THE ACTUARIAL SOCIETY OF HONG KONG

ASHK Newsletter

VOLUME 03/2007 DECEMBER ISSUE

FEATURES

Editorial

by Mr. David Waples

Welcome to the third edition of the newsletter for 2007.

The theme for this edition is the reform of health care in HK. Our Chief Executive, Donald Tsang, devoted part of his recent policy address last month to this subject. He noted that while HK takes pride in the current health care system, there are causes for concern. This is due to the aging population and the demand for health care services increasing substantially.

His address highlighted the need to implement a comprehensive and fundamental reform of our health care system to maximise medical benefits and promote the good health of the community. These include enhancing primary health care and promoting family doctor-based services, introducing more services through public-private-partnership, encouraging healthy competition between the private and public sectors, and purchasing health care services from the private sector.

At the same time, he stressed the need to face reality by making long-term arrangements for health care financing. He noted that it is impossible for the Government to increase public health care expenditure indefinitely. In this context, we as actuaries can contribute in public policy by a considered evaluation of the financial impacts of different models of the provision of health services.

Pang Chye gives a comprehensive overview of the status of health finance reform in HK, addressing the question of why reform has not made so much progress to date.

Michael Huddart, Chairman of the HK Federation of Insurers, provides insights on the health reform in this edition's interview. Michael draws on earlier policy studies to highlight choices that could be considered in future directions.

An article by Howard Bolnick covers the value that can be drawn from studying other health-care systems. The results of these are distilled in a single measure known as Health Adjusted Life Expectancy (HALE). Hong Kong has one of the highest measures amongst all countries with 70.3 for males and 75.7 for females.

The subject of climate change has been very topical of late with the UN releasing its long term outlook this month. Louis Perroy's article is timely on this subject with increasing attention to the environment around us. Louis will deliver a luncheon talk on this subject at the Marriott on 7 December.

Wishing you an early Merry Christmas and Happy New Year!

Author's Profile:

Chye Pang Hsiang, FIA (1998), MAAA (2000), Principal & Consulting Actuary of Milliman Limited

Pang can be reached at pang.chye@milliman.com

"In fact, healthcare reform has been discussed for well over a decade with numerous high profile studies having been conducted."

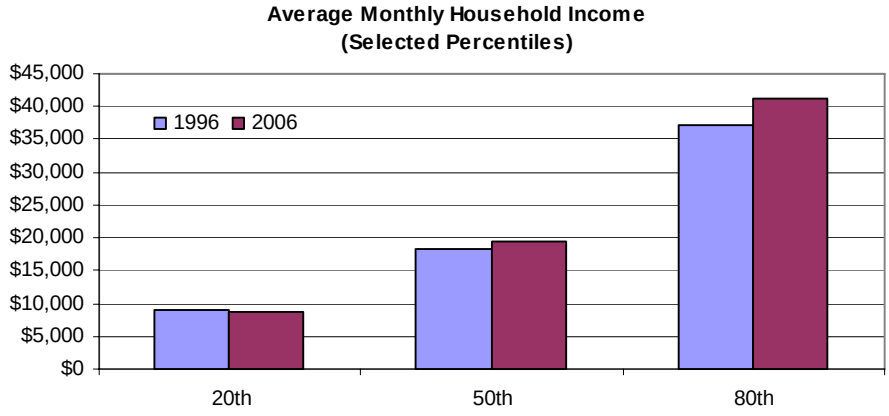
Health Financing Reform.....By Pang Chye

There has been a lot of discussion about healthcare financing reform in the last few years. The Hong Kong SAR government issued a white paper on the reform of the healthcare delivery system in July 2005 and is expected to issue another white paper on healthcare financing. In fact, healthcare reform has been discussed for well over a decade with numerous high profile studies having been conducted.

Why Haven't We Moved Forward?

The fundamental issue is whether Hong Kong citizens will be better off under a different system. The current system has a lot of good things working in its favour:

- The tax-based financing system creates a cross-subsidy between the rich and the poor; something that I think is essential for a sustainable healthcare financing system in Hong Kong. The divide between the rich and the poor has widened over the last ten years.



- Subsidized services at the point of care provide a cross-subsidy between the healthy and the unhealthy.

Under this system, Hong Kong boasts some of the lowest infant mortality and highest life expectancies in the world, well-trained medical professionals, and low out-of-pocket payments to patients, all at a cost of 5.5% of GDP. Any alternative system clearly has some very big shoes to fill.

2004 national healthcare expenditure, % of GDP

Singapore	South Korea	Hong Kong*	Taiwan	Japan	UK	Australia
3.7	5.5	5.5	6.2	7.8	8.1	9.6

* 2001/2 figure, based on latest available published information.

What Are We Moving Away From?

The drivers that are prompting Hong Kong to consider change today are:

- The aging population will see healthcare spending increase at around 1 to 2% per annum, over and above medical inflation. In itself, this is perhaps not a major issue. However, at the same time, the population tax base will narrow and the government will have to look to other sources of financing, increase the tax rate, or ration the available care.

- Many governments (Hong Kong included) are attempting to re-emphasise their role as providers of safety nets. They want to ensure everyone has access to the necessary care, with subsidies going to those that need it. However, targeting subsidies is difficult to do when the subsidy is provided at the point of care without means testing (which presents its own set of challenges).

Most observers view the current system as unsustainable in the long run and there has been much talk about private medical insurance playing a role in sharing the financing burden.

Moving Towards Private Medical Insurance?

Insurance is a risk-pooling mechanism. At present, the Hong Kong government is the country's largest medical insurer, with premiums being paid in the form of tax. If this risk-pooling function is privatised, this could change the financing dynamics between:

- The proportion of healthcare spending financed through government funds versus private money (although government funds are actually private monies spent by the government!).

- The level of subsidies and out-of-pocket costs for lower income groups versus higher income groups.

It depends on how the government chooses to allocate the healthcare budget and incentives corresponding to any change. However, even if the government balances the numbers so that the sources of financing remain mostly unchanged, private medical insurance will have a significant impact on the delivery of care.

"Private medical insurance presumably means a policyholder is free to choose where to spend the private insurance monies… Provided there is adequate transparency in provider costs and there is a true level playing field between public and private providers"

Private medical insurance presumably means a policyholder is free to choose where to spend the private insurance monies. That means a free choice of public or private providers and public-private competition. Provided there is adequate transparency in provider costs and there is a true level playing field between public and private providers, this can benefit patients and the Hong Kong economy in numerous ways, such as improved allocation of capital, process efficiency, and perhaps even making Hong Kong a regional medical centre of excellence.

Moving Towards Insurers?

Privatising the risk-pooling function in itself brings no benefits unless insurance companies can add value in terms of:

- Bridging the divide between public and private providers, including coordinating the care and transferring information between public and private providers, and between primary and tertiary providers.

- Innovation. With the role diversified amongst several insurance companies, and with competition amongst insurers, hopefully this would lead to innovation in terms of services and consumer information and choices, and perhaps even insurers working with providers on shared risk-pooling responsibilities.

If the government chooses this route, the potential for insurance companies is obviously tremendous, although important questions will be asked by all stakeholders: Can insurance companies step up to the job? How will insurers fare in the eye of the media when there are conflicts with policyholders and providers? Will the public and the government allow private insurers to earn adequate returns on the capital invested?

Having lived in several countries and worked in the area of healthcare insurance and financing for over fourteen years, it seems to me only one thing is clear: the current Hong Kong healthcare system works. And like everything else in Hong Kong, it appears to work relatively well (at least compared to many other countries).

"To make it work in the longer term will likely require greater transparency and cooperation amongst all stakeholders."

But that does not necessarily indicate that it will continue to satisfy the requirements of the population in the future, as technology plays an increasingly important role in medicine, demands escalate, and resources are stretched. To make it work in the longer term will likely require greater transparency and cooperation amongst all stakeholders.

Puzzle Corner

Do you know the answers? (Answers on Page 19)

Question 1

R E

Question 2

Yours sincerely
Profit

Interview with Michael Huddart.....By Sandra Tso & Winnie Ching

We have invited Mr Michael Huddart, Chairman of the Hong Kong Federation of Insurers and Executive Vice President & General Manager of Manulife (International) Limited to share with us his views on healthcare financing in Hong Kong.

Interviewee:
Mr. Michael Huddart

Q1: What would you consider to be the main factors that call for a reform of the existing healthcare system in Hong Kong?

A1: The health care system in Hong Kong is heavily subsidized by the Government, which runs a Pay-As-You-Go system in which the public healthcare costs are financed by the tax revenue every year. This creates an increasing strain to the Government where the demographic developments are such that the baby boomers are approaching retirement age and low birth rates are transcribing into a restricting tax base.

In addition, where a public health system should provide a safety net to those who really need it whereas those who are more affluent would pay for their own healthcare, it is not exactly the case in Hong Kong. Without any forms of a means-testing mechanism the health care system here may not always directs resources to where they are needed the most. The proposed reform is a step towards financing, at least part of the health care costs, by the users themselves. It is also about choosing the levels and forms of health care that the users want to receive, and at the same time reducing the system's dependency on Government funding.

As for factors other than financing, there is relatively little public awareness on health issues or on the personal responsibility in health care. Preventive care education and services also tend to be neglected. All of these I think call for a reform and/or continuous improvement in the health care system.

Q2: Can you tell us a bit more about the proposed reforms and also the Medical Savings Account ("MSA")?

A2: The current health care system is a two pillar system, with one pillar being the highly subsidized essential service pillar (Pillar 1) and another being a totally unsubsidized private service pillar (Pillar 3). Under the proposed reform an additional pillar of services will come between the existing two (Pillar 2), which is partially subsidized and provides extended care and long term medically supervised care.

This additional pillar aims to strengthen preventive health services and ensure access to quality care in old age, and includes medical insurance and healthcare services such as wellness promotion, health screening and prevention which are not currently being subsidized. The target level of Government subsidy on this will be on around 50% for this pillar.

The MSA is an individual account where contributions from each individual accumulate and the funds of which are spent on purchasing Pillar 1 and Pillar 2 services. Upon reaching age 65, MSA holders can also spend their MSA funds on Pillar 3 services.

"The purpose of setting up MSAs is to foster a more judicious use of health care resources."

When MSA holders spend their funds on purchasing Pillar 2 services, they will receive substantial Government subsidies, which aim to promote awareness, responsibility and incentive to look after their personal health. Part of these Pillar 2 services will include Government approved medical insurance plans. Insurance is essential in the implementation of MSAs as it pools risks for the population and smoothes the costs of treatment of acute critical illnesses.

The purpose of setting up MSAs is to foster a more judicious use of health care resources and ensure that Pillar 1 services serve as a safety net for essential health care services, and not being abused by indiscriminating and insatiable use.

In a nutshell, the proposed reform suggests for the basic safety net health care benefits to remain unchanged. And for any additional benefits above the Pillar 1 level, individuals will need to fund for them by saving over their working life. While the MSA balance aims to provide for on-going medical expenses after retirement, the one-off risk events such as critical illness or disability will be covered by health care insurance purchased under Pillar 2.

Q3: What obstacles would you envisage the Government to be faced with in carrying out a reform of the health care system and how do you think they might be overcome?

A3: I think it will not be a quick process, it will be gradual and would definitely require patience from the Government. One issue is that there is very low public awareness on the need to change. The current system has very comprehensive medical coverage with relatively short waiting time and very low costs to the users as compared to other countries. At a time when the economy outlook is favourable and Government finances are strong it would be difficult to explain to the public that there is a need to change the current system.

There will be a lot of marketing, and a lot of education around the problems associated with an ageing population and the increasingly expensive medical services, and how these would burden our next generation of tax payers or lead to compromises in the level of medical service available if measures are not taken now to prepare for the future. Rather than explaining on a macro or society level I think the campaign would need to be personal to the public, and illustrates how the reform may impact on the level of health care they can enjoy in the future. There should be case studies, or real people examples, to focus on the choices available and on the flexibility of the new system which members of the public can relate to on a personal level.

"At a time when the economy outlook is favourable and Government finances are strong it would be difficult to explain to the public that there is a need to change the current system."

Q4: The proposed level of contributions to the MSA is 3% of the salary of an individual, subject to a certain maximum like the Mandatory Provident Fund ("MPF") contributions. What considerations have been given in proposing the level of 3%? Would it appear high when the MPF contributions, aim to provide for the living of people in retirement, are only 5%?

A4: When setting a contribution level of course there will be some form of a model estimating the future funds available in the MSA and the average health costs per person in order to come up with a savings level. But then on top of these estimation and projections we have to consider what level should be set as a starting point to such a new concept of health care funding. 3% will probably be insufficient in providing for an individual's

medical needs beyond retirement, especially for people in their 50s or even 60s where there is very little time for contributions to be paid or accumulated in the MSAs, but it would definitely be a good start.

The MSA will most likely be compared with the MPF as they share similar concepts and contribution collection/investment framework, but then we need to bear in mind that unlike MPF, employer contributions to the MSA are not mandatory. Also rather than contributing 3% being too high as compared to MPF, it is more of the case of the MPF contributions being too low. As mentioned I feel that the marketing of the MSA must show the real costs of health care that individuals are required to bear, show examples of stories of real people for which services have been required and how much they would costs without Government subsidies.

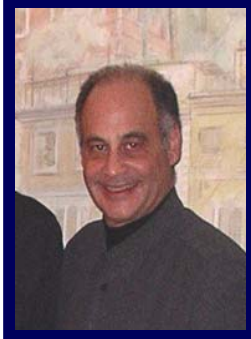
"The MSA will most likely be compared with the MPF as they share similar concepts and contribution collection/ investment framework...rather than contributing 3% being too high as compared to MPF, it is more of the case of the MPF contributions being too low."

Q5: In light of the new health care model, how do you think the insurance industry will be affected?

A5: It would really depend on whether a compulsory or voluntary model will be implemented in terms of health care insurance. I would much prefer a compulsory model where all holders of the MSAs are required to purchase a minimum level of health insurance cover. This will create a lot less concerns for the insurance industry in terms of anti-selection, and can create a much larger pooling of risks.

While some rules and regulations on the product coverage or definitions of conditions are essential, the premiums would largely be market driven. I would expect the market for compulsory minimum cover to be extremely competitive with very thin margins, and individual insurers' success to be largely dependent on the business volume and hence the level of economies of scales achieved.

Beyond the minimum cover level where the higher economic groups may want to seek more comprehensive or higher level of cover, they can be offered 'top-up' policies which complement the minimum cover. I think these 'top-up' policies will have more scope for higher profit margins for the insurers, as companies can offer more varied products with specific benefits or features, for example in-patient benefits at specific private hospitals, coverage for cosmetic procedures or lifestyle enhancements, all of which are tailored to different specific needs and hence make the products not as directly comparable between companies.



Author's Profile:

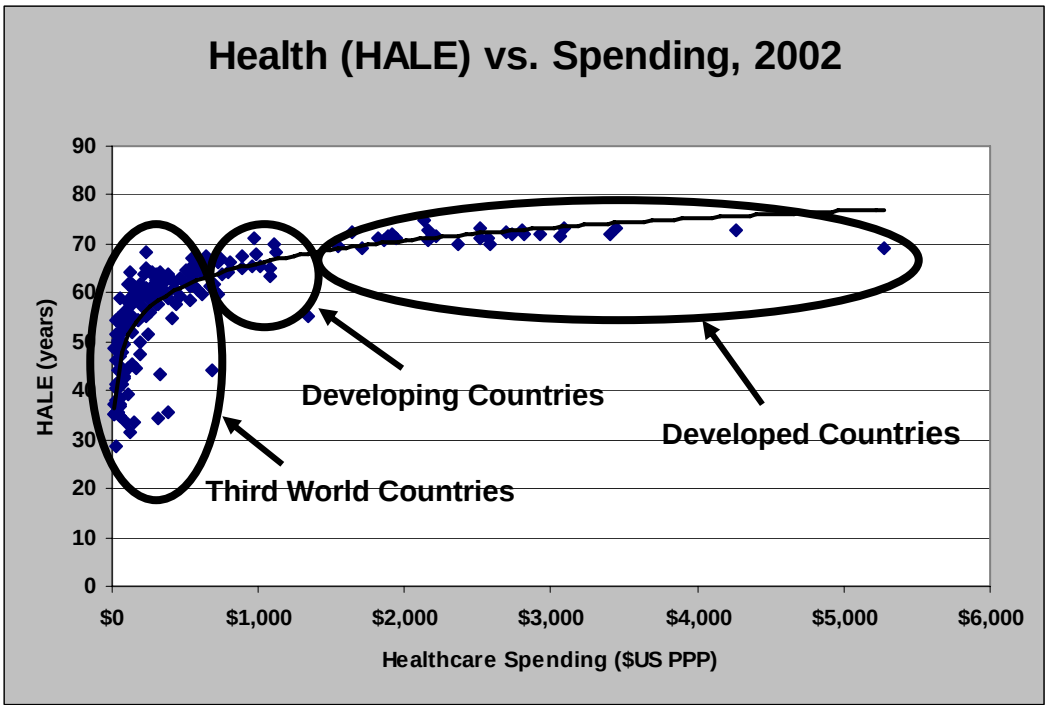
Howard J. Bolnick, FSA, MAAA, HonFIA, chairman of inFocus Financial Group, Inc. in Chicago

Howard can be reached at hbolnick@sbcglobal.net

A Brief Introduction to Comparative Health Policy

.....By Howard J. Bolnick

Our U.S. healthcare system is unique among almost 200 healthcare systems across the world. Reflecting our individualistic mores and characteristics of our political system, private health insurance is far more widespread, and, our healthcare delivery system is less government managed and more entrepreneurial than those of other nations. Not surprisingly, our system also has its own unique problems and institutions: for example, no other developed country has a large group of uninsured citizens, and managed care is far more advanced here than in other countries. So, do we have anything to learn from studying other healthcare systems? The answer to me is a resounding "yes", which I hope to demonstrate through one very interesting graph.



The graph relates population health outcomes to healthcare spending for the 191 member countries of the World Health Organization (WHO). WHO and its researchers have developed a large and very useful database (www.who.org) that is often used by health policy analysts. Our measures of population health and healthcare spending are data for 2002 from this source. Health Adjusted Life Expectancy (HALE) at birth is our population health measure, and, Total Healthcare Expenditure Per Capita (THE), in U.S. dollars at purchasing power parity, is our measure of total public, private, and out-of-pocket healthcare spending.

HALE is an actuarial calculation of expected years of life lived in good health. It can be though of as life expectancy adjusted downwards for expected years in less than full good health, with the downward adjustments varying based on the degree of disability. For most countries, other than the poorest nations, HALE is broadly 85% - 90% of life expectancy.

The Graph

Not surprisingly, countries that spend more on healthcare have generally better population health outcomes. Our graph includes a trend line fitted to the data. The trend in HALE increases from about 30 years for the poorest nations, to a bit more than 70 years for those nations that spend the most on healthcare. For the large number of Third World Countries (see graph), a little spending goes a long way. As spending increases from a meager $11 per capita (Liberia) to about $800 per capita, HALE increases from around 30 years to 65 years. There is a second group of Developing Countries, whose healthcare spending ranges from as low as $500 to about $1,100 per capita. This very interesting group of eighteen developing countries has population HALE of 65 years or more. Lastly, there are twenty-eight Developed Countries, which include pre-expansion EU, North America, Japan, Australia, and New Zealand that spend at least $1,500 THE per capita and have HALE of around 70 years. These 28 countries set the world standard for what healthcare systems can deliver in terms of population health outcomes.

Developed Countries

" The U.S. is the world's unrivaled healthcare spending champion… looking at objective statistics, our extra spending does not appear to buy us the most important outcome --- better health."

One country out-spends all others by a wide margin: This is none other than our U.S.A. In 2002, we spent an average of $5,274 per person on healthcare, which exceeded the number 2 spender, Monaco ($4,258), by 24% and the number 3 spender, Switzerland ($3,446), by 53%. Our nearest large country rival is Germany, at $2, 817. The full range of spending among these twenty-eight developed countries ranges from a low of $1,547 in Slovenia to the U.S. high-water mark, which is a range of 3.4:1. No other country is really in the running: The U.S. is the world's unrivaled healthcare spending champion.

We clearly spend huge amounts on healthcare, and we are quite proud the technological miracles produced by our researchers and performed daily by our physicians. However, putting aside our pride and looking at objective statistics, our extra spending does not appear to buy us the most important outcome --- better health. Among this group of countries, HALE ranges from a low of 69.2 in Portugal (THE of $1,702) to a high of 75.0 in Japan (THE of $2,133). The U.S. actually fairs very badly: Our population HALE, at 69.3, ranks twenty-seventh of the twenty-eight countries in the group.

Within this group, comparing the U.S. to the U.K. National Health Insurance (NHI) system NHI is a true "social insurance system": It is funded by taxes and health care is run by the government. We often read stories negative stories about the U.K. system and the "need" for U.K. citizens with adequate financial resources to buy Private Medical Insurance in order to jump lengthy queues and to avoid poor service and "rationing" in NHI. What we generally do not know, though, is the U.K. healthcare system costs only 41% of ours ($2,160 versus our $5,274) and, yet, it produces population HALE of 70.6 versus our 69.3, which is actually better than ours, with little variation across population segments measured by area and income. This "bad" U.K. healthcare system, then, performs quite well when objectively compared to ours!

Our poor showing on HALE is the result of many reasons, including two obvious population characteristics. First, there are large numbers of uninsured Americans who do not have regular access to healthcare, and, second, our lowest income citizens have relatively poor health and more limited access to healthcare resources. Both populations, therefore, suffer from relatively poor health outcomes.

Even taking these characteristics into account, it is very difficult to explain why we outspend other nations by so much. In trying to understand this problem, it is interesting to note that the U.S. often has fewer medical resources per capita (hospital beds, physicians, healthcare professionals, etc.) and we are often relatively more efficient in delivering much of our medical care (e.g., fewer hospital days per thousand) than other developed nations --- thank you, managed care! However, these relative resource efficiencies do not translate into lower costs.

Exploring reasons for our relatively poor results is beyond the scope of this brief article; but, this inquiry can be a very fruitful exercise to help us better understand our healthcare system and, potentially, to help us manage its evolution. Possible explanations for further exploration include: faster introduction and more widespread use of new, expensive technology; higher relative pay for healthcare professions than in other countries; a larger portion of the workforce employed in healthcare, particularly due to relatively inefficient administration; and, a personal healthcare ethic that believes more healthcare is always better. Adding items to this list is relatively easy: Identifying objective causative factors, though, is much more difficult.

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The article first appeared in the SoA Health Section Newsletter in Sept 2006. This is an edited version. For the original article, please visit: http://www.soa.org/library/newsletters/health-watch-newsletter/2006/september/HWN0609.pdf.

Change of Climate in the Actuarial World

Author's Profile:

Louis Perroy, previous life insurance actuary and a partner for Deloitte in Hong Kong and then in Paris.

In 2001, he decided for a complete change of career towards the environment and climate change, and completed a Masters in Environment Technology at the Imperial College, London. He went on and worked for two specialized climate change organizations, Ecosecurities and Climate Change Capital.

A week rarely goes by without hearing about climate change and its disastrous consequences. Even the Nobel Prize has been attributed to world class climate change fighters on the basis that climate change will most likely cause numerous conflicts in tomorrow's world.

This inevitably leads us to ask ourselves what climate change may means for us actuaries residing in Hong Kong. Are our financial services industries completely shield from this plague that every politician and scientist are talking about or should we also worry?

Let us remind ourselves briefly what climate change consequences are, what it means for the world and economies.

First thing people think when talking about climate change is temperature increases by a few degrees (1.7°C to 5.6°C by end of century around Hong Kong) and sea level increase (40 to 60cm by 2050 in the Pearl River delta). Automatically we start switching off, although it will concern our grand children, it feels too remote to make us react today in a big way, and we have heard so much about it anyway, it is almost out of fashion.

What experts and scientists say unanimously today is that climate change impacts will be gradual, disastrous in due course and that even if emission of GHG (green house gases) was contained at an acceptable level in the next 20 to 30 years, which is the best case scenario and unlikely to happen, the disruptive effects of climate change would still be felt throughout the 21st century.

The effects of global warming will be felt to a differing extent in different parts of the world. Tropical countries will suffer greater consequences than temperate countries. The IPCC (Intergovernmental Panel on Climate Change) states that the impact of climate change will 'exacerbate inequities in health status and access to adequate food, clean water, and other resources'. For instance, 1.7bn people currently live in 'water-stressed' countries. This is projected to increase to 5bn by 2025. Ironically, the rich temperate countries who have been the main source of greenhouse gas (GHG) accumulation are projected to only suffer the least from climate change.

In the Pearl River delta direct impacts will mostly be through changes in sea level combined with harsher storms affecting coastal areas and river mouths, abnormal precipitations and extreme heat, damage to roads and infrastructures, increasing cardio-respiratory illnesses and compounding the already high levels of air pollution by accelerating photochemical reaction rates among chemical pollutants in the atmosphere. Also climate fluctuations will translate into increase in demand and disruption to supply of water, electricity, and gas. A full report on these matters (http://www.cefc.com.hk/Climate.CE%20report.11.06.pdf) was produced by "civic exchange".

The consequences of Climate change will be and are already today apparent in numerous forms. To name just a few, sea level rise will affect coastal flooding and coastal biodiversity, while air and water temperature rise will cause higher number and intensity of storms, unpredictability of weather patterns (precipitation, alternation of extreme cold and hot weather), low fresh water supply (including salinisation of soils, and sea water entering water ways) , intensification of tropical and sub tropical diseases (expansion of malaria, dengue), loss of biodiversity (species extinction), etc.

Two courses of reaction are possible: adaptation and mitigation. On the one hand the adaptation refers to finding ways to live with the consequences and on the other mitigation refers to reduction or modification of the sources of such GHG.

Countless reports, recommendations and information have been produced on the issue and some actions are slowly being implemented. The largest mitigation action taken today is the Kyoto protocol which was finally ratified in November 2004 and aims at reducing emissions level of developed countries (except for the US and Australia) by 5% (compared to 1990 emissions level) through a cap-and-trade system. This will be far from enough, especially with increasing emissions projected for China and India.

Consequences for economies around the world will be very diverse geographically and in intensity. Changes caused by climate change are so progressive, diffuse and interlinked that it is difficult to predict the size of their impact and the timing of occurrence. This is an endless source of material for scientists, researchers, statisticians, and economists.

Most sectors of the economy will be impacted. On the one hand numerous industries such as agriculture, forestry, fisheries, healthcare, insurance and reinsurance, tourism, and real estate will suffer direct physical risks; while regulatory pressure (aiming at mitigation) will affect other sectors such as fossil fuel power generation, oil and gas extraction and refinery, manufacturing, chemical, cement, ceramic and glass, paper pulp, transportation (aviation, automobile…), agriculture, forestry (deforestation of natural forests).

Closer to actuaries, the financial service sector, at centre of the economies, will also be seriously impacted. Impacts of climate change will be found on both sides of balance sheets of banks, insurers, reinsurers, pension funds, investment houses, etc.

For the assets, a great number of industries as listed above will be affected in various ways and will therefore radically change investment decisions. Moreover, on a macroeconomic level, it can be argued that such a great number of modifications in the economy as we know it today, added to the potential political instability, are likely to cause great havoc to economies.

The liability side is not less dramatic although it may be easier to deal with using selection of risk and tariffs increases. For life insurers, death and medical experience may be modified, for non life and reinsurer, weather calamities will be felt acutely as well as business interruption. Banks mortgage portfolios will be affected through economic consequences and property price fluctuations. Likewise consequences on pension portfolios may be severe due to economic and demographic changes.

A large number of financial institutions are starting to react to the problem through participation in specialised non profit organisation such as the Carbon Disclosure Project (www.cd**project**.net) or Investor Network on Climate Change Risk (www.incr.com). Other institutions (for example large reinsurers such as Munich Re, Swiss Re) have departments specifically to study in depth the likely consequences of climate change; others such as HSBC are setting up departments to understand the consequences of the issue across the range of their activities on a world wide basis.

For actuaries who are 'making financial sense of the future', and concerned with medium- to long-term financial problems, climate change will have a definite effect on their work. They will be faced in their jobs with a crucial dilemma of whether to pursue adaptation to climate change or mitigation.

- Non-life insurance actuaries will have to learn to reduce their exposure to climate change through policies of risks exclusion, risk mitigation (eg building flood defenses), risk transfer, or adjustments to product price.
- Actuaries who look at asset and liability management may have to monitor increasingly the consequences of climate change on their medium to long-term scenarios. For the projection of assets, a distinction by sectors of assets may be necessary to reflect the likely consequences of climate change.
- Long-term business actuarial regulatory obligations for life insurance and pension actuaries should probably include consideration of climate change.
- Finally, actuaries working on the investment side, as detailed above, will have to allow for climate change on the various sectors of the economy and the global economy in their investment strategies and the financial models they use.

All these considerations mean actuaries will have to be informed about the latest climate change projections from climatologists and other scientists, and about climate models predictions and new legislation on climate change.

Climate change will require an extra degree of vigilance from actuaries in their work but, at the same time, will open a whole new range of opportunities. These opportunities may include new types of insurance and investment products, wider use of new instruments such as weather derivatives, alternative risk transfer (catastrophe bonds), role with new emission trading markets, etc.

The Institute of Actuaries in the UK and its Australian counterpart have both already set up groups of actuaries reflecting and researching on how actuaries should allow for climate change in their daily work. A similar working group is being put together in Hong Kong and will meet once a month. The main purpose of the group is to

1. Provide regular information to actuaries in Hong Kong about environmental threats (mostly climate change) relevant to their work.

2. Establish a database of publications dealing with environment and climate change in relation to financial I issues.

3. Provide regular information to financial institutions in Hong Kong about environmental threats (mostly climate change) which are relevant to them.

4. Start gathering data related to climate change which may include new patterns; and

5. Initiate or conduct research on the impact of climate change and environmental issues on the work of actuaries.

If you feel also that climate change should be taken seriously by actuaries, you can join our nascent group by contacting directly the ASHK or Louis Perroy at louisperroy@gmail.com.

Market Update

Several revised Guidelines and Code have recently been approved by the Management Board of the Mandatory Provident Fund Schemes Authority.

Guidelines on Central Securities Depositories (Guidelines 1.7)

Since the last update of Guidelines I.7, the approved Central Securities Depositories ("CSDs") and the central bank of Ireland, and the approved CSDs in the United Kingdom, the Philippines and Romania have changed their names due to merger or restructuring activities. The list of approved CSDs in Annex A to Guidelines I.7 and the illustrative list of treasuries, central banks and reserve banks in Annex B to Guidelines I.7 have been amended to reflect these changes and to incorporate a few changes made for housekeeping purposes.

Guidelines on Custodians (Guidelines I.3)
Guidelines on Debt Securities (Guidelines III.1)
Guidelines on Eligible Overseas Banks and Authorized Financial Institutions (Guidelines III.3)

To align the requirements of the Hong Kong Monetary Authority and the Authority, Guidelines I.3, III.1 and III.3 have been amended to remove the differences in minimum credit rating requirements between Rating & Information, Inc. and other approved credit rating agencies.

Code on Disclosure for MPF Investment Funds

The Authority earlier issued the Consultation paper on Proposals to improve the Content of Annual Benefits Statements ("ABS") for public comment, followed by the Consultation Conclusions on the Consultation Paper. Respondents were generally supportive of the proposals to expand the content of the ABS. In light of this, the Authority decided to introduce new content requirements into the ABS as Part F of the Code on Disclosure for MPF Investment Funds. Consequential amendments were made to Parts A and G, and the Explanatory Notes of the Code.

The revised Code will be issued to trustees and service providers to allow a transitional period from knowing the detailed new requirements to the production of ABS complying with those requirements. The revised Code will not be formally amended and promulgated until the Mandatory Provident Fund Schemes (Amendment) Bill 2007 comes into effect. The Authority will inform relevant partied of the formal issuance of the revised Code in due course.

Copies of revised Guidelines I.7, I.3, III.1 and III.3 could be downloaded from the Authority's web site at [http://www.mpfa.org.hk].

Membership Update

since September 2007

New Members Welcome

Fellows

David Laurence BARTLETT, *FIA (1983)*, Resolution Plc
Bennie Yiu-Wai CHIU, *FSA (2006)*, Manulife Financial
Fred Ting-Him CHOI, *FCAS (2006)*, S. Yu & Partners Ltd
Michael John DALY, *FIA (1997)*, Watson Wyatt
Michael Joseph DAVIES, *FIA (1997)*, Manulife Financial
Kam-Kit LAU, *FSA (2007)*, Manulife (International)
John York-Hon LEE, *FSA (2006)*, KPMG
Peter LEE, *FFA (2004)*, Watson Wyatt
Diane MULLER, *FSA (1989)*, *FCIA (1989)*, Sun Life
Charles Man-Ho NG, *FIA (2005)*, *FSA (2006)*, Watson Wyatt
Martin NOBLE, *FIA (2007)*, KPMG
Luc ST-AMOUR, *FSA (1990)*, *FCIA (1990)*, Sun Life
Andrew TANG, *FIAA (2007)*, NMG Financial Services
Lan TANG, *FIA (2005)*, Mercer Human Resource
Daniel Tsun-Yin WAN, *FIA (2006)*, HSBC Insurance
Keilic WONG, *FIAA (1996)*, AIA
Melissa WONG, *FIAA (2005)*, ING
Toby Chung-Yin WONG, *FCAS (2007)*, Swiss Re
Randi WOODS, *FSA (1999)*, *MAAA (1989)*, Principal

Associates

Timo Sascha KRAUSE, *FSAA*, Swiss Re
Mario Tin-Hang LAI, *ASA (2006)*, CIGNA
Cathy Ching LEE, *AIAA (2002)*, Manulife
Alfred LEUNG, *ASA (2006)*, Manulife
Julie Li ZHU, *ASA (2006)*, Towers Perrin

Students

Benedito Lap-Kong CHAN, SOA Student, Standard Life
Eric Lik-Yeung CHAN, SOA Student, Deloitte Actuarial
Patrick Chung-Yan CHAN, SOA Student, Manulife
Ka-Leung CHEUNG, SOA Student, Manulife Financial
Lawrence Shing-Chung CHEUNG, SOA Student, Manulife
Sandra Nga-Ting CHEUNG, SOA Student, ING
Wan-Yin CHEUNG, SOA Student, Watson Wyatt
Candy Hiu-Yan CHIU, SOA Student, Manulife Financial
Gary Ka-Wai CHIU, SOA Student, Principal
Danny Wai-Kit CHOI, SOA Student, HSBC Insurance
Chun-Pong CHOW, SOA Student, RGA Re
William Pui-Yin CHOW, SOA Student, Watson Wyatt
Ka-Hei CHOI , SOA Student, Deloitte Actuarial
Leong-Hang CHOI, SOA Student, Watson Wyatt
Dilys Chung-Sze HO, SOA Student, Manulife
Ka-Wai HO, SOA Student, RGA Re
Angela Yan-Chung LAM, SOA Student, Manulife
Ronnie Long-Lee LAM, SOA Student, Sun Life
Cathy Ka-Yi LEE, SOA, IoA Student, AT & T
Phobe Ching-Yue LEE, SOA Student, Principal
Wai-San LEE, IAAust Student, RGA Re
Ivan Chung-Man LEUNG, SOA Student, Watson Wyatt
Sau-Fung LEUNG, SOA Student, Principal
Wendy Wan-Man LI, SOA Student, HSBC Insurance
Julia Jia-Chian LIN, SOA Student, Watson Wyatt
Ka-Yan LUI, SOA Student, Prudential Assurance
Pui-Wai NG, IAAust Student, Manulife
Yi-Ting PONG, SOA Student, Watson Wyatt
Usman SHAHID, SOA Student, Merrill Lynch
Ben Ming-Tak TANG, SOA Student, MassMutual
Billy Chi-Wai TANG, SOA Student, AXA China
Calvin Yu-Ching TANG, SOA Student, Manulife Financial
George Yiu-Nam TANG, SOA Student, Manulife
Kai-Fu TONG, SOA Student, HSBC Insurance
Eric Kwong-Fai TSANG, SOA Student, ING
Johnny Hau-Yin WAT, SOA Student, Deloitte Actuarial
Wey How YEW, IoA Student, Deloitte Actuarial
Barbara Kai-Ling WONG, SOA Student, ING Asia/Pacific
Dominic WONG, SOA Student, Manulife
Suki Shuk-Kwan WONG, SOA Student, Manulife
Hilary Yann-Lin YANG, SOA Student, AXA
Yin WONG, SOA Student
Jinxia ZHU, SOA Student, University of Hong Kong

Membership Upgrade

Fellows

Lily Lee-Ni CHANG, *FSA (2007)*, Manulife
Winnie Sze-Wan CHING, *FIA (2007)*, Watson Wyatt
Joseph Yun-Peng CHU, *FSA (2006)*, Manulife
Yoke-Wai GOH, *FIA (2003)*, Prudential
Carole HO, *FCAS (2007)*, Swiss Re
Vincent Lok-Sang KOK, *FSA (2007)*, Infinity Strategic Advisors
Ken Kin-Shing LAU, *FSA (2007)*, AEGON Direct Marketing
Sara Wai-Man LAU, *FSA (2006)*, HSBC Insurance
Rodney Lok-Lai LEUNG, *FIAA (2007)*, HSBC Insurance
Daniel Kin-Hing LI, *FSA (2007)*, BOC
Sylvia Sau-Kei LI, *FSA (2006)*, HSBC Insurance
Eric Tat-Chi MAN, *FSA (2007)*, Manulife
Becky Ho-Tsun PUI, *FSA (2007)*, Hannover Life Re
Gloria WAN, *FSA (2007)*, MassMutual
Carol Hiu-Kwan WONG, *FSA (2007)*, Manulife
Tak-Chi WONG, *FSA (2007)*, Manulife
Willis Chun-Fai WONG, *FSA (2007)*, Aviva Asia

Associates

Flora Ming-Yiu CHAN, *ASA (2007)*, Swiss Re
Daniel CHENG, *ASA (2007)*, Swiss Re
Ronald Yu-Ching CHENG, *ASA (2007)*, Manulife
Evan Wai-Wah CHEUNG, *ASA (2007)*, AXA China
Kevin Wai-Ho CHOR, *AIAA (2005)*, AXA China
Jasmine Tan-Ping HUI, *AIAA (2007)*, MassMutual
William GOH, *ASA (2007)*, Sun Life
Kelton Hoi-Leong LAM, *ASA (2007)*, ING Life
Danny Yuk-Ming LEE, *ASA (2006)*, Manulife
Keet Ying LEE, *ASA (2006)*, Manulife
Ellen Wai-Ying LEUNG, *ASA (2006)*, Manulife
Kendy Yee-Man LEUNG, *ASA (2007)*, ING Life
Selina See-Wan MA, *ASA (2007)*, HSBC Insurance
Simon Heung-Lok PANG, *ASA (2007)*, Sun Life
Josephine Ming-Yin WONG, *ASA (2007)*, HSBC Insurance
Estee Yin-Wa YEUNG, *ASA (2007)*, AXA China
Kwong-Wing YEUNG, *ASA (2007)*, AXA China

Reinstated Members

Fellows

Rawson Yi-Chuan CHEN, *FSA (2004)*, Sun Life
Alan MERTEN, *FIAA (1990)*, Manulife
Alexander REID, *FFA (1993)*, Standard Life

Actuaries on the Move

Fellows

David HUGHES
Edmond Chun-Wah LEE
Richard Kwai-Fu NG
Jeremy WALL

Student

Elaine Yim-Ling LAW
Terence Tin-Hang YIU

International News

ELAS archive: catalogue listing on Actuarial Profession website

The Faculty and Institute of Actuaries are pleased to inform those actuarial companies, UK and overseas actuarial societies, dining clubs and many individuals who most generously contributed to the purchase that the Equitable Life Assurance Society archives acquired have now been fully catalogued. With support from the purchase appeal's surplus, it engaged an archivist to appraise and describe the archive according to established archival standards.

Links to the catalogue of the archive, now located at the Institute's offices at Staple Inn, London and at Guildhall Library, London may be found through the Actuarial Profession's website:http://www.actuaries.org.uk/link/library/elas/index.html

News in the Circle

(We welcome contributions from members)

Sahara Race 2007 With Stuart

Our member Stuart Leckie traveled to Cairo and joined the Sahara Race 2007 with his wife, Alexandra.
It took seven days of about 350,000 steps to cover the 250 km in this five-stage race. Stuart raised more than US$60,000 for the GAP Foundation Home in China!

Congratulations to Daisy!

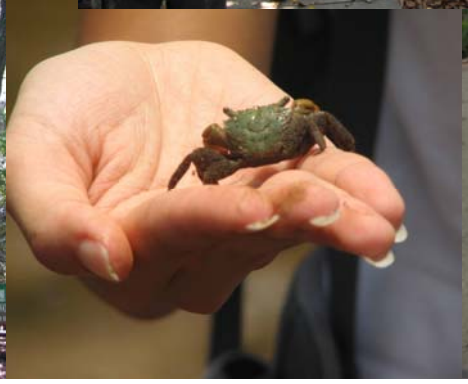
In September 2007 Daisy Ning tied the knot with Patrick in Desa Pecatu, Bali, Indonesia.

Events' Highlight

ASHK Boat Trip, Jul 2007

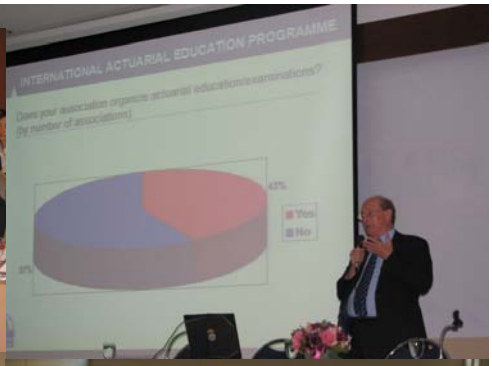







SOA USGAAP Seminar, HK, 7-9 Aug 07

IAA Fund Meeting, Bangkok, 5-8 Sep 07






SOA ALM Seminar, Singapore, Sep 07





ASHK Annual Dinner, 6 Nov 2007

Speakers

Our Honorary Guests

We were entertained by our sporting New Fellows!

Our New Fellows received souvenirs from the President of ASHK, Ms. Sim Ng

There were 130 members who attended the Annual Dinner. We were honoured to have Mrs. Alexa Lam as our distinguished guest speaker and also the VIPs joining us. The ASHK would like to extend sincere thanks to the following companies which had provided raffle draw sponsorship for the 2007 Annual Dinner:

Cologne Reinsurance Company plc, Hong Kong Branch; Darwin Rhodes; Deloitte Actuarial and Insurance Solutions (HK) Ltd; Grand Hyatt Hong Kong; Hannover Life Reinsurance; HSBC Insurance (Asia-Pacific) Holdings Ltd; InterContinental Grand Stanford Hong Kong; JW Marriott Hotel Hong Kong; Metropolitan Life Insurance Co of Hong Kong Ltd; Novotel Century Hong Kong; QED Actuarial; RGA Reinsurance Company; Sun Life Hong Kong Ltd; Swiss Reinsurance Company; Transamerica Reinsurance, Asia Pacific Head Office and Watson Wyatt Hong Kong Ltd

ASHK Appointed Actuaries Symposium, 7 Nov 2007







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Fax: (852) 3101 0989
Email: recruit-hk@darwinrhodes.com.hk

Or Visit our website: www.darwinrhodes.com.hk

Do you Sudoku?

A prize will be presented to the member who submits the first correct entry. Join the puzzling craze and submit your entry to ASHK Office by email:

actuaries@biznetvigator.com *NOW* !!!

	8			2				
			8	6	7			5
		9	3			1		
	2					4	7	
9	4						1	6
	1	5					2	
		8			6	2		
2			1	3	8			
				7			3	

How to play: fill in each square with a number so that each row, column and each 3 x 3 block contains 1 to 9

One of the solutions for last issue's Sudoku:

8	5	6	9	1	7	4	2	3
3	4	2	6	5	8	7	1	9
9	7	1	3	2	4	6	5	8
1	6	4	8	9	2	5	3	7
5	2	9	7	3	1	8	4	6
7	8	3	4	6	5	2	9	1
6	3	7	2	4	9	1	8	5
4	9	5	1	8	6	3	7	2
2	1	8	5	7	3	9	6	4

Puzzle Corner (Page 4) Answer:
1. Catastrophe reinsurance
2. Profit signature

Message Board (Contributed by members)

Adobo Chicken

Ingredients
Vinegar
Oil
Soy Sauce
Ground pepper
Salt (Optional)
Bay Leaves
Chicken pieces

1. *Clean chicken pieces*
2. *Pour vinegar into big frying pan*
3. *At max. heat, submerge chicken in vinegar about 1/4 or less level*
4. *Add a little soy sauce, pepper, bay leaves (10) while boiling*
5. *If too much vinegar, pour away. If too little, add more*
6. *Fry chicken, add oil if dry*

BBQ Pork

Ingredients
Pork slices
2 tbsp garlic chopped
1 tsp sesame oil
1-2 tbsp oyster sauce
4 tbsp sugar
Pepper
2 tbsp soy sauce
1 tsp dark soy sauce/sweet

1. *Mix above with pork slices*
2. *Bake at 450 degree for 20 minutes*

2007-2008 Up-coming Events

For details, please visit: http://www.actuaries.org.hk/

ASHK Risk Management Regional Conference, Venetian Macao

28-29 January, 2008

By now you would have all received a copy of the brochure for the risk management conference organised by the ASHK to be held in Macau. The event is larger than those normally found on the ASHK calendar and will get the program for the year off to a strong start. Risk management was chosen as the theme given the high level of interest observed among our member base at lunch and evening talks held recently around the topic.

Our focus for this seminar is very much on education and advancing the interests of the actuarial profession in our region.

The event brings you high caliber international speakers at greatly reduced cost as you need only travel as far as Macau and, thanks to the support of our sponsors, we have been able to keep registration costs low. We are pleased to be able to facilitate such a unique conference for our members and encourage you to take advantage of this one-off opportunity.

The overseas speakers that have generously agreed to share their time and knowledge with us include:

- Tom Karp, the Executive General Manager of the Australian Prudential Regulation Authority (APRA), a jurisdiction at the forefront of risk based capital developments
- Tom Wilson, recently appointed Chief Risk Officer for Allianz after holding similar positions at insurance and consulting companies
- Mark Chaplin, Watson Wyatt's Global Head of Risk & Value Services and an active participant in related working groups run by the UK actuarial profession
- Colin Wilson, Chairman of the Finance, Investment & Risk Management Board of the UK Institute of Actuaries and a senior consultant at Barrie&Hibbert based in Edinburgh
- Greg Martin, the president elect of the Australian Institute of Actuaries and a senior director with KPMG in Australia
- Robert Stribling, Chief Risk Officer at Australia National Bank

They are supported by a strong cast of familiar faces such as Jeffrey Liew from Fitch, Liu Shu Yen from PWC, Standard & Poors' Connie Wong, Bernard Fung from Aon, Paul Carret from Goldman Sachs, Terrence Wong from AM Best and industry veteran Stuart Leckie. We are particularly pleased that Elizabeth Rychling from the Venetian Hotel has agreed to be our guest speaker at the Welcome Dinner. Ms Rychling is a lawyer whose career has focused on insurance law and risk management. She is currently responsible for risk management for the Venetian Hotel and the Las Vegas Sands Corp. and her talk on "Controlling the risks of a rapidly growing global gaming company" promises to be entertaining and informative.

The dinner is sponsored by Fortis with cocktails beforehand sponsored by Deloitte, DW Simpson, ING and QED Actuarial. The gold sponsors who will host you at lunch are Gen Re, Hannover Life Re, HSBC Insurance, RGA, Swiss Re and Watson Wyatt. The main sponsor, Fortis, and the gold sponsors also have the opportunity to host events on the Tuesday afternoon so look out for those in further communications.

Key dates for your diary are:
24 December 2007 - registration deadline
28 and 29 January 2008 - the event itself

There are already over 130 attendees so the conference promises to be a lively one; and we haven't even mentioned the attractions of the Venetian Macao Resort Hotel yet! I look forward to seeing you there.

Naomi Burger
ASHK Investment & Risk Management Committee Chairperson

Global Best Practices in ERM for Insurers and Reinsurers Webcast

16 January, 2008

The SOA is offering a two-track webcast at convenient times for three regions: the Americas, Asia/Pacific and Europe. The webcast has been developed to promote awareness of a global actuarial community by involving actuaries globally in one event and allowing people to share emerging and new risk management practices across different geographical regions.

ERM is a unique field that is developing in all parts of the world at more or less the same time; therefore it is a new practice area where a global actuarial community of practitioners is developing. The webcast will include speakers from Europe and Asia/Pacific, as well as the Americas, and will allow risk officers to share emerging and new risk management practices across different geographical regions.

To register for the webcast, visit the following website **http://www.soa.org/meetings-and-events/event-detail/global-best-erm/**

The webcast is supported by the Institute of Actuaries of Australia, Joint Risk Management Section, Society of Actuaries, and UK Faculty and Institute of Actuaries.

Dec	Jan	Feb	Mar	Apr
7 ASHK Luncheon Meeting	16 INARM ERM Webinar	19 ASHK Evening Talk - "IFRS Preliminary Views" by Tom Herget, Poly-Systems	31-1 SOA Equity-Based Insurance Guarantees Conference, Hong Kong	
13 ASHK Annual General Meeting	28-29 ASHK Risk Mgt Regional Conference, Venetian Macao	21-24 Education & Careers Expo 2008		2-3 SOA Insurance Seminar on Economic Capital, Hong Kong

2007 - 2008

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Editor
David Waples
Tel: (852) 2510 5490 Fax: (852) 2806 9288 E-mail: david_waples@manulife.com

Assistant Editors
Sandra Tso
Tel: (852) 2588 7166 Fax: (852) 2877 6221 E-mail: sandra.tso@transamre.com

Winnie Ching
Tel: (852) 2820 9975 Fax: (852) 2827 7700 E-mail: winnie.ching@watsonwyatt.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

Emily Lye
Tel: (852) 2147 9420 Fax: (852) 2147 2497 E-mail: actuaries@biznetvigator.com

Contributions to the ASHK Newsletter

We welcome members' contribution to the following sections of the ASHK Newsletter: Feature Article, Actuaries on the Move and Do you Sudoku?

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@

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