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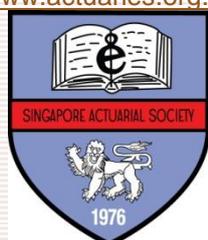
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Editorial

A very Happy New Year to everyone and best wishes for 2012.

2012 promises to be yet another busy year for the actuarial profession, not helped by the potential impact of the unstable situation in Europe. In the second of the series of articles following the SAS Appointed Actuary Forum, Keith Walter writes further on the impact of the Current Economic Environment. We should all take some time to read this article and to think about some of the scenarios that could potentially unfold and affect us in 2012.

It is good to see lots of activities regarding planned events for 2012. In this respect, plans for the Health and Retirement conferences are well underway and are dates to pencil into your diaries.

We look forward to an interesting Year of the Dragon!

Richard Holloway

Message from the President

Even though the 2011-2012 Council year is coming to a close a lot of activities are still taking place, please see below in the Newsletter. I will be setting a date shortly for the end of February, beginning of March to discuss the Constitutional matter about what designation is classified automatically as a Fellow by the SAS. I remind you however, that the Council can consider Fellowship status to those that are automatically designated as an Associate on a request basis. As well, the AGM and AGM dinner will be on March 23rd, so please hold that date in your calendars.

With the AGM means an election of a new Council and Executive Council. As always, all positions are up for election, so if you are interested in knowing more about what the positions entail, please contact me directly.

I wish you a healthy and happy 2012!

Jill Hoffman



Upcoming Events

Date	Event	Location	Contact
30 th – 31 st Jan 2012	2 nd Climate Change Summit for Asia's Insurance Industry	Singapore	Asia Insurance Review
3 rd Feb 2012	SAS Talk: Equivalence under Solvency II	Singapore Management University	Patsy Lau: admin@actuaries.org.sg
15 th – 16 th Feb 2012	12 th Asian CEO Insurance Summit	Marina Mandarin Hotel, Singapore	Asia Insurance Review
19 th – 21 st Feb 2012	14 th Global Conference of Actuaries	Mumbai, India	Aparajita Mitra: aparajita@actuariesindia.org
5 th – 6 th Mat 2012	1 st Conference on Social Media & Mobile Marketing for Insurance	Marina Mandarin Hotel, Singapore	Asia Insurance Review
14 th – 17 th Oct 2013	17 th East Asia Actuarial Conference	Singapore	Wil Chong: Wil.chong@allianzre.com

Council Update

Have you paid your SAS membership subscription for 2012 yet? There is still a couple of days left before the early bird discount period ends on 20th January, so please make your payment to Patsy early to take advantage of the 10% discount.

Earlier this month, we have informed all SAS Fellows and Associates that the amended SAS PS1 Professional Standard on Continuing Professional Development (CPD) has been uploaded in our SAS website. With effect from March 2011, all Associates, just like Fellows, are required to complete a minimum of 20 hours of CPD records for each calendar year. As the new calendar year has just begun, please start compiling your CPD records for the whole of last year if you have not done so, and start filling up the CPD hours for 2011 via our website. We hope to receive all your submissions by 31 January 2012.

As this is the last edition of the 2011 Newsletter, let us look back on the achievements we have made in last year. In 2011, the SAS has organized a number of very

successful conferences, forums and social events. All these would not be possible without our dedicated SAS volunteers. I would like to thank all the volunteers who have contributed in big and small ways in 2011 and please continue to support SAS in the coming year. The SAS has also reached 500 members for the first time in 2011!

Have you set your New Year resolution for 2012 yet? I hope you will include attending more SAS events as one of your New Year resolution! The SAS will continue to organize many conferences, forums and social events for our members in 2012. In fact, many sub-committees have already started their planning for their upcoming events. Let us look forward to a great year ahead in SAS.

We welcome any feedback and suggestions on how we can serve you better in the SAS. Please email me at secretary@actuaries.org.sg or Patsy Lau, our Administrative Executive, at patsy@actuaries.org.sg for any SAS matters.

Raymond Cheung



Committee Reports

• Student Committee

The Student Committee is pleased to announce that it will be organizing the 3rd annual SAS Career/Internship Fair in end March/early April 2012. Invitations will be sent out to the individual companies in due course. If

Aaron Wee

you would like your company to participate in the event, do drop me a note and I will get in touch with your HR department directly. We look forward to another successful event in 2012!

• PR Committee

Volunteers - we celebrate you!

February 9 will see the SAS thank all our volunteers for all the work they do for our profession. Thank you all! Please diarise the date and we will confirm venue shortly.

If you'd like to be a volunteer, and contribute to the profession at the same time as improving your CV. Email Patsy Lau and nominate your area of interest!

The SAS AGM will be Friday 23 March. All members please mark you diaries. There will be our Annual Dinner afterwards.

Annette King

• General Insurance

A Happy New Year (both Gregorian and Lunar) to you all. 2012 looks to be a busy year for general insurance actuaries in the region with lots of regulation changes and uncertainty surrounding the natural catastrophe events of last year.

For those with some time spare and a desire to assist the industry, there are a number of working parties starting up in the next few weeks on different topics. These include

- Motor Claims Experience in Singapore - Frederic Weber (frederic.weber@axa.com.sg)
 - A review of the experience in Singapore to provide benchmarks for the industry
- Potential Catastrophes in the Region (Natural and Man-Made) - George Attard (george.attard@aonbenfield.com)
 - Potential large loss scenarios, past experience, trends etc
- Latest trends in Stochastic Reserving Techniques – Colin Priest (colin.priest@asiacapitalre.com)

- Or something equally technical and statistical from Colin

- Stress Test Guidance Note – Matthew Maguire (Matthew.Maguire@NMG-Group.com)
- Update of the Guidance Note on Actuarial Investigations - William Song (william_song@msig-asia.com)

If anyone would like to chair another working party, please let me know and we will help you to advertise it and get some more like-minded people to help you.

One of the aims of these working parties will be a presentation at the GI conference to be held later this year on 31st May / 1st June. This year promises to continue the strong tradition of the event, and calls for papers will be distributed soon. So keep the date free, and if you have an idea for a paper, please respond to the call.

So wishing you all a healthy and prosperous 2012 and looking forward to seeing you all at the conference later in the year.

Matthew Maguire



• **17th East Asian Actuarial Conference Committee**

As many of you are aware, the 17th East Asia Actuarial Conference (EAAC) will be held in Singapore from October 14-17, 2013. Though this may seem like a long way away, there are many things that need to be planned for and many are already underway. For starters, the organizing committee has been set up since September 2011 with the following volunteers:

Name	Position / Responsibility
Wil Chong	Chairperson (President of 17 th EAAC)
Esther Huang	Secretary
Patricia Chang	Chief Financial Officer
Lau Sie Liang	Chief Financial Officer Comm
Christine Wang	Chief Financial Officer Comm
Raymond Lee	Chief Financial Officer Comm
Joyce Poh	Chief Logistics Officer
Vanessa Sukanto	Chief Logistics Officer Comm
Ong Jin Jing	Chief Logistics Officer Comm
David Maneval	Chief Program Officer
Grishma Kewada	Chief Program Officer Comm
Shailendra Sapra	Chief Program Officer Comm
Hussain Ahmad	Chief Program Officer Comm
Ong Shir Lynn	Chief Marketing Officer
Lee Kah Jing	Chief Marketing Officer Comm
	17 th EAAC Advisory Council
Jill Hoffman	Chairperson and Council Liaison (President SAS - 2011)
Chi Cheng Hock	Advisor
TBC	Advisor

Several of the committee members had the opportunities to attend the last EAAC held in Kuala Lumpur and gained much valuable first-hand experience. Our special thanks to Mr. Teh Loo Hai, the 16th EAAC Chairman, whom provided many insights and assistances when our committee was initially formed.

One of our first tasks was to secure a Professional Conference Organizer (PCO). This has to be done early in order to reserve a conference venue to accommodate 400-500 participants on the fixed date. The Logistics Committee sent out RFP with specific requirements to several potential vendors. After going through several PCO's proposals, three of the short-listed vendors were invited to present their pitch to the organizing committee. We were quite pleased with their presentations and we are very close to finalizing the PCO pending a few loose ends. Watch out for further updates in this space in the next newsletter.

Wil Chong, 17th EAAC Chair

There were no updates and no new SAS members for the month of December.



News & Articles

• General News

Aviva and DBS Launch Singapore's First Renminbi-Denominated Insurance Plan

Aviva in the News, 8 December 2011

Aviva and DBS Bank Ltd ("DBS") have launched the Dragon Renminbi Plan – Singapore's first five year Renminbi-denominated (offshore Chinese Yuan, CNH*) single premium non-participating endowment plan. The product, underwritten by Aviva, will allow investors to take advantage of opportunities on offer in the rapidly developing Chinese market. The Dragon Renminbi Plan is available to investors at all DBS Treasures Centres, with a minimum single premium of RMB250,000.

According to Mr Jeremy Soo, Managing Director and Head, Consumer Banking Group (Singapore), DBS Bank, "We've seen a strong demand for Renminbi products, since introducing our suite of Renminbi offerings in February this year. We're confident the demand for Renminbi-denominated products will continue as investors seek to diversify their portfolio and capitalise on the relative strength of the Asian economy. The launch of the Dragon Renminbi Plan provides our customers with another product that leverages on the rise of Asia and China's growth, allowing them to enjoy potential currency gains."

The suite of Renminbi products that DBS launched earlier this year includes current and fixed-deposit accounts, currency-linked investments, as well as CNH-denominated bonds, unit trusts and structured notes. The Dragon Renminbi Plan is their first Renminbi insurance product with a five year term.

Mr Simon Newman, CEO, Aviva Singapore, says that the current economic landscape has made it important for insurers to seek opportunities within the region to meet the growing financial appetite of customers.

"We felt that the time was right for us to offer a Renminbi product to our customers, backed by a rewarding yield. The Dragon Renminbi Plan is the first product of its kind and unlike anything seen in this market before. As the only Renminbi endowment product in the market right now, the plan provides investors with a mid-term financial planning solution into a currency that is expected to gradually appreciate in the next five years. Moreover, with the fixed return of 2.85%, it allows investors to gain access to China without taking on excessive market risk," explained Mr. Newman.

"The development of such a product would of course not have been possible without the strong partnership between Aviva and DBS that has been built over a number of years," Mr. Newman continued.

Aviva and DBS have been in a bancassurance partnership since 2001. This partnership has been a significant contributor to Aviva growing its business extensively in Singapore. The third-quarter results this year showed that Aviva's life insurance sales grew by 65 per cent. Bancassurance sales tripled when comparing the nine months in 2011 against the same time in 2010.

Tremendous growth opportunities foreseen in non-life insurance segment in China till 2015: Report

Insurance Business Review, 20 December 2011

The Chinese non-life insurance market continued to grow at a healthy clip despite the fallouts of the global financial crisis, according to a report by BRIC data.

Currently, this market is in the grip of domestic insurers, while foreign non-life insurers collectively account for a meagre share of the total non-life insurance market.



It is expected that that large domestic insurers will continue to hold their sway over the market during the forecast period. However, smaller domestic non-life insurers are expected to increase their market share over time.

Despite the strong growth registered by the Chinese non-life insurance market in the 2006-2010 review period, it has still not reached out to the large sections of the populace, owing to factors like lack of product awareness, lack of reach in rural areas and absence of a well defined distribution model.

It should be taken into account that if major banks increase their exposure in this sector, by selling insurance policies and improving the efficacy of the present distribution channels, it will definitely spur a growth in non-life insurance policy volumes.

Though domestic insurers will undoubtedly dominate this market segment, it is expected that foreign non-life insurers will make forays and gradually increase their marketshare.

As has already been discussed, despite the Chinese non-life insurance market's brisk growth over the 2006-2010 review period, its reach to large sections of people has been restricted due to various reasons. Besides,

the protectionist policies of the Chinese government have also not helped in fuelling its growth further.

It is imperative that strategic business decisions should be made making use of top-level historic and forecast market data related to the Chinese non-life insurance industry and various sectors under it.

There is a need to comprehend the trends relating to the demand-side and key market, and growth areas need to be identified within the Chinese non-life insurance industry, says the report.

The need of the hour is to assess competitive trends prevailing in the non-life insurance industry and also the reinsurance segment.

The growth areas and industry trends within key product categories need to be clearly recognised.

It is also important that the key regulations that control the Chinese insurance industry should be understood to foresee what impact it will have on companies operating in this space and the non-life insurance industry as a whole, the report says in conclusion.

Outlook for European insurers getting worse

Reuters, 20 December 2011

European insurers' prospects deteriorated in the second half of 2011, weighed by a worsening sovereign debt crisis, a slowing economy, and persistently low interest rates, the industry's pan-European regulator said on Tuesday.

"Sovereign risk and the lack of a comprehensive political response to the sovereign crisis are the main sources of risk" facing insurers in 2012, the European Insurance and Occupational Pensions Authority (EIOPA) said in a twice-yearly overview of the industry. Policymakers must remove all doubts that the euro would remain intact, it said.

"If policy responses remain unconvincing to financial market participants, the European insurance and occupational pension sectors could be severely and adversely affected."

European insurance stocks have slumped 16 percent since the start of the year, reflecting fears the sector could be forced to raise capital to make good sharp falls

in the value of its holdings of distressed European government debt.

EIOPA conducted two hypothetical tests of the resilience of 82 insurers to a prolonged period of low interest rates and found that in the more severe of the two, eight insurers would not have enough capital to cover the minimum regulatory capital requirement. EIOPA did not identify the companies involved.

Low interest rates weigh on insurers' investment returns, eroding profits, with companies that provide minimum guaranteed payouts to their customers most severely affected.

In the stress test scenario, the failed insurers would need about 6 billion euros (\$7.8 billion) in total to reach the minimum capital ratio, EIOPA said.

The European Banking Authority in separate stress tests of the region's lenders found a capital shortfall of 115 billion euros that banks will need to find by mid-



2012 to plump their capital cushions to the level required by the regulator.

The bloc's insurers on average showed resilient capital positions during 2010, with a solvency ratio for the sector of 309 percent, but this did not mean that every insurer was in a healthy position, EIOPA said.

"There is reason to highlight pockets of concerns with respect to both the weaker capitalised companies and the undertakings with asset holdings that have been adversely affected during 2011," it said.

EIOPA had already identified the sovereign debt crisis, triggered by fears critically-indebted eurozone countries may be unable to repay what they owe, as the main risk facing the insurance sector in an earlier report in July.

The European Central Bank this week said in a separate Financial Stability Review that it expected the financial condition of large euro area insurers to remain broadly stable in the next six to twelve months, though it too, said investment and underwriting risks could pose challenges for the sector.

Asia: Contingent business interruption insurance sees worst hit from Japan and Thailand

Asia Insurance Review, 12 December 2011

Insurers and reinsurers may limit the coverage they offer for supply-chain disruptions and negotiate higher prices after record claims for contingent business interruption (CBI) from natural disasters in Japan and Thailand. A market and worldwide review of underwriting routines and pricing levels regarding business interruption risk is expected following these catastrophes, reports Bloomberg.

"The disasters in Japan and Thailand this year were the worst hit that CBI coverage ever took," Bloomberg cites Mr Volker Muench, head of corporate underwriting property at Allianz SE's industrial-insurance unit, as having said. "Japan is a very important link in the global supply chain and basically Thailand is its backup for some industries." Measuring potential losses for insurers is made more complicated as extensions to contingent business interruption policies also cover the loss a supplier may face because physical damage has put a customer out of business, he says. Japanese companies such as Toyota Motor and Honda Motor are the biggest foreign investors in Thailand, which is which is also the world's second largest producer of hard disk drives for computers. About 1,500 industrial facilities in Thailand, which Swiss Re says is a "significant" link in the global manufacturing supply chain, were flooded for weeks.

CBI policies, which protect automakers and other manufacturers when a catastrophe in one part of the world halts production in another, rose over the past 10 years as reinsurers helped insurers shoulder the risks, says Mr Jochen Koerner, a member of the executive board in Germany and Austria at insurance broker

Marsh & McLennan. This year's "perfect storm" boosted claims and undermined risk assumptions, he says. "Contingent business interruption insurance is not straightforward and can be seen as a massive black box," he says. "If a factory burns down, that's only one claim in property insurance, while the same incident could potentially disrupt the supply chains of hundreds of companies if the factory supplies essential goods to other companies."

"The Thailand floods are another wake-up call, so that the industry as well as the relevant manufacturers would be well advised to tackle this issue now," says Mr Torsten Jeworrek, who heads Munich Re's reinsurance business. To limit future losses from this type of coverage, Munich Re is requesting more information on its customers' supply chains, especially in the semiconductor and automotive industries, he says. "If after 18 months there is no full transparency, or plans for replacing key suppliers of the insured to make it possible for us to budget for these CBI exposures, we will limit or even exclude the coverage under the reinsurance treaties," he says. "The scope of coverage will certainly shrink."

Some reinsurers may cut their contingent business interruption risk, says Mr Bryon Ehrhart, chief executive officer of Aon Benfield's analytics unit. He estimates the size of the global market for these policies at US\$10-12 billion. "The experience this year has been fairly exceptional, but I don't think it will result in a substantial cutback of the product," he adds. "These losses might actually stimulate more demand for the product."



• Article of the Month

Discussion session at the SAS Appointed Actuary Symposium on Nov 3 2011 on “Dealing with the Current Economic Environment”

The current economic environment and associated uncertainties about the future pose a number of challenges for life insurers. While these issues are being felt more severely in some other markets, life insurers in Singapore are also being impacted by many of the same issues.

Our discussion group at the Appointed Actuary Symposium on 3rd November tackled the topic of “Dealing with the Current Economic Environment” from the context of the life insurance industry in Singapore.

We first considered recent global economic trends and market conditions, and discussed the possible scenarios for Singapore. While none of us in the group were economists and we would all be quick to say that we cannot accurately predict the future, the consensus of the group was that Singapore would likely experience moderate economic growth, persistent low interest rates and equity market volatility for a number of years to come. At the date of the symposium, current yields on 10 year government bonds were below 2% and the stock market was down from the start of the year. Even though Singapore’s economy is supported by the strong growth in the South East Asia region, it is not isolated from global trends.

Given the difficulties in the European Union and persistent unemployment in some key economies around the world, we also considered the possibility of a global economic slowdown and extended bear market for equities. This was generally seen as a less likely scenario, but could not be ruled out as a possibility.

In a period of persistent low interest rates, it will be more important to fully understand the impact of “smoothing” (for example, in setting the valuation discount rate). The group generally agreed that companies should test the implications of this by comparing the results with and without smoothing in order to anticipate any potential future exposures.

We then turned to the question of the credibility of the insurance industry and the products we sell in an environment of persistent low interest rates. The group identified a number of tactics that should be considered

now to reduce the risk of problems for the industry in the future. In particular, there were a number of suggestions to ensure that customers are treated appropriately, including:

- Completing a review or check of all marketing material to ensure that non-guaranteed product features or benefits are probably described and explained
- Investing in consumer education and transparency of product features and benefits, for existing as well as new customers
- Increasing the focus on sale of protection products to reduce dependency on investment returns and to help customers close the protection gap

At the same time, there were some important ideas raised in support of the long run financial health of the life insurance industry. These included looking for opportunities to reduce embedded guarantees in products; focusing on efficiency and cost reduction to offset reduced investment returns; and ensuring that senior executives and Boards of insurance companies have a better awareness and understanding of the risks in this environment.

Building on this last point, we also discussed what more could be done to ensure that risks associated with the current economic environment are identified, understood, and managed appropriately at all levels within our companies. There were some in the group that felt that the actuarial community in Singapore needs to develop better risk quantification techniques and improved methods for valuation and pricing of insurance policies. This could include improved models, additional scenario testing, and more extensive use of VaR measures and other risk measures.

However, the group felt that it was as important to focus on communication and governance approaches as on quantification and modeling. In general, we thought that it was important to improve internal communication of risk measures at all levels, and to include risk in companies’ key performance indicators and staff compensation programs. We debated if it was possible to include risk measures in communication and



incentive plans for sales staff at life insurance companies – a huge topic in itself.

In the end, the point was made that life insurance is a long term business and that companies need to do what is right for the long term health and credibility of the industry. This is good advice for all of us to remember.

Written by Keith Walter

Brainteasers

#1

At a musical recital five students (John, Kate, Larry, Mary and Nick) performed five musical pieces. Two by Bach, two by Mozart and one by Vivaldi. There were three violinists and two pianists. Each student performed only one piece, and played only one instrument. Find the order of the students, their respective instruments and the composer, with the following conditions:

1. The composers were not played consecutively. Vivaldi was played last and Mozart was played first.
2. There was one piano piece that was played between two violin pieces, and two violin pieces between the first and last piano piece.
3. There were no piano pieces by Mozart.
4. Kate played third.
5. Nick played the piano, and immediately followed John, who played a piece by Mozart.
6. Mary did not play a piece by Vivaldi.

Answers for last month's brainteasers:

#1

The same amount

The rope ladder is not affixed to the ocean bottom, so it rises with the boat, and remains constant.

So ten feet will remain above water.

#2

EDAM cheese is MADE backwards!

#2

10 prisoners are locked up in individual cells, unable to see, speak or communicate in any way with each other. There is an exercise room with a single light, that is initially off and the prisoners cannot see the light from their own cell.

Every day, the warden picks a prisoner at random, and that prisoner goes to the exercise room.

While there, the prisoner can choose to switch the light on or off, and are not allowed to leave a message.

At any point, any prisoner can claim that all 10 prisoners have been to the exercise room. If they are wrong then all 10 prisoners will be locked up forever! However, if they are correct all of the prisoners are set free.

Before the random picking begins, the prisoners are allowed to discuss a plan. What is their best plan to determine when all 10 prisoners have visited the exercise room?