# NEWSLETTER

\* Volume 02/2005 \* September Issue



# Editorial

Recently Singapore has developed and implemented a new risk-based capital framework. As a result, the feature article of this issue will lay out this new statutory reporting system. We believe that this is an important issue that actuaries in Hong Kong need to know, particularly as the Actuarial Guidance Note on Dynamic Solvency Testing has taken effect since last December.

Members must have heard of actuarial jokes that say the profession is rather dull though well respected. Of course, you must know it is not the case. Here is a virtual example showing the career is challenging and enjoyable, and a balance between work and life can be achieved. Read on "Gobi March 2005" in the "Beyond Actuarial Work".

We hope you'll enjoy reading this issue of the newsletter and should you have any comments, we would welcome them.

(Chairperson of the ASHK Membership & Publications Committee, Mr. Greg Brennan, FIAA, can be reached at <a href="mailto:greg.brennan@ap.ing.com">greg.brennan@ap.ing.com</a>.)

# Council Update

# Committees' Report



Experience Committee

A preliminary report on Hong Kong Assured Lives Mortality and Critical Illness - Experience Study 2000-2003 was published in July (available on the website:

%20Hong%20Kong%20Assured%20Lives%20Mortalit y%20and%20Critical%20Illness%20Experience Study %202000-2003.pdf). The report that has been produced is very factual in that it presents the results of the study with relatively little analysis. This is intentional, with more in-depth analysis of specific areas of interest expected to follow later this year after a wider audience have had the opportunity to discuss the core results. With this in mind, an evening session

was held on 30 August 2005 where the Experience Committee presented an overview of the results

http://www.actuaries.org.hk/doc/ASHK%20-

followed by an open forum for members to raise any questions as well as express their views, ambitions and hopefully support for the next phase of analysis.

This experience study has proved a bigger task than originally anticipated, in part because of the volume and depth of data collected, but I believe the resulting information is well worth the effort expended. Having reached this first milestone, I would like to take the opportunity of expressing my thanks to the members of the experience committee and those members at the participating companies involved in collating the data for their efforts in this cause.

(Chairperson of the ASHK Experience Committee, Mr. David Gott, FIA, can be reached at <a href="mailto:david.gott@swissre.com">david.gott@swissre.com</a>.)

### General Insurance Committee

To enhance the reliability of the actuarial report and to promote discipline in the employees' compensation and motor insurance markets, the Insurance Authority has recently revised the actuarial review requirement in the Guidance Note on Actuarial Review of Insurance Liabilities in respect of Employees' Compensation and Motor Insurance Businesses (GN9). In principle, the ASHK supports the proposed changes but has raised several concerns. The General Insurance Committee will continue with last year's work of drafting ASHK actuarial guidance note as regards GN9. The revised GN9 is intended to take effect with the actuarial review report on financial years ending on or after 31 December 2005.

(Chairperson of the ASHK General Insurance Committee, Mr. Pang Chye, FIA, MAAA, can be reached at <a href="mailto:pang.chye@milliman.com">pang.chye@milliman.com</a>.)

Editorial	1
Council Update	1
Feature Article	3
Market Update	5
Membership Update	6
Actuaries on the Move	
Actuary Express	7
Actuaries in the Media	8
Beyond Actuarial Work	8
Events' Highlight	9
Actuarial Education	
Puzzle Corner	14
Upcoming Events for Your Diary	

# NEWSLETTER

\* Volume 02/2005 \* September Issue



# Life Insurance Committee

Following the adoption of the Actuarial Guidance Note on Dynamic Solvency Testing (AGN7), the Life Insurance Committee would like to conduct a survey among appointed actuaries about their interpretations of the requirements of this guidance note. A questionnaire has been sent out to appointed actuaries and we hope to gain support from appointed actuaries

in completing and returning the questionnaire. The information collected will be reported on an aggregate basis at the 5<sup>th</sup> Appointed Actuaries Symposium to be held on 15 November 20005.

In collaboration with the Hong Kong Federation of Insurers, ASHK held a seminar on 22 August 2005 for actuaries/ financial management personnel on understanding the purpose of dynamic solvency testing and how it can help to assess the financial conditions of long term business insurers on an on-going basis.

(Chairpersons of the ASHK Experience Committee, Mr. Thomas Lee, FSA, can be reached at thomasmn.lee@aig.com and Ms. Sim Ng, FIAA atsng@cmgasia.com.hk.)

# Ad-hoc Interest Rate Committee

Given the significant deviation of Hong Kong dollar yield curve from US dollar yield curve over the past years is a concern, the Interest Rate Committee has successfully developed a software to produce



Hong Kong dollar yield curve of up to 10-year term on daily basis by using Hong Kong Monetary Authority's data that are publicly available on its website. As the interest rates for various terms currently published in newspapers are approximations and are therefore not suitable for use in such work as pricing and valuation, the Committee at the next stage will release the report and recommend the public to use the ASHK model.

(Chairperson of the ASHK Interest Rate Committee, Mr. Peter Luk, FIA, FIAA, FSA, can be reached at peterluk@peterluk.com.)

# Other Announcements

# ASHK Best Paper Award 2005 - Call for Papers

Submissions for the ASHK Best Paper Award 2005 are now being accepted. ASHK members are strongly encouraged to send us your intriguing papers on actuaries' issues and concerns. This annual Best Paper Award aims at giving recognition and appreciation to ASHK members who excel in actuarial or businessrelated research. The top 3 winners will be presented with their awards (Winner: Cash of HK\$10,000; 1st Runner-up: Book Coupon of HK\$1,000 and 2nd Runner-up: Book Coupon of HK\$500) at the 2005 ASHK Annual General Meeting to be held on Friday, 9 December 2005. In addition, their papers will be posted on the ASHK website. Please send your papers to ASHK Office at patkum@netvigator.com or actsoff@netvigator.com before the deadline (Friday, 18 November 2005). The pertinent requirements and guidelines for authors can be found on the ASHK website:

http://www.actuaries.org.hk/doc/Best%20Paper%20Award%20-%20Call%20for%20Papers%20(05).pdf.

Don't miss out this opportunity that can enhance your profile and career prospects!



## ASHK Website Revamp

To encourage members to make use of the ASHK website, the website will be undergoing some exciting changes. The new look will enable new types of contents to be included like FAQ regarding actuarial education and careers, and make the website more user-friendly with the restructuring of current sections as well as adding keyword search function. The ASHK will also create a member-only section area in which members can update their membership information instantly, search existing actuarial job postings and even register online for ASHK events.

So, be watching for these enhancements and we hope to see the restructured website will attract increasing number of visitors! In the meantime, we value your input. Please send your suggestions on our website revamp to ASHK Office at <a href="mailto:patkum@netvigator.com">patkum@netvigator.com</a> or <a href="mailto:actsoff@netivgator.com">actsoff@netivgator.com</a>.

# NEWSLETTER

**\* Volume 02/2005 \* September Issue** 



# Feature Article

# The New Risk-Based Capital Framework in Singapore by Richard Holloway

The last few years have seen the emergence of new risk-based capital (RBC) reporting frameworks in many international markets. Progress has been slower in Asia Pacific, however, with many regulators content to continue with traditional current reporting frameworks, at least for the time being.

RBC frameworks demand that companies hold a level of capital commensurate with the risks inherent in the business they conduct. Typical RBC rules aim to calculate capital requirements following an assessment of risks that can affect the potential variability in liability and asset values. More complex frameworks also aim to capture areas more difficult to quantify, such as operational risk.

Following four years of planning, on 1 January 2005 the Monetary Authority of Singapore (MAS) required companies to follow its new RBC reporting regulations. These rules cannot be considered the first in the region, this honor going to Indonesia which introduced a risk-based solvency standard in 1999. It can, however, be considered to be one of the more complex frameworks, having been devised to cater for some of the specific features of life insurance business in Singapore, many of which are also prevalent in other countries in the region.

# Motivation for change

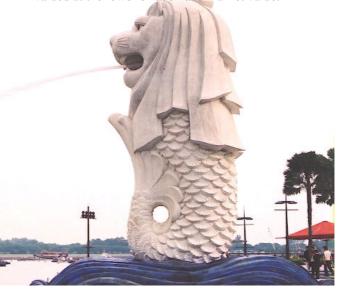
The main driver for the Singapore Government introducing the new rules was the fast convergence of financial products and the desire to adopt common regulatory principles across different financial sectors (for example banking and insurance). The traditional 'one size fits all' solvency margin framework was seen to be outdated and the MAS sought to develop regulations that provide a clearer indication of financial strength, and a series of trigger points for regulatory action.

The challenge was to derive a framework that was acceptable to life insurance companies, while taking into account some of the features of the Singapore market such as the guaranteed nature of some business lines, volatile equity markets, and the significant durational mismatch of assets and liabilities. The MAS, working with industry representatives, analyzed several RBC approaches from around the world before designing the new model for Singapore. The choice of regulatory model follows an extensive period of consultation between the MAS and the industry, involving a requirement for companies to test the impact of draft proposals along the way. The testing proved to be particularly valuable, as the industry gained a thorough understanding of the concepts and the MAS had access to actual live data that was used to 'calibrate' the final model adopted.

# Traditional framework

Capital or solvency requirements cannot be examined in isolation and need to be viewed together with the reserving regime in place, amongst other things.

Under the previous regulations, a life insurance company had to demonstrate that it met a certain minimum level of solvency. The solvency margin was calculated to be a percentage of the reserves plus a percentage of the sum at risk. The formula was the same for all companies (in other words 'one size fits all') and, as such, did not reflect the specific characteristics of a particular company's business. Such a system sat alongside the traditional 'net premium' valuation reserving approach, with assets valued at the lower of book and market value.



# NEWSLETTER

**\* Volume 02/2005 \* September Issue** 



# New framework

The new framework evaluates assets and liabilities on a more realistic basis. Assets are taken at market value and policy liabilities are calculated using a gross premium valuation methodology.

# Policy liabilities

Guarantees are valued using a risk-free rate of interest based on the government bond yield curve. In essence, this means that liabilities in the non-participating fund are discounted using risk-free rates. Liabilities (including future bonuses) in the participating fund are valued using best estimate assumptions, but the total liability in the participating fund must be at least as great as the value of guaranteed benefits (including declared bonuses), discounted using risk-free rates.

# Capital requirements

Capital requirements are then assessed through a separate series of calculations that capture specific risks inherent in the company. Capital charges are calculated for the following categories of risk:

- C1 Insurance risks which are calculated by applying specific risk charges to key parameters that affect policy liabilities, such as mortality, expenses, lapses, and so on. Many of the assumptions to be adopted are prescribed (for example, mortality risk is computed with respect to a specific mortality table).
- C2 Risks inherent in the asset portfolio. This includes credit risk, foreign currency risk and mismatching risk.
- C3 Concentration risks of certain assets.

The Total Risk Requirement (TRR) is defined to be the sum of the various capital requirements, namely: TRR = C1 + C2 + C3.

# Fund Solvency Requirements and Capital Adequacy Requirements

A company has to demonstrate that it has sufficient capital at both a fund level and a company level. The Fund Solvency Requirement (FSR) is applied to each fund (for example the participating fund or the non-participating fund). The Capital Adequacy Requirement (CAR) applies to the entire company.

To meet the FSR, an insurer must have sufficient Financial Resources (FR) in excess of the TRR for each fund. For a non-participating fund, the FR is simply the excess of assets over liabilities. For a participating fund, the FR is made up of 50 per cent of the provision for future bonuses or non-guaranteed benefits (with the detail prescribed in the legislation.)

At a company level, an insurer must have a CAR of at least 100 per cent. There should be sufficient financial resources to cover the TRR across the entire company, satisfying a minimum level of S\$10 million.

The definition of FR is included in the regulations. It comprises various items, including the aggregated surpluses in the various insurance funds, but can also include paid-up ordinary share capital, surplus outside insurance funds, shareholders' surplus within the participating fund and the provision for non-guaranteed benefits.

One of the MAS's main objectives was to define certain 'trigger points' for regulatory action. An initial 'warning event' will occur if the CAR falls below 120 per cent, in which case an insurer will be asked to submit a plan for rectification. The MAS also has the power to change the level of capital, based on an assessment of other risks that it sees in a specific insurer.

# **Implications**

It will be interesting to see how the new RBC framework will impact on the way companies manage their businesses. The MAS hopes that companies will gain a greater understanding of the risks inherent within their portfolios and force them to manage these risks appropriately. Specific issues that companies may need to consider in the near future are:

- The re-assessment of an appropriate investment strategy for each fund having regard to capital charges on various asset classes and the inherent level of durational mismatching. We expect to see insurers focusing more on asset liability modeling to help understand the financial and capital implications of various investment strategies.
- The merits and cost of providing guarantees. The future of traditional annuity business in Singapore has been the subject of discussion for some time and the increased costs of RBC charges will not improve the attractiveness of this line of business.

# NEWSLETTER

**\* Volume 02/2005 \* September Issue** 



- The impact of RBC on pricing in general, with companies assessing the impact of different reserving bases and the opportunity to re-examine the allocation of capital between various product lines. We are already seeing evidence of re-pricing, particularly for protection products.
- Companies' preferred product mix having regard to the implied profitability of various product lines. Although RBC frameworks have led to the emergence of a greater proportion of investmentlinked business in some markets, it may not be the case in Singapore where the new framework does not unduly penalize participating business.

In anticipation of the new framework, the MAS announced a reduction in the minimum level of paid-up capital from S\$25 million to S\$5 million for an insurer writing either solely investment linked or short-term accident and health business, and S\$10 million for any other direct insurer. The rationale is that the ongoing capital for a company will be based on its own underlying risks, making the minimum capital requirement less important.

# **Other countries**

In summary, the new framework has been well thought through and captures some of the unique features of the Singapore environment. One could argue that certain aspects of the new framework are still 'formulaic', and that it is not as complex as the new frameworks that have been introduced in other markets such as the UK, but overall, it can be considered a significant enhancement to the previous approach. Although regulators in other countries may take time to move to a risk-based framework, the convergence of 'risk-based' principles is likely to happen across the major insurance markets in the not too distant future.

Regulators in Malaysia and India have publicly announced that they are looking to introduce RBC, and initial details of the proposed framework in Malaysia have been released. In Taiwan, the Minister of Finance finally confirmed the formal introduction of a new risk-based solvency margin system in 2003 after a lengthy consultation period. Insurers are now required to report their solvency ratio and meet the stipulated requirement on a yearly basis.

In the People's Republic of China, the China Insurance Regulatory Commission (CIRC) is currently examining a number of solvency regimes around the world. It appears that the US-style approach to RBC is preferred and a new regime could be introduced in 2006.

Although risk-based capital frameworks are likely to differ across markets, they are all likely to capture the common risks that exist in most countries in Asia Pacific, namely the provision of significant guarantees and the mismatched nature of portfolios.

Risk-based reporting frameworks will be common in Asia in the years to come; in our opinion it is not a question of 'if', but, 'when'. In those countries where the regulator has been slower to introduce them, there is clearly merit in companies identifying and assessing the risks that they are taking with a view to reflecting these in the pricing and level of capital that is being held, even prior to the regulators making their moves.

(Richard Holloway is Managing Director of Watson Wyatt Insurance and Financial Services teams in Singapore and India. He was a member of the workgroup that developed the new Risk-Based Capital Framework in Singapore. He can be reached at



<u>richard.holloway@watsonwyatt.com</u>. This article first appeared in May 2005 issue of Watson Wyatt's Asia Pacific Insurance Review and is reproduced with permission.)

# Market Update

# Revised GN3 – Guidance Note on Prevention of Money Laundering and Terrorist Financing

To cater for the evolving developments in the standards of anti-money laundering and combat of terrorist financing, the Insurance Authority has revised the Guidance Note. The revised GN3 supersedes the former Guidance Note as well as the Supplement to the Guidance Note on Prevention of Money Laundering and Guideline on the Combat of Terrorist Financing issued on 25 June 2003 and will take effect from 1 July 2006. The Guidance Note is available for downloading at the OCI website: http://www.info.gov.hk/oci/download/gn3jul05.pdf.

# NEWSLETTER

\* Volume 02/2005 \* September Issue



# Revised MPF Guidelines and Code

The Management Board of the Mandatory Provident Fund Schemes Authority has recently approved one set of new Guidelines, five sets of revised Guidelines and the revised code of Conduct for MPF Intermediaries: Guidelines on Approved Credit Rating Agencies (Guidelines I.9), Guidelines on Custodians (Guidelines I.3), Guidelines on Eligible Insurers (Guidelines III.1), Guidelines on Debt Securities (Guidelines III.1), Guidelines on Eligible Overseas Banks (Guidelines III.2) and Code of Conduct for MPF Intermediaries.

# Guidelines I.9, I.3, I.4, III.1 and III.3

A new set of guidelines is issued to consolidate the various lists of approved credit rating agencies into one list. Guidelines I.3, I.4, III.1 and III.3 have been amended to make cross-reference to the new Guidelines I.9.

# Guidelines on Other Securities (Guidelines III.2)

This set of Guidelines has been revised to:

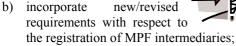
- a) include Richmond "A" equity units listed on the SWX Swiss Exchange and non-voting equity securities issued by Roche Holdings Ltd listed on SWX Swiss Exchange; and
- b) remove the requirement that the underlying shares of certification van aandelen must be listed on the same stock exchange.

# Code of Conduct for MPF Intermediaries

The Code has been revised mainly to:

a) stipulate compliance with Continuing Professional Development requirement as one of the criteria in

assessing the fitness and properness of applicants (applying for re-registration) and registrants;



 reflect the expiry of the transitional licensing arrangement provided under the Securities and Futures Ordinance.

Copies of the revised Guidelines and Code can be downloaded from the MPFA website: Guidelines (http://www.mpfa.org.hk/main.asp?pageNo=62&langNo=1) and Code (http://www.mpfa.org.hk/main.asp?nodeID=88&langNo=1).

# **Membership Update**

We would like to extend the warmest welcome to the following new members who joined the ASHK since May 2005.

### **Fellows**

Xiao Lei CHI, FCIA (2004), FSA (2004), Towers Perrin Lucy Chia-Ling CHOU, FSA (2003), ING Asia/Pacific George CHOW, FCIA (1998), FIA (2001), FSA (1998), RGA Reinsurance

Timothy Ward CLARK, FIAA (1997), Swiss Reinsurance Cindy FORBES, FCIA (1980), FSA (1980), MAAA (1992), Manulife Financial

Jen Chien SEE, FIA (2003), AXA Asia Pacific

### **Associates**

David Gregory ADAMS, ASA (1993), HSBC Candice YAM, ASA (2002), Manulife

### **Students**

Rebecca CHOW SOA Student
Jiong DU, IoA Student, Transamerica Reinsurance
Ellen Wai-Ying LEUNG, SOA Student, Manulife
Grace Ho-Shuen LUK, SOA Student, AXA China Region
Soo Hwee TAN, SOA Student, AXA Asia Pacific
Kitty Meng YAN, SOA Student, Towers Perrin
William Chi-Wing YEUNG, SOA Student, Swiss Reinsurance

# Change of Membership Status

The following members have changed their membership status.

# **Fellows**

Ka Chun CHEUNG, FSA (2005), RGA Reinsurance Gary Chi-Wing LAM, FSA (2005), Deloitte Actuarial

# Actuaries on the Move

The following members have changed their business details recently.

### **Fellows**

Wai Sum CHAN Iris Lai-Hing CHEUNG Russel LOK Daisy Hiu-Mei NING Colin STARTUP Wilson Chee-Ping TANG Steven Siu-Yin TO Candy Shui-Fan YUEN Terry King-Shing YUNG

# NEWSLETTER

\* Volume 02/2005 \* September Issue



### **Associates**

Jeffrey Sze-Tsi LIEW Alan Chi-Lun LIU Julian Ka-Wai LO Wayne Sze-Kam WONG

# Students

Simon Sau-Man CHEUNG Thomas Kar-Kei LO Carrie Mee-Fung YIP

Corporate Changes

# **Ernst & Young Actuarial Services Ltd**

18/F, Two International Finance Centre 8 Finance Street, Central Hong Kong

# Mercer Human Resources Consulting Ltd

26/F & 27/F, Central Plaza 18 Harbour Road, Wanchai Hong Kong

### Milliman Ltd

Unit 1409-1410, Great Eagle Centre 23 Harbour Road, Wanchai Hong Kong

Further details of members' movements are available on ASHK online membership directory: <a href="http://www.actuaries.org.hk/doc/2005%20Membership%20Dir.pdf">http://www.actuaries.org.hk/doc/2005%20Membership%20Dir.pdf</a>.

# Actuary Express

Name: Estella Chiu

Title: Chief Actuary

Company:

HSBC Insurance (Asia-Pacific) Holdings Limited

- Q: What is your objective of being the president of the Society?
- A: To make a small contribution to the profession.
- Q: How do you think the ASHK can help Hong Kong the most?
- A: To provide a forum for actuaries practicing in Hong Kong; which has the largest number of internationally qualified actuaries in Asia.

- Q: Do you think it is important to work more closely with the China actuarial society?
- A: I think so. Many members of the ASHK are very already active in the Mainland market.
- Q: What kind of people would you never ever want to work with?
- A: Unmotivated.
- Q: What is the biggest challenge you have ever faced?
- A: Dealing with uncertainties.
- Q: What would you say is your greatest achievement?
- A: A network in the profession and the financial services industry.
- Q: What would you be if you did not choose to work in actuarial field?
- A: An economist? A sociologist?
- Q: What is the biggest merit you think most of the actuaries have?
- A: Analytical.
- Q: As a busy executive, how do you manage the work/life balance?
- A: I'm still learning!
- Q: Are you married? Do you have any children?
- A: Yes. A 14-year old daughter.
- *Q:* What is your favorite pastime?
- A: Doing something in open-air, under the sun.
- *Q:* What is your favorite food?
- A: Any good food.
- Q: Which sport do you enjoy the most?
- A: Swimming.
- Q: What book have you read most recently?
- A: The Art of Happiness (forget the author's name, it's about his conversations with the Dharla Lama)
- Q: What was your most enjoyable birthday?
- A: I'm not keen on celebrating birthdays so far perhaps the most enjoyable one would be my 80th birthday!

# NEWSLETTER

**\* Volume 02/2005 \* September Issue** 



Q: Who would you like to be your mentor and why?

A: I have learnt from many people I encounter, they are all my mentors in some way.

Q: If you can turn back the clock, what would you like to change about your past?

A: A better voice - so I can sing.

Q: Would you like to be born a male or female in your next life and why?

A: Not sure if there's a next life - no preference.

Q: How would your friends describe you in 4 words?

A: I'm just guessing: optimistic, committed, fair, openminded.

# Actuaries in the Media

On 18 August 2005 in an article "Fight to survive in tough market", the South China Morning Post quoted Mr. David Hughes, Vice President for Individual Financial Products at Manulife saying that there is potential for more consolidation in the Hong Kong insurance industry. To counter the competition from bancassurance, traditional insurers offer products that banks and fund managers traditionally provide. Financial planning and investment-linked products have become popular as investors desire to get better yields. Interest rates offered by banks on savings accounts are just too low. Notwithstanding the tough competition, the industry still has room to grow compared to Taiwan and the United States.



# Gobi March 2005

by Stuart Leckie

The Gobi March 2005 was the toughest event ever for me - but I did complete the 250 km March!

The event started in Urumqi, capital of Xinjiang Province, China and five hours flying time from Hong Kong. Xinjiang is a huge area with Uygur and Kazak peoples as well as Han Chinese and is at the geographic centre of Asia.

The March consisted of six sections, with the general pattern being that each section was more difficult than the previous one, with section 5 as the big challenge.

I managed pretty well for the first four days. We walked through some amazing countryside, ranging from totally arid desert to intensively irrigated grapegrowing valleys, to sandstone hills and deserted plateaus.



Each competitor carried his food for seven days, plus his own sleeping bag, clothing and equipment. We were supplied with water and with tents at night. Each section was timed, with huge variations in times between fastest and slowest athletes.

The weather in the first four days was good – about 25°C maximum and 2°C minimum as we were at an altitude of up to 6,600 feet. There was still considerable snow on the backdrop of the Tian Shan (Heavenly Mountains). On two occasions we had strong winds which threatened to blow away the tents and gave everything a fine coating of sand and dust. We also had a rare but violent thunderstorm another night.

The fourth day was particularly spectacular as we alternated between traversing narrow hill ridges and pushing through slot canyons down to the Turpan Basin. The Turpan Basin is the second lowest place on earth at 500 feet below sea level and is the hottest place in China

By this time, probably half the competitors had blisters or other problems with their feet but the medical team were excellent at repairs.

We knew section 5 would be brutal - 93 km starting at 8 am on Day 5 and finishing at whatever time on Day 6. To compound the challenge of distance, an early heat wave pushed the temperature from the expected 30°C to 40°C+. Almost all competitors had to rest at each

# NEWSLETTER

**\* Volume 02/2005 \* September Issue** 



checkpoint, and at midnight myself and many others just had to stop to sleep. Then it was up before dawn to try to cross the sand dunes at the end of this section, before the mid-day heat. The dunes were really tough, and in fact about twenty competitors out of eighty seven starters could not complete the course.

The last day was easy, except that 80% of us had real foot problems to contend with. We finally finished in a town on the edge of the desert to a great welcome from the local people.

While the athletes were on the March, the Operation Smile medical team were working miracles in Xian. Last week a total of 166 children in Xian had corrective facial surgery and in China this means acceptance by the community as opposed to being shunned by society.

So, A VERY BIG THANK YOU to everyone who sponsored me so generously – for a total of almost US\$40,000. As soon as a few outstanding cheques are received, receipts will be issued to everyone.

Was it worth it? Undoubtedly yes, to feel that all the pain and effort on the March will lead to so many handicapped children in China being transformed into happier youngsters with the prospect of a normal life.



(Stuart Leckie is Chairman of Stirling Finance Ltd. He can be reached at stuart.leckie@stirlingfinance.com.)

### Behind the scenes:

The Gobi March is a six-stage, 250-kilometer footrace across the Gobi Desert of China. All competitors must carry all their own food, gear and clothing while navigating through about 30 checkpoints (CPs). The Gobi March is part of the Four Deserts, a series of footraces in the world's four largest deserts (the Atacama, the Gobi, the Sahara and Antarctica). Competitors must complete the Gobi March (China), the Atacama Crossing (Chile) and the Sahara Race (Egypt) before qualifying for The Last Desert in Antarctica.

Mr. Stuart Leckie participated in the March to raise funds for corrective facial surgery for 150 severely disfigured children in China and to celebrate his 60<sup>th</sup> birthday!

# Events' Highlight

# Health Seminar in Beijing, March 2005 by Howard Bolnick

Sixty Chinese actuaries, health executives, and regulators from the China Insurance Regulation Committee (CIRC) signed-up for a full week Health Seminar held in Beijing at Central University of Economics and Finance (CUFE) from Monday, March 14th through Friday, March 18th, 2005. This Seminar has been developed and was taught by Howard Bolnick, who is a former President of the SOA, an experienced health insurance actuary and company executive, Adjunct Professor of Finance at the highly rated Kellogg School of Management, and, currently, Chairman of the IAA Health Section. It was first conceived and developed in 2001 at the request of the three Baltic State actuarial organizations to introduce the special characteristics of health insurance markets and health insurance to actuaries and insurance executives in countries where health insurance products are in their formative stages. Professor Bolnick has the Seminar in five taught Eastern European countries before this most recently Seminar in China, which is the first one to be held in Asia.

# NEWSLETTER

\* Volume 02/2005 \* September Issue





Participants gathered for a group shot at the Health Seminar.

The Beijing Seminar was hosted by the China Institute for Actuarial Science at CUFE and it's Dean Professor LI Xiaolin. Valuable administrative support was provided by CUFE, the Society of Actuaries of China (LIU Donghong, Administrator) and the Society of Actuaries Hong Kong Office (Pat Kum, Manager and her assistant, Sarah Hui). Funding support was provided by the Society of Actuaries International Committee, ASTIN, and Munich Re's Beijing Office. ASTIN has been a generous and very appreciated supporter for a number of Professor Bolnick's previous Health Seminar. The Seminar was taught in English.

The Seminar intensive was an learning experience: classes were held over five consecutive days for five hours per day. In addition, there was reading and a very important economic market-structure exercise that attendees needed to complete in advance of class. The Seminar stresses the importance of (non-mathematical) risk management tools over actuarial analyses. Seminar attendees are trained in general non-mathematical tools needed to properly design and manage health insurance portfolios rather than provided with detailed product-by-product design and operating considerations.

Health insurance differs significantly from other areas of actuarial specialization. Success in developing and managing health insurance portfolios depends much more on understanding insurance market dynamics and customer behavior than on being good actuarial mathematicians. The Seminar emphasizes this very important theme. It consists of two distinct parts. The first part describes the unusual economic and behavioral characteristics, and fundamental problems of insurance markets (which are referred to by economists as markets with asymmetric information); it then uses these characteristics to uncover consequences

of market structure for insurance products; and, finally, attendees discover how insurance company risk management tools are used to overcome these problems so that insurance markets are both feasible and viable. The second part applies this framework and risk management tools to a variety of health insurance products found in most insurance markets. During this health insurance product was joined by oriented part, Professor Bolnick two SOA members, each with extensive experience in the Chinese health insurance market: Song Song Liao, ASA, who is General Manager Health for Munich Re in China, Davout Yean, FSA, Vice President and Head of Product Development for AIG in Beijing. Their knowledge and help was invaluable to making the Seminar a huge success.

A rapidly developing and very favorable environment for private health insurance in China explains the large number of Seminar attendees and their enthusiasm for the material. The previous government health care financing and delivery system has been replaced with a mixed public social insurance - private health insurance financing system supporting an evolving health care delivery system. Unlike Eastern and Central Europe, where Communist era government health care systems were transformed into wage-tax based social health insurance systems looking quite like those found throughout the pre-expansion EU, the health care financing system in China is being totally reformulated and reconstructed. Social health insurance to cover some of the cost of hospital care exists only in urban areas, and, even in these areas, it does not even cover all workers. Health care financing in rural areas, where institutional financing no longer exists, is a real problem. From conversations in China with Seminar students, other insurance executives, and regulators from CIRC, it appears that the huge "gap" in health care financing between the modest benefits offered by government Social Insurance Bureaus (SIB) and the cost of Chinese citizens' health care needs will be filled in the future largely by new private health insurance companies and managed care plans.

There are currently only a small number of health insurance companies with licenses to operate in China, as well as a limited number of Chinese life and general insurance companies that are exploring the health insurance market as adjuncts to their primary insurance businesses. For the future, CIRC appears to favor encouraging the formation of new insurance companies that specialize in health insurance. This means there now is strong interest in developing joint ventures between health insurance specialists from

# NEWSLETTER

**\* Volume 02/2005 \* September Issue** 



developed countries and new Chinese health insurance companies.

While the general direction of growth in health care financing is clear, the problems and unique characteristics of China and Chinese insurance markets means that there is both great opportunity and great peril to those entering such a new and unformed market. There is a strong sense that opportunity outweighs peril for companies from developed countries that know health insurance and health care delivery and can find appropriate ways to merge their ideas and knowledge with Chinese culture and integrate successfully with China's developing health care delivery system. If this is successfully done, 15 to 20 years from now private health insurance in China will be the largest market in the world!

including Past successes. this recent Beijing Seminar, reinforce the attractiveness of this Health Seminar and others like it to actuarially developing countries where there is a core of well-trained actuarial mathematicians who are seeking guidance from experienced professional on how to apply their skills to product-specific problems they face job. Central and Eastern Europe have been the focus of this type of Seminars to date. Interest is now being expressed from Asia. For the future other opportunities exist in a wide range of actuarially developing areas such as Central Asia, India, and Southeast Asia, Latin America, and Africa.

(Howard Bolnick is Chairman of the Infocus Financial Group, Inc. in Chicago, Ill. He can be reached at <a href="https://hbolnick@kellogg.northwestern.edu">hbolnick@kellogg.northwestern.edu</a>. This article first appeared in July 2005 issue of SOA International News and is reproduced with permission. Kindly note that Mr. Bolnick has scheduled a second seminar with the same program from 26-29 September 2005 in Kuala Lumpur, Malaysia To view the registration brochure, please click:

<u>http://www.actuaries.org.hk/doc/Health%20Seminar%</u> 20Brochure%20(KL).pdf.)



Institute of Actuaries of Australia's Biennial Convention, May 2005 by Sim Ng

Cairns, Australia was the location of the Institute of Actuaries of Australia's Biennial Convention in May 2005. An idyllic tropical setting adjacent to the Great Barrier Reef, Cairns was the perfect spot for the convention, which was based on the theme, "Sustainability". Just as the Great Barrier Reef is managed to ensure continued sustainability for the pleasure and benefit of future generations, actuaries have a responsibility to ensure continued solvency and ability to meet future obligations to policyholders.

The conference began with welcome drinks and dinner by the pool, which provided an ideal opportunity for delegates to mingle and chat. One could immediately recognise familiar voices filtering through the warm night air, be it that of past colleagues, business partners or acquaintances. It was certainly a warm and friendly atmosphere which set the scene for the next few days of the convention.

The convention consisted of daily plenary sessions focusing on sustainability. The first day was on Corporate Sustainability, the second day on Sustainable Futures followed by the third day on Sustainability of the Profession. Some of the key issues presented included:

- Past projections of global growth had not appropriately included China as a significant economic force in the future.
- Companies find themselves in a position of having to adapt to sustainability issues as well as to respond to market forces.
- Actuaries can play a role in the Enterprise Risk management regimes. In addition, they need to promote their abilities in broader contexts as well as collaborate more efficiently with other professions.

The topics covered in the other sessions were varied and could be broadly categorised into the following themes:

- Life Insurance and Wealth Management
- General Insurance
- Health Insurance
- Investments
- Professional issues
- Wider fields



# NEWSLETTER

**\* Volume 02/2005 \* September Issue** 





Panel Discussion

In Australia, the statutory role of the actuary has recently been extended to both the General Insurance and Health Insurance sectors. This move has been received well by the regulators who are optimistic that this will lead to a greater awareness of a responsible financial management framework and appropriate pricing.

The Life Insurance sessions included risk based capital, operational risk management and International Financial Reporting Standards (IFRS). In one session, there was an interesting debate as to whether companies have become so focussed on measuring risk to the extent that such measurements have generated "excuses" for businesses not to take risks, thus forgetting that the very nature of business is about taking measured risks for adequate return. During the IFRS sessions, there were several discussions on the volatility of profits reported under IFRS, in particular for risk business, and the communication of such results to management.

One of the Investment sessions also presented a fresh perspective on investment risk. It was proposed that investment risk should be viewed as a one-sided risk, i.e. the risk is when returns are lower than expected and not vice-versa. To this end, volatility measures should focus on volatility of returns which are lower than expected or returns which are lower than the minimum return required for profitability.

In terms of wider fields, there were some interesting topics such as "techniques for valuing ecosystem goods and services", "environmental finance" and "the use of actuarial techniques to model media effectiveness". The wider field was certainly taken to an extreme at the

convention gala dinner where the entertainer for the night was an actuary. She certainly displayed her hidden talents as a stand-up comedian and had the whole audience roaring in laughter.



Delegates enjoyed at the Gala Dinner!

In response to recent events affecting the actuarial profession, the Institute's Council had appointed a taskforce to conduct a comprehensive review of the Institute's Code of Conduct. A discussion draft of the revised version of the Code of Conduct was presented at the convention. The aim of the review is to ensure that the Code properly reflects and upholds the objects of the Institute's Constitution, continues to articulate high standards and principles of professional practice and adequately defines "actuarial advice".

Overall, the presentations at the convention were varied and challenged one to consider the actuarial profession and responsibilities in a broader context. There were also many stimulating discussions and debates as well as exchange of ideas and information. It was also well attended, with representatives from the regulators, government organisations, corporate firms and consulting companies.

(Sim Ng is Chief Financial Officer & Appointed Actuary of CMG Asia Ltd. She can be reached at <a href="mailto:sng@cmgasia.com.hk">sng@cmgasia.com.hk</a>.)



# *IEWSLETTER*

\* Volume 02/2005 \* September Issue



# Forthcoming Event

SOA Asset Liability Management **Training** Program, 8-10 November 2005, Hong Kong

With the success in Tokyo last year, the Society of Actuaries and Nexus Generations are organizing an intensive 3-day executive training program on Asset Liability Management: Techniques and Practices for Insurance Companies in Hong Kong. http://www.nexusgenerations.com/docs/HongKongAL M.pdf to download the registration brochure.

# Internship for University Students

In order to maintain Hong Kong's position as a leading financial centre, the FinMan Committee HKRSA identified student internship program as being an effective initiative in gearing up HK university students for the longer term benefits and interests of the financial industry. Companies interested in offering internship opportunities for university students are encouraged to contact the respective universities directly and their contacts are shown as follows:

Ms. Louisa Li

Director, Careers Education & Placement Centre

Fax: (852) 2559 5238 Tel: (852) 2241 5231

Email: louisali@hku.hk

# The Chinese University of Hong Kong

Ms. Rudy Ching

Projector Coordinator, Department of Finance

Tel: (852) 2609 7849 Fax: (852) 2603 6586

Email: ruby@baf.msmail.cuhk.edu.hk

Ms. Jennifer Chong

Executive Officer, Undergraduate Programs Office

School of Business and Management

Tel: (852) 2358 8978 Fax: (852) 2358 1467

Email: bmjchong@ust.hk

# The Hong Kong Polytechnic University

Mr. Jack Kwan

Counseling Specialist (Personal & Career Development)

Student Affairs Office

Fax: (852) 2774 5226 Tel: (852) 2766 6803

Email: sajack@inet.polyu.edu.hk

Ms. Anita Lam

Executive Officer, Department of Marketing

Tel: (852) 2788 9656

Fax: (852) 2788 9146 Email: mkalam@cityu.edu.hk

# Hong Kong Baptist University

Ms. Rosa Tang

Senior Career Service Officer, Placement Centre

Tel: (852) 3411 7437 Fax: (852) 2336 1762

Email: rosatang@hkbu.edu.hk

Ms. Rebecca Lee

Administrative Officer, Business Programmes Office

Fax: (852) 2575 5185 Tel: (852) 2616 8301

Email: rebecca@ln.edu.hk

# Exchange Program for University Students



Exchange students, professors and actuarial staff at HSBC Insurance (Asia-Pacific) Holdings Ltd. During the visit, Mrs. Estella Chiu (centre front), Chief Actuary of HSBC Insurance & ASHK President, delivered a welcome note to the students.

In early June, 21 university students coming from the Chinese University of Hong Kong, Lingnan University and Shanghai University of Finance and Economics visited the Insurance Authority, Hong Kong Stock Exchange and several Hong Kong insurance companies following their 6-day visit in Shanghai. This was an 11-day exchange program sponsored by Swiss Reinsurance Company with the aims of promoting understanding and interaction of insurance students from Hong Kong and Mainland China and deepening their knowledge of the insurance industry in Hong Kong and Mainland China. During the visits, students were given the opportunity to experience what different departments in the companies do. In addition to being dazzled by company visits, the trip also offered sightseeing program for students in both cities.



# The international specialist on your doorstep

Darwin Rhodes' extensive network of offices brings you local knowledge with a global perspective to ensure clients and candidates find the best possible solutions to their recruitment and career needs. As the only specialist multinational actuarial recruiter with an office in Asia, our multicultural Hong Kong based consultants travel regularly and work on assignments in Hong Kong, China, Vietnam, Singapore, Malaysia, Thailand, Indonesia, Philippines, Korea, Japan and India. Solutions are tailor made for each client whether providing local or returning candidates or globally sourcing expats.

Recruiting from graduate level to Chief Executive or Partner we now advise the leading local and multinational employers on a range of services including Database Search, Executive Search and Salary surveys.

If you are thinking of recruiting or looking for your next career move contact your local office or e-mail to

recruit@darwinrhodes.com.hk All information supplied will be used for recruitment purposes only.

**Hong Kong:** Suite 802(A), Tower One, Lippo Centre, 89 Queensway, Admiralty, Hong Kong. Tel: +852 3101 0930.

**PRC:** Level 21 HSBC Tower, 101 Yin Cheng East Road, Shanghai 200120. Tel: +86 21 2890 3167.

**Australia:** Level 7, 35 Clarence Street, Sydney, NSW 2000. Tel: +612 8264 0327.

**London (Head Office):** 32 Threadneedle Street, London EC2R 8AY. Tel: +44 20 7763 6261.

www.darwinrhodes.com.hk

DARWIN RHODES

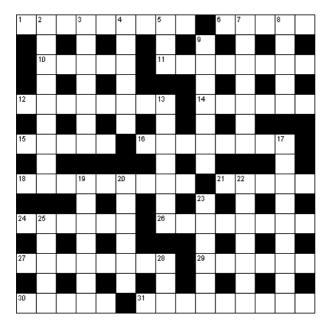
# NEWSLETTER

\* Volume 02/2005 \* September Issue



# Puzzle Corner

# Puzzle Fans ... Here's Another One for You!



# Across

- 1/6 Brilliant drinks, champagne substitutes! (9,5)
- 10 Salt-petre found in zucchini tremendous! (5)
- 11 Excited, Ma goes up for a starter course (4,4)
- Making a pig of yourself with forcemeat? (8)
- 14 Star so upset by oven-cooked meats (6)
- 15 Hungarian white wine all right in Scottish river (5)
- 16 Ties note about pieces of tenderloin meat (8)
- Abandons ice cream wafer for a Scottish pancake (4,5)
- 21 Southern mineshafts they're used for open-fire roasting (5)
- 24 Rogue has one fried seafood dish (6)
- Wise people devouring America's polonies, etc. (8)
- 27 Strong spirit makes after-school doze an afterthought (8)
- 29 Describes one sort of small mushroom or a chocolate one? (6)
- 30 Poultry-bird's headwear in place (5)
- 31 Sweet white wine enters USA improperly (9)

## Down

- 2 Stirred in iron pot, this black grape produces great Burgundy wines (5,4)
- 3 Macaroon-like biscuit concocted at a fair (7)
- 4 See 25
- 5 Go North (that's up) for an egg-flip (3)

- 7 Flash, hurriedly-made coffee? (7)
- 8 Some liver upturned blow your top (5)
- 9 In the morning or before outstanding love type of sherry! (7)
- 13 Sporting venues' fresh coffee remains (7)
- 17 Centre toe would make a nice boned steak! (9)
- 19 Yours truly gets into kidney bean for allspice (7)
- 20 Shout about Internet service provider's description of Chinese-style noodles? (6)
- 22 Large serving dish that went to John the Baptist's head? (7)
- 23 Edible flatfish, sort of trout with black inside (6)
- 25/4 Tip: one sort of onion that's a Scottish soup (4-1-6)
- 28 The main bit of mayonnaise albumen! (3)

Please submit solutions to ASHK Office by email: <a href="mailto:actsoff@netvigator.com">actsoff@netvigator.com</a>. This puzzle is reprinted with permission.

### **Solutions for Last Issue's Puzzle:**

D	Α	R	Ε	S		Ε	М	Р	Е	R	0	R
Ι		U		Η		Χ		R		Е		Τ
R	Е	S	Р	Е	С	Т		Α	D	D	Е	D
Е		S				R		$\circ$		$\cup$		G
$\circ$	Н	_	Ζ	Α		Α	R	Т	_	$\circ$	L	Е
Т		Α		L		0		_		Е		S
			Α	Т	Т	R	Α	О	Т			
Α		Α		Ш				Α		S		Е
В	Α	О	Α	R		_		┙	Α	$\vdash$	Е	R
ഗ		$\circ$		Z		Z				R		Α
0	Р	Е	R	Α		Α	Ν	S	W	Ш	R	S
R		Ν		Τ		R		Α		Ш		Е
В	Α	Т	Т	Е	R	Υ		W	Α	Т	Е	R

# NEWSLETTER

**\* Volume 02/2005 \* September Issue** 



# The Actuarial Society of Hong Kong NEWSLETTER

# Volume 02/2005 September Issue

**Editor** 

Greg Brennan

Tel: (852) 2843 9325 Fax: (852) 2525 8881

E-mail: greg.brennan@ap.ing.com

**Assistant Editors** 

Henry Lok

Tel: (852) 2973 5377 Fax: (852) 2295 3979

E-mail: hlok@latitudecapital.com

Billy H.W. Wong

Tel: (852) 2820 9937 Fax: (852) 2827 7700

E-mail: billy.hw.wong@watsonwyatt.com

Carrie Yip

Tel: (852) 2832 1047 Fax: (852) 2834 2813

E-mail: carrie-mf.yip@aig.com

Coordinators (ASHK Staff)

Patricia Kum

Tel: (852) 2147 9418 Fax: (852) 2147 2497

E-mail: patkum@netvigator.com

Sarah Hui

Tel: (852) 2147 9419 Fax: (852) 2147 2497

E-mail: actsoff@netvigator.com

# Contributions to the ASHK Newsletter

We welcome members' contribution to the following sections of the ASHK Newsletter: Feature Article, Actuaries in the Media, Actuaries on the Move, Actuarial Joke and Puzzle Corners.

Send correspondence to the ASHK Office at the address below. When sending in correspondence which has been created in a word processing program, when possible, email a copy of the file to either the editor's or the coordinators' e-mail address. Publication of contributions will be at editor's discretion.

# **Corporate Advertisement**

The ASHK will accept from insurance companies' or actuarial consulting firms' advertisements in the ASHK Newsletter provided that the advertisements do not detract from the actuarial profession. Positioning of advertisement will be at the editor's discretion.

### File Formats:

Advertisers have to supply the artworks which should be created in MS Word/PowerPoint/JPEG/PDF formats.

## **Advertising Rates:**

	One Off	Whole Year
Full page	HK\$4,000	HK\$3,600@
Half page	HK\$2,000	HK\$1,800@
Quarter page	HK\$1,000	HK\$900@

To advertise, please contact the ASHK Office by tel: (852) 2147 9418/9419 or e-mail: patkum@netvigator.com /

 $\underline{actsoff@netvigator.com}$ 

# NEWSLETTER

\* Volume 02/2005 \* September Issue



# Upcoming Events for Your Diary - Year 2005

### **January**

4 Jan 05

# **ASHK Luncheon Meeting**

"Update on Morris Report" by Mr. Mike Pomery, IoA President

# **February**

19-22 Feb 05

# **Education & Careers Expo**

(ASHK was one of the Exhibitors and organized a careers seminar, "The Actuarial Profession" which was well received by the public.)

### March

9 & 23 Mar 05

### ASHK Luncheon Meetings

"Selling Our Services Internally as if Failure is not an Option" by Mr. Sidney Yuen, HK Benchmarking Clearinghouse

"Current Issues in the German Life Insurance Industry" by Dr. Johannes Loerper, Hamburg-Mannheimer

# April

15 & 27 Apr 05

# **ASHK Luncheon Meetings**

"Asset Allocation for Life Assurance Companies and Pension Funds' by Mr. Greg Cooper, Schroders

"Leadership: The Courage to Commit" by Mr. Andrew Gale, IAAust President

# May

30-31 May 05

IAA Pensions Seminar, Taipei



### June

6 Jun 05

# ASHK Luncheon Meeting

"Hong Kong Population and Demographic Trends" by Mr. Frederick Ho, Commissioner of the Census & Statistics Department

27 Jun – 4 Jul 05

Joint Regional Seminar, Beijing (27-28 Jun), HK (29 Jun), Taipei (30 Jun – 1 Jul) & Singapore (4 Jul)

"Asset Liability Matching"

# July

6 Jul 05

# ASHK Evening Talk

"Prospects for General Insurance Actuaries in Asia" by Mr. Pang Chye, Mr. Louis Mak, Mr. Raymond Su & Mr. Sheng Yu

20 & 28 Jul 05

# **ASHK Luncheon Meetings**

"The Myth of an Ideal Index" by Mr. Vincent Kwan, Hang Seng Index

"Introducing Preferred Risk Underwriting into a Market" by Mr. James Kelly, Transamerica Reinsurance

# **August**

22 Aug 05

# ASHK/HKFI Seminar

"Dynamic Solvency Testing" by Mr. Robert Fok, Ms. Angel Hon & Mr. Thomas Lee

30 Aug 05

# **ASHK Evening Talk**

"Mortality Report" by Mr. David Gott & Mr. Tony Cheng, ASHK Experience Committee

# **September**

13-17 Sep 05

13th EAAC & IAA Fund Meeting, Bali, Indonesia

14 Sep 05

# ASHK/HKRSA Luncheon Meeting

"Pension System in a Changing Global Context-Ideas for HK" by Ms. Yvonne Sin, The World Bank

19-25 Sep 05

Chinese Actuarial Exams, HK

# October

7 Oct 05

# ASHK/HKICPA Luncheon Meeting

"Embedded Value"



# November

7-10 Nov 05

SOA Asset Liability Matching Seminar, HK

14-15 Nov 05

ASHK 2<sup>nd</sup> Annual Dinner & 5<sup>th</sup> Appointed Actuaries Symposium

Nov 05

### **ASHK Luncheon Meeting**

by Mr. Jonathan Anderson, UBS

# December

9 Dec 05

**ASHK Annual General Meeting** 

