



SAS

QUARTERLY



YOUR QUARTERLY NEWS, INFORMATION AND CAREER GUIDANCE
SOURCE FOR THE MEMBERS OF THE SINGAPORE ACTUARIAL
SOCIETY

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EDITORIAL



Welcome to the third issue of the SAS Quarterly newsletter for 2016.

The past 3 months were very busy with no less than 4 major events organised by the SAS, gathering around 600 participants.

First of all, the 40th Anniversary Gala Dinner was a good opportunity to take some time off the office, celebrate and enjoy the fun of all the sparkles of the night. We discovered that the SAS has some very talented singers amongst us!

This was followed by 3 of the 4 Annual SAS Conferences – Life, ERM and Health & Retirement. In the last conference, we conducted a dedicated session to present the results of the SAS Big Data Working Party's Asia Actuarial Analytics Challenge. With the inclusion of speakers emerging from mature markets, we have received an unexpected extended number of good reviews.

I have personally attended 3 of the events and was immensely impressed by the professionalism of the organizers. To the respective committees, I'd like to extend my gratitude for the amount of effort placed in preparation of the events.

The call for sponsorship for the SAS Conferences 2017 is coming soon... watch out for it and don't miss the opportunity to improve your company's visibility within the Singapore Actuarial community.

On an International level, the SAS was represented by Mr Chi Cheng Hock at the IAA Joint Colloquium in Canada, our second overseas exposure after Jill Hoffman attending the IAA Conference in Saint-Petersburg earlier this year. The SAS will continue its involvement in future IAA events.

Although there are no major conferences planned in the coming quarter, a couple of events are worth keeping a look out for: the SAS Practising Certificate Seminar, the professionalisation of the ECC Speakers & Influencers (more details coming soon - keep an eye on your mailbox) and the Cyber Risk Working Party. On the same note, don't miss the article from Dr Jade, Shaun Wong and Shuanming Li at the end of this issue.

Happy reading!

Frederic Weber
Vice President

Platinum Conference Sponsor



Gold Conference Sponsor



redefining / insurance



Silver Conference Sponsor



Institute
and Faculty
of Actuaries

Bronze Conference Sponsor



Upcoming Events

**Risk Management for Banking and Insurance:
Then, Now and Tomorrow**

Nov 7, 2016

20th Asian Actuarial Conference (India)

Nov 9-12, 2016

4th Practising Certificate Seminar

Nov 21, 2016

Please go to www.actuaries.org.sg to register for the above events

MESSAGE FROM THE PRESIDENT



Life begins at 40!

Or so the old saying goes. I'm sure for all of those of us able to attend the party held to celebrate the SAS's 40th birthday we would agree that the society is certainly full of vigour and well placed to make the most of the next 40 years. A special thanks to all those involved in the organisation of the event and to all those who helped to make the night a special one. Also a vote of thanks to our VIP guests (Kim Leng, MAS's AMD of Banking and Insurance Group, Founding Members, Past SAS presidents, Current Presidents of international actuarial bodies and their representatives)

However, the anniversary is also a good opportunity for us to think about what we want the society to be now. While the SAS has obviously been successful to date, just look at the number of members, the quality of people involved in all the areas of SAS activities, and the range of activities provided, are we all that we can be? And just what do we want to be? This is an area Council will be examining over the coming months and looking for feedback from members as we set the goals and objectives of the society.

These goals and objectives will help to shape almost every one of the society's decisions going forward. From considerations around subscription and conference fees, to the type and frequency of events we hold, to the number of staff required and the type of office we require. So I look forward to these discussions, both in council and with the wider membership and other stakeholders, as we set the course for the next 40 years.

In the meantime, I wish you all a productive final few months as we wind down (or build up) towards the year end.

Matthew Maguire
President



COUNCIL UPDATE

The SAS has just celebrated its 40th anniversary at Regent Hotel Singapore on 28 September. With over 250 members joined us at the occasion together with representatives from MAS and overseas actuarial associations, we had great fun at the gala dinner.

The night started with speeches from the various overseas actuarial associations and an inspiring keynote speech by Mr Chua Kim Leng of MAS to thank the contribution of the SAS over the last 40 years. It reminded us of our humble beginning with just 16 founders in 1976 and developed over time into an established and vibrant professional society of today. We also presented our token of appreciation to our staff Patsy and Linda for their dedicated service to the SAS.

With our emcee ushering our first performer of the night, the dining hall was quickly turned into celebration mode all the way through the night. Every table was filled with laughter, with members enjoying all the singing, dancing and the great performance by our lively and entertaining performers.

The night was concluded with all the participants lining up shoulder-to-shoulder moving and dancing around the dining hall demonstrating the dynamic and vibrant nature of the SAS. I would like to say a Big thank you to the organising committee and GB@Works, the event coordinator, for their hard work over the last few months.

I would like to wish the SAS a happy 40th anniversary with many more 40 years to come.

Raymond Cheung
Honorary Secretary

COMMITTEE REPORTS

Professional Affairs

Committee

The Professional Affairs Committee (PAC) met on 4 October. This was the first meeting with myself as the new head. The other members of the committee are Matthew Maguire, Frederic Weber, Cheung Kwok Kei, Richard Holloway and Raymond Cheung.

The most pressing task facing the committee is the upcoming Practising Certificate Seminar scheduled for 21 November 2016. This is the 4th seminar being held in the last two years.

In addition to the Seminar, the PAC is tasked with revising our Guidance Notes to take account of current best practice and also comments received from various sources.

Current best practice for professional bodies such as the SAS is to have a documented Disciplinary Procedure in place. To date there has not been much call for such a procedure for the SAS, however it is something that the PAC hopes to bring to the members and the Council shortly.

Frank McInerney
Chair of Professional Affairs Committee

Education and Career Committee

The ECC activities have resumed since July with a new team of volunteers: Frederic Weber, Bernice Zhang, Colin Pakshong, Zhou Erjie, Frederic Boulliung, Hussain Ahmad, Mudit Gupta, Prof. Tse, Goh Jing Rong, John Gan, Lin Fangcheng, Chen Mingyang, Joe Lim, Joanne Tan, Tai Woon Fang, Lee Teng Huan and Liu Chen.

Thanks all of you for volunteering!

The sub-committee leads have no change and feel free to contact them directly should you have any questions or suggestions:

- Universities Sub-Committee: Bernice Zhang - bernice.zhang@axa.com.sg
- Speakers & Influencers: Hussain Ahmad - Hussain_Ahmad@swissre.com
- Forums Coordinator: Fred Boulliung - frederic.boulliung@partnerre.com
- Innovative Topics: Mudit Gupta - Mudit.Gupta@sompo.com.sg

The last Speakers and Influencers session was held on 1 September and the attendance was good with 15 members.

Preceding the traditional table talk, the instruction session was given by Kok Leong from Aon and the theme was Charting.





The Speakers & Influencers Club will come with exciting updates soon... watch it out!

The traditional Students Networking Night was held on 8 September. It was a good opportunity for students to meet professionals and ask all the questions they had in mind, ranging from daily activities to career paths.

Below is Matthew opening the event, describing what Actuaries can contribute in a company and who they often interact with:

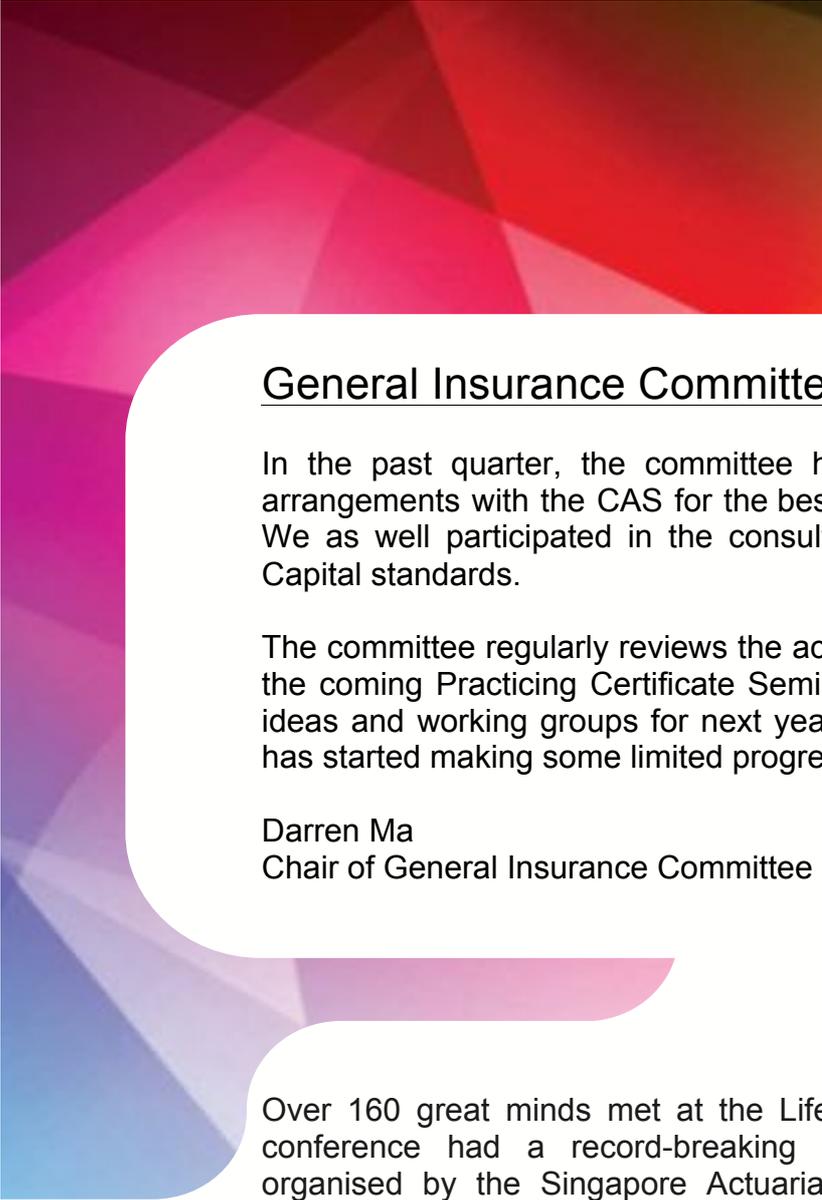


Finally, **“The Bolts and Nuts of building a Big Data infrastructure”** was presented by Eric Choo in the Afternoon Forum on 22 September.

Keep in mind that if you have an interesting topic to share or interesting speaker to recommend, Frederic Boulliung (frederic.boulliung@partnerre.com), our Forums Coordinator, is the right person to turn to.

Looking forward to the last quarter of the year with exciting activities such as the update of the Singapore Employability Survey and the preparation of the Annual Career Fair!

Frederic Weber
Chair of Education and Career
Committee



General Insurance Committee

In the past quarter, the committee had continuous discussions of reciprocal arrangements with the CAS for the best presentations at respective conferences. We as well participated in the consultation process with MAS on International Capital standards.

The committee regularly reviews the actuarial practice standards and is preparing the coming Practicing Certificate Seminar. At the same time, we are looking for ideas and working groups for next year's conference. Cyber Risk Working Party has started making some limited progress.

Darren Ma
Chair of General Insurance Committee

Life Committee

Over 160 great minds met at the Life Insurance Conference last month. The conference had a record-breaking number of participants amongst those organised by the Singapore Actuarial Society. On behalf of the Organising Committee, I would like to thank all the participants for their active participation, not only during the mini-games and lucky draws, but also the panel discussion as well as all the insightful presentations.

Collaboration was our theme. There was no intention to add another buzzword into your dictionary. In fact, the Organizing Committee put in a lot of thoughts before deciding on this theme.

Innovation is probably a prevalent topic that you come across more often in your daily life. Heavily penetrated into the social media and company strategies, this word may even exist on your KPI. Dr Lee Ng from MetLife's Innovation Centre said during her inspiring presentation, "ideas are cheap, execution is difficult". Not trying to undermine the importance of being innovative, the ability to turn your brilliant ideas into reality would be as important, if not more. The members of the Organising Committee truly believe that, in order to execute your ideas effectively and successfully, collaboration is an imperative component.

Whilst the Life Insurance Conference has traditionally been very actuarially and technically-focused, we infused some new energy into this valuable event this year. In addition to the “not-to-be-missed” presentation by MAS and the interesting sessions on various actuarial topics by our fellow actuaries, we invited speakers from disciplines that we probably don’t deal with on a day-to-day basis. Stronger evidence that we can learn so much through collaborating with entrepreneurs, innovation leaders, doctors, as well as mathematicians/modellers. If you missed the conference, please refer to the report in this issue and read about the fun two days we have had.

Companies and individuals apparently have their own forte. As Lim Siang Thnia noted during his opening speech, “alone we can do so little; together we can do so much”. The largest insurer in Taiwan recently recruited a troop of robots (called Peppers) who are well equipped with insurance knowledge. Clearly a collaborative effort, as I wouldn’t expect engineers would be as knowledgeable in insurance products as actuaries, and likewise, actuaries would not be as capable as engineers in terms of creating prototypes and programming. With the ever-rising demands from the industry and our customers, let’s unleash our imagination and continue collaborating with experts from different fields – to develop revolutionary products and to improve customer experience.

Maple Lam
Chairman of Life Insurance Conference 2016

ERM Committee

In collaboration with the 40th anniversary gala dinner, the ERM Committee hosted our 3rd “Enterprise Risk Management (ERM) Conference” with the theme “ERM: the compass for the evolving risk frontier in Asia” on 27 and 28 September 2016 at Regent Hotel Singapore. There were exciting programmes featuring some power-packed keynote presentations, insightful panel discussions and an interactive workshop.

Some key highlights of the conference include:

RBC2 panel – our RBC2 taskforce representatives have provided good overview of the current RBC2 development in Singapore surrounding the life, non-life, health as well as reinsurance sector.

ERM Committee (Cont.)

Mr Michel Dacorogna – a keynote speech illustrating how ERM has provided a change of paradigm for the insurance industry from pure cash flow approach to risk adjusted model, thereby creating value for the stakeholders.

Ms Marie Kratz – a keynote speech on the validation of risk models. A very technical paper, but with comprehensive overview on why the model validation process is important.

Dr Jade Nie – a good overview of the recent NTU research paper on Cyber Risk Modelling, illustrating with a simple model how we can estimate the cost of cyber security for an organisation.

Synergies panel – an interesting sharing and debate session with the invited overseas panelists on how the education, insurance industry and actuarial associations can work together in future to advance the insurance industry.

Mr Colin Wilson – provided a detailed presentation on why risk management is important in government and provided some practical case studies on how government can harness ERM in developing national policies and tackling some of the national issues such as climate change and pension.

Mr Mehul Dave and Mr Amar Mehta – provided a good overview of IFRS updates and how the insurance industry should begin to prepare themselves to meet with IFRS reporting requirements in a few years' time.

Besides the great presentations, the ERM conference has also provided a platform for actuaries and risk practitioners to share their experience and networking. Most importantly, the ERM Conference has provided some handles to our participants how ERM can be used as the compass for the evolving risk frontier in Asia to navigate insurance business in the right direction.

Raymond Cheung
Chair of ERM Committee



The SAS 40 Gala Dinner was successfully held on Wednesday 28 September 2016 at Regent Singapore. Over 300 members and guests of the society attended the event. Since its establishment in 1976, Singapore Actuarial Society has been proud to serve and grow with the profession. It was a special occasion for actuaries to meet and celebrate this ruby anniversary together.

Current president, Mr Matthew Maguire, delivered his welcome remarks, appreciating the collective effort by the SAS committees to cope with the development of the industry. He enclosed the new initiatives within the Society, in particular, the Big Data Working Party and Speaker and Influencer Club, to equip the profession to overcome upcoming challenges.

Actuarial associations from other parts of the world were invited by the SAS to celebrate this important milestone. Mr Colin Wilson, President of the Institute and Faculty of Actuaries (IFOA) and Mr Lindsay Smartt, President of the Actuaries Institute, Australia congratulated the SAS upon its success in bonding the actuarial community and upholding the professional standards in the region.



↔ Both presidents presented gifts to Mr Matthew Maguire, in celebration of the 40th anniversary of the SAS.

The SAS was delighted to have Mr Chua Kim Leng, Assistant Managing Director of Banking and Insurance at the Monetary Authority of Singapore as the Guest of Honour for the night. Mr Chua recognised the involvement of the Society (representing the profession) in relevant policymaking process and regulation implementation. The authority will continue to respect opinions from the actuarial profession in the future. Mr Chua concluded his remarks, saying that it was though impossible to foresee what the world will be like for another 40 years to come, the authority wished to take on the challenges together with the industry.



↑ Mr Chua delivered his speech and hosted the cake-cutting ceremony with the SAS president.



↑ Mr Colin Wilson, President of IFoA, Ms Jill Hoffman, Ex-Officio of the SAS and tables of the SAS counterparts.

Conferences and events are part of the major identity of the society. Over the years, Ms Patsy Lau and Ms Linda Chua have been striving for excellence in the coordination work behind the scene. The SAS president, Mr Matthew Maguire presented, on behalf of the Society, tokens of appreciation to the two SAS staff for their dedicated service.

The dinner commenced with emcee Allen the Kameleon inviting our performers to take over the stage. Members enjoyed singing and interacting with one another in various sessions throughout the night.



Alfred George

Singing with Suzie Wong

Members were participating in a balloon game.

The Gala Dinner was a memorable event for current members. The efforts by the organising committee and the event organiser GB@Works were well recognised for the great night of celebration.

To take the golden opportunity recalling some of the SAS moments in earlier ages, the SAS invited Mr Chi Cheng Hock, one of the longest-serving council members, to share here his memory down the lane and his wishes for the Society.

What is it like hosting a dinner for members a few decade back?

We could all fit in around one table – and that included some spouses! It was a year-end dinner in 1985 I attended for qualified actuaries, hosted by the then President of the SAS and also then Singapore Insurance Commissioner, Mr Law Song Keng.

When did you join the SAS?

I joined in 1985 when the SAS was almost 10 years old. By that time, not all members were actuarially trained. The only member who had to be a Fellow was the President!

How did the SAS come along and become what it is today?

In the late 80s, the SAS was more of a social club for members with a common interest in actuarial science. The SAS organised actuarial talks, tutorials for actuarial students and invigilated actuarial examinations. It was in the early 90s when the SAS started to transform itself into a professional body, with the intention to become a Full Member of International Actuarial Association (IAA). Membership was then restricted to those who have at least passed or been exempted from one actuarial examination, and divided into 3 of the current 4 categories – Fellow, Associate and Ordinary, depending on the qualification attained.

Amid the Asian Financial Crisis in 1997 / 98, the SAS worked closely with the Monetary Authority of Singapore (MAS) to develop the Risk-based Capital (RBC) framework. MAS later agreed to recognize the SAS in legislation, by requiring appointed actuaries to be Fellows of the SAS, and onwards Certifying Actuaries to be members of the SAS.

Reaching the SAS's 40th birthday, do you have a few words for the Society and the current actuaries?

40 years is a milestone, and with 400 Fellows and 800 other members, or more, to tap on, it may be time to raise the bar again. The SAS should look to what needs to be done for the SAS to be recognised as an actuarial association on par with the major actuarial bodies – upgrading the professional guidance; encouraging research on local matters; engaging other stakeholders in the fields which actuaries are active; and engaging the international community more actively, so that the SAS can be an influencer of global development. I look to the day when the SAS actually takes the lead on some issues which actuaries around the world grapple with.

I hope that, with the support of a strong SAS, actuaries can more often than not see themselves as professionals with fiduciary responsibilities to all who depend on them. I ask the younger members to be more assertive, to have the confidence to challenge the status quo and currently received wisdom. Some members have branched out into data analytics, an exciting new field, but more can still be done in traditional areas.

I suppose that what I wish for is for SAS members to always keep reaching outwards and upwards, so that the SAS and the actuarial profession in Singapore will continue to be regarded in the financial and wider community as a relevant contributor to the good of society.



Life Insurance Conference

Aug 25-26, 2016

Collaborate Or Stagnate

COLLABORATION
IN THE INSURANCE
INDUSTRY:

[REPORT BY EDITOR]

Facing the biggest shift ever over the next decade, the Insurance Industry is evolving itself to adapt the new changes. The SAS Life Insurance Committee set the theme “Collaboration in the Insurance Industry – Collaborate or Stagnate” for the 2016 Conference, with a goal to initiate discussions on the importance of collaboration amidst the changing landscape.

The Life Insurance Conference 2016 hosted 167 participants on 25 and 26 August at Mandarin Oriental, Singapore. 21 speakers were invited and the presentations were centered around scenarios to collaborate, in their areas of expertise.

Collaborate or Stagnate?



“Alone we can do so little; together we can do so much” was quoted by Mr Lim Siang Thnia, Co-Chairman of the Life Committee, to commence the conference. The first presenter, Mr Alex Bryant, Consulting Actuary of Milliman Singapore, shared his experience in managing participating life business with the recent regulatory changes in Malaysia. New regulation forces better education of par business to board, at the same time, requires an increased auditability and transparency in decisions. As fairness and consistency remains core in managing expectations of policyholders, he stressed business to engage in the consultation process early.

Towards Regulation Changes

To keep the profession ahead of the game, Ms Lee Wai Yi, Director and Head of Supervisory Analytics Division at the Monetary Authority of Singapore (MAS), was invited to give an update from the regulator perspective. She pinpointed the collaboration needed from insurers to feedback on QIS 2, through assessing the impact of revised RBC 2 proposals, and highlighting the implementation issues. It is in MAS's intent to keep the industry well capitalized, so that it will continue to grow meaningfully. In addition, she mentioned the MAS effort in preparing the digital age, with the announced



“Sandbox” in FinTech to reduce regulatory friction and provide a safe space for innovation. Insurance industry is expected to take the opportunity to obtain market view of customers, work across regulatory bodies, look beyond national borders, adjust to pace of change in markets and look out for emerging trend.

↑ Ms Vanessa Lou, Senior Manager at Ernst & Young updated on IFRS 4 Phrase 2 and its challenges to implementation in ASEAN.

Towards Digitalization

A number of speakers responded to the digital development in the insurance industry. Mr Ronald Cheng, Head, and Ms Jessica Sum, Executive Director of Business Development at RGA, presented on the level of support beyond traditional reinsurer capabilities, to enhance capital efficiency of insurers as well as to cater their needs in engaging digital customers.



← Chairman Mr Maple Lam and Moderator, Ms Jill Hoffman, both from Munich Re, with the speakers from RGA.

→ Panel Discussion on Innovation In The Insurance Industry: (Center) Mr George Kesslman; (Right) Alex Kiruma



Mr Alex Kimura, Chief Strategy from Aviva Asia as well cited the business-driven innovations from their UK and Poland offices in contributing sales from the digital direct. On the other hand, Mr George Kesslman, Co-founder of InsurTech Asia, an industry-wide innovation ecosystem in Singapore, spotted the immediate opportunities that can be taken up by collaboration to scale start-up ideas to transform insurance.

Dr Lee Ng, Chief Operating Officer of LumenLab, shared in the Conference the prediction from her work with MetLife: “By 2019, over 1.1 billion people in Asia Pacific will purchase goods and services online. Insurance will be bought, not sold”. Dr Ng foresaw the industry would have to evolve from a product-centric approach to a customer-centric one, as customers will demand simplicity, speed and convenience in digital interactions on top of the product itself.

Towards Customer Centricity

Nevertheless, it is not without challenges to meet the customer need for simplified products. Mr Ernest Mak, Senior Pricing Actuary at Munich Re, demonstrated the progressiveness and collaboration required among actuaries, underwriters and marketing to achieve effective distribution of guaranteed issue products.



It was asserted by Mr Aravind Srinivas from the Regional Pricing team of Munich Re, who spoke of the influence of media in a claims scandal in Australia. The reputation risk made insurers rethink from the customer's perspective: Are we being fair and equitable? It is beyond doubt that moving to a litigious society, customers are increasingly aware of their rights and legal recourse.

Towards Demographic Changes

Another prediction shared by Dr Ng was the radical longevity from advanced technological treatment. With a majority population reaching 100 years old, it is expected the needs for traditional life insurance will be challenged. Life insurance is going to embrace "living well" and to suit different needs from now.

Dr Ng, believed that, to get over the demographic changes, insurers will have a great advantage in adopting risk and pricing to combine actuarial science with big data.

What is a pressing concern to insurers nowadays is mental health protection. It requires knowledge beyond the long-served physical health direction. Dr Neoh Wee Keong, SCOR Services Asia Pacific, talked about the underwriting of mental illness, bringing forward the issues in addressing related diseases.



Towards Advanced Analytics

Mr Will Halley, associate director at Moody's Analytics, introduced approaches from modelling perspective to insurers, in particular for measuring risks at low-persistent or negative rates environment; Mr Paul Maitland, AON Center for Innovation and Analytics, spoke of stochastic analysis in business decisions and risk management. Besides, Mr Thibault Antoine, Head of Critical Illness R&D Center at SCOR Global Life, Singapore, explained Decision Trees in application to LTC insurance. And Mr Simon Drimer, founder and Managing Director of Pi Financial Services Intelligence, shared his expertise in significant indicators to monitor agency channel performance.



Mr Will Halley

Mr Simon Drimer

Mr Thibault Antoine

Mr Paul Maitland

Rethink of “Life” Insurance

The conference was concluded showing a bigger picture for the industry imagination. Dr Krzysztof Ostaszewki from Illinois State University asked the participants to rethink life insurance as a human capital. By deriving security, life insurance has long served a social purpose for people to become more risk-taking at a price. On the go, individualized life insurance can be viewed as rearrangement of human capital, which requires customers to cooperate, and of course insurers to experiment on modelling and simulation.

Mr M. Ansanul Haq from Actuarial Society of Bangladesh, where actuarial profession is still underrepresented, talked about the challenges in the industry, including the inadequate life fund from life contribution, and the low insurance growth rate in general. Audiences were surprised to uncover another face of the industry, for which it becomes an inspiration for them to look at the vast opportunities in regional collaboration.



Dr Krzysztof Ostaszewki

Mr M. Ansanul Haq

↑Mr Hamza Mush (Oliver James HK) talked about the actuarial career path in the age of collaboration.

The 3rd Life Insurance Conference was held by the Singapore Actuarial Society, with RGA and Milliman as the SAS conference platinum sponsors and Oliver James Associates and Pacific Life Re as the event sponsors.

International
Actuarial
Association
(IAA)

Joint Colloquium 2016

Author:
Chi Cheng Hock

Treasurer and Committee
Member, IAA Health
Section (IAAHS)
SAS Health and
Retirement Committee

St John's Newfoundland
& Labrador Canada
June 28-29, 2016

The Joint Colloquium was jointly organised by 3 IAA Sections – the International Association of Consulting Actuaries (IACA); the Pensions, Benefits and Social Security (PBSS) Section; and the IAA Health Section (IAAHS) – together with the International Pensions and Employees' Benefits Lawyers Association (IPEBLA), which is a professional association independent of the IAA. The Joint Colloquium was held in conjunction with the Canadian Institute of Actuaries (CIA) annual conference. There was an overlap of 2 days – 28 and 29 June 2016. The idea was to allow registrants of the two conferences to attend sessions of both (limited to 2 sessions per non-registered conference).

There was a joint keynote address for both the Joint Colloquium and the CIA conference. It was delivered by Michael Woodford, the CEO of Olympus (Japan) who blew the whistle on the chairman and chief financial officer of Olympus for financial improprieties. The address was titled, "Whistle-blowing and Lessons on Governance and Crisis Management". The keynote address was highly entertaining, although it said much more about Japanese corporate culture rather than the issues surrounding whistle-blowing. It was also a pitch for his book, which was on sale at the CIA conference. I should note that many actuaries were intrigued enough to buy the book to read!

5 plenary sessions were held at the Joint Colloquium as well as 51 breakout sessions, divided into 6 time slots over the 3 days, organised by the Sections and IPEBLA. Unfortunately, the attendance of the Colloquium was relatively small at about 140 (about 400 attended the previous Joint Colloquium held in Hong Kong in 2012). There were very few Asians registrants, mainly Japanese actuaries working in pensions. The remote location of St John's was probably a critical factor.

The quality of the presentations was variable, but they did provide a geographical breadth to the discussion of issues. Due to the programme structure, I could only attend the plenary sessions and the IAAHS breakout sessions. Together with Adrian Baskir of BUPA (UK), I coordinated the programme for the IAAHS sessions. I am glad to note that one of the speakers at an IAAHS session, Kudzai Chigiji, will be presenting at our own Health and Retirement Conference on 14 Oct 2016. Another Joint Colloquium speaker, Jan Zijlmans, will also be speaking at HRC 2016.

Of the plenary sessions conducted, I found the one on “The Personalised Medicine Revolution” the most interesting. Dr Pieter Cullis, of the University of British Columbia, a leading proponent of personalised medicine, explained how the molecular analysis of genomics, proteins, metabolites and microbiota (from saliva, blood and stool samples) could lead to early diagnosis of 100+ diseases [note: the genomic data is only predictive, but the results of the analyses of the other components can point to actual contracted diseases].

The plenary session I had a hand in organising was the one on “Global Healthcare Cost Drivers”, which was a panel discussion by actuaries from 3 continents, North America, Europe (actually, he was from the UK, which may still be considered part of Europe for now) and Africa. The catalyst for this session was the series of 4 webcasts on the same subject, organised jointly by the IAAHS and the American Academy of Actuaries (AAA) in 2015. I presented a background based on these webcasts, which preceded the panel discussion.

Joint Colloquium 2020

I strongly encourage SAS members who practice in the health, retirement and consultancy fields to consider attending the IAA Joint Colloquium 2020. It is a wonderful opportunity to meet actuaries practising in the same fields from all over the globe. The most likely candidate for JC 2020 is Dublin, Republic of Ireland. If nothing else, you will enjoy great Guinness stout!

IAA Section Meetings

The Sections also took this opportunity to hold their biennial (once every 2 years) general meetings, principally to elect or re-elect Section Committee members, as well as Committee meetings, as a number of Committee members were in attendance of the Colloquium. I was re-elected as Treasurer of the IAAHS for another 4-year term, to 2020.

St John’s, Newfoundland and Labrador

Firstly, let us get the pronouncement of “Newfoundland” right – it is New – fe(r)nd – LAND [with the “r” being silent and the stress being on the “land”]. The full name of this Canadian province is actually Newfoundland and Labrador.

St John’s sits on the island of Labrador (a name which should be familiar to dog-lovers), off Newfoundland, which is part of the Canada mainland, but her residents call themselves Newfoundlanders. St John’s would actually be a wonderful tourist destination if it were not so very far away from Singapore! The town centre is filled with houses painted in different colours (known as the “Jellybean Houses”, for obvious reasons) and is lovely to walk around (and up and down – it is extremely hilly!).

The locals, who are largely of Irish descent, are warm and friendly. Their music and dance are distinctly Irish. They are also extremely courteous – my wife and I were constantly delighted by drivers stopping their vehicles at least 10 feet from the crossing whenever we crossed a street! Sometimes they stop even if they THINK that you are about to cross! We almost felt obliged to cross!



I am an honorary Newfoundlander, as I was “screeched in”. I drank a tot of the Screech rum (which Newfoundland has been importing from Jamaica directly for 2 centuries) and then kissed a cod (which was dead, fortunately!). I have photographic evidence! Cod fishing was at one time the bedrock of the Newfoundland and Labrador economy. The rum certainly made it easier to kiss the cod (but you can still smell it – maybe, I did not have enough rum!)

If you are of the adventurous type, you can get out in a boat to watch for whales [my wife and I saw 3, but only from a distance – unfortunately, they did not resurface when we got closer].

Thank You to Council

I wish to take this opportunity to thank the Council for agreeing to cover my travel and accommodation expenses, as part of its initiative to engage with the international actuarial community. In return, I hope that I had done justice to representing the SAS at the Joint Colloquium.



[REPORT BY EDITOR]

ERM Conference 2016 built around conversations over the evolving risk frontier in Asia. It was an interactive conference, with two panel discussions and an afternoon workshop in the two-day conference.

Mr Raymond Cheung, Chairman of the ERM Conference, welcomed both local and overseas participants with a demonstration of the few common risks that Singapore is lately experiencing: environmental risk from Haze, pandemic risk from Zika and risk of addiction from Pokemon Go. It aimed to help audience focalise on Asia trends and stir discussions in the recent development of ERM in this part of the world.

More on RBC2

The conference started off with the RBC2 update emphasizing on the new risk requirements for equity investment, credit spread, counterparty default and operational risk, followed by a panel discussion on the topic formed by Mr Chi Cheng Hock, RBC2 Task Force of the SAS, Mr Lim Siang Thnia, Director of Asia Actuarial Services at PwC and Mr Julien Parasio, Head of Capital Management of SCOR Asia Pacific.

Singapore Actuarial Society, representing by the RBC2 Task Force has actively involved in the consultation round earlier this year. Mr Chi from the Taskforce spoke of the discussion in discount rates in life insurance. Mr Lim raised concerns over health insurance contract boundary, in particular for the long-term guaranteed renewable products in Singapore, which the RBC2 interpretation could thereof establish a reserving approach. Mr Parasio attended to the CAT risk charge under operational risk in the solvency framework.

Upon closing, Mr Cheung, chairman and the panel facilitator, concluded with the government's changing attitude towards the industry - more consultative and forward looking, from supervision to surveillance, i.e. to allow the industry to follow the principle based on a set of boundaries, so that different companies can seek out their best practice.



Change of Paradigm – towards an economic risk-based solvency approach



Mr Michel Dacorogna, Head of DEAR-Consulting, with rich experience in models and capital management presented on the tendency towards economic risk-based solvency approach for market-consistent valuation of liabilities. It was believed that the change in paradigm makes insurers be judged differently in the future, for instance, premiums under available capital. All material risks are valued economically and with market-consistency, according to Mr Dacorogna. An internal model, with a complex IT system, is to be used to access the risk of the economic balance sheet of the company.

There is a problem with the economic valuation, reported by Mr Dacorogna, i.e. to clearly separate tasks in an organization to find the best definition. It requires companies to have a definition of risk appetite, with policies and guidelines to ensure a strong awareness of risk tolerance and risk preferences. It is a long-term commitment and possibly a complete reorganisation of company structure. To comply with the above, "the role of actuaries is expected to change, from reserving and pricing policy to estimating capital and risks," Mr Dacorogna said.

Readiness to Take on Challenges

Mr Nico Snyman, CEO of Crest Advisory Africa, addressed the growing concern amongst shareholders and board on ERM, with the experience in economic hardship and in fulfilling compliance and implementation of frameworks or standards. Nevertheless, Mr Snyman emphasized the importance for the whole organization to understand the company objectives and have risk information in mind in making enterprise decisions. It is a continuous management process, combining risk optimization, dynamic risk appetite, and strategic risk management, according to Mr Snyman. Companies were advised to continuously improving the business sustainability through integrated enterprise risk management and stakeholder assurance.



Synergies Panel: Education, Insurance Industry and Actuarial Associations

Facing the ERM Challenges, another panel discussion focused on opportunities to cooperate among stakeholders was held in Day 1 afternoon. It was formed by Mr Dacorogna, Ms Marie Kratz, Professor at ESSEC Business School and Mr Derek Cribb, Chief Executive at the Institute and Faculty of Actuaries (IFoA). The discussion was surrounding regulatory adaptation, surging demand for data analytics and education for future actuaries.

Mr Cribb shared with the audience the IFoA figures for actuaries in Life, Pension and General stream. 30 years ago, 40% of their members worked in Life, 60% in Pension and not any in General. Today, Life is the biggest group, General comes the second, Pension the third and the number of pension actuaries is expected to decrease further down the road.

It showed us the evolving roles in the profession and adaptation required in pursuing an actuarial career. Ms Kratz rated the managerial ability equally important to actuaries' technical ability. Mr Dacorogna agreed to the importance for actuaries to gain strategic skills on communications and management.



Actuaries and Risk Management

Apart from ERM, Mr Colin Wilson, the IFoA President and UK Deputy Government Actuary, was invited to speak on risk management in governments. Governments increasingly recognise the importance of actuaries in understanding and managing risk. Colin explained: "the main change is the understanding of the actuarial techniques [goes] more widely." In definition, actuaries are risk professionals who help make sense of complexity. They care for the government balance sheet, strategy for management, and help the government to understand impact of policy changes on financial projections.

At present, the UK Government has an insurance department with 120 actuaries, with 60 fellows and 60 students, to handle ongoing projects, including accessing risk on climate change etc. Actuaries go through maturity through facing risk repeatedly, which makes actuarial skills very relevant! The lessons from a broad range of topics are at the same time useful for actuaries.

Mr Wilson, also a Chartered Enterprise Risk Actuary (CERA) since 2012, spoke of the CERA qualification for actuarial professionals who wish to specialize in ERM. There are currently 21 actuarial association members of CERA and 3362 actuaries with the qualification worldwide. The membership is expected to rise 10% every year and in total to reach 6000 actuaries in ERM, according to Mr Wilson.



Mr Wilson spoke to actuaries on public interest: If you can help, you should help.



IFRS Updates

Mr Mehul Dave and Mr Amar Mehta, Associate Directors from Deloitte, kicked off the second day of the conference providing audience the IFRS updates. It was predicted that the standard for IFRS 4 Phrase II is going to be published by March 2017 and, counting the 3-year adopting stage, is to be effective by 1 January 2020.

IFRS 4 Phrase II turns out to be the IFRS 17 as a new consistent and transparent standard. Other than the insurance reform in achieving a market-consistent valuation of liabilities, the new RBC regulations are soon getting in place. The convergence of IFRS and RBC targets to get the industry moving towards a current, portfolio-specific cost, plus an explicit margin calibrated to the premiums.



ERM Standards and ERM Programs

Ms Keri Lee from Ernst & Young Singapore presented on the insights on ORSA Review, emphasizing ERM the foundation of ORSA. Developing ORSA helped companies to communicate with regulators.

Mr Zhang Sifang from AON Benfield Asia updated the audience with the ERM Program Reviews. No disconnections in review of ERM were discovered between regulators and rating agencies. The leading countries in ERM review included Japan, Korea and Australia.



Mr Girinker Aggarwal, a GI Actuary at XL Catlin Group, applied stochastic modeling to ERM. It was advised that overall business application is manifold and insights into unforeseen business scenarios require appropriate and optimum risk management measures.

The Conference was concluded by a workshop led by Mr Nico Snyman. There was an overall of 78 participants attended the ERM Conference 2016. The Conference was held by the Singapore Actuarial Society at Regent Hotel Singapore on 27 and 28 September.

Health and Retirement Conference

PLAN Ahead, LIVE Long,
RETIRE Comfortably, Stay WELL

Oct 13-14, 2016

[REPORT BY EDITOR]

The Health and Retirement Conference 2016 with the theme “Plan Ahead, Live Long, Retire Comfortably, Stay Well” addressed the challenges societies face with populations that are ageing rapidly and living longer, and looked beyond existing retirement plans and healthcare systems to consider a holistic view on sustainable solutions to the issues.

“Only 7% of employers in Singapore provide financial planning support to their employees,” Mr Mark Whatley, Co-Chair of the Conference quoted Willis Tower Watson research to highlight a missed opportunity to encourage better retirement planning. He reinforced the value of the Central Provident Fund (CPF) in creating a solid foundation for retirement in Singapore. However, the dominance of the CPF and the complexity of the system may mean that many Singaporeans do not fully understand the need to save additionally to provide for the retirement outcomes they are hoping for. Further pillars of retirement savings need to be encouraged. Section 5 legislation, which enables employers to make supplementary retirement savings for their employees, is in urgent need of reform. Mr Whatley stressed that actuaries have a role to play in advancing retirement and health outcomes in Singapore, quoting George Bernard Shaw “We are made wise not by the recollection of our past, but by the responsibility for our future”.

Other than actuaries, insurers, reinsurers and healthcare providers, speakers from the scientific, medical and policy research fields formed part of the solution discussion by updating developments in their respective areas.



Combating “ageing” is now feasible

The keynote speaker, Dr Aubrey de Grey, Chief Science Officer of SENS Research Foundation, defined ageing as an “accumulation of damage”, and introduced the audience to rejuvenation biotechnology that could give humans around 30 years of extra life in its initial phase, and potentially much longer lifespans as the technology develops further and longevity escape velocity takes hold. Dr de Grey discussed how this revolution will have implications to society’s expectations for longevity within our lifetimes. Policymakers, insurers and pension funds should be preparing themselves for this future right now.



Dr Aubrey de Grey



Dr Jan Gruber

Dr Jan Gruber, Assistant Professor at Yale-NUS in Singapore talked about the expansion of healthspan – the prevention or delay of age-dependent diseases. Like Dr de Grey, Dr Gruber pointed out that dealing with age-dependent diseases is about management rather than cure. However, the amount spent on researching the ageing process currently represents only a small fraction of what is being spent on looking for a cure to chronic diseases.

But first, to survive the ageing crisis

If making sense of ageing is vital to prepare the industry for the future, understanding the struggle in defying ageing in Japan, the country with the oldest population in the world, should provide a good glimpse into what is coming.

Mr Jeff Howatt, Director of Benefits consulting at Willis Towers Watson in Japan, shared that for 78% of Japanese employees, their employer’s retirement plan is the main way they save for retirement. However, “Japan is the least confident about retirement.” Poor retirement outcomes partly arise from mandatory retirement under Japanese law, as well as that around 40% of the workforce is in part-time employment, with lower pay and no traditional employee benefits. Mr Howatt said that employers should be thinking about the design of their retirement arrangements, about offering more wellness support – both health and financial, and should look at putting more flexibility into their benefit offerings.



Solution borrowed: The Netherlands Case



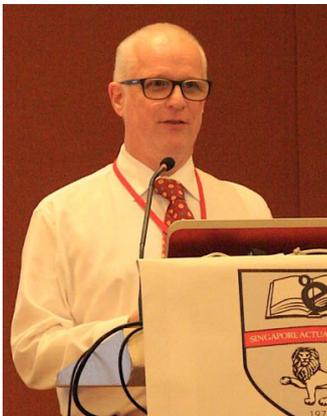
The Netherlands pension system ranks in the top 5 countries globally for sustainability, adequacy and integrity, but is often overlooked when developing countries are looking for a solid reference point. Mr Leon Zijlmans, Managing Partner of Syntaxyz Asia Ltd, a consulting firm focusing on government pension systems, explained the Collective Defined Contribution (CDC) plan as a solution to balance the interest of both employers and employees, following the unsustainable rise in the cost of providing traditional Defined Benefit (DB) plans. Under CDC, a fixed percentage of salary is contributed by the employer, and whilst the accrual of benefit for the employee is still DB in nature, usually based on career-average salary, that accrual is conditional on the funding level of the scheme. “More and more companies will shift to CDC,” Mr Zijlmans said, following companies such as ING, Phillips, Unilever and many others who have already adopted the scheme.

Towards needs-based and consumer-driven care

An ageing society is not just characterised by more seniors, but more health services per old person, which compounds health costs as a country ages. Mr Stuart Rodger, Health Practice Leader with Deloitte in Australia, talked about the need to consider how the retirement funding, healthcare and old-age care sectors overlap. With Australia as context, he stressed that we need a basket of solutions, including offering consumer-driven choices, harnessing technology and sharing data across multiple sources, and public-private partnership to achieve better outcomes.

Dr Christopher Reynolds, Head of Long Term Propositions at PartnerRe in Switzerland, reflected on the history of critical illness (CI) insurance, and how the product has become more and more complex for consumers to understand. He proposed a simpler product which evolves with a policyholder's changing needs during their lifetime, with a focus on accidental risks during the younger years, on core CI risks during the working ages, then transition to an Activities of Daily Living trigger into the retirement years. The challenges that an old-age CI product faces are the affordability of premiums, the onset of old-age diseases and the limited insured data with which to price the risk accurately.

Mr Christopher Gee from the Institute of Policy Studies, NUS, discussed financial preparedness for longer lives in Singapore. "Seniors can no longer expect their children to support them; the government or the community has to support vulnerable seniors," he said. Mr Gee identified opportunities for insurers in Singapore to act as a systems integrator in the care continuum, to introduce home equity monetisation options for seniors' private housing assets and active participation in the government's upcoming review of ElderShield and long-term care financing solutions. He encouraged insurers working together towards a patient-centric and outcome-oriented care system.



Mr Stuart Rodger



Mr Christopher Reynolds



Mr Christopher Gee



Dr Calvin Ho

Sustainable healthcare systems rely on shared individual responsibility

In view of the increasing healthcare burden from the ageing population, Dr Calvin Ho, Assistant Professor at the Centre for Biomedical Ethics, NUS, emphasised the importance of shared responsibility to make sensible and beneficial choices in maintaining a sustainable financial model. The industry can assume a more proactive role to promote that goal, in relation to preventive cost under value-based insurance design (VBID). He highlighted the potential of VBID with a case study on diabetes care provided by a large employer in the US, where combining VBID and disease management led to a return of USD1.33 for every dollar spent.



Dr Kelvin Bryan Tan

From the government perspective, national health expenditure has to be a sustainable share of government expenditure. Dr Kelvin Bryan Tan, Director of Policy, Research and Economics Office, Ministry of Health Singapore, pointed out the need for an appropriate set of metrics to measure sustainability and equity, so that the healthcare systems are affordable for both current and future generations. Mr Tan suggested that a large proportion of the future potential healthcare burden could be avoided by preventative care, by keeping people engaged and informed, by appropriate cost sharing, by developing innovative arrangements to encourage savings and by harnessing technology to deliver services in the future.

Future analytics and healthcare

Mr Mudit Gupta, Chief Actuary for Sompo Insurance Singapore and Lead in the SAS Big Data Working Party, described 21st century actuaries working in Big Data as “Actuaries of the Fifth Kind”. Besides demonstrating their capability in both statistics and programming, two actuaries-turned-data scientists presented their experiences on disease identification and prevention using machine learning.

The winner of the Asia Actuarial Analytics Challenge, Mr Wong Ling Yit, a Data Scientist at Holmusk, explained the big data analytics techniques his team employed to predict re-admission to hospital for diabetes patients. Mr Colin Priest from DataRobot then affirmed the improved outcomes from machine learning, which outpaced traditional analytics in pattern finding and extrapolation, and helped to individualise healthcare. “It [machine learning] can even give reasons for the probability estimate,” Mr Priest said.



Mr Mudit Gupta



Mr Wong Ling Yit



Mr Colin Priest



Mr Wong Soon Leong

The closing speaker was Mr Wong Soon Leong, representing the SAS Health Systems Working Group. Mr Wong revealed the group’s findings on the drivers of medical cost inflation in Singapore. The study showed that the average medical inpatient bill size in Singapore increased by 9.3% pa between 2007 and 2014. Ageing and medical cost inflation were two irreversible components within this figure. Mr Wong suggested the bundled payment system and insurance company tie-ups with pharmaceutical companies as two solutions for more active cost management in the future.

The Health and Retirement Conference 2016 was held by the Singapore Actuarial Society at Resorts World Sentosa, Singapore. 128 participants attended the event and 18 speakers spoke over the two-day conference on 13 and 14 October. The Conference opened the window to new possibilities in retirement planning and healthcare financing, from refining definitions of ageing to deploying future analytics in health system designs.

Research TRAILER

A Ruin Theory Application on Cyber Risk Modelling

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Cyber risk has become a hot topic given the ever-increasing cyber breaches and resulting losses of data and business disruptions. Cyber risk differs from traditional insurance risks in that they are very much driven by human behaviors in terms of attacks and defenses. What quantitative tools can actuaries imply to offer insights in measuring and managing cyber risks? In this paper we apply traditional ruin theory in an innovative way to the level of cyber security, and gained interesting insights from this theoretical framework.

Traditional actuarial ruin theory was developed in modelling of insurance capital solvency, whereas the level of capital is influenced by two opposing forces: the upward drift driven by a stream of insurance premium income and the random downward jump driven by insurance claims.

During our literature review for cyber risk analysis (mostly from the computer science literature), we noticed that in many of the quantitative models, the security level of a system could be assumed as a quantifiable amount, which is primarily affected by the amount of investment in security development. In addition, it is commonly assumed that the probability and the loss severity of a defense failure (a cyber breach) depend on the security development and the damage control scheme.

In this paper, we assume the security level of a system is a quantifiable metric and apply the ruin theoretic framework in assessing the defense failure frequencies. We assume that the security level of a system changes over time due to attack and defense. The security level is then modelled by a modified surplus process: the current security level of an information system can be viewed as the initial surplus; defense investment resulting in an increase in the security level can be viewed as the “premium income”; the cyber-attack arrivals are modeled as a Poisson Process, and the impact of attacks are modeled as losses on security level using an assumed loss distribution. A cyber-attack succeeds (or the defense fails) when ruin occurs. In other words, we apply the risk process to model the frequency of the cyber failure. Once the defense failed, an independent financial loss amount is incurred depending on the nature of data being breached.

To our knowledge, this is the first attempt in the literature to apply the ruin theory on IT security investments and risk modelling. Instead of modelling cyber incidence directly, we assume that attacks can occur but unsuccessful if higher security level (strong defense) is in place. We also assume that the security level erodes even if unsuccessful attack happened. This is based on our assumption that the dark web (or cyber criminals) are capable of learning from their past attempts, which leads to a decrease of security level without active upgrading on the defense side.

One important insight derived from this theoretical framework is that there is an optimal allocation of total cyber security budget to (1) IT security maintenance/upkeep spending versus (2) external cyber risk transfer. This has an implication in insurance product design: insurers may consider offer a combination of IT risk management services and risk transfer. The IT risk management services can be jointly offered with or outsourced to IT security firms.



Dr Jade presented the findings in the article during the SAS ERM Conference 2016.

INSIGHTS

Author:
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Asian Insurers and Regulators Confront Digitisation Challenges

The technological disruption reshaping industries as diverse as automobiles and food delivery has come to insurance. Rapid technological adoption is changing the core traditional relationship between insurer and consumer, with consumers looking for ease, flexibility, accessibility and simplicity.

Regulators and insurers are also dealing with something else: rebuilding trust in an industry that has suffered from misselling issues. Over 60% of the insurance CEOs taking part in PwC's Global CEO survey see lack of trust in the business as a threat to growth. Regulators have responded accordingly: Hong Kong's OCI introduced guidance for insurers with the GN 15 and GN 16. Some are also increasing the metrics to judge insurers' and agents' performance with customers. The BNM in Malaysia will introduce balanced score cards and measure non-sales KPIs starting in 2018, like MAS did before them, while the JFSA in Japan plans to develop a set of benchmarking indices to assess financial institutions' contributions to their customers. A bill of rights of policyholders was issued in the Philippines, enumerating rights like prompt and fair settlement of claims, and the right to be offered a duly approved insurance product. Trust can be built on the sell-side, but greater information access on the buy-side will be key to maintain trust. This could include giving policyholders online access to all of their information, and initiatives like regularly updated expected returns of their products and notifications will help as well. An automated and transparent online claims process is another means to increasing trust in the insurance sector.

Digitisation supports customer centricity as well as (re)building

Insurers respond to the challenges (and opportunities) above by using digital tools and technology in serving their customers, in part of or across the entire value chain. They are getting closer to consumers and create genuinely customer-centric products, services and lifetime solutions. This digitisation of the insurance industry has benefits for both insurers and customers. In addition to creating a better customer experience and rebuilding trust, digitised insurance will lead to lower transaction costs.

A regulatory angle to digital

There are several regulatory angles to digitisation that are worth exploring, three of which we highlight here. Firstly, data analytics is a component of digitisation that has huge impact on the way insurers operate. Moving from data to insights is proving to be no mean feat. As it is relatively new, insurance provided with the help of algorithms, robotics and data analytics, raises questions about the role of judgment and liability in providing insurance products without a human-to-human interaction. Regulators have to develop regulation that protects the consumer without limiting R&D and innovation.

Another area of regulatory uncertainty is around replacing the 'wet signature' and other manual identification procedures with other potential authentication mechanisms such as biometric identification. There are many other options, almost all of which are stronger, more reliable and more robust than a signature. An example is facial recognition software in combination with voice or a certain device. However, regulatory clarity is often lacking in this area.

Thirdly, the rise of insurance price comparison websites is evident in the new competitive environment. Web sites such as GoBear and compareFIRST, the latter a joint effort by MAS and other organisations, are increasing comparability and transparency in the market. The simpler products are, the better they can be compared online, and the more transparency is created.

Opportunities come with challenges

However, digitisation poses challenges for the insurance sector. Insurers need to transform their business models to be ready to adapt to change quickly and embrace a new way of working. And they have to do so in an environment of regulatory uncertainty due to the sheer pace of change.

Regulators need to work out how regulation should change to facilitate digitisation. They need to think deeply how to allow for more choice in the market, while also making sure that consumers have the information and protection they need to make the right decisions.

Alignment through engagement

Insurers and regulators need to move forward together, and engagement is key. Insurers and regulators should have dialogues on the impending changes and what they could mean for regulation. MAS is already helping to facilitate these discussions with the creation of FinTech roles, such as Chief FinTech Officer, and a 'sandbox' space. Insurers need not go at this alone: industry bodies like the HKFI in Hong Kong and the LIAJ in Japan are well positioned to help shape the dialogue and drive the change, with an eye on industry as well as consumer.



The SAS Working Party Updates

Big Data Working Party

The **Asia Actuarial Analytics Challenge 2016** hosted recently by the SAS to promote the development of data analytics skills and talent had attracted over 550 entries from around the world. The competition involved predicting re-admission to hospitals for diabetes patients using data analytics techniques. Mr Wong Ling Yit (pictured with Colin Wilson, President of the IFoA) was announced as the winner at the IFoA Awards Ceremony and Networking evening on 27 September 2016 in Singapore. The IFoA is a proud sponsor of the challenge, giving a special prize for the discussion post with the highest number of votes to encourage knowledge sharing and learning from each other's experiences. Congratulations to Mr Wong! Be noted that the result of the competition will be posted on the next SAS newsletter. Stay tuned!





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Asian roles

Health Actuary \$Competitive market rate
Singapore

A global re-insurer is looking for an experienced newly / newly qualified Actuary to be the key individual providing analytical support through their regional health business. The ideal candidate must have solid general linear modeling experience and a very good understanding of the health insurance market in the APAC region. Please contact christinac@hfg.com.sg for more information. Ref: TY1001

Consulting Actuary \$Competitive market rate
Hong Kong / Singapore

An exciting opportunity to play a key role in various actuarial related projects such as traditional reporting and pricing, M&A, ALM, Sol II and strategic planning. If you are a newly/newly/post qualified Life Actuary with strong technical and communication skills and a genuine interest to develop your career within the consultancy environment, please do not hesitate to get in touch. Please contact christinac@hfg.com.sg for more information. Ref: TY1002

Actuarial Manager \$Competitive market rate
Hong Kong / Singapore / Malaysia

An established direct insurer are seeking a qualified GI Actuary who wants to step up into a management role. This is a local-market focused role and requires the incumbent to have at least 7 years of relevant traditional pricing experience across APAC, in particular personal lines of business. Strong technical expertise in SAS and Emblem will be a huge benefit. Please contact shuyu@hfg.com.sg for more information. REF: SL1001

Regional CAT Modeller \$Competitive market rate
Singapore / Malaysia

A global reinsurance firm are seeking highly motivated and passionate CAT Modellers with 2-5 years of relevant experience across APAC region. This is a regional role and proficiency in Mandarin will be advantageous because of the Asian territories the incumbent will be looking after. Fresh graduates (with relevant degrees) will be considered. Please contact shuyu@hfg.com.sg for more information. REF: SL1002

Pricing Actuary SGD \$100k - \$120k
Singapore

An internationally acclaimed re-insurer is looking for a Pricing Actuary to join their Asia business. As a Pricing Actuary you will be responsible for structuring and developing pricing bases and procedures, research and analysis and treaty negotiations. Almost qualified Actuaries with strong technical pricing knowledge and good business acumen are welcomed to apply. Please contact christinac@hfg.com.sg for more information. REF: CC1001

Health Actuary \$Competitive market rate
Singapore

A renowned global re-insurer is recruiting for a Health Actuary in expansion of their South East Asian team. Almost or newly qualified, this role will be responsible for pricing of treaties for life and health businesses supporting Business Managers across the SEA region. An independent individual with 5 years of technical pricing experience for life insurance products are highly recommended. Please contact Christina at christinac@hfg.com.sg REF: CC1002

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Oliver James associates

Who are Oliver James?

Oliver James Associates is a specialist recruitment partner to the Financial Services sector, sourcing and placing market-leading talent across the world. We focus on all areas of Financial Services; our specialist vertical market is Actuarial in which we are recognised as the most trusted and largest team of Actuarial recruiters globally.

General Insurance

Whilst global general insurers are going through an extended period of change, due to M&A activity and reorganisations, and commercial lines business in Asia remains flat, there is still a demand for actuaries in the region. Reinsurers competing on price, and retail insurers developing data analytics capabilities, has driven growth in the number of actuarial hires in the region, and attracted actuaries from more traditional positions. However, thanks to a proactive actuarial society, and in recent years, a consistent supply of strong graduates, there is a lot of competition for top roles and applicants need to demonstrate not only sound technical skills, but the ability to communicate technical terms in layman's terms to non-practitioners.

Life

Asia's life insurance sector despite global market volatility remains largely unaffected and continues to go through an exciting time of change and enviable growth potential. Singapore is taking an increasingly proactive role in the dialogue around how best to respond to the changing needs of policyholders through increased collaboration and innovation, optimizing modes of distribution, along with new strategies to driving business and increasing bottom line through inforce management. As a regional financial center Singapore also provides a clear opportunity to sell products to HNW clients, and more businesses are looking to shift or at least split regional roles towards being based in Singapore where historically they would be based in Hong Kong. New actuarial hires within the life space in Singapore are being driven by new market entrants or regional reinsurance offices looking to expand operations, expansion amongst the consultancies, RBC II, capital optimization and inforce management needs, and a stronger push to service the health and medical reimbursement markets.

Life opportunities

Team Lead - Medical - Singapore

\$150,000 SGD+

Reporting to the Head of Medical and managing a team of five across Asia, a world leading reinsurer is seeking a qualified Life Insurance actuary with Product experience to join their Medical Reimbursement team.

Daniel Kirk

Senior Manager - Singapore

\$180,000 SGD+

A globally renowned consultancy firm is seeking a well-rounded and qualified life actuary to drive business development in the South East Asia alongside technical functions and reporting to the Country Director.

Daniel Kirk

Regional Head of Products - Singapore

\$300,000 SGD+

A leading global financial institution seeking a senior commercial actuary to work across the South Asia region to develop Insurance propositions and provide thought leadership on new partnership opportunities and global best practices.

Daniel Kirk

General Insurance opportunities

Regional Chief Actuary - Singapore

\$280,000 SGD+

Global composite insurer seeking Regional Chief Actuary to lead pricing and reserving functions across eight countries in Asia. Inspirational leader with strong personal lines reserving experience sought for opportunity with a market leading business.

Toby Weston

Chief Actuary - Malaysia

45-55 MYR/ Month + Bonus

Global General insurer seeks Chief Actuary to join their Malaysia management team, reporting directly to the CEO the successful applicant will lead the actuarial function, perform statutory sign off and actively engage in business and strategic planning.

Toby Weston

Pricing Actuary - Singapore

SG\$10k/ month

Global Re/Insurance group seeks pricing actuary for Singapore regional office. Reporting to the Regional head of pricing we are looking for a NNQ actuary with strong personal lines pricing skills. Autonomous role for an ambitious actuary.

Toby Weston

Get in touch with one of our team



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The SAS would like to welcome the following new and upgraded members:

FELLOW MEMBERSHIP

Gareth James SMITH	Zurich Financial Services Australia	LI Xiaoxuan	China Re P&C
Robert SORBELLO	Swiss Reinsurance Co	Tim ANDREWS	Finity Finity Consulting Pty Ltd
Mark Aram COCKROFT	Qatar Reinsurance Service LLC	HUANG Kai	DBS Bank
Kon MAKKRIS	Tokio Marine Asia	ZHENG Yanxiang	NTUC Income
Frank Stuart BUTLER	Aetna Insurance Company Ltd	ENG Pingni	AIA Singapore Ltd
KOH Soo Wee	General Reinsurance (Singapore branch)	Bruno PINSON	Tokio Marine Asia Pte Ltd
LI Jiang	NMG Financial Services Consulting	LOW Zee Jiun	Prudential Assurance Company
LUI Cheuk Tong Phillip	QBE Insurance (Singapore) Pte Ltd	LI Boyu	Milliman Pte Ltd
YONG Yau Wern James	Manulife (Singapore) Pte Ltd	LIU Jun	Tokio Marine Life Insurance Spore Ltd

ASSOCIATE MEMBERSHIP

MOO Suh Sin	NTUC Income Insurance Co-operative Ltd	Maricel Gaballes VITOR	Gravitas Recruitment Group
HAN Rong Ze	SCOR Global Life SE Singapore Branch	LOH Song Yi	Gravitas Recruitment Group
LAU Seng Kieh	NTUC Income Insurance Co-operative Ltd	LAU Guan Kiat	TFW Management
Sachal GANDOTRA	Swiss Reinsurance Co		

AFFILIATE MEMBERSHIP

ORDINARY MEMBERSHIP

TEO Jia Chin	AIA Singapore	NGUYEN Minh Trang	Upgraded Manulife (Singapore) Pte Ltd
LEONG Zhi Cong (Zac)	AIA Singapore	TEO Mei Ting	Upgraded -
GOH Wee Chian	AIA Singapore	TIAN Yufan	Upgraded MSIG Insurance (Singapore)
CHEW Zi Yan	Deloitte Consulting Pte Ltd	KOH Sui Hwan, Jasmine	Upgraded Aspen Re
LENG Marcel	Aon Singapore Center for Innovation, Strategy and	IMA Xinning	Upgraded Aviva Ltd
MOO Khai Mun	AIA Singapore	CHANG Tze Heng	Upgraded Pacific Life Re Limited
WU Ruiyun	Direct Asia Insurance Singapore Pte Ltd	MAO Yuanzhi	Upgraded Munich Reinsurance Co, Singapore Branch
HO Chin Keat	AIA Singapore	Suraj Dhanraj BINWANI	Upgraded SARC
ZHU Zikun	Upgraded -		

Anniversary Gala Dinner
28 September 2018 Singapore

End of the list and the Issue, thank you!