INTERNATIONAL SECTION
"A KNOWLEDGE COMMUNITY FOR THE SOCIETY OF ACTUARIES"

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INTERNATIONAL NEWS

Social Health Insurance Plans: 中国制造 (Made in China)

by Davout Yean

China, as a developing country with 1.3 billion people, has experienced unprecedented growth since opening its economy to the world in the late 1970s. Along with economic transition, the health care system in China also has undergone dramatic changes. After studying the related experience of other developed countries in the late 1990s China launched several Social Health Insurance Plans (SHIPs) to cope with increasing public demand for better health care. Unlike the Great Wall of China, the Forbidden City and the lovely panda bear, many features in these plans, including plan-funding mechanisms, the concept of a medical savings account, cost-sharing requirements and limited access to care providers, are not unique to SHIPs. Still, nobody can deny that these plans are the genuine "中国制造."

The old health care system was established shortly after the revolution in the early 1950s. Under the old political and economical systems, you might say a social program doesn't exist in China. Or, if you look at it from the opposite direction, you might say any program in China is a social program, and that the entire country is nothing but a one huge social program. At that time, the government was the only enterprise; people only could move with government's approval, and a clear division between urban and rural was obvious. Under these circumstances, there were two health care systems to provide for the needs of the entire country. In urban areas, the urban health care system covered all the citizens with official residence status. The health care system for the rural population was called the Cooperative Medical System. This system put rural residents under a mutual-assistance mechanism for their health care needs.

This health care structure once provided basic health coverage for a very large population, and the achievement was praised by the World Bank and the World Health Organization (WHO) in the late 1970s. During the transition from a planned economy to a market economy, many economic entities, such as foreign investment enterprises, joint-stock enterprises and private enterprises arose rapidly on a very large scale. There were more and more people moving to and working in these newly established entities; consequently, they lost eligibility for the coverage under the old health care system. Consistent with the speed of economic growth, the drawbacks of the old health care system emerged quickly, such as low quality of health care service, many state-owned enterprises were closed, there was a heavy and increasing burden on the government's budget due to medical inflation and abuse of medical resources, etc. There was no doubt in anybody's mind: A new health care system was needed.

After years of study, in 1998, the government announced the infamous "State Council Document No. 44," formally called "The Decision of the State Council to Establish a Basic Medical Insurance System for Urban Employees." The "Decision" gave birth to the first SHIP in China and created a fundamental shift in the funding mechanism. For this program, the government is no longer the payer; the government became the administrator of a mandatory insurance program. This insurance program is funded through employer and employee

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International Section News
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Editor's Note

by Michelle John

This is a busy and interesting time for the profession. Actuaries are grappling with a number of weighty issues. The International Section newsletter facilitates the sharing of burdens and solutions across borders. Actuaries are adept at building, using and adapting models to solve problems.

Old models sometimes don't work when they are exported to a different place or time. François Xavier Hay and Kumar Shailabh in "If You Want to Go Far … Go Together," explain a grassroots model for health-risk pooling that is being used in India. They explain why traditional health insurance models have not worked in this context. Davout Yean describes the health insurance models being developed in China in "Social Health Insurance Plans: 中国制造(Made in China)." The old models did not work in the new economic reality. There still is no perfect solution, but they have come up with new models and are working to improve them in the next few years. Sylvain Goulet gives us a basic introduction to the Takaful insurance model, a mutual, insurance-type model that meets requirements of the Islamic faith in "A Primer on Takaful." Models for solvency have been under review for a number of years. Solvency II, the European model, is described by Edina Rozinka in "Solvency II: A New Piece of European Insurance Regulation or Much More?"

It's not just the technical models that might need adapting. Actuaries are also rethinking their work-life models. Xueyun Huang interviews Ling-Ling Wang in "Insurance Market in China." Ms. Wang worked for many years in the United States and is now the chief actuary for Taikang Life in China. She describes how she has overturned some "comfortable assumptions" and chosen "to try new things." Jill Hoffman is a Canadian expatriate who has just moved from a posting in the Bahamas to a posting in Singapore. In "Life on Tiny Islands," she discusses the personal and professional challenges of being an actuary on the road.

The Caribbean Actuarial Association (CAA) held its annual conference in the Bahamas in December. Marcia Tam-Marks provides a review in the article "17th Annual Caribbean Actuarial Association Conference." The range of topics and global participation illustrate actuaries' eagerness to learn more and apply new models.

Max Rudolph presents the results of a May 2008 survey of international actuaries on emerging risks in "International Survey of Emerging Risks." The best way to stay on the cutting edge is to identify that next big risk and start thinking about the model to respond to it.

Many models stand before us, so how do we choose that next top model? There's no easy answer. Just keep your eyes and ears open to the world and be flexible in your thinking!

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Chairperson's Corner

by Alex Kogan

Following up my prior "Chairperson's Corner" article, summarizing the section's plans and priorities for the year, I am pleased to report that on behalf of the council, we are making good progress on execution of our prior stated plans. A few highlights on our status include:

1) Our plan to reach out to members to get your input is moving forward. We have just completed our member survey questions and format. These will be released to members shortly to get direct and extremely valuable input on our future plans and activities.

2) Our plans and efforts to organize relevant educational sessions at Society of Actuaries (SOA) meetings in the United States and at international locales have progressed. With regard to SOA meetings, we have organized sessions at the Spring Health and Life meetings on comparison of North American health care systems and Takaful insurance. For seminars at international locales, we are excited about the upcoming U.S. GAAP seminar workshop to be offered in Hong Kong and Shanghai (for the first time) later in June. These sessions are co-sponsored with the Financial Reporting Section, with strong support of the SOA staff, and we are thankful for their collaboration. Also, the section, along with SOA staff, recently participated in the hosting of a visit by representatives of the Vietnam Ministry of Finance to the United States, with a presentation on international experience studies to the delegation led by Bill Horbatt (past chair of the International Section).

3) I am pleased to inform that the section has implemented a few small, but concrete, steps to strengthen the International Ambassador program, which strategically serves to connect local SOA members in international markets with the SOA. First, we have announced a funding initiative, which was communicated to the ambassadors in May 2008, which provides for an annual $500 funding to help sponsor local, in-country meetings with SOA members, which are organized by ambassadors in their respective markets. Second, the section has developed an enhanced communication approach when appointing new ambassadors. It includes a structured e-mail communication to all in-country SOA members to announce a new ambassador appointment and to better explain the ambassador role in serving local, in-country members' needs.

4) The section is finalizing plans for our annual networking event at the SOA annual meeting in Orlando this year. This year we have confirmed plans to have this session co-sponsored by several other groups, including the Chinese Actuarial Club, International Association of Black Actuaries and the Caribbean Actuarial Association. In so doing, we expect to increase networking opportunities for attendees. In addition, we have made plans for karaoke entertainment to be available for this event. We will have more updates on this session shortly.

5) The voting is in for the section's "Country Feature" article competition in support of our section newsletter. Congratulations go to the winner, Nhon Ly, for the article "Vietnam: An Emerging Market, No Longer a War." It will be published in the next edition. We all can look forward to reading some excellent articles based on the numerous submissions.

Please feel free to contact me or any of the section council members should you have any questions or suggestions about the council's plans. We welcome your input. □

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Davout Yean, FSA, is general manager of the health division at Taikang Life Insurance Co. Ltd. in Beijing. He can be reached at tofu.yean@gmail.com.

contributions. The “Decision” also prescribed the framework and benefits for this program, but unlike the U.S. Medicare system, it allows for variations set by local government.

Following the “Decision,” since 1999, many cities launched Basic Medical Insurance for Urban Employees and covered all kinds of enterprises (including state-owned, private-owned, foreign-investment enterprises); institutions; social organizations; non-government, non-enterprise units; and all their employees. As I mentioned earlier, the “Decision” allows for variation set by local government. As a result, it is each city’s decision whether to include more people, including villages’ and towns’ enterprises, or self-employed workers. In addition, the cost-sharing level and eligible services also are slightly different.

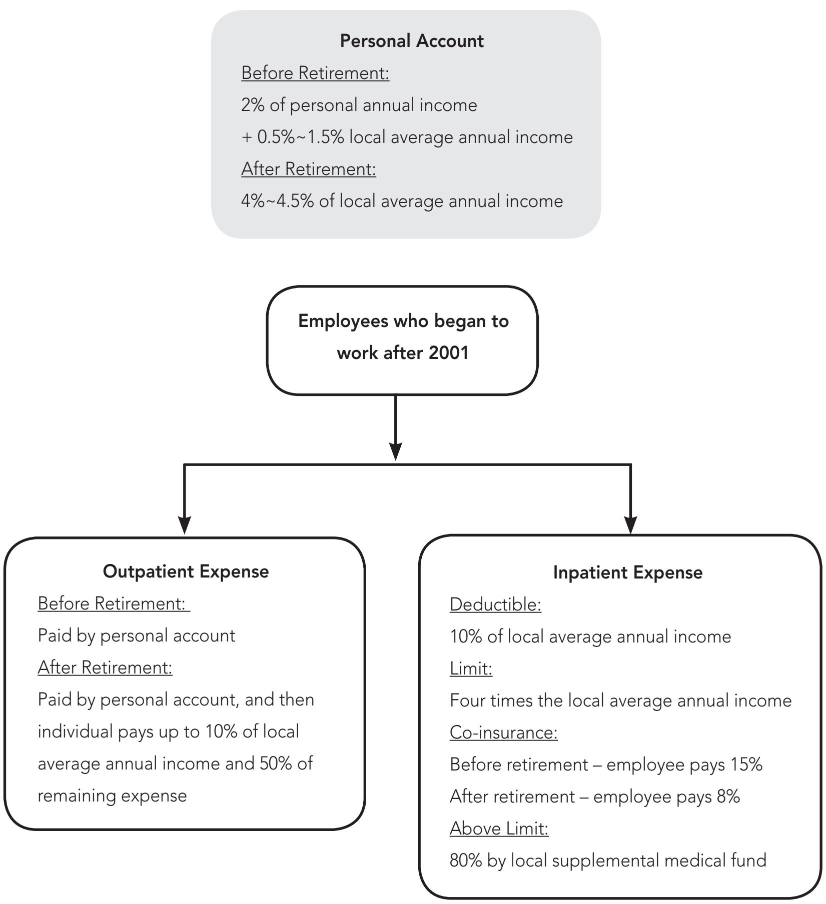

Exhibit 1: The Basic Medical Insurance for Urban Employees for Shanghai (for Employees who begin to work after 2001)

By design, local government administers the program, and the fund comes from two parts: 1) the employer pays 6 percent of the total payroll and 2) the employee pays 2 percent of wages. About 70 percent of the employer’s contributions are diverted to the social overall account, and the remaining 30 percent, together with 100 percent of the employee’s contributions, are assigned to the personal medical account. The overall fund is used to pay some in-patient expense, and the deductible is equal to about 10 percent of the local average annual income, and is limited to about four times the local average annual income. Co-pay ratio also is applied to the eligible expenses; the ratio varies by city. Personal accounts can be used to pay outpatient fees. Refer to Exhibit 1 as an example. This program only covers services provided by an appointed hospital and drugstore. Meanwhile, each city has eligible drug, examination and health care services.

In late 2007, there were 165 million employees and retirees covered under the Basic Medical Insurance for Urban Employees plan. This plan has obvious advantages over the old health care system. The separation of the personal account and the overall account eliminates the abuse of funds. Since a proportion of treatment expense is born by employees’ personal accounts, they have incentive to avoid overcharges by hospitals. Also, the cities’ centralized administration provides uniform and expanded coverage for workers.

Indeed, 165 million is a very large number, but it’s only 10 percent of China’s total population. How to extend the coverage to the other 90 percent of the population becomes the next challenge, especially for the people who live in rural areas. In early 2003, the answer finally arrived: The New Rural Cooperative Medical System was introduced. The second SHIP provides basic health care coverage for rural residents, who comprise 70 percent of the population in China. To participate in this SHIP, the rural residents should pay no less than RMB10 ($1.35) per year, and matched RMB10 from local government’s budgets. For western areas, it’s RMB10 per person per year (increased to RMB20 in 2006) from the central government. Funds only can be used for major health expenses or inpatient expenses. By the end of June 2007, there were close to 700 million rural residents (more than two times the total U.S. population) taking part in the system. It will be expanded to all rural areas in 2010.

With the launch of the aforementioned SHIPs, there still are certain populations that are not eligible, including dependents of the enrollees of Basic Medical Insurance for Urban Employees, students, migrant workers and urban residents who do not have jobs. To close this gap, in July 2007 the government initiated several experimental projects called "Basic Health Insurance for Urban and Town Residents." All these experimental projects will set the foundation for the third SHIP. For this SHIP, the contribution can vary by city according to local expense level, and the government will provide no less than RMB40 per person per year. The focus of this scheme is the health care expenses related to critical illness, outpatient and various inpatient costs.

It's expected that the experiment will be expanded in 2008 until 2010 when all the gaps will be closed and all citizens will be covered under one big umbrella created by these three SHIPs. It seems the story will conclude at the end of 2010, at which time the problem will be solved. Unfortunately, this might not come to fruition; history has taught us that for any SHIP, a solution usually comes with several problems. SHIP 中国制造 didn't escape this curse. The following are some examples of the problems encountered since each SHIP was introduced.

For "Basic Medical Insurance for Urban Employees," Problems are as Follows:

- It is a mandatory program but the participation rate is far below 100 percent; not all of the eligible enterprises have enough financial capability and inclination to take part in the program.
- The unfairness caused by localization. For example, the benefits provided in rich cities like Shanghai and Beijing are very generous, but this is not the case in other less-developed cities, especially the cities in the inland provinces.
- Localization weakens the portability of this program. When participants travel or take a new job in another city, the uneven benefits and paperwork create confusion and dissatisfaction.
- Compared to the other two SHIPs, this program offers the richest benefits, but for critical illness or chronic illness the cost-sharing can go up to 50 percent of the total expense. This puts a heavy burden on the participant.
- One of the program guidelines says, "Balance the expense with the income with a little surplus." In other words, this is a pay-as-you-go financing scheme. China has a rather young retirement age and mortality is improving significantly. The pay-as-you-go scheme will face program deficiency risk faster than the government can imagine.

For the "New Rural Cooperative Medical System"; Problems are as Follows:

- In this program designed for rural areas, affordability is a major issue. To deal with this issue, benefits are limited. This program is intended to help rural residents with critical illnesses and other illnesses that require a high treatment expenses.
- In exchange for limited benefits, the cost to join this program is very low. For example, the average cost to join this program is RMB30 per year, compared with the cost to join the Shanghai Basic Medical Insurance for Urban Employees, which is RMB200 per month. This low-cost program inevitably excludes many necessary health care services, including illnesses that require minor to medium inpatient care and almost all outpatient care. But, the expense for these health care services is still expensive to a large portion of rural residents. As a result, many residents will not go to hospital unless a medical condition becomes severe.

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Medical Secure System (%)	Total		Urban		Rural	
	2003	1998	2003	1998	2003	1998
Basic Insurance	8.9	-	30.4	-	1.5	-
Government	1.2	4.9	4.0	16.0	0.2	1.2
Labor Insurance	1.3	6.2	4.6	22.9	0.1	0.5
Cooperative Insurance	8.8	5.6	6.6	2.7	9.5	6.6
Others	1.4	5.0	2.2	10.9	1.2	3.0
Commercial Insurance	7.6	1.9	5.6	3.3	8.3	1.4
Self payment	**70.3**	**76.4**	**44.8**	**44.1**	**79.0**	**87.3**

Exhibit 2: Medical Secure System
Source: National Survey on Health Service in 1998 & 2003

- Unlike "Basic Medical Insurance for Urban Employees," this program is on a voluntary basis. There are still some people who are too poor to pay the participation fee.

- Most of all, this program doesn't address two key issues in rural areas: the accessibility and quality of care. Still, the shortage of health care facilities and the low quality of health care are still the major issues in rural areas.

Sum up all these issues and it is not a surprise that the gap has not gone away completely yet. According to the National Survey on Health Care Service in 1998 and 2003, the good news is the gap is getting narrower, but clearly, it is still there (Exhibit 2). All these figures somewhat demonstrate the transition trends since the first SHIP was launched. The question is, what is the lesson learned? Where should China go from here? According to these figures, maybe China should give all or some of the following a try:

- Recognize the success of the three SHIPs, continue to strengthen the programs to cover a larger population and provide more benefits. The additional cost from the expansion should be funded by the savings from improvement of program efficiency rather than by additional expenditure.

- Minimize the variation of SHIPs and establish cross-subsidies between the rich and poor, urban and rural.

- Encourage commercial insurance to take a larger role in offering gap insurance either on an individual basis or via an employee-benefit basis.

- Encourage commercial insurance to participate in SHIP programs either on a full- or partial-risk basis or no-risk basis. The involvement will not only allow for sharing of the risk, but also will improve the efficiency of the program.

- Revisit the pay-as-you-go scheme; establish proper reserving guidelines to ensure the long-term viability of the programs.

Without any exception, social programs take time to build and require constant reform and enhancement. Similar to other economical miracles China has created, SHIPs "中国制造" made a substantial contribution to the society in a very short period of time. We all agree that these programs are not perfect and probably never will be, but based on their history, these SHIPs will continue to serve their purpose and will sail into the future with greater success! ☐

Life on Tiny Islands

by Jill Hoffman

Being born on a cold winter's day in Saskatoon, Canada, did not prepare me for a life as an actuary. It did, perhaps, give me the longing to live in the tropics.

I completed my fellowship in 2001 and after getting married in 2002, I received a call from one of my clients in the Caribbean, asking if I would consider moving to the Bahamas. The decision is not as easy as one would think. Moving away from your friends and family is difficult, but living abroad was something my husband and I always wanted to do. Plus, my client (soon to be my new boss) kept checking the weather report in Toronto before calling me, so that he would call on the coldest, snowiest winter days. So, I quit consulting and went to work for a Bahamian-owned insurance company.

Life in the Bahamas was good. You can't beat the sub-tropical climate, blue skies and clear water. Work presented an interesting and challenging atmosphere.

The Bahamas is a very Christian society, and it claims the most churches per capita. It would not be unusual to start a meeting with a prayer, and I'll always remember a sign posted in the washroom, "Don't steal the Lysol. Remember, God is watching."

Nassau

While we were in the Bahamas, we experienced two hurricanes, both in 2004: Hurricane Frances and Hurricane Jeanne. Hurricane Frances came closer to the island, and because we were living on a point, surrounded by the sea on three sides, we decided to bunker down at the Radisson Hotel. This was a fun time because all of our neighbors were there, the bar was open and the hotel had a generator for electricity. During Hurricane Jeanne, we stayed home and had full power until the hurricane passed us. Then the power went out, but only for an hour. The capital city of Nassau was spared, but northern Bahamas was not as lucky.

The population of the Bahamas is about 300,000. This means that everyone either knows each other or is related somehow. It would not be uncommon at the company Christmas party, when all the agent offices from across the islands would get together, to overhear a conversation that two people would find out that they are second or third cousins. There was a real feeling of family, not only in the company, but on the entire island.

But life wasn't all about the beach; work had to be done. Some outsiders to the Caribbean might think that life there is quite laid back, but it is a different story for those who work and live there. Filing deadlines are still filing deadlines. Agents are still agents.

The Bahamas, while not having a prescribed method for calculating reserves, informally followed the Canadian methodology. However, following some of the methods was difficult at times. We would have to find ways to make Canadian interest rate scenarios appropriate for the Bahamas marketplace. Most mortgages and loans were tied to the prime rate, which was set by the government. This rate, while it tended to be stable, could change overnight, without warning, and affect the value of your asset portfolio immediately. Trying to do asset-liability matching was difficult because the Bahamas Stock Exchange (BISX) was an illiquid market, to say the least. At the time of writing this article, there are fewer than 20 companies listed. For trading to take place, the investment manager practically had to find an individual who was willing to sell or buy.

One good thing though, was we didn't have to worry about corporate tax (beyond premium tax) and there is no individual income tax. Living with no income tax was nice. Coming from Canada and seeing my first paycheck with only $50 taken out for the national Social Security scheme made my eyeballs pop out like Bugs Bunny.

However, the lack of income tax was eaten up by the cost of living. The Bahamian dollar is tied one-to-one with the U.S. dollar, and milk cost more than $7 per gallon. Getting fresh produce was hit or miss at times. It was difficult to plan meals because you had to go with what was fresh in the store at the time. Bahamians have a long-standing tradition of taking a 50-minute flight to Miami and bringing a cooler to stock up on food from the United States.


Singapore

But all good things must come to an end. After spending four years in the Bahamas, wanderlust struck again, and an opportunity to live on another island presented itself. This time, the island was in Southeast Asia. So, after many deliberations, we packed up our family and moved to Singapore.

We had been told that Singapore is "Asia lite," and in some ways, it is. It is a beautiful, green city with a thriving economy. It possesses the charm of Asia, particularly in the cuisine, but also has all the conveniences of North America and Europe. The climate has been described as having two seasons: hot and humid and very hot and very humid. We have only been here since May, but this is proving to be true.

I'm still learning about the Southeast Asian insurance market. The office I work in covers Singapore, Malaysia, Thailand, Philippines, Taiwan and Indonesia. These are all very different markets that are in various stages of development.

Being an expatriate has certainly been an enriching experience for me. Besides the challenges at work, you have new challenges at home. Moving around the world is a time-consuming, expensive (even if you have a moving allowance, you'll still need to buy new ketchup), but worthwhile experience. The expatriate communities around the world are close-knit, and you will find yourself making friends with people from all over the world. This is great, because when you are on vacation, you'll always have a place to stay!

However, to make the expatriate experience work for you, you need to have a supportive spouse. More often than not, your spouse will not be able to find employment abroad, either due to opportunities or government regulations. If your spouse is used to working, this will be a big change for him or her, much more so than for you. Remember, you get to leave the house every day, and talk with other people. Your spouse will not have this opportunity, particularly in the beginning, or if you are living somewhere where you don't speak the local language.

But, the positives outweigh the negatives. For those of you who work in international divisions of global companies, but in your local home office, I recommend that you ask for a two-year transfer. Your professional and personal life will be the richer for the experience.

If I ever get homesick for cold winter's night, Saskatoon is only a plane ride away. ☐

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17th Annual Caribbean Actuarial Association Conference

by Marcia Tam-Marks

Atlantis, Paradise Island, the Bahamas— Dec. 6-8, 2007 "The Changing Risk Pool"

Destination Atlantis, Paradise Island in the Bahamas was all it took for the Caribbean Actuarial Association (CAA) to attract its largest attendance ever to its annual conference. Make no mistake, the program was not to be outdone either. It featured presidents of the Society of Actuaries (SOA), Canadian Institute of Actuaries (CIA), the Faculty and Institute of Actuaries, and actuarial and business experts from around the world.

Atlantis Hotel – Royal Towers

The conference kicked off with the usual welcome cocktail party on Wednesday night on the Lagoon Deck of the resort, and it featured delicious Caribbean seafood and other appetizing delicacies both local and international.

Derek Osborne, CAA president, opened the conference, which had special significance for him. This was the first time the CAA had gone to the Bahamas, his current home, and it was his final year as president. We also took time to remember our friend, colleague and former CAA vice president, Stephen Alleyne from Barbados, who passed away a few months before the conference.

In keeping with the conference theme, "The Changing Risk Pool," Sylvain Goulet of Eckler Ltd. spoke about the "Impact of Consolidation on the Caribbean Life Insurance Industry," and gave a history of the consolidation that has taken place, the reasons for this consolidation, and speculation about further consolidation. Lloyd Steinke from Munich Re gave the reinsurer's perspective on the impact of consolidation, and Montgomery Braithwaite from ColinaImperial gave a first-hand account of his company's merger and acquisition in the Bahamas.

Stanley Lalta from the Bahamas and James Cercone from Sanigest, Costa Rica conducted the session on "National Health Insurance (NHI) Initiatives in the Caribbean and the Role for Private Health Insurance where NHI exists." Stanley discussed the drivers and challenges of NHI in particular, with regard to financing related arrangements. James delved into trends in Private Health Insurance (PHI), as well as the issues and change-drivers in PHI.

As is characteristic of CAA conferences, there is always something for everyone. The remaining day's sessions featured Andrew Long, a fellow Jamaican, from Watson Wyatt in the United Kingdom, who spoke about "Where did Risk Management of DB Pension Plans Fail?" followed by the CIA President Jim Murta's presentation on "Enterprise Risk Management – 20 Questions Actuaries and Clients Should be Asking." Concluding the day's proceedings was the ever passionate presenter Russell Greig from Towers Perrin, who spoke about predictive modelling and how it can be used to make better business decisions and develop strategies for the future. Bruce Schobel, President of the SOA, ended the evening by providing insight into and an explanation of the SOA's education redesign.

After a long and insightful day, it was time to relax, Caribbean style. Attendees were transported to the old governor general's house, which overlooks the ocean and is now home to a restaurant. Dinner was served family style, which is typical in the Bahamas, where groups of about five to 10 people share from several dishes that are served one at a time. The food just kept coming! After dinner, the young and the young-at-heart headed to the Aura nightclub. Others tried their luck in the casino or took a stroll along the Marina Village deck.

On the following day, attendees had a choice of concurrent sessions. Bahamas' first qualified actuary, Tamara Campbell, who is a principal at Mercer in New York City, presented on the topic, "A Global Defined Contribution Pension Plan Update." Concurrent with this session was another Bahamian presenter, Gowon Bowe from PriceWaterhouseCoopers, who led a discussion about IFRS4 as it applies to insurance contracts and future developments.

Another president, Stewart Ritchie of the Faculty of Actuaries, presented on "Longevity Trends and their Implications for Pension Funding." He focused on his experience in the United Kingdom and the relevance of these trends for the Caribbean. Stephan Levesque from Eckler Ltd. showed us an aspect of thinking outside the box in his presentation on "Nontraditional Insurance and Reinsurance." He addressed three areas, namely life settlements, takaful and retakaful (insurance and reinsurance under Islamic Law) and micro-insurance.

Another fellow Jamaican, Norbert Fullerton, who works with Watson Wyatt in the United Kingdom, spoke about "Scheme-Specific Funding in the U.K.—Could it Work in the Caribbean?" He focused specifically on the United Kingdom's experience. Grenville MacDonald from Park Re, Canada, and Annemarie Brownmiller from Consulting Services of Princeton LLC, delivered an informative session on "Pandemic Coverage," providing its history and implications for and impact on the life and health insurance industries.

After-dinner party: actuaries on the dance floor.

Regulators and students were not forgotten; there were concurrent sessions after lunch on Friday evening. Leon Anderson from the Financial Services Commission in Jamaica presented on the topic "The Relationship between the Regulator and the Appointed Actuary." His counterpart in Trinidad, Wendy Ho Sing, deputy inspector of financial institutions, spoke about the "Current Challenges for the Actuaries and the Regulator in the Supervision of Insurance Companies and Pension Plans." Ending the formal business sessions of the conference was the person who probably has spoken at the most CAA conferences, Nick Dumbreck, president of the Institute of Actuaries. Nick was asked to speak about "Good Discipline" because the CAA was due to adopt its first disciplinary process later that afternoon at the annual general meeting.

The students had the pleasure of discussing strategies and tips for preparing for SOA and FIA exams with Andrew Long, Norbert Fullerton and Bruce Schobel. The majority of students in the Caribbean sit for the SOA exams, and they had the opportunity to discuss with their president issues ranging from the education redesign to some of the challenges actuarial students face outside of North America.

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Marcia Tam-Marks, FSA, is an independent consulting actuary in Trinidad, soon to be relocating to Toronto, and is the past secretary of the CAA. She can be reached at mtammarks@gmail.com.

The evening ended with the Annual General Meeting, during which the membership approved the CAA Disciplinary Process. A new executive was also elected, spearheaded by new president Winston St. Elmo Whyte, FIA, from Jamaica, and ably assisted by President Elect Cathy Lyn and Secretary Horace Johnson, both from Jamaica. Both Derek Osborne, immediate past president, and Lisa Wade, first vice president from Barbados, remained on the executive council. Newcomers to council were Neil Dingwall, Aftab Ali and Marlon Marquis (student representatives), all from Trinidad.

Conference participants: Philip Whittaker, Marcia Tam-Marks, Michelle Assing, Britta Hay, Jevon Holder, Josanne Mohammed, Marlon Marquis, Kemba Hackett, Robyn Day and Lynne Woolridge.

On Friday night after dinner we were introduced to Jonkonnu, the local version of Carnival. On Saturday morning, Swiss Re hosted a Bahamian breakfast during which they presented on a variety of hot topics in the reinsurance industry. These included "Global Life Trends," presented by Brenda Buckingham, "Capital Markets," presented by Emile Elefteriadis, "Pandemics," presented by Binni Rana, and "Life Underwriting" presented by Paul Mendonca. The culminating session was a personal development workshop titled "Festival in the Workplace," which emphasized using the unique work ethic and passion exhibited while producing Carnival costumes in the Caribbean, and applying these concepts to the workplace.

As the saying goes, "All good things must come to an end." On Saturday afternoon participants took advantage of the many activities, with the strong-hearted venturing to try the Leap of Faith and Serpent Slide in the beautiful Mayan Temple. Some participants confessed to missing lunch during the business sessions to try out some of the slides—it brought out the child in them—and was a sight to behold!

This conference would not have been possible without the support of our generous sponsors and the hard-working organizing committee. The CAA wishes to thank ColinaImperial, Sagicor Life, Eckler Ltd., Life of Jamaica, Munich Re, Swiss Re, BF&M, Valani Consulting and GGY. Kudos must be given to DeAndrea Lewis of ColinaImperial, chairperson of the organizing committee, and her hard-working committee for hosting an unforgettable conference.

Trinidad 2008, here we come!

All conference presentations can be viewed on our Web site at *http://www.caa.com.bb/caa_conferences.html*. ☐

18th Annual CAA Conference

The CAA is hosting its 18th annual conference at the newly constructed Hyatt Regency Hotel in Port of Spain, Trinidad on December 3-6, 2008.

Come and experience Caribbean hospitality and cuisine while networking with Caribbean actuaries and their colleagues from around the world, sharing ideas and learning from experts in various fields.

Reservation Method

An electronic reservations facility will be made available in due course.

Conference registration forms can be downloaded from our Web site at *www.caa.com.bb.*

Reservations also can be made by calling (868) 623-2222 and referring to the group and meeting name. *Reservations must be made on or before November 2, 2008.*

International News Announcements

The Pacific Rim Actuaries' Club of Toronto Calendar of Events

Founded in 1993, the Pacific Rim Actuaries' Club of Toronto (PRACT) was established for actuaries with an interest in the Asian Pacific region.

Our Annual Dinner Meeting will be held on October 2nd, 2008, with an exciting speaker, Patricia Croft, Chief Economist, from Phillips Hager & North, who will speak on the economy in the Pacific Rim area.

The next PRACT business workshop will take place in November 2008. For more details on those events please keep checking our website: *www.pacificrimactuaries.com*. Actuaries from all areas for practice are welcome to join our events.

2008 IAA Sections Colloquia

18th AFIR Colloquium in Rome, Italy
October 1-3, 2008
Web site: *www.actuaries.org/AFIR2008*

If You Want To Go Far ... Go Together.

by François-Xavier Hay and Kumar Shailabh

Editor's Note: This article was originally published in the December 2007 issue of Microfinance Insights. *It is reprinted here with permission.*

Community health mutual funds offer a real-time, bottom-up approach by helping to sustain community solidarity and individual responsibility through an inclusive risk-pooling mechanism.

The Idea Behind Community Health Mutual Funds

Health is the most interesting risk to work on because of its strong attachment to human behavior and decisions. When insuring a life or a catastrophe, the statement is clear, and the reason is often seen as fate or an act of God where man's hand has not much immediate power. As far as health is concerned, most insurance companies propose only hospitalization products and not primary health care or maternity products. This is because they lack the control of these contingencies in the system, known as moral hazards in insurance parlance.

The question is what will prevent an insurance client, who has paid a premium, from misusing the system and making its insurance utility systematically positive?

The insurance companies' answer: rules and exclusions.

Mutual funds' answer: other clients.

Insurance companies, so far, have neglected the risk-pooling factor in their system whereby they can invite communities to take a share in their own risk-management and decrease exclusions through en bloc enrollment. Why is it so? It's probably because profit-sharing clauses are not yet popular, and also because of competition.

In the paradigm of developmental work, the rhetoric of "community" has so often been used in letters, but not in spirit, that it has now become a cliché and inappropriate in today's emerging market-based economy where free market conditions are supposed to deliver the best results.

The Mutuals system is an effort to put people at the center of their own development and establish a democratic governance mechanism operated professionally and built up on solidarity, as well as individual responsibility, in securing protection for all. Presented here is the story of how all it began and where is it headed today.

In 2002, a group of women from Annapurna (Pune) faced the shock of a heart operation with which one of them had to cope. They decided to react and looked for solutions. When an insurer presented a product matching their capacity to pay (Rs50 per head per year at that time), the immediate question was: "Can we get the money back if we are not sick?" Upon receiving a negative answer from the insurer, they concluded that they had no incentive to be healthy in joining this plan. They understood very well the insurance pooling concept, not its management.

So they decided to set up six "Arogya Nidhis" and chose to contribute Rs50 per person per year, which was enough to bear hospital coverage of Rs5,000 per person in case of hospitalization.

This "Arogya Nidhis" idea flowed to Parvati Swayamrojgar (MFI in Pune) and Swayam Shikshan Prayog (Marathwada) so that today, about 35,000 people are pooling risk in their 19 health mutual funds. These Arogya Nidhis are physically situated in bank accounts with communities and facilitating organizations as the joint signatories. The organizations facilitating this Arogya Nidhi, against many odds, decided to set up a federal organization that would become the milestone for developing people-led, professionally managed, social security systems. It goes by the name of UpLift, which today houses resources, skills and competencies that are commonly shared: professionals, a network of 115 health care

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providers, encoders and a statistical unit, software development and testing, a call center and actuarial skills. Thus, a professionally managed system today is controlled via communities.

Evolving in a context where so much professionalism is expected, starting from the bottom, expecting decisions to be understood is often felt as more complex than just "selling the product." The whole effort in UpLift has been to keep the job simple and professional.

One systematic criticism given to a mutual is that it has no safety net in case of (the rarest) epidemics or other catastrophes. In UpLift, communities have made the choice clear, preferring to start from the bottom and build layers of coverage. Today, when there is a problem in one health mutual fund, other funds contribute. That is just simple enough to be understood by everyone. Yesterday they were not pooling the risk at all; today, risks are pooled over a few districts. That is already a major step, but members of the mutuals are conscious that the risk should be pooled further on a larger platform.

Such simplicity has its impact when talking about health: The community's incentive in keeping the fund balance positive triggers numerous discussions at claim-committee meetings pushing people to be more health conscious. The role of the field organizations/facilitators is to smooth the decision-making processes while ensuring transparent health mutual-fund management. Community representatives are the signatories of the physical fund; they validate all policy decisions and vote on accounts, and they make the final decision on claims paid. Their election is just one of the features of UpLift's vision of a democratic governance system where the community representatives (from among the members) are being systematically trained to take over the board management in days to come.

A steadily increasing membership, a positively controlled claim ratio, an ascending renewal ratio, and healthy reserves are promising snapshots of villager-controlled schemes that manage to bargain good concessions from health care providers on the strength of their numbers.

To conclude on the mutual concept, the system is similar to the insurance industry, but here the risks are not transferred to an insurer, but shared under the community's responsibility.

MUTUALs—Management from Community to Communities

Target Group

- Informal sector, no specific selection of BPL
- Urban slum dwellers + rural population

Districts

- Pune, Osmanabad, Solapur, Latur, Beed
- To start: Mumbai, Pune Rual, Naunded, Buklana, Amravati

Risk Management Model

- Mutual: risk sharing (not a risk transfer)
- Community based and managed

Enrollment/Selection

- Per family, with individual pricing
- By group/community
- No age bias/limit

UpLift Services

- Federative organization owned and controlled by member organizations
- Around 100 health care providers (private and public under a signed MOU with negotiated rates/discounts
- Back Office: (InHouse TPA Service + other services) training, enrollment encoding (BPI), Health Card, Claim Settlement, to start soon: Cashless, Call Centre
- Technical Support: product design, marketing, operations setup, quality control, personnel recruitment and training
- MIS: SYSLIFT with reporting for the organizations to be web-based

The management is kept simple: Yearly contributions are divided into 12 parts and whatever the fund is in that month is the money available for paying claims. Claims and claims rules are decided by the communities in monthly claim meetings according to the guidelines laid for the fund.

The contribution and the cover of the current product of the scheme is low (because it is based on people's paying capacity), UpLift Mutuals' strategy of negotiating discounts with health care providers without compromising on quality helps it to make the scheme relevant to the cost of hospitalization. The referral services provided by UpLift to its members to network services has saved 1.4 million rupees this year. With discounts on OPD, investigations and medicines, and organization of health checkup camps and health talks, the services part is one of the crucial components of mutual operations. A 24/7 helpline ensures that members get useful advice in times of emergency.

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Such services are controlled by the various organization members of UpLift through the board of directors (elected by the organizations and renewed by one-third every year). UpLift is a Section 25 nonprofit company.

These health mutuals so far have been able to ensure a 70 to 80 percent claim ratio. This generates a reserve fund that gives communities the ability to build reserves in case of epidemics or structural growth of the claim ratio, but also to have a solidarity fund to give more than the product's limits when claimants really are in trouble.

Syslift, a free micro-insurance MIS, allows for data encoding and management, and provides analytical results that are used to monitor the health and progress of the fund. This facilitates a transparent information system as monthly data of the fund operations (including all financial details) are shared with members in monthly committee meetings.

The Way Forward for Community-Led Social Security

As the self-help group (SHG) movement for providing finance with a peer control proved that the poor and women were bankable, we need in India a movement that involves the grassroots level in controlling risk, for health or other risks, as well to establish a comprehensive social security system to correct the ills that consume such contemporary European models.

Insured Pain Points	Mutual Benefits
Financial shock at the time of hospitalization	A solidarity-based financing solution for paying hospitalization costs
No access to timely quality health care	A network of health care providers whose acts are controlled, ensuring the proper delivery of health care
No one to trust when going to a hospital	A consumer-owned call center provides reliable health care guidance
No preventive guidance/health knowledge	Monthly meetings to review the health fund's activities and learn the analysis of health care troubles provided by a medical doctor
Difficult-to-trust insurers	Transparent system: A monthly financial report is available with all decisions; no hidden profit
Claims rejected/limited refund	A solidarity fund spent by a member's committee reviews the requests and provides additional support on an exceptional basis
Micro Insurance Practitioners' Pain Points	**Mutual Benefits**
Insurer keeps too many hidden profits	Transparent system: The collected contribution and co-contributions transparently finance the whole chain. Accounts are audited. No hidden cost in TPAs
Insurer's product doesn't match what the implementing organization wants to do	The participative management of the mutual develops solidarity aligned with the service purpose of the organization
Insurer's procedures and limitation associated with the organization's image	The organization and members decide together the procedures they want, under the guidance of UpLift to ensure a financial balance
No technical internal capacity to handle mutual	Technical capacity, MIS, and other requirements to allow mutual-fund management

The SHG size is not enough, but a 2,000-person village (Gram Panchayat) provides the critical mass to manage hospitalization insurance mutually when the claim limit is below Rs15,000 with at least 2,000 members. For a higher limit with lower frequency, the number to be pooled should be higher. Such policies with a Rs15,000 deductible are being quoted by insurers.

Therefore, UpLift, like many other grassroots-committed entities, proposes that Gram Panchayat should be the entity to control its risks. UpLift might in this context provide the model of mutual governance.

Members of UpLift are willing to associate with other organizations already well implanted in the rural sector. They are working with Gram Panchayat in the microfinance sector to expand the creation of a health mutual fund (tomorrow's social security fund) gathering all premiums for insurance from the village. Such a decision should be based on an "everybody or nobody basis" to avoid any adverse selection.

Gram Panchayat might decide then to outsource the whole premium to an insurer or to keep some part of it and outsource a higher layer to an insurer, or to a group with other villages to share a solidarity fund in the same fashion "UpLift Arogya Nidhis funds" share their risk today in Pune.

The government, scouting to find the effect of its huge social security measures, should take a role, as modest as contributing to the total amount of premium. Therefore, it's enabling the poorest to be part of the social security endeavor. Ensuring that the poorest become a part of the fund is the major effort required.

This endeavor of extending social security without exclusion to a whole community will need everybody to cooperate. If you want to go far … go together. ☐

Performance Indicators	Micro Health Insurance units
Ongoing Members	33,545
Contributions Collected	Rs 2,065,620
Amount disbursed	Rs 810,104
Reimbursement Ratio	77%
Reimbursement Rejection Ratio	15%
Reimbursement Frequency	1.5%
Renewal Ratio	55%
Reserves	Rs 708,458
Services Indicators	**Performance Data**
No. of IPD (hospitalization) referrals given	1,952
% of positive referrals	73%
Health Camps	79
Attendance	4,147
Health Talks	94
Attendance	1,263
Number of Out Patient referrals	2,112
Amount saved of members fund thanks to referral services	Rs 1,463,124

UpLift Performance for 2007

International Survey of Emerging Risks

by Max J. Rudolph

Emerging risks surprise us, they sneak up on us, and after they occur everyone wonders why we didn't anticipate them in the first place. Hindsight is, indeed, 20/20. Try to recall how often you thought about the likelihood of the most recent financial bubble or a recent natural disaster prior to its occurrence. Even if you were aware of it and wanted to take action, the markets were unlikely to recognize the risk.

Recently, a group was asked to complete a survey of emerging risks for financial services firms. The International Network of Actuarial Risk Managers (INARM) is a loosely organized group of actuaries who work to share best practices across the six continents where they reside. A total of 86 responses were received during this inaugural survey. The project is likely to be repeated periodically and should receive broader exposure.

Rather than ask responders to create their own list of risks, an existing set was chosen. The World Economic Forum Report on Global Risks, completed in January 2007, listed 23 core risks for the next decade. Respondents were asked to choose their top five emerging risks from this list, and could select other risks in addition. General categories included economic, environmental, geopolitical, societal and technological risks. Not surprisingly, this group primarily chose economic risks as the highest priority. One might hypothesize that the risks of most importance to a group of actuaries would differ from a list compiled by farmers, military officers or technology experts.

Chart 1

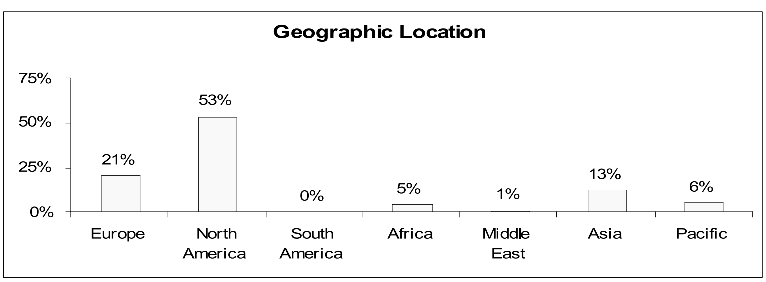
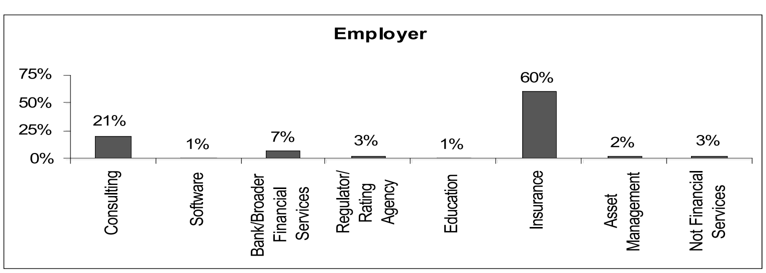


Chart 2



The responders were more diverse than the typical actuarial crowd, with 47 percent from outside North America (Chart 1) and 40 percent employed outside the insurance industry (Chart 2: The charts do not add up to 100 percent due to rounding). As the survey evolves, information such as primary practice area also may be included.

The survey asked for the top five emerging risks from the list, and 369 responses were made using the core risks listed. An additional 18 responses fell in the "other" category. The dominant response, with 57 percent, was oil shock/energy supply interruptions. Given the timing of the survey, in May 2008, it will be interesting to see how this risk stands up in less hostile energy environments. For more detail about the 23 core risks, see the glossary of risks at the end of the article.

Four of the top five responses reflected economic risks. In addition to oil, they were:

- Climate change (environmental risk): 40 percent
- Blow up in asset prices/excessive indebtedness: 40 percent
- U.S. current account deficit/fall in U.S. dollar: 38 percent
- Fiscal crises caused by demographic shift: 29 percent

The most interesting response is the last one, which pertains to looking at the trends caused by an aging population and their potential impact on the financial landscape. The business press reports on the other topics on a daily basis. Demographic shifts take longer to reach critical mass.

The next most popular responses are more diverse.

- Pandemics (societal risk): 26 percent
- Chinese economic hard landing (economic risk): 23 percent
- Breakdown of critical information infrastructure (technological risk): 22 percent
- Middle East instability (geopolitical risk): 20 percent
- International terrorism (geopolitical risk): 17 percent

These are the highest-ranking geopolitical risks. It is hard to classify these as emerging risks but instability caused by nation-states and organizations not tethered to physical geographic boundaries will continue to change history and be high priority risks for world leaders.

Sorted by response rate, here are the remaining 13 risks:

- Retrenchment from globalization (geopolitical risk): 15 percent
- Natural catastrophe: tropical storms (environmental risk): 14 percent
- Loss of freshwater services (environmental risk): 10 percent
- Infectious diseases in the developing world (societal risk): 10 percent
- Chronic diseases in the developed world (societal risk): 10 percent
- Liability regimes (societal risk): 10 percent
- Emergence of risks associated with nanotechnology (technological risk): 8 percent
- Interstate and civil wars (geopolitical risk): 8 percent
- Natural catastrophe: inland flooding (environmental risk): 7 percent
- Proliferation of weapons of mass destruction (geopolitical risk): 7 percent
- Trans-national crime and corruption (geopolitical risk): 7 percent
- Natural catastrophe: earthquakes (environmental risk): 5 percent
- Failed and failing states (geopolitical risk): 5 percent

With even the 23rd highest response rate at 5 percent, the core risks provide a solid group with which to work. The response rates at another point in time would likely yield a different answer. It will be interesting to trend this survey over time. The current focus has been on energy imbalances and the subprime crisis, and that is reflected in the responses. Recent events, such as if a major metropolitan area like Tokyo is hit by an earthquake or if a nuclear warhead goes off somewhere in the world, will drive responses to some unknown extent. This is the opposite of the old saying, "Out of sight, out of mind."

Those who decided that these 23 core risks were not broad enough tended to look at societal and economic risks, sometimes combining them. An example of this is the combination of depleted resources and a shift in the balance of power from developed countries with stable populations to developing countries with growing populations. Other examples focused on food shortages, bioengineering developments and concerns about the unintended consequences of accounting requirement changes.

Learnings

Any survey is limited by its size and participant expertise, but this group of INARM actuaries has provided a first look at what risk managers are worried about internationally as they gaze into their crystal balls. It also shows the bias that any given group will have based on their knowledge, location and experience. This survey can help other risk professionals, especially actuaries, improve their thought processes regarding emerging risks to provide better insights on the topic.

Functioning risk areas can include this type of information to help their efforts evolve. No matter which industry you are involved in, these risks have the potential to affect your company's results. This survey can help prioritize risk-education efforts. One way is to facilitate a workshop to prioritize current risks. By starting off talking about future risks, it puts some perspective on previous prioritizations and reminds participants that the list must evolve over time and not simply be copied from the last pass.

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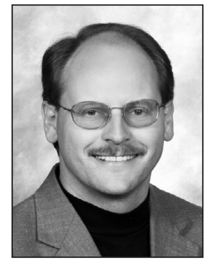

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Glossary of Risks

The following 23 core risks were defined in "Global Risks 2007: A Global Risk Network Report," and can be found at *www.weforum.org/pdf/CSI/Long_Global_Risk_Report_2007.pdf*. What follows is a summary of these risks.

Economic Risks

- Oil price shock/energy supply interruption—Oil prices rise steeply due to major supply disruption.
- U.S. current account deficit/fall in U.S. dollar—U.S. current account deficit triggers a major fall in the dollar's value.
- Chinese economic hard landing—China's economic growth slows, potentially as a result of protectionism, internal political or economic difficulties.
- Fiscal crises caused by demographics shift—Aging populations in developed economies drive economic stagnation by forcing governments to raise taxes or increase borrowing.
- Blow up in asset prices/excessive indebtedness—Personal assets, such as housing, collapse in the United States and Europe, fueling a recession.

Environmental Risks

- Climate change—Climate change generates both extreme events and gradual changes, affecting infrastructure, agricultural yields and human lives.
- Loss of freshwater services—Water shortages affect agriculture, businesses and human lives.
- Natural catastrophe: tropical storms—Hurricane or typhoon passes over a heavily populated area, leading to catastrophic economic losses and/or high human death tolls.
- Natural catastrophe: earthquakes—Strong earthquake(s) occur in heavily populated areas.
- Natural catastrophe: inland flooding—Flooding associated with rivers causes significant economic losses, fatalities and disruption.

Geopolitical Risks

- International terrorism—Attacks disrupt economic activity, causing major human and economic losses. Indirectly, attacks aid retrenchment from globalization.
- Proliferation of weapons of mass destruction—Trend fatally weakens the Nuclear Non-Proliferation Treaty and leads to the spread of nuclear technologies.
- Interstate and civil wars—Major interstate or civil war breaks out.
- Failed and failing states—Trend of widening gap between order and disorder.
- Trans-national crime and corruption—Corruption continues to be endemic and organized crime successfully penetrates the global economy.
- Middle East instability—The Israel-Palestine conflict and Iraqi civil war continue.
- Retrenchment from globalization—Rising concerns about cheap imports and immigration sharpen protectionism in developed countries. Emerging economies become more nationalist and state-oriented.

Societal Risks

- Pandemics—A pandemic emerges with high mortality among economically productive segments of the population.
- Infectious disease in the developing world—HIV/AIDS continues to spread geographically. Other diseases could develop.
- Chronic disease in the developed world—Obesity, diabetes and cardiovascular diseases become widespread.
- Liability regimes—U.S. liability costs rise by multiples of gross domestic product (GDP) growth, with litigiousness spreading to Europe and Asia.

Technological Risks

- Breakdown of Critical Information Infrastructure (CII)—A major disruption of the availability, reliability and resilience of CII caused by cyber crime, a terrorist attack or technical failure. Results are felt in major infrastructure: power distribution, water supply, transportation, telecommunication, emergency services and finance.
- Emergence of risks associated with nanotechnology—Studies indicate health impairment due to under-regulated exposure to a class of commonly used nanoparticles (used in paint, nano-coated clothing, cosmetics or health care), exhibiting unexpected, novel properties and easily entering the human body. □

Let Your Voice Be Heard!

THE SOA 2008 ELECTION POLLS ARE NOW OPEN AND WILL CLOSE ON SEPTEMBER 10 AT 11:45 A.M. CENTRAL STANDARD TIME. ONLINE VOTING FOR THE ELECTION IS OPEN 24 HOURS A DAY.

Visit the SOA Web site at *http://www.soa.org/elections* to learn more about the candidates. You'll find:

- Video recorded campaign speeches by President-Elect candidates.
- President-Elect roundtable discussion moderated by Past President Ed Robbins.
- Photographs and biographies of Board Candidates.
- Biographies of Section Council candidates.
- Entire ballots including the Board, Bylaws amendment and proxy information and Section Council candidates.

This election has a SOA Bylaws amendment proxy to allow Associates—who have been members of the Society for five years or more—to vote in elections for President-Elect, Vice Presidents and elected Board of Directors. Remember: all information—including the suggested Bylaws amendment—can be found at http://www.soa.org/elections.

Let your voice be heard! Please vote!

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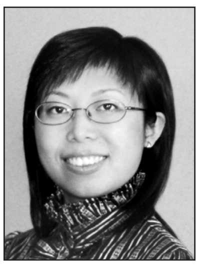
Questions regarding the election or bylaws amendment can be sent to *elections@soa.org*.

The Insurance Market in China

by Xueyun Huang



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Editor's Note: Xueyun Huang, SOA China Ambassador, conducted an interview of Ling Ling Wang. Wang has 15 years of experience working in the United States and more than four years of experience in China as chief actuary of Tai Kang Life Insurance Company. Tai Kang Life was established in 1996 and is now the fourth-largest life insurer with nationwide branch offices throughout China. During the interview, Wang shared her thoughts about the Chinese insurance market, business environment, working challenges and cultural differences.

1. What were the factors that drove your decision to accept a job offered in China, and in a market that was unfamiliar to you?

Before I came to China I worked at Principal Financial Group for 15 years. Principal is a top-tier life insurance company in the United States that has a solid reputation, a good corporate culture and generous employee benefits. Principal provided the platform for me to learn and opportunities to develop a variety of skills that have proved to be very useful in the Chinese insurance market. I appreciate having had that opportunity. I had a stable career and a comfortable life while working at Principal. However, as time went on, I knew that I was ready and able to face a greater set of challenges, both personally and professionally.

My work experience at Principal International gave me the best possible exposure to international insurance markets. I recognized very quickly that in developing countries, like in Latin America and Asia, the actuarial profession was underdeveloped, and that was where the opportunities for me would be in the future. Also, as a Chinese person, I felt I could contribute to my own nationality by leveraging the skills I had developed and imparting the knowledge I had gained to help develop the professional skills of local actuaries in China. This was an important factor for me at this stage of my life, and at this point in my career. It is my hope that when I retire, I will be remembered as having provided leadership in helping the coming generation of Chinese actuaries to develop actuarial skills that will benefit the profession and society as well.

Another factor that drove my decision to accept the job offer in China was related to my family. As a Chinese person, I wanted to provide more exposure to Chinese culture to my two children. Living in China seemed like the best way to provide exposure not only to Asian culture, but to a larger global society that they will become members of in their adult lives.

I knew I would be taking a chance when I decided to come to work in China. But I had made up my mind, and when I finally made the decision it became clear to me that it was time to move on. I sold my home and all my possessions in the United States, which was quite surprising to many of my friends and colleagues in Iowa. Sometimes people live their lives based on comfortable assumptions. They assume they will have a job tomorrow. They assume they will grow old and retire comfortably. However, sometimes those assumptions don't work out quite as planned. A person should have the courage to try new things when the opportunity presents itself. At least that is the way I felt at the time I made my decision to come to China. Every road a person chooses provides a different landscape with a variety of changes of scenery along the way. Each scene has its own beauty, but so much depends on whether a person can recognize and appreciate the opportunity that a changing landscape can offer. Don't be afraid to try.

2. Since you have been here, how has your understanding of China's insurance market changed?

Before I came here, I knew the China insurance market was a big market with great growth potential. However, the market here is like a giant sequoia tree; you really can't understand how big it is until you stand next to it. It is easy to find a medium-sized company in China that offers hundreds of products and holds millions of policies. What also impresses me is the vast number of differences between the various regions within China. Each region is like a small insurance market with distinctive characteristics. Added to that is the fact that the market is extremely dynamic and expanding fast. All of which becomes particularly obvious to anyone coming from a mature market, as is found in the United States. Although the level of corporate governance and operational efficiency is still developing, the market here as a whole has improved substantially in the last few years. Chinese people on the mainland are highly motivated. They are open to new ideas and are trying to learn as quickly as they can. They will catch up with mature markets sooner rather than later.

Another point I'd like to mention is that the China Insurance Regulatory Commission (CIRC) has introduced many measures to make sure that the insurance industry is headed in the right direction. I understand that there are complaints that CIRC has regulated too much. However, I think for an industry still in its infancy, regulation is appropriate to keep the market in check while at the same time providing a basis for stable growth. CIRC is moving toward regulations that are consistent with international insurance industry standards, such as solvency regulation and corporate governance, which will provide the industry with a path for healthy, ordered growth.

3. I understand you are now the Chief Actuary of both Taikang Life Insurance Co. and Taikang Pension Insurance Co. Could you please tell us about the annuity business here in China?

Most of the individual accumulation annuity business is sold mainly through bancassurance. The majority of the products are single premium deferred annuities (SPDAs). Variable annuities (VAs) have become popular since last year as a result of booming stock markets. The annuity business in China is still in its infancy because customers prefer guaranteed returns. However, China has no hedging instruments to hedge for the guaranteed benefits embedded in VAs. So the regulation prohibits any return guarantees in the VAs. VAs in the China market are the least risky products in the world.

Most of the accumulation annuities currently sold by group channels are participation products. A lot of this type of business will be replaced by corporate pension business in the long run. The corporate pension business is new in China. The products are trustee products, not insurance products. Due to regulatory restrictions and unclear taxation incentives, this business is difficult to do. As a result, the corporate pension market has taken off slowly during the last two years. Chinese regulatory bodies realize that changes need to occur to encourage growth in this market. I would expect the situation to change eventually.

There are also few payout annuities. In the agency and bancassurance channels, most payout annuities sold are fixed annuities with little longevity risk. Volume is small in these two channels. In the group channel, there are true payout annuities with longevity risk. The volume is bigger. China does not have a true annuity mortality table. The current industry annuity table is mostly derived from life experience, which understates the longevity risk. Furthermore, it's common industry practice to use a static table without future mortality improvement for annuity pricing and reserving. If the pricing is not right, there is no way we could manage the longevity risk. Therefore, we need to be cautious about this type of business.

4. How would you describe the changes to your work after moving to China?

Before I came to China, I worked for Principal International (PI) for several years. I supervised, provided consultation services and training for local actuaries in PI global companies. The scope of the job in PI was similar to what I do at present in terms of actuarial matters. But currently I am more involved with the daily operations of the larger company than before.

I would say the biggest difference is the role change from actuarial director to chief actuary.

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Besides actuarial matters, I am also a member of the company executive team. I serve as a member of the Finance Committee, the Investment Committee, the Risk-Management Committee, the Underwriting Committee and the Product Committee. I have the opportunity to participate in all the important matters involved in running a major life insurance company. As they say in the United States, I get to wear a lot of hats. It's fun, although I am not wild about the long hours spent in endless meetings.

Also, because I report directly to the CEO and chairman of the company, my ability to influence company policies and strategy is greatly enhanced. Like any other insurance market in the world, local people have a built-in bias toward certain types of insurance business. Different businesses have different business models. Finding a suitable business model and managing it for profit is the key to success. It's very rewarding for me to see my actuarial analysis guide management decision making, help the CEO and other executive team members make informed decisions, and, in turn, help the team discover and develop new business opportunities.

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Other than that, I would say I spend a fair amount of time on staff coaching and development through daily on-the-job training. My staff is young, very smart and highly motivated. My focus on staff development is to develop their actuarial professional skills as well as management skills. Staff development is not only to prepare our people for actuarial-related positions, but also to build and develop, at the local level, a talent pool to fill management's needs in the future. Taikang Life is expanding fast with strategic business unit structures and subsidiaries. We will need highly skilled and well-trained actuaries and managers to meet the demands of the future. I currently have 30 staff members. I plan to double the size of the current team in the next five years.

5. What are the main challenges you have faced in China?

I think the biggest challenge is to get used to the communication style and corporate culture.

Most Americans say what they mean. A lot of Chinese do not necessary tell you what they think. Instead, they may tell you what they think you want to hear. This is part of the culture. After living in United States for 20 years, my communication style has become more Western. It's a challenge for me to get used to the Chinese style of communication. I need to pay more attention to overtones. I need to be able to grasp what the true meaning of other people's words might be.

The Chinese insurance industry has opened up its markets within the last decade. Before that, businesses did not have much of an open-market experience to draw upon. The dynamic and fast-changing market, along with regulation changes, often makes plans outdated before they can be implemented. Therefore, business planning is not as important as in American corporations. In China, business people are more used to rough planning, and then plans change as things move along. This presents challenges for those of us who might have worked in a more structured environment previously

6. What is your impression of Chinese actuaries and what are your suggestions for them to continue to grow professionally?

Chinese actuaries are smart, highly motivated and eager to learn. However, compared with their counterparts in the United States, and other Western countries, they tend to be more mechanical and do not have a broader business perspective. They tend to limit their work to a narrow technical scope. They are comfortable with writing correct formulae and calculating the numbers while ignoring the meaning behind the numbers. This can be harmful to their career development in the long run. In my opinion, actuaries should be the insurance company's MBAs. Other than actuarial technical skills, actuaries should be encouraged to develop good business sense. They should work to understand and develop knowledge of financial and investment issues, as well as hone their management skills. Actuaries should be able to help management make business decisions and to achieve corporate financial objectives. Technical skills alone will not help to achieve these goals.

The suggestion I would give to the local actuaries is to broaden their vision and be patient. Gather working experience to build up their knowledge of the industry and the business of insurance. I see some young actuaries here who think they know everything after working for two years in one company, and then they quickly move to another company to chase the big pay increase. That is not a good practice, and, in fact, very shortsighted. A professional actuary needs to build a solid foundation by doing all the basic, detailed work and by accumulating knowledge and expertise over a period of time. Frequent job-hoppers will probably not gain solid experience, and their credibility and loyalty to the company will be questioned if they move from company to company. It can take years for an entry-level actuary to be experienced enough to make a substantial contribution to the company he or she chooses to work for. There are no shortcuts.

7. Is there anything else you would like to share with the other SOA members who are interested in the insurance market in China, for example, job market, product features, corporate culture?

As a professional, if you are interested in coming to work in China, you need to have an appropriate attitude. Many people outside of China are concerned about the local people's integrity and the gray areas of doing business here. That is only part of the story. There are also many people who are highly professional and eager to learn and improve themselves. The level of competition is becoming more intense with each passing year. You should understand, appreciate and perhaps embrace the culture in China, and plan on being here for a while if you want to be successful.

For foreign insurance companies operating in China, localization is extremely important and should be a key component in your deployment strategy early on. Companies should make a real effort to identify and develop local staff. Finally, I think it's important for companies that might be considering a move to the China market to realize that the environment is very competitive, and that will not change in the short-run. Therefore, if you plan to be successful, it will be helpful to have a long view of development and growth, and to recognize the importance of putting a Chinese face on your enterprise. □

The author would like to express her thanks to Joe Chou for his help with this article.

Ling-Ling Wang (front row, fifth from the left) and her team stand in front of the Taikang Life Building.

A Primer on Takaful

by Sylvain Goulet

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Editor's Note: This article was originally published in the June 2007 Milliman Global Employee Benefits newsletter. It is reprinted here with permission.

Background

The recent spike in oil prices has created an explosion of new wealth in the Middle East. Combined with rising devoutness throughout the Muslim world, the result is a mushrooming market for Islamic finance, currently estimated at $500 billion. In the last couple of years alone, numerous Middle Eastern countries have enacted legislation for Islamic law-observant Takaful insurance and issued new licenses for Takaful insurance companies. At the same time, opportunities for Shari'ah-compliant investment are emerging across the financial services sector.

Takaful is a form of cooperative insurance in which members contribute money to a common pool. The system observes the rules of Islamic law and is based on mutual responsibility and cooperation among the participants.

An industry still in its infancy compared to conventional insurance, the first Takaful company was formed in Sudan in 1979. But the industry only developed and grew after Malaysia adopted Takaful-specific regulations in l984. Today, there are about two dozen such insurers—all of them mid-size (average premiums: $1 billion). Yet with an estimated 1.5 billion Muslims worldwide, the opportunity is golden. The untapped Takaful market (life and general) in Asia and the Middle East is estimated at 23.4 million potential new buyers for $11 billion USD of new annual premiums.

Although Muslim beliefs often differ from those held by Westerners, the Islamic form of insurance can be so attractive that even many non-Muslims in Southeast Asia have opted to buy it.

Takaful is not that foreign as an insurance concept. It encompasses what is often referred to as ethical investing—along with a healthy dose of high-quality corporate governance. The key elements are explained below.

Profit-Sharing

In Arabic, "Takaful" means "guaranteeing each other." Based on cooperation, a Takaful company is similar to a mutual insurer; policyholders share profits with shareholders. There is, however, a wide range in terms of what is acceptable. Some Muslims read the Qur'an (the Islamic holy book) literally while others interpret it. As a result, there are 12 or 13 Takaful models. In some conservative Muslim countries, policyholders can expect 90 percent of the profits; in more liberal Muslim countries, they may expect as little as 10 percent. That said, the company cannot make a profit at the expense of policyholders—nor can policyholders profit at the expense of the company.

Shari'ah Compliant

Islam's sacred law is Shari'ah. Its principles are based primarily on the Qur'an (the Islamic holy book) and the Sunnah of Muhammad (the collected words and actions of Muhammad outside revelation). In general, those principles, which have a strong societal aspect, dictate that investments must better mankind. As a result, certain industries are forbidden, including weaponry and the military, gambling, alcohol (Muslim law forbids drinking), and Western-style banking (Muslim law forbids usury, or the charging of interest for the use of money).

A Takaful company's suppliers must also comply with Shari'ah law. As a basic example, take the office coffee supply. Starbucks is a well-known coffee company that also happens to sell (as a tiny percentage of sales) a coffee liqueur as one of its many product offerings. Therefore, in the true sense of the word, a Takaful company would not be allowed to buy Starbucks coffee for its offices.

What about reinsurance? Technically, a Takaful company that reinsures with a non-Takaful reinsurer is not Shari'ah compliant. The problem is that there are very few Retakaful insurers (reinsurers that are Takaful)—something that has no doubt stunted the industry's growth. But there are many gray areas in Takaful, and due to the lack of options, this is one of them.

One other note: When a traditional insurance company has a separate line of business dedicated to Takaful, this is called a "Takaful window." The purpose is to have Muslim operations, but this approach is not always permitted. For example, the new Saudi Takaful Insurance Act prohibits any insurance other than Takaful.

Shari'ah Board

Another key component of a Takaful company is a Shari'ah board consisting of at least three clerics that are experts in the Shari'ah law. Separate from the insurer's governing board of directors, its purpose is to make sure the company and its products comply with the Shari'ah. This is not easy. Human affairs are complicated and constantly changing, and religious texts simply do not cover every possible ethical issue that could arise. Specifically, there are many gray areas in Takaful—so many that some Muslims were unable to access insurance at all. The ideal board members are well-respected religious and legal scholars—and can understand economics and the increasingly complex world of finance.

Note that the concept of a Shari'ah board is not really that foreign. The fraternal societies in the United States more than 100 years ago—many of them offshoots of a church—included a priest, doctor and lawyer on their boards of directors. Based on English common law (where an insurable interest in one person was required in order to have life insurance), the idea was to maintain the organization's morality—and approve or disapprove of applications for life insurance to prevent abuses.

Full Disclosure

Perhaps the most attractive feature of Takaful from a policyholder's perspective is its transparency: the requirement for 100 percent disclosure in an insurance contract. You must disclose not just how the profit will be divided among policyholders and shareholders, but also how you made it: the investments you made; how you arrived at your pricing; sales commissions; the cost of computer, marketing and actuarial services; administrative costs, etc. In other words, who gets what. In effect, the formula to derive policyholders' and shareholders' profits must be clearly spelled out so that one would in theory be able to calculate the distribution of profits. These same principles of full disclosure also apply to the partnership between a Takaful company and its Retakaful company. □

Takaful Products

It is no easy task developing investment products that are Shari'ah-compliant. To begin with, since the Qur'an specifically prohibits usury (the charging of interest for the use of money), products cannot be based upon a rate of return. That means no universal life products that offer guaranteed minimum return, no preferred shares investment with a fixed dividend rate, and no bonds with fixed coupon rate. Instead, insurance products should be based upon a mutual fund model—something that incorporates capital gains, not rate of return. To put it another way: Dividends are indeed allowed—if they are expressed as a proportion of earnings, not as a fixed return.

Also prohibited are windfall profits. For this reason, a traditional North American-style term insurance policy may be problematic unless it has a return-of-premium aspect. If you pay $300 per year for a premium and then die the following year, thus garnering your heirs a windfall of $500,000, that is seen as gambling about the timing of your death. Because this is another issue that is gray, it requires the assessment of a Shari'ah Board.

Such a return of premium certainly can be applied to a retirement product. Let's say that a single premium is $100,000, which provides an annuity of $1,000 per month. If the person received 54 months of payments worth $54,000 before dying, the heirs will receive a lump sum payment of $46,000. An alternative to that is an installment refund annuity, whereby the annuity payments will continue for 100 months until the outstanding amount reaches zero.

Thank You

Alex Kogan

Alistair Cammidge

On behalf of the International Section Council, please accept our heartfelt thanks to the many members who commented on the proposed Society of Actuaries' Continuing Professional Development requirements. There were far too many responses to allow us to individually thank you. A very substantial number of the comments were extensive, closely-reasoned documents which provided a real insight into the particular challenges faced by some actuaries overseas.

All of us within the actuarial profession know how difficult it is to maintain pace with professional developments when one is resident outside of North America. Now, with your assistance, both the SOA's Knowledge Management Strategic Action Team and the Board of Directors has the thoughts of not just a few folk in North America but the opinions of many members from every corner of the globe.

The International Section Council exists to serve you; we continually strive to improve the work that we are doing. We hope you responded to our recent survey. Your answers will allow us to learn more about your needs and in turn, help us to do a better job!

Thanks again!

Alex Kogan and Alistair Cammidge
International Section Council

International Section Council members will host our annual gathering at the conference hotel. This year's event will be co-sponsored by the Chinese Actuarial Club, the International Association of Black Actuaries and the Caribbean Actuarial Association. Mingle with your colleagues from home and abroad while enjoying drinks, hors d'oeuvres, good conversation and karaoke entertainment.

The cost of this event is $50. You may register as part of your Annual Meeting registration or at the event. If you are not attending the conference, you are invited to register separately. *Space is limited, so register early!*

If you have any questions, please contact Jill Leprich at jleprich@soa.org.

Orlando World Marriott Resort

Orlando, Florida

Tuesday, October 21, 2008

6 p.m. - 10 p.m.

You are cordially invited to attend the International Section Reception

INARM on the Web

The International Network of Actuarial Risk Managers (INARM) is an informal group of people who are interested in learning and sharing enterprise risk management (ERM) practices across borders to enhance the level of actuarial ERM practice around the world.

INARM is mainly a virtual group that offers the following contact points:

1. INARM Listserv

The SOA has provided an e-mail listserv. This has been used by the more than 280 listserv members to share articles, ask questions and to provide answers, opinions and program information. It is open to all. Sign up at this link:

http://www.soa.org/news-and-publications/listservs/list-public-listservs.aspx

2. INARM Blog

As an alternative to the listserv, we have created an INARM Blog. Discussions of subprime, the 2008 ERM Symposium, fair value, limitations to modeling and a dozen other topics have been copied there from the listserv e-mails from 2007 and 2008. You can add your comments without having to join anything:

http://riskviews.wordpress.com/

3. INARM Emerging Risks

In January 2008, INARM helped to create the Global ERM Best Practices for Insurers and Reinsurers Webinar. This program ran for 16 hours and drew an audience of 1,600 people from 47 countries. One of the programs was on the topic of emerging risks. Material from that program, plus new sources on the topic, has been made available in an open platform that allows users to add more material as they see fit. This is accomplished via a Google Group called INARM Emerging Risks. Anyone can make comments, but you need to join the group to add significant postings. Instructions are on the Web site at

http://groups.google.com/group/inarm-emerging-risks/web

4. INARM LinkedIn Group

The listserv is not anonymous, but it does not allow members to easily learn each other's identities. LinkedIn is a professional networking Web site that allows the formation of special groups, including our INARM group. As of this writing, the INARM group on LinkedIn has more than 150 members from more than 25 countries. To use this facility, you must join LinkedIn. There is a level of service on LinkedIn that is free and that you may find to be sufficient to make connections with other INARM members if you are so inclined. To join the INARM group, go to

http://www.linkedin.com/e/gis/83735/3270834C5E91

5. Other INARM Citings on the Web

For more information about INARM, look at

http://www.actuaries.asn.au/NR/donlyres/1C5D0157-1B4E-4059-B75E-32F751723D99/2700/INARMKit.pdf

http://www.soa.org/professional-interests/joint-risk-management/jrm-inarm.aspx

SOA Releases Financial Reporting for Insurance Contracts under Possible Future International Accounting Standards Report

PricewaterhouseCoopers and the Society of Actuaries' Project Oversight Group have completed this study, examining the impact of the International Accounting Standard Board's (IASB's) tentative conclusions on international financial reporting standards for insurance products.

View the report

by going to www.soa.org, and clicking on "Research," "Research Projects," and "Life."

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