas of interest to actuaries practicing in Latin America. GAAP accounting is necessary for Latin American subsidiaries of U.S. parents. Additionally, GAAP accounting is necessary for any Latin American company that wishes to enter the capital markets in the United States. Cash flow testing, as we are aware in the United States, is a far more comprehensive way to evaluate reserve adequacy and company viability than traditional methodology, primarily because it brings into consideration the asset side of the balance sheet, and it is not a tool that is regularly used south of the border. It was

also felt worthwhile to discuss the major aspects of mergers and acquisitions, due to the significant amount of such activity taking place over the last few years in South America and the emphasis on embedded value in the acquisition process. Finally, inquiries with local actuaries resulted in a significant perceived need for discussion of actuarial audit techniques.

A second reason to put on the seminar was to foster closer relationships between the actuaries practicing in both these parts of the world. We all gained further insights into actuarial adaptation to our respective markets and economies and the differences between our respective education and examination systems. Beyond that, we started some very strong friendships between our two communities.

The local sponsor of the seminar was the “Professional Council of Economic Sciences for the Capital District of Buenos Aires.” The Council has about 40,000 members, consisting of accountants, economists, and actuaries. The



Council permanently occupies a modern building in downtown Buenos Aires. The facilities were beautiful and functional, and the seminar was handled in a highly professional manner by the local staff of the Council down to the small details, including excellent simultaneous translation facilities. Dr. Simon Groll, a member of the Board of Directors of the Council, opened and closed the seminar.

The faculty members doing the presentation were all members of the Society of Actuaries: Edward Robbins, Peter Duran, Carl Harris, John Nigh, Antonio Gonzalez, and Camilo Salazar. As noted below, several of us served double duty, presenting on more than one session.

Peter Duran and John Nigh spoke on GAAP topics first. Basic GAAP concepts and principles were covered, followed by the details of the rules, and pragmatic insights. This discussion was detailed enough to include, for example, such abstruse concepts as the SFAS 115 “Shadow DAC” and deferred taxes.

Carl Harris covered the appointed actuary's role in the United States and discussed the heavy current emphasis on cash flow testing and the regulatory requirements. Peter Duran then came back on stage and dealt with advanced cash flow testing topics, including uses of the cash flow testing process and how to get significant useful by-product information out of the process.

I was next, as I served the double duty of seminar coordinator and faculty member. I covered the actuarial aspects of auditing and the external auditor's perspective on the audit process. I went into some excruciating detail on reserve reviewing methodologies and stratified sampling techniques and somehow managed to keep a few people awake during the session. John Nigh then returned to the podium and dealt with a



related topic—the actuary’s role in the due diligence process.

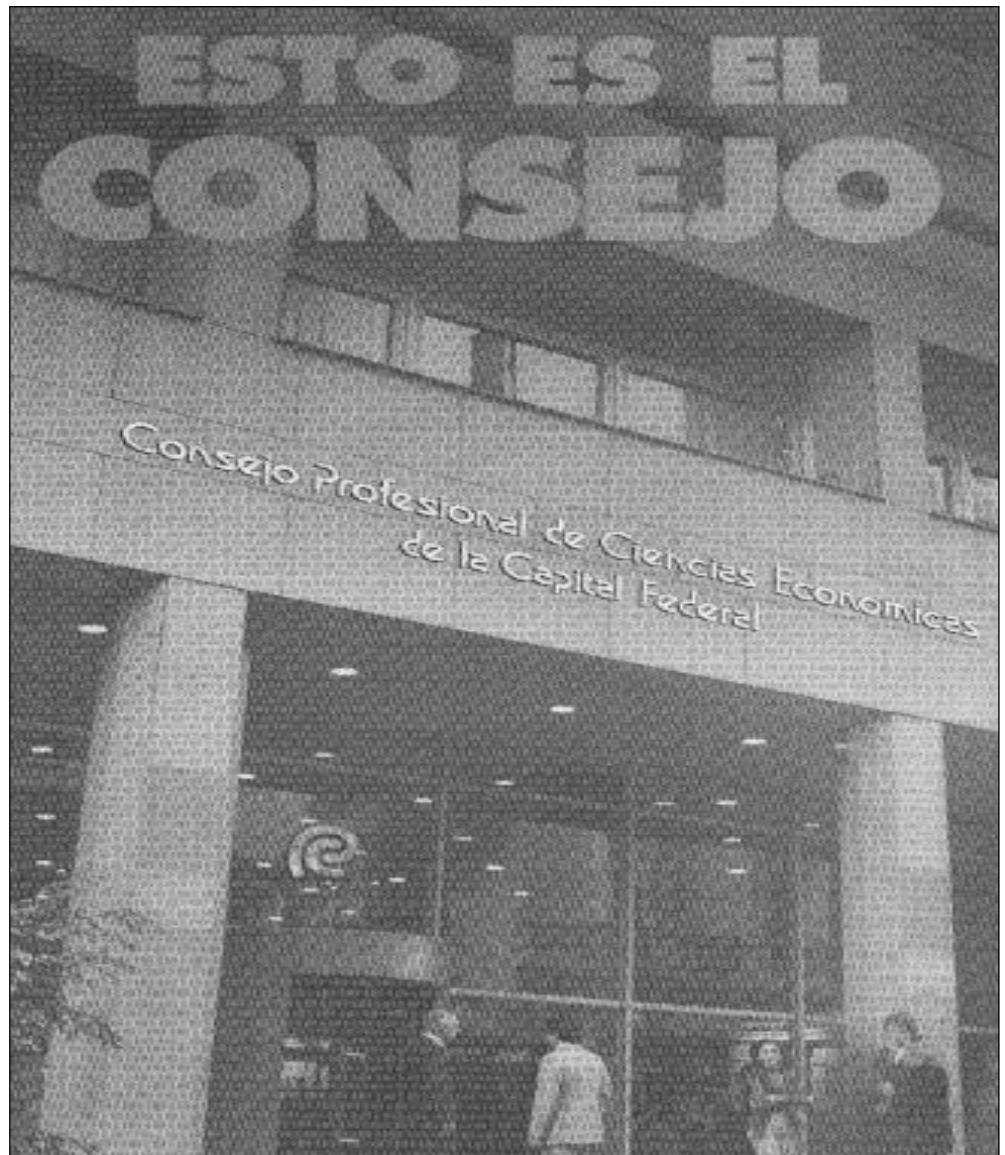
Camilo Salazar and Antonio Gonzalez wrapped things up with the mergers and acquisitions environment in the United States and Latin America. They gave a brief recent history of acquisitions in this hemisphere and discussed the actuarial appraisal process in some detail.

I would like to express my great appreciation to the many people involved who helped make this seminar a success. Coordination between the actuarial communities in four countries is not a simple thing. The faculty, the administrative staff of the local Professional Council, the Society of Actuaries staff, and the many volunteers from the actuarial organizations in Argentina, Brazil, and Chile all deserve our thanks for making this seminar a success.

The Asian and South American experiences have been so positive that the Section Council is contemplating two more foreign-based seminars. One is for the Caribbean actuaries and a second would be for emerging countries in eastern Europe. The local participants and the panel leaders have been so enthusiastic that the Section Council feels mandated to continue riding the rails of the education train on North American life company financial reporting practices.

Edward L. Robbins, FSA, is Senior Actuary, Zurich-Kemper Life Insurance Companies, Long Grove, Illinois, and Treasurer of the Financial Reporting Section Council, and an organizer of the Buenos Aires seminar.

Pictures from Buenos Aires Seminar



Top Right: Entrance to the Professional Council of Economic Sciences for the Capital District of Buenos Aires modern headquarters.

Bottom: Hosts, speakers and spouses pose at the banquet. Front center, Marcelo Artana, Chief Administrator of the Professional Council; Back, 3rd from left, Dr. Simon Groll, Sponsor Delegate and a Director of the Council. Back, 1st, 2nd and 3rd from right, speakers Carl Harris, Peter Duran and Edward Robbins.



Promoting Actuarial Education Across Asia

by Patrick Cichy
Coordinator of Asian Services

The Society of Actuaries has a long history of supporting actuarial education across North America by supplying universities' actuarial science departments with SOA-published materials. This type of assistance appeared to be a logical first step for the Asia Committee (now the China Region Committee) to promote actuarial education in China where an ever-increasing number of students sit for SOA exams. Study materials are also hard to come by in a country where the annual per capita income as reported by the World Bank is less than US\$1,000.

The CRC identified universities with either undergraduate or graduate actuarial science programs, many of which are SOA exam centers, and designated them as Society of Actuaries Reference Centers. The SOA sends them complimentary materials, requiring them to place the materials in a library available to all students, faculty, and others interested in learning more about the profession. The Reference Centers receive a one-time complete set of

Associateship level study notes (with revisions sent biannually) and SOA-published textbooks, plus regular mailings of *The Actuary*, *The Future Actuary*, *North American Actuarial Journal*, *Yearbook*, *Associateship and Fellowship Catalog*, and all of the Section newsletters.

There are currently nine Reference Centers across China: East China Normal University, Shanghai; Fudan University, Shanghai; Hunan College of Finance & Economics, Hunan; Nankai University, Tianjin; Peking University, Beijing; Renmin University, Beijing; Shanghai University of Finance & Economics, Shanghai; University of Science and Technology of China, Hefei; and Zhongshan University, Guangzhou. The CRC is also considering adding two more centers in the near future.

SOA Reference Centers have also been established at two universities in the region encompassed by the recently formed Southeast Asia Committee—MARA Institute of Technology, Shah Alam, Malaysia, and Nanyang

Technological University, Singapore. These institutions were chosen based on the same criteria as those in China. The SEAC is currently reviewing the programs at other universities in hopes to further promote actuarial education in more countries throughout Southeast Asia.

For more information on the CRC, SEAC, and the Reference Centers, please visit the SOA Asia News Homepage at www.soa.org/committees/asiahp.html.

* * *

Patrick Cichy is the Coordinator of Asian Services for the Society of Actuaries in Hong Kong. He can be reached at pcichy@soa.org.



Faculty and student members at Fudan University, Shanghai, China, discuss a paper from the latest edition of the North American Actuarial Journal.



Students at the Hunan College of Finance & Economics, Hunan, China, study for the SOA exams at the Reference Center.

Cairo University Actuarial Graduation

by Michael Hubbart

10 April 1999
Cairo, Egypt

The first graduating class of actuarial students at Cairo University received their degrees in a ceremony at the university. Ten of the eleven students, who started the program in 1995 are currently working in the insurance industry, either for private companies, or for the Egyptian Insurance Supervisory Authority. One is working as a Demonstrator in the Mathematics Department at Cairo University, where her duties consist of assisting in the Actuarial Science Program in the Faculty of Commerce.

The program was started in 1995 as a joint effort with City University in

problem sessions during the term. During the past term, an American actuary has been teaching in the program as a part of a U.S. aid project intended to provide technical assistance for economic reform in Egypt. The program, as it stands, is a joint effort of many individuals, groups, and organizations, all of whom were represented at the graduation ceremony.

Guests at the ceremony included Paul Thornton, President of the Institute of Actuaries; and Elisabeth Goodwin, Chief Educational Officer of the Institute. Attendees from City University were Richard Habermann, Dean of the School of Mathematics, Actuarial Science, and Statistics; David Rhind, Vice Chancellor; and Linda Wolstonholme, Head of Department of Statistics and Actuarial



fulfilling. In Egypt there are currently ten individuals who are members of either the Institute of Actuaries, or of the Society of Actuaries. The program at Cairo University will add to this number. He also noted the founding of the Egyptian Society of Actuaries within the past month as another milestone in the development of the actuarial profession in Egypt.

Professor Ibrahim received an enthusiastic standing ovation from the graduating students.

The ceremony, which included a marching band and a full academic procession, was followed by an Egyptian feast in the University Guest House.

Finally, I would like to add that, for me personally, it was a great honor and an inspiration to be present at the commencement. I noted that many of the current students in the program attended. I believe that their attendance is a measure of the affection and esteem that they feel for their graduating colleagues. It is an affection that I share.

Michael Hubbart is a guest columnist for this issue of International Section News. He can be reached at (tapr_5_7@intouch.com).

“Courses in the program are taught by regular members of several of the Faculties of the University and by actuaries in practice in the Cairo area.”

London. Under the arrangement with City University, Cairo University receives support and advice on curriculum, and students in the program can obtain exemptions on up to eight of the Professional Examinations offered by the Institute of Actuaries in the United Kingdom.

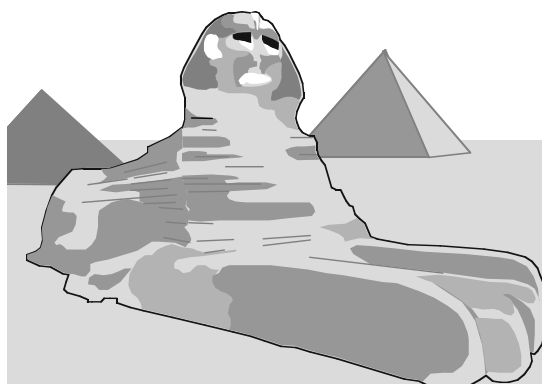
For certain courses offered by Cairo University, the final examination paper is submitted to City University for independent grading.

Exemption from the Institute Examination is based on the result of that independent review. The independent review is under the close supervision of the Institute.

Courses in the program are taught by regular members of several of the faculties of the university, and by actuaries in practice in the Cairo area. Visitors from City University conduct

Science. The degrees were presented to the graduates by Dr. Farouk Ismail, Rector of Cairo University. Also represented were the Insurance Federation of Egypt and the Insurance Supervisory Authority.

Professor Fathi Ibrahim spoke to the gathering about the history of the program, and the need that it was



Announcement of Actuarial Meeting in Bogota, Colombia

Editor's Note: Following are excerpts, consisting of selected articles, from a document prepared by the Colombian Actuarial Association (Asociación Colombiana de Actuarios, or A.C.A.) concerning an actuarial meeting that will be held later this year. For complete information, including a registration form, please contact the A.C.A. at the address shown in Article 1 below.

According to a note received from the A.C.A., they are expecting attendees to consist of about 200 lecturers and delegates from Argentina, Brazil, Canada, Germany, Mexico, Spain, Switzerland, United States, Venezuela and several other Latin countries.

Asociacion Colombiana de Actuarios

III Panamerican Congress of Actuaries I Colombian Congress of Actuaries Ibertoamerican Meeting of Actuaries

REGULATIONS OF THE CONGRESS

Date and Place of the Congress— Article 1

The 3rd Pan-American Congress of Actuaries and 1st Colombian Congress of Actuaries will be held in Bogota, Republic of Colombia, from September 29 to October 1 of 1999.

It will be organized by the Colombian Association of Actuaries (A.C.A.) through its President Víctor Raúl Sánchez Espitia. Carrera 16ª #86ª-79 Oficina 302, Tel: (57-1)6104073 and (57-1)6108200, Fax (57-1)6918095, A.A. 11216 Santafé de Bogotá D.C., Colombia, South America.

Objectives—Article 2

The objectives of the Congress will be:

- Study actuarial topics, both theoretical and practical, in all areas of the actuarial world, focusing particularly on Social Security issues.

- Increase knowledge and opinion exchange among actuaries at a Pan-American level.
- Promote the maximum level of professional work.
- Communicate actuarial activities to other professions that have a relationship with the actuarial field, and in general, to promote professional relations inside our society.

Participants—Article 6

Participants will be classified into the following categories: Active, Invited and Student.

Article 7

The Active category includes:

- Actuaries from Colombia or from abroad
- Persons or delegates from institutions interested in the Congress' topics and in the actuarial world
- Members of other institutions or associations that have a relationship with actuarial work

Article 8

The Invited category includes:

- Government and university authorities
- National and international actuaries designated by the Executive Committee

Article 9

The Student category includes those who are studying actuarial science, or similar majors like Mathematics, Finance, Economics, Demography, Statistics

Scientific Program—Article 10

The topics of the Congress are grouped in six areas:

- A. First Area: Information at Pan-American level
- Standardization
 - Exchange
 - Techniques
 - Software, etc.

B. Second Area: Health

- Lecture of the Model in every country
- Legal Principles
- Experiences
- Expectations
- Actuarial Models
- Catastrophic Diseases

C. Third Area: Professional Risks

- Lecture of every country's model
- Measuring methods/models
- Risk and Disease Evaluation techniques
- Rating Methods

D. Fourth Area: Pensions.

- Lecture of every country's model
- Pension Bonus
- Other Latin American experiences
- Survival and Disability
- Pension Reinsurance

E. Fifth Area: Complementary Products

- Fund Market's Experience
- Complementary products

F. Sixth Area: Other

- Actuarial applications of the Diffuse Set theory
- Legal Regulation of Social Security

Article 16

Meeting sessions will be presented in one of the following formats:

- Lectures of invited guests
- Panel discussion
- Debate among the participants
- Review and conclusions about the topics presented

Languages—Article 18

The official languages of the Congress will be English, Spanish and Portuguese. During presentations every lecturer will have to use one of these languages; we will have simultaneous translation into the other two languages.

China Region Committee Is Right on Track

by Patrick Cichy
Coordinator of Asian Services

The SOA's China Region Committee conducted its first membership survey earlier this year in order to determine what the region's members thought were the most important objectives and to identify their needs. The results show that the committee's objectives coincide with the issues identified as most important by the members. The survey was sent to approximately 550 members in Hong Kong, Taiwan, China (including students with over 200 credits), and also to the Asia News list server. Nearly 9% (49) were returned; 59% (29) from Hong Kong,

18% (9) from China, 16% (8) from Taiwan, 4% (2) from the US, and 2% (1) from Singapore.

For questions 1 and 2A, members were asked to rate the importance of activities and seminar topics with "5" representing extremely important, "4" very important, "3" somewhat important, "2" not very important, and "1" not at all important. The activities and topics were then ranked using a system which gave each "5" 1.2 points, each "4" 1.1 points, each "3" 1.0 points, each "2" 0.9 points, and each "1" 0.8 points.

A similar system was used for ques-

tion 2B, except that the answer selections ranged from "1," meaning "first choice" at 1.2 points, to "6," signifying "sixth choice" at a point value of 0.7.

The Results

Question 1: Please rate the importance of the following current activities and possible projects of the CRC.

Question 2A: Seminar topics. Please rate the importance of the following potential topics of future CRC-sponsored seminars.

Question 1

Project	Point Value:					Total Points
	1.2	1.1	1.0	.9	.8	
	5	4	3	2	1	
1. Working with the AAC	19	25	4			54.3
2. SOA seminars in China region	20	15	11	3		54.2
3. Asia News e-newsletter	9	22	13	3	2	52.3
4. Promoting education in mainland	14	19	11	3	1	52.2
5. SOA exams relating to local practice	13	17	17	1		52.2
6. Working with the IAA	8	27	11	2		52.1
7. SOA Reference Centers in China	5	20	22	1		50.9
8. Review courses for FSA exams	10	14	18	4	2	50.6
9. China Region Development Fund	12	10	20	4	2	50.6
10. Virtual Tutorial Center	9	12	17	7	4	50.5
11. China Region Teacher Support	8	12	24	4		50.4
12. SOA-Nankai program	5	11	27	4	2	50.3
13. Asia News list server	4	12	26	3	3	49.1
14. Review courses for ASA exams	5	13	18	7	5	48.6
15. Liasing with local actuarial clubs	5	17	19	4	1	48.1
16. Other: Liasing w/ local ins. officials	1					1.2
16. Other: Student/teacher internships	1					1.2
16. Other: Development of prof. standards	1					1.2
16. Other: Reducing exams fees	1					1.2

Question 2A

Topic	Point Value:					Total Points
	1.2	1.1	1.0	.9	.8	
	5	4	3	2	1	
1. Valuation standards	27	12	6		1	52.4
2. Investments	21	19	5	1		52.0
3. Social insurance/pensions	14	20	9	4		51.4
4. Product development	26	13	4	2		51.3
5. Healthcare	10	21	12	2	1	49.7
6. Reinsurance	10	23	8	2	2	48.7
7. Managed care	7	13	16	10		47.7
8. Other: Computer systems		2				2.2
9. Other: Matching	1					1.2
10. Other: Solvency		1				1.1
10. Other: Group/employee benefits		1				1.1

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China Region Committee is Right on Track

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Question 2B: Seminar location. Please rank the following locations that you would travel to for a CRC-sponsored seminar with "1" being your first choice. If you would not travel to a certain location, do not rank that city.

Question 3: The CRC is divided into the four following focus groups. Based on each group's mandates, what issues do you think each should address and what additional projects should they be undertaking?

Question 2B

City	Point Value:						Total Points
	1.2	1.1	1.0	.9	.8	.7	
1. Hong Kong	32	2	1	2			43.4
2. Beijing	7	10	3	10	4		34.6
3. Shenzhen	6	10	4	2	10	1	32.7
4. Shanghai	6	4	14	5	1	1	31.6
5. Taipei	6	5	7	7	5		30.0
6. Other: Macau		1		1			2.0
7. Other: Guangzhou			1				1.0
8. Other: Kaohsiang				1			0.9

Professional Practice

Respondents recommended that the CRC provide seminars and workshops including participating in the biannual East Asian Actuarial Conference, and establishing research centers in the region, in order to promote the importance of professionalism. Some issues recommended included working to establish professional standards in China and to work closer with the China Insurance Regulatory Commission.

Actuarial Education

Members recommended that the CRC organize tutorial groups, internship programs, and provide further details on the new exam system. Several respondents suggested that the CRC address the issue of reducing exam fees in China.

Finance Affairs

Respondents also suggested that the finance affairs subcommittee address the issue of reducing exam fees in China. One suggested raising funds from mainland foreign insurance companies.

Membership and Public Relations

Many of the suggestions and comments were represented in previous responses, but some members also suggested that the CRC produce a bilingual newsletter and provide continuing education programs.

Question 4: Do you have any suggestions on how the CRC can further promote the actuarial profession?

Some suggestions included providing

seminars, working with the Actuaries Association of China, research projects with universities, and providing opinions to the media and public, regulatory bodies, and senior management of insurance companies.

Question 5: Do you find the US/Canadian-specific material covered in the SOA exams to be useful in your present job? Please explain.

Of the 27 members who responded to this question, 62% (17) answered yes, 19% (5) answered no, and 19% (5) saw both advantages and disadvantages of the exams. Those who thought they were useful said the exams gave them new perspectives and ideas, background knowledge and references which could all be applied to their present jobs. Of those who said no, many said they were not useful because of different regulatory and economic environments, taxation, laws, and accounting. The remainder agreed that although the US/Canadian-specific material could not be used directly, they could apply the concepts indirectly to their jobs.

Question 6A: Do you have access to the Internet?

93% (41) of the respondents to this question answered yes, while the remaining 7% (3) do not have access.

Question 6B: Do you have e-mail access?

All respondents have access to e-mail. Thirty-two of them gave their e-mail addresses to receive further information on the CRC and have been added to the Asia News list server.

CRC Plans

The main projects of the CRC match those identified as most important—working with the development of the Actuaries Association of China and providing SOA seminars in the region. Last September, the CRC and SOA President Howard Bolnick presented a large donation of books to the AAC to establish their reference library. Individual CRC members have served as advisors to review the AAC syllabus and other important documents and the CRC is planning to assist in the development of their Fellowship study materials. Also in September, the CRC sponsored a highly successful seminar on "The Impact of the Asian Financial Crisis on the Insurance Industry." The CRC is planning a seminar on healthcare to be held in Hong Kong in September 1999. It is continuing to review the feedback to plan for future seminars to be held throughout the China region and to initiate other projects.

For more information on the CRC or to be added to the Asia News list server, please visit the SOA Asia News homepage at www.soa.org/committees/asiahp.html or contact patrickcichy@compuserve.com, (852) 2199-1110, or by fax (852) 2730-5356. The SOA Representative Office is located at Units 2207-2212, 22/F, Miramar Tower, 1-23 Kimberley Road, Tsim Sha Tsui, Kowloon, Hong Kong.

April 5 ISC Meeting Minutes

Attendance:

Chairperson Bruce Moore	
Josh Bank	Mike Gabon
Richard Geisler	Kevin Law
Bob Lyle	Randy Makin
Angelica Michail	Ron Poon-Affat
Jim Toole	Lois Chinnock
Chelle Brody	

Annual Meeting Update: Mr. Lyle reported that the section is sponsoring six sessions at the annual meeting. The session titles, moderators, and presenters are listed on Attachment 1. In addition, there are two sessions being co-sponsored and recruited by the Financial Reporting Section. These topics are International Reporting Standards and International Valuation. There is one session on the European Union being co-sponsored and recruited by the Investment section.

Chairperson Moore confirmed that the Section could pay the additional cost of the hot breakfast over the usual SOA continental breakfast.

Mr. Lyle will check availability of an appropriate time for a Section reception with the SOA office.

Spring Meeting - Atlanta: Mr. Gabon reported that there are five sessions scheduled in Atlanta. The session titles are listed on Attachment 1. There is an urgent need to finish the recruiting for this meeting. Council members made suggestions regarding potential speakers for the sessions not fully recruited. These names are needed as soon as possible so that the SOA office can send speakers kits to those involved.

Spring Meeting - Seattle: Mr. Gabon reported that there are four sessions scheduled for the spring meeting in Seattle. The session titles, moderators, and presenters are listed on Attachment 1.

Minutes: The minutes of the October 18, 1998, and December 17, 1998, meetings were approved as written.

Newsletter: Mr. Law reported that he had two reprint articles and was expecting to receive four potential articles for the next

issue of the newsletter. The closing date for the issue is May 15, but may be extended if there is not enough material. Mr. Poon-Affat agreed to write another article for his series on developments in Brazil, and Ms. Michail will write an article on the Clearinghouse Scholarship program. Mr. Toole will be providing an article on the Country Web Page project.

Mr. Gabon agreed to write an article on practice issues in the Caribbean for the fall issue.

Treasurer's Report: Mr. Toole reported the section has a US\$43,000 balance, and that last year the section had receipts of US\$13,000 in excess of expense.

Council members approved reimbursement to Ms. Michail for reasonable travel expenses for the next Council of Section Chairpersons meeting.

Ambassador Program: Mr. Toole reported there had been good response to the article in the last newsletter soliciting additional ambassadors. The goal is to have an ambassador for each country with 10 or more SOA members.

The country Web page survey has been tested and ambassadors will be filling these out and returning them to the SOA to be published on the SOA Website. The goal is to have 15 done by the end of the summer, with 20 completed by the end of the year. There is an article scheduled for the next issue of *The Actuary* to publicize this information. Thanks to Richard Geisler, Jeanette Selin, Ronald Poon-Affat and Debbie Jay for their hard work in making the project a success.

SOA Mexico City Seminar: The International Section is cosponsoring a seminar with the Financial Reporting Section scheduled in October to take place in Mexico City. The speakers are Ed Robbins, Jim Bridgeman, Carl Harris, John Nigh, Roger Smith and Jim Toole. Council members approved \$1,000 for handout printing expenses.

Teacher Salary Subsidies: Ms. Brody described a proposal from the China Region Committee that seeks funding

from the International Section of \$1,500 per year for each of three teachers to be selected annually. The proposed project involves subsidizing teacher salaries at Chinese universities in an effort to encourage them to remain in teaching positions rather than choosing higher paying non-academic jobs. Council members felt that it was a lot of money to commit compared to their total resources. The motion was tabled in order to ask the International Policy Committee to further define the policies supporting SOA initiatives in Asia. One member indicated that he would prefer to see the Section encourage students to sit for exams by providing books or subsidies. Ms. Brody indicated this would be welcomed as well.

Library Indexing: Ms. Chinnock explained that, on behalf of the Committee for Knowledge Extension, Mr. Huntington had made a proposal at the last Council of Section Chairpersons meeting to have SOA publications indexed and available on the SOA website. There are about 650 publications to be indexed at a cost of US\$60,000. Ten Sections already have committed funds to this project. The Research department is expected to support the effort too. Council members allocated US\$1,000 to support this project. They all agreed it would be very helpful to international members whose only access to the SOA library could be through the Internet.

Proposed International Section

Seminar: Ms. Michail has spoken with Ms. Choyke, SOA Director of Continuing Education, regarding the details of a Section-sponsored seminar. The seminar would require five months to plan and the section would be charged a US \$10,500 management fee. Speakers are reimbursed at US\$1,000 per day, plus expenses. The seminar registration fee is around US\$750.

Mr. Moore supported exploring cosponsoring an international financial reporting seminar around the Valuation Actuary Symposium. A concern was

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April 5 ISC Meeting Minutes

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voiced that this symposium attracted a very U.S. oriented audience who would not be interested in international GAAP and reinsurance. The annual meeting was suggested as a better location because of its popularity with members who live out-side the U.S. and Canada. Either Friday, October 15 or Thursday, October 21, are potential dates for the seminar.

Ms. Michail asked council members to e-mail potential topic suggestions to her and she will follow up with Ms. Choyke.

Portuguese Translation of the

Newsletter: Mr. Poon -Affat reported that Tillinghast and General Re have agreed to support the translation and printing costs to make a Portuguese issue of the

International Section News available to local members and other interested parties in South America. The supporting companies' logos will be printed on the issue. The sponsored cost of this project is US\$3,500. He needs commitments from two other companies before proceeding.

Ms. Chinnock reported that the SOA Website is an English-only site. It also could not accept the company logos.

Section Elections: Ms. Chinnock asked council members to submit the names of at least six candidates to include on the 1999 ballot. The section will elect three new members to three-year terms to replace retiring members Bruce Moore, Ric Geisler and Peter Luk. The deadline

is May 21 for the ballot to be mailed on time. Chairperson Moore asked that names be submitted before May 3 to allow adequate time to review and discuss potential candidates. A concern was expressed about our ability to find qualified candidates overseas who were willing to actively participate and provide needed balance on the Council.

Next Meeting: Ms. Chinnock will poll council members for available dates in June for the next conference call. There also will be a council meeting scheduled for the afternoon of Sunday, October 17, in conjunction with the annual meeting.

International Section Sessions and Presenters for 1999

As of April 7, 1999

Meeting	#	Title	Moderator	Presenters
Atlanta	9 IF	Foreign Insurer Reorganizations	None	John A. Jenkins
Atlanta	23 PD	Opportunities for the International Actuary	None	None
Atlanta	40 OF	European Insurance Market Update	None	None
Atlanta	64 IF	Underwriting Issues/Processes In Foreign Jurisdictions	None	None
Atlanta	72 PD	Life in the Americas	James F. Toole	Lisa S. Kuklinski Steve Putterman Jean Seidle
Seattle	8 PD	Opportunities for the International Actuary	Joshua David Bank	Rejean Besner Ignacio Gurza de Con Ronald L. Poon-Affat
Seattle	19 PD	Pension Reform in Eurasia* (* Eastern Europe and Asia)	Joshua David Bank	Rejean Besner C. David Gustafson Lena Serge Zezulin
Seattle	35 CS	Health Care Reform in Brazil	Joshua David Bank	Marco Antonio De Pontes Ronald L. Poon-Affat
Seattle	63 TS	Global Health Care Pooling	Joshua David Bank	Z. Samuel Bernstein Lucille Jones
San Francisco	7 PD	Have FSA Will Travel	Bruce D. Moore	Michael J. Corey Linda B. Emory Yves Laneuville
San Francisco	34 PD	Emerging Reinsurance Markets	None	None
San Francisco	60 PD	Demographics and Longevity into the Next Century	James C. Hickman	Charles G. Hertz David M. Holland Shripad Touljapukar
San Francisco	79 PD	The Asian Flu—Is Anyone Immune?	Frederick W. Kilbourne	Stijn Claessens Edmund F. Kelly Stuart Hamilton Leckie
San Francisco	101 PD	U.S. Social Security: To Be or Not To Be?	Joseph A. Applebaum	Christopher David Daykin Ronald Gebhardtshauer
San Francisco	122 SM	International Section "Hot" Breakfast	Bruce D. Moore	None