Welcome from the Editor

Gerd Warnke (Germany)

Dear IACA member:

When we issued the first IACA newsletter in August 2014 we announced that we intend to send a newsletter at least twice a year. Today we present you the second issue, which we hope you will find both interesting and helpful.

Consulting actuaries are doing valuable work all over the world. Rodrigo Silva gives us some insights into aspects and objectives of actuarial work in South America, and Kudzai Chigiji gives an impression of the developments in southern Africa.

To live up to their important and challenging role in society and economy, consulting actuaries need to have a number of specific skills and abilities. Rade Musulin and Tawanda Chituku tell us – each from his/her personal point of view – what you need to meet the demands of your clients and be successful in this field of work.

Nigel Sloam has been working in the pensions area for many years now. Looking at the situation in the UK as an example, he states the need for a change in the function and design of pension plans. Though this could give actuaries an opportunity to participate actively in redesigning, he wonders if actuaries are aware of this chance and their responsibility.

If you were not able to come to London yourself, Margaret Tiller Sherwood (the lady on the next page) gives you some information about the committee meeting in London and especially about the decisions taken concerning the future development of APACA as an independent organization.

Please also note the updated information on upcoming events. We are looking forward to the presentation of some very interesting papers and would very much appreciate seeing you in person at one of these very promising events.

To be able to issue a newsletter at least twice a year, we need and are looking for consulting actuaries willing to contribute. So if you happen to know of any papers, interesting news, or articles suitable for publication in the next newsletter, please let us know. We are always happy to publish articles our members have written.

This newsletter is to be archived and can be easily accessed by every IACA member on the IACA website. There you can also find some other interesting information about IACA and its members.

If you have feedback or would like to offer to write material for future editions, please send a note to Rade Musulin at rmusulin@sprynet.com.
Greetings from the Chair
Margaret Tiller Sherwood (United States), IACA Chair

We are off to a strong start. At the September 2014 meeting we approved the 2015 budget, worked through how we could help APACA have a smooth transition to an independent organization (see below), and discussed our many continuing education offerings. The last includes:

- half-day meeting in conjunction with the ACA in Gatwick UK in February 2015;
- Joint Colloquium of IAAHS, PBSS, and IACA at Oslo, Norway in June 2015;
- Joint Colloquium of ASTIN, AFIR/ERM, and IACA at Sydney, Australia in August 2015;
- Joint Colloquium of IAAHS, PBSS, IACA and the International Pension and Employee Benefits Lawyers Association in St. Johns, Newfoundland, Canada in June 2016 (our biennial meeting); and
- our many members-only webcasts.

We also focused on our newsletter schedule and content, marketing to increase membership, and services we can provide members. Suggestions for IACA's continuing improvement are always welcome and can be addressed to me through the secretariat.

I look forward to seeing you at a meeting soon.

APACA becomes the Actuarial Consulting Congress of Asia

In December 2014 the Actuarial Consulting Congress of Asia (ACCA) came into existence. This is the successor organization to the Asia Pacific Association of Consulting Actuaries (APACA) that started as an IACA subcommittee in May 2010. IACA provided support for APACA's endeavors while it was a subcommittee and worked with ACCA on a smooth transition from subcommittee to independent organization. The IACA Committee wishes ACCA well and looks forward to working with it in the future.

On Another Note...
Rade Musulin (Australia)

To the right, we show our Chair, Margaret Tiller Sherwood, about to descend into a gold mine on a client project. She also performed in the CAS Choir at the Centennial Celebration Dinner in November. You can see their last song here:

The choir got a standing ovation and had to do an encore. Margaret is the fourth from the right in the front row.

Upcoming Events

General

Dates for the next meetings of the IAA at which the IACA Committee will meet:

- 8-12 April 2015 – Zurich, Switzerland
- 14-18 October 2015 – Vancouver, Canada
- 26-29 May 2016 – St. Peters burg, Russia

Biennial Meetings

- 27-29 June 2016 – St, John’s Canada with PBSS, IAAHS, IPEBLA, and the CIA
- 30 May – 2 June 2018 – Berlin, Germany – With ICA meeting

Joint IACA, LIFE and PBSS Colloquium in Oslo 2015

Den Norske Aktuarforening will be hosting a joint IACA, LIFE and PBSS Colloquium in Oslo, Norway from June 7 to 10, 2015. The website for the colloquium is http://www.actuaries.org/oslo2015/ and can also be found on IACA’s homepage under the title Meetings.

We are happy to announce that all the involved sections have awards for the best paper or presentation in their field. For the best IACA session/presentation the award is CAD 500.

It is now possible to register for the colloquium directly through the website. This will also enable you to book hotel rooms for the period.

Follow the news about the colloquium on above mentioned address. Here you can also find an overview of the program and a list of the sponsors of the colloquium. Main sponsor is SCOR Sweden Re. We are happy to have support from many well-known companies, both international and national. Thanks to them, we believe that the colloquium will be successful also from a social viewpoint.
Joint ASTIN, AFIR/ERM and IACA Colloquium in Sydney 2015

The Actuaries Institute will host the Colloquium of the International Actuarial Association in Sydney, Australia from 23 to 27 August 2015. This colloquium is a joint collaboration of three IAA sections, the Actuarial Approach for Financial Risks/Enterprise Risk Management (AFIR/ERM), Actuarial Studies in Non-Life Insurance (ASTIN), and the International Association of Consulting Actuaries (IACA).

The theme of the conference, Innovation & Invention, recognizes the historic and ongoing contribution of ASTIN, AFIR/ERM, and IACA to actuarial thought and practice.

The meeting website is http://www.actuaries.org/sydney2015/index.cfm. Registration will be opening soon.

Survival Skills
Rade Musulin (Australia)

I recently was invited to give a lecture to the actuarial students at Australian National University (ANU) in Canberra. The professor asked me to talk from the perspective of an employer looking for young graduates about things I look for when hiring.

I entitled the lecture “Survival Skills for Actuaries” and used examples from my own career to illustrate the skills that have helped me over the years. I identified seven things students should have:

• Strong technical background, plus...
• Big Data competence (manage, handle, analyze large data sets).
• Multidisciplinary focus, particularly history and economics.
• “Big Picture” mindset.
• Master of communications techniques.
• Attributes of flexibility and adaptability.
• Global thinking.

I reminded them that very few of us who have been fortunate enough to make it to our late fifties had any idea at their age what we would be doing forty years later. In today’s world that is an eternity, long enough for me to have started working before there was widespread use of laptops, spreadsheets, mobile phones, ATM cards, or the internet. In order to survive the introduction of so many potential disruptions I had to continually learn new skills and be flexible in how I applied those I had.

If you get the opportunity to mentor a young student, help them understand the value of skills like those I have listed above. Having worked with many of them in recent years I have been struck by ones who assume that getting a 4.0 in university and passing some exams will lead them directly to a great career, or who think they can confidently predict what they will be doing in ten years.

As you consider how to accumulate your Continuing Education (CE) points, think about broadening your own learning outside your immediate practice area. Education is a lifetime activity, and as actuaries we are fortunate to have many options for CE. I try to allocate a portion of my CE time to things well outside the scope of my current role, as one never knows when circumstances will change and knowledge of a new area can help. That is particularly true for people in consulting.

Joint IACA, IAAHS and PBSS Colloquium in St. John’s 2016

St. John’s, Newfoundland, Canada

June 27-29, 2016

The scientific committee has issued a call for papers for the 2016 Joint Colloquium being held in St John’s, Newfoundland from June 27-29, 2016. This is a joint Colloquium with participation from IACA, IAAHS, and PBSS members as well as the International Employee Benefits Lawyers Association (IPEBLA). As the meeting attendees will be lawyers and actuaries, some topics that are relevant to both professions will be preferred. We are also seeking specialized topics that are of keen interest to IACA members, as there will be parallel sessions during all three days of the Colloquium.

The meeting is being held in conjunction with the Canadian Institute of Actuaries – with planned joint plenary sessions in the newly constructed Convention Center as well as joint networking sessions and festivities. For those who have not visited St John’s before check out views of the City on our website. http://actuaries.org/stjohns2016/.

There are a limited number of sponsorship opportunities at the meeting. If your organization is interested in being a sponsor please contact Eduardo.Lara@swissre.com

For more information concerning the 2016 Joint Colloquium contact Adam Reese, the chair of the meeting at adam.reese@prmconsulting.com
Are We Now Just Cemetery Attendants?

Nigel Sloam (United Kingdom)

Current UK pensioners with pensions from occupational schemes enjoy probably the most generous pension benefits that have ever been provided. Unfortunately, such provision does not extend to the whole of the retired population - and even more important there is little hope that future generations will enjoy anywhere near the same level of benefits. Even with the introduction of "Auto Enrolment" whereby employers must provide pension contributions, only at best half the population is covered by workplace schemes currently. Such schemes will not, however, provide anywhere near "replacement income" in retirement.

The traditional UK model for workplace pension schemes was defined benefits. This was, in part, influenced by the nature of State benefits and also by the format of pension provision for State employees. However, times have changed and, as in other territories, it is clear that neither Governments nor individual employers can afford to offer guaranteed defined benefits.

Indeed, previous pension guarantees date the current trade of the employers involved and put jobs and companies' future survival at risk. Historic obligations to pension schemes have in some cases exceeded the market capitalisation of the employer involved. For this reason there is a worldwide switch away from defined benefits to money purchase schemes (also known as defined contribution schemes). In the UK the new Auto Enrolment provisions have a strong money purchase bias and it is likely that modal pension provision will be money purchase - but the quantum contributed will be reduced.

At the same time, more pension provision is needed.

In my working lifetime life expectancy post retirement age has increased threefold. If retirement commences in mid-sixties this implies that during a working lifetime of perhaps 40-45 years three times more has to be saved for than was the case 35 years ago! This is also at a time when investment returns are at least as volatile as ever before and fixed interest yields are at historic lows.

Thus, more has to be contributed by or on behalf of a hard pressed working population that has trouble enough in coping with current costs. General high taxation does not help - unless substantial reliefs are given for pension savings.

Politicians are, notoriously, short term in outlook. Most only think about current issues and leave their successors to deal with what will be an increasing and major problem. This is the shortfall in provision for life after working has ceased - plus the increasing supplemental costs of long term care for the elderly.

Provision for old age income can only come from a limited number of sources:

- Pension provision
- Remain working – albeit part time
- Drawing down on savings
- Accessing wealth in homes and support from family members

Actuaries working in the pension field must therefore take on board the increasingly obvious conclusion that pensions will not just be provided by pension schemes!

Further, a direct consequence of the continuing switch from defined benefits to money purchase is that risks are now borne by individuals rather than groups and that laws of large numbers do not apply.

Involved actuaries must devise techniques to enable individuals to make their resources last a lifetime (and perhaps a little bit longer) and to create solutions for pooling risk.

The classic actuarial technique is to make provision for uncertain events, and the current uncertain prospect for pensions throughout the developed world should be a happy hunting ground for our professional involvement. Yet we appear, at best, semi-detached to the problem. Few actuaries appear interested, and less are involved in developing solutions.

The concept of a level pension is becoming redundant as pensions need to be variable to cope with a slow retreat from employment and increasing costs for care as old age advances. Scheme design is therefore of paramount importance.

All of these problems are acute. For example, it is predicted that in the UK in 2040 30% of the population will be aged over 60. Therefore, there will be a much smaller core of younger workers to support the old. The effects of technology may also limit the numbers who can work.

Yet little or no attention is given in the training of the actuary in these matters. In the United Kingdom the specialist examination paper on pensions includes nothing on the subject of money purchase/defined contribution pension schemes. In national and international seminars there are only lone voices trumpeting "the elephant in the room". In pension conferences worldwide there is a concentration of attention on managing defined benefit schemes - rather than dealing with the future.

We appear to concentrate more on the dead than on the living. Perhaps actuaries are becoming a profession of cemetery attendants rather than the thrusting innovators that we need to be.

The issues will not go away. If we do not get involved in necessary planning, adjust our own training to take account of what is happening, develop and learn new techniques and skills, and then apply these, then our profession will be perceived as irrelevant and our importance will diminish.

We have a huge potential involvement that could prolong actuarial life for many years to come. We appear to be burying our heads in the sand and wasting the opportunity - to the detriment of not just of ourselves.
A Change is Gonna Come
Rodrigo Silva

Colombia is in the process of adopting International Financial Reporting Standards (IFRS), and it means that we are moving to a new environment. From a regulatory perspective we are transitioning to a whole new landscape. In this article, I explore some of the implications of this change.

One of my favorite songs is “A Change is Gonna Come” (by Sam Cooke), a timeless classic, and its lyrics cannot be truer nowadays: “It’s been a long, a long time coming but I know a change gonna come”. In the context of the actuarial work, it means that we as actuaries have to update our toolbox and to change our role from doing valuations in order to comply with the local regulation, to become a business partner of our clients in order to help them to navigate to IFRS.

Rodrigo Silva, ASA is an actuary with 15 years working in retirement and benefits, he is a principal in Mercer. He can be reached at Rodrigo.Silva@mercer.com

The Role of an Actuary in Developing a Sustainable National Healthcare System on the African Continent
Kudzai Chigiji

Healthcare, once seemingly untrodden terrain by the actuarial profession, has become common ground for many actuaries. Involvement has evolved from primarily private healthcare to increasing involvement in the public healthcare sector. It has also become home for many actuaries. Involvement has evolved from primarily private healthcare to increasing involvement in the public healthcare sector. It has also become home for many actuaries. Involvement has evolved from primarily private healthcare to increasing involvement in the public healthcare sector. It has also become home for many actuaries. Involvement has evolved from primarily private healthcare to increasing involvement in the public healthcare sector. It has also become home for many actuaries. Involvement has evolved from primarily private healthcare to increasing involvement in the public healthcare sector. It has also become home for many actuaries. Involvement has evolved from primarily private healthcare to increasing involvement in the public healthcare sector. It has also become home for many actuaries. Involvement has evolved from primarily private healthcare to increasing involvement in the public healthcare sector. It has also become home for many actuaries. Involvement has evolved from primarily private healthcare to increasing involvement in the public healthcare sector. It has also become home for many actuaries.
provided their assistance in these projects and have actively engaged with government to ensure that the derived approach to national healthcare takes into consideration the insights that actuaries have into demographics, finances and economic factors. In Namibia and Zambia, actuaries have also been actively involved in costing and strategy development of national healthcare systems, calling on actuaries from other parts of the continent to provide their insights.

This can also be seen within government-supported medical aid schemes that now frequently seek the services of healthcare actuaries for their financial management. Given the significant portion of the formal sector working within government institutions, the role of government medical schemes has become pivotal to successfully introducing sustainable and efficient nationwide healthcare solutions.

The African healthcare landscape is as diverse as its economic and socio-cultural landscape with varying levels of funding and provider care. Operating in different countries comes with varying challenges and a strong requirement to remain flexible and able to learn rapidly to provide relevant solutions.

Actuaries such as Ms. Fatima Badat (Senior Manager at Ernst & Young Africa Advisory Services) and Mr. Barry Childs (co-CEO of Insight Actuaries and Consultants) have been actively involved in both the private healthcare sector and in assisting government to define funding models, optimal reimbursement structures, and financing policies for national healthcare. They have briefly shared their experience and insights from performing actuarial healthcare work in Africa.

Both Mr. Childs and Ms. Badat have pointed out that the initiatives implemented in each country and their success are heavily dependent on the current state of healthcare and supporting facilities and structures. Health is inextricably intertwined with many other aspects of society such as clean water, sanitation, education, and employment. Many countries are able to achieve significant health outcomes with limited healthcare resources because they have taken care of essential basics such as those mentioned above. However, national healthcare reform is still a lengthy process that requires thorough consideration of all the factors that contribute to the development of an enabling environment.

**Unique Contributions by Actuaries to Healthcare in Africa**

Ms. Badat pointed out that within the developing nations, the role of the health care actuary has expanded and evolved significantly. Within Africa, health care actuaries play an important role in developing, valuing, and monitoring innovative health insurance products such as gap cover, hospital cash-plans, medical aid cover, etc. Strategically, actuaries have further embarked upon development of innovative health care solutions targeted at low-income earners and informal employees so as to increase the access to health care funding within Africa. Actuaries have also taken on a role in policy and strategy development.

Barry Childs says of the unique skills actuaries have to offer to ensure sustainable national healthcare, “we understand how to structure sustainable funding mechanisms for healthcare systems, as well as how to structure benefits, pricing, and provider reimbursement structures. We also understand how to assess the impacts of policy on the healthcare environment. And our ability to work with varying levels of data are invaluable to ensure healthcare systems are meeting their desired objectives.” The value actuaries are bringing to the table is clearly invaluable and provides structure and “science” to problem solving very difficult and challenging problems.

Mr. Childs and his team have moved beyond simply providing price and benefit design advice into measuring quality and value, profiling provider efficiency, and developing tools for market stakeholders to better measure their risks. They are also increasingly involved in the interactions between funders and providers to assist them in exploring alternative reimbursement models in a mutually beneficial basis.

**A Quick Look at the Private Sector and Resource Allocation**

In South Africa, actuaries working in private healthcare insurance companies have provided their assistance to ensure that the nation can leverage off of the learnings from those in the private sector as well as to maximize the utilization of resources. Understandably, the existence of a private sector is still necessary, especially in the African countries that are only beginning their journey to a comprehensive and reliable national healthcare solution. The actuaries within private companies have been forthcoming to also understand what the implications on their businesses would be, especially in the markets where private insurers are the main healthcare funding providers for individuals.

A lot of the work currently being done by actuaries sits in the private sector but will hopefully assist government as it seeks optimal health solutions for the nation. Even as much of the technology and innovation in healthcare comes from the private sector, its implementation in the public sector is essential. The private system can also act as a ‘competitor’ to a public system by showing an alternative by delivering excellent quality care affordably, and thereby holding the public sector accountable. It is clear from the experience of actuaries in both sectors that performing the current functions in both public and private sector concurrently is necessary to ensure a continually improving healthcare system.

Given the current shortages of healthcare professionals in the nation, with a greater weighting towards the private sector, public-private partnerships will be required to ensure there is a fair distribution of healthcare personnel across the nation. African actuaries have already performed research and modelling exercises in task-sharing and task-shifting to ensure optimal utilization of healthcare professionals. This, if effectively implemented, may result in a reduction of costs associated with running a national healthcare program.

**A Word of Wisdom**

Having extensive experience in the actuarial healthcare sector, Barry Childs advises those looking to get more involved in this area to supplement their actuarial training with an understanding of health economics, and other wider fields. The solutions in healthcare are elusive and difficult, but extremely rewarding.

Ms. Badat supported this, saying skills in these wider fields "are directly transposable to the health care arena, and it is imperative that health care actuaries practicing within emerging markets begin to develop these broader actuarial skills." Ms. Badat pointed out (and cautioned) that actuaries are "by no means business and economic experts, nor are health care actuaries clinical experts". Collaboration across
various professions such as economists, statisticians, demographers, health care professionals, politicians, and actuaries is vital in order to develop a comprehensive understanding of the health care complexities inherent within each nation and to collaboratively produce synergized solutions and strategies in achieving universal, efficient, appropriate, and cost-effective health care.

Ms. Badat rightfully says the key to the success of an actuary in the healthcare space (and of many things in life) is "successful health actuaries are those that are following their passion. If health is your passion, then immerse yourself and know no boundaries."

A special thank you to Fatima Badat and Barry Childs for taking time to discuss the work they are doing in this space.

Actuarial Cs “Cees” and Diversity
Tawanda Chituku

An interesting presentation was done by Darryl Wagner of Deloitte USA at the diversity conference during the ICA2014 conference held in Washington DC about the actuarial skill sets that Employers seek. The discussion that ensued was thoroughly entertaining, as the initial skill set presentation led to the adoption of ‘actuarial Cs’.

The original list of skills as presented by Darryl included: (i) Calculus (ii) Computer stuff (iii) Context (iv) Communication (v) Common sense (vi) Connecting the dots (vii) Confidence. These all seem nice and tidy as indeed they all start with letter ‘C’. Huge emphasis was placed on the last three on that list, as their absence is the chief culprit regarding why actuaries are rarely viewed as business savvy individuals.

On throwing this to the panel, which had caught on to Darryl’s theme of ‘Cs’, a whole additional list of ‘Cs’ was developed: (viii) Collaboration (ix) Commitment (x) Critical Thinking (xi) Coaching (xii) Community (xiii) Curiosity (xiv) Caveats (xv) Challenge (xvi) Creativity (xvii) Committed beyond calculations; phew, but hang on... and finally...

- Chinese
- Ethics (We almost had to call it ‘CEthics’ to fit in 😊)

I need to explain Chinese a little bit. One of the attendees of the diversity conference gave testament to the dedication shown by Chinese students, i.e., they pass exams quickly, have strong programming skills, and work fast and hard. So there you have it.

The discussion realised that serious investment would have to be channelled, in an organised way, to promote that attainment of the above skills. The International Actuarial Association should ideally take it upon itself to groom members towards the attainment of these skills. Institutionally, it will probably be best to form sub-committees dedicated to the development of the above skills, which could still be called the ‘Cs’, but that is just Darryl and me really. Let me turn to diversity briefly.

Diversity

Another interesting presentation by Themba Gamedze explored the topic of diversity in the provision of actuarial services, which basically implies that we have to depart from services that are based on a ‘house view’ or ‘imported view’ or ‘one-size-fits-all’ type of service. Themba presented that diversity aims to draw in the various views of stakeholders, to endeavour to understand them, and then to develop solutions that embody respect for other people’s business views. Those who are used to business will agree that sometimes our mindset is challenged on things such as complex mathematical approaches, communication, failure to follow-up our calculations with credible solutions, unwillingness to back-test our previous results, or a failure to adequately capture an evolving business. This is where diverse views come from.

Someone might question what the purpose of diversity is in such a tightly regulated financial services sector where everyone must toe the line, essentially. Added to that is the realisation that the aspect of diversity is a mountain climb for a lot of us. To put us out of our misery Themba developed a three point response to the issues surrounding diversity:

### Practical steps towards making it happen

**Key lessons [as an actuarial association]**
- Stay/become attractive to the top talent
- Follow and champion our pioneers
- Watch where the consultants are working
- Challenge members to seek out the complex tasks

**Winning attitudes [as an individual actuary]**
- Regularly benchmark your skill set with real competition
- Believe in your superior training
- Scan beyond roles protected by regulation
- Be prepared to prove your worth...again and again

**End results [for the profession as a whole]**
- We should then achieve diversity, relevance and thereby... sustainability

There were plenty other interesting presentations in Washington DC. For those of you who would like the slides from the diversity conference, e-mail me on tchituku@atchison.co.zw or tawchit1@gmail.com, and I will gladly send them your way.