



A New Term



L-R: Maurice Whyms and Roma Burke

At our AGM in June, Maurice Whyms' term as President of the Society of Actuaries in Ireland came to an end. Over the previous two years, Maurice led with passion, wisdom and good humour. Keeping [2020 Vision](#), our 3-year strategy plan, front and centre, he steered the course and kept us focused and aligned in our many strands of work. He enjoyed engaging with members across all areas of practice and hearing their opinions. The inaugural President's Conference, on the theme "[Towards a Fairer Future](#)", was just one of his many successes. He was a wonderful ambassador for the actuarial profession and we are indebted to him for his great contribution.

At a recent members' meeting in Dublin, our new President, Sean Casey, shared his thoughts on extending the Society's influence and serving the public interest. He commented that actuaries are well used to taking a long-term risk-adjusted financial perspective and

that can be a very useful perspective to bring to any discussion. Afterwards he hosted an enjoyable networking reception. Sean will repeat the event in Cork on 8th October.

After a short summer break, our Council, Committees and Working Groups are now hard at work again, delivering on [2020 Vision](#). There are three core target outcomes implicit in the themes of [2020 Vision](#): strong member engagement; a high level of public trust in the profession; and high visibility for the profession, particularly among policymakers and current and future employers of actuaries. When I [presented the Year in Review](#) at our Annual Convention, I spoke about our activities in these areas over the previous year. A fuller [report](#) on progress to date on [2020 Vision](#), and our near-term priorities, is now available on our website – do take a look.

It would not be possible for us to achieve our

goals without the input of the many members who volunteer to participate in our work. A huge 'thank you' to all of you for your enthusiasm, commitment and hard work. And 'thank you' also to the many employers who encourage members to get involved and allow them time to do so.

If you have not yet volunteered, I hope that listening to this year's recipient of the Outstanding Contribution Award, Roma Burke, talk about the [personal benefits of volunteering](#) will encourage you to do so! And even if you are not in a position to volunteer at the moment, do feel free to send us your thoughts and ideas on what we do or should do – simply email info@actuaries.ie.

Yvonne Lynch, CEO & Professional Affairs Director

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SAI Annual Convention 2019

The SAI Annual Convention is the flagship event for the Society. With over 580 delegates in attendance this year, the turnout exceeded our expectations and it was wonderful to meet so many members and guests in one place. It was also wonderful to have, for the first time in the Society's history, videography being recorded for this event. Video recording has allowed the capture of that certain 'je ne sais quoi' that makes the Society so special. A huge thank you to all our members, speakers, delegates and colleagues here, who together

have all made the SAI Annual Convention such a huge success. We could not have done it all without you all!

A special 'thank you' goes out to Roma Burke and Lorcan Nyhan (Communications Clinic) who agreed to be the subjects of our first interviews (links to which you can see below). I would strongly encourage you to watch these 'bite-sized' video clips given the fascinating insights you can glean from them.

I would also like to express my gratitude to everybody who allowed the recording and distribution of video footage. Much of this footage is included in this edition of the SAI Newsletter.

Enjoy!

Brian Donnellan,
Head of Engagement and Communications

The Society of Actuaries in Ireland SAI Annual Convention Video, 2019



Video link: <https://youtu.be/9hZjntlg0C4>

[1 min: 57 s]

Interview with: Roma Burke Interviewer: Kevin Manning



Session Title	YouTube Link	Duration
1. Roma Burke: What does the Award Mean to You?	https://youtu.be/0QRdWXyeQac	[1 min: 57 s]
2. Roma Burke: Benefits of Volunteering	https://youtu.be/wLsAYjBxtUs	[1 min: 58 s]
3. Roma Burke: Getting Involved	https://youtu.be/wfCm2-lhAyg	[0 min: 51 s]
4. Roma Burke: Being an Actuary	https://youtu.be/TxkxVGKoNvc	[1 min: 15 s]
5. Roma Burke: Role of an Actuary in Wider Society	https://youtu.be/cfMQ0YYlkeY	[1 min: 43 s]
6. Roma Burke: Role of SAI in Adding Value and in Public Debate including Dignity in Retirement	https://youtu.be/PlIxmW1qNi8	[1 min: 35 s]

Interview with: Lorcan Nyhan, The Communications Clinic Interviewer: Kevin Manning



Session Title	YouTube Link	Duration
1. Perception of Actuaries Relative to Other Professions	https://youtu.be/RNGzd7RssKc	[1 min: 20 s]
2. Key Soft Skills to Focus On	https://youtu.be/o6X6_Hvt040	[1 min: 14 s]
3. Underlying Communication Skills (Development & Application) Throughout Your Career	https://youtu.be/EM7tsp9New	[0 min: 52 s]
4. Networking Quick Tips	https://youtu.be/CjHU2Vru25M	[1 min: 04 s]
5. Networking – Tips to Continue or Exit Conversations	https://youtu.be/8YGJ5BruUpA	[1 min: 05 s]
6. What is Your Professional Brand	https://youtu.be/O8jj5WlonGM	[1 min: 22 s]
7. Learning & Investing in Communication Skills	https://youtu.be/PLCnPB4zv5E	[1 min: 45 s]

SAI Annual Convention 2019



Maurice Whyms
(SAI President 2017-2019)



Yvonne Lynch (SAI Chief Executive
Officer & Director of Professional Affairs)



Sheelagh Malin
(SAI Vice President 2019-2021)



Launch of the SAI Competency
Framework



L-R: Maurice Whyms and Paul Craven
(Keynote Speaker)



L-R: Maurice Whyms and
Roma Burke

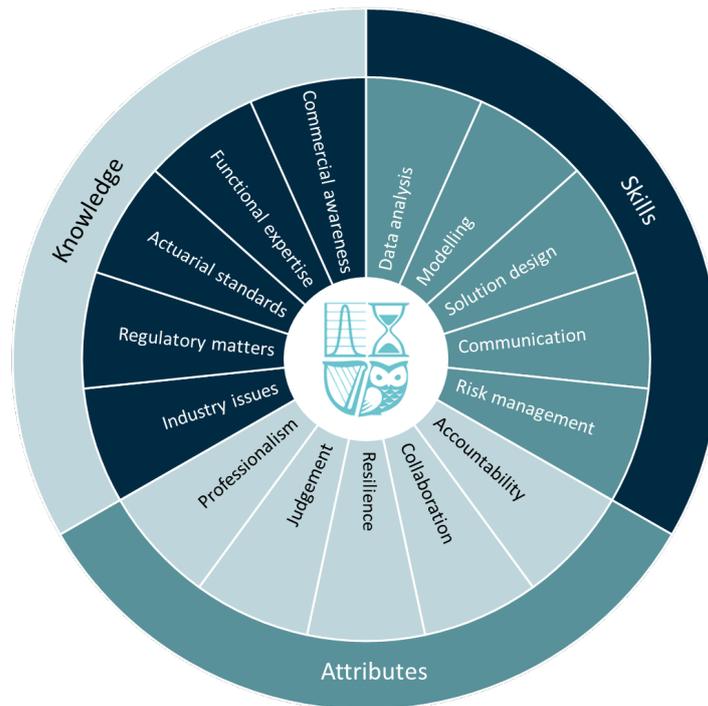


L-R Darragh Pelly and Paul O'Callaghan



Member Networking at the SAI Annual Convention

Launch of SAI's Competency Framework



SAI Competency Framework

This year's Annual Convention saw the launch of the SAI's new Competency Framework. Sheelagh Malin presented at the plenary session about the SAI's strategic goal, within [Vision 2020](#), to establish a framework for actuaries that defines the range of technical and non-technical skills typically required for various roles. Many professions have competency frameworks as a guide to help their members see the broad range of skills required and potentially link with their continuous professional development programme. This competency framework is designed to support members in their current and future professional development.

Eoin Haugh led the team that developed this competency framework over the last 2 years with regular updates to and feedback from Council and SAI Committee members. The criteria, for developing the tool, were that it be simple and easy for actuarial and non-actuarial audiences to use. It was also designed to take a broad approach to lifelong learning and be relevant to all members, regardless of their role or length of time in the profession.

What is it & where can I find it?

The framework can be used as a self-assessment tool, as there are competency definitions within the framework that give an indication of appropriate capabilities and behaviours across three competency levels – core, expert & master. See <https://web.actuaries.ie/about/sai-competency-framework>

The purpose of the competency framework is to:

- Support members in the identification of their learning and development needs, in relation to both their current role and any future roles to which they aspire. By reviewing the detailed competencies within the framework and considering (together with a line manager, for example) what competencies might typically be expected for a given role, members can identify gaps in their own current competency profile.
- Facilitate members in identifying which parts of the Society's Continuing Professional Development programme are relevant to the development and enhancement of specific competencies.
- Promote the profession to external stakeholders. In support of this, the competency wheel has a prominent role on the website and in marketing material used to promote the profession.

How can you use it?

The framework is a personal assessment, not a scientific one. The framework can be used to support mentoring and coaching focused on developing a wide range of capabilities. Members can use it to assess their own competency level versus expectations for their current or a new role, to identify potential development areas, or where to focus their CPD training. It has multiple purposes in terms of promoting the valuable combination of skills actuaries can bring to organisations and highlighting to employers the wide range of roles that actuaries can potentially fill. This is another tool to assist members in their professional development, rather than a new requirement on members.

Each competency in the tool has definitions of core, expert and master capabilities, which can be used to facilitate discussion or reflection on your own skillset. One important point discussed at the session at the Convention is that your levels of competence across the skills, knowledge and attributes, is skin to a signature that changes over time and depends on the nature of your role. For example, technical competence increases as additional knowledge and skills are acquired and more experience gained. However, if you move from a technical role to a more general management role, the 'use it or lose it' principle may mean that some of your technical competencies reduce, while attributes such as judgement and collaboration increase.

This is an important tool to promote the value of lifelong learning and complement the Society's professional development programme. The Lifelong Learning Committee will be developing further supports and guidance on how the tool can be used in the coming months.

Lifelong Learning Committee

Additional Links

- [Introduction to the New SAI Competency Framework – YouTube Video](#)
- [PDF Slides](#)
- [Podcast Link](#)

The Actuarial Profession in Ireland

An actuary is a professional with a skill set to use numbers to make judgments about the future. Actuaries design solutions to problems that involve risk or uncertainty. Actuaries have strong analytical skills and a thorough knowledge of financial theory, economics and the regulatory environment relevant to their role.

A brief snapshot of actuaries in Ireland

Over
1,900
members

Over
1,250
actuaries

33%
of members
are female

650
students

Industry Sectors

90% of our members work in the insurance and pensions sectors

56%

Life Assurance,
Investment and
Pensions

20%

General
Insurance /
Reinsurance

3%

Healthcare

11%

Pension Consultancy

5%

Asset Management

5%

Other

In addition, a growing number are expanding into other fields such as data analytics, aviation finance, banking and international health financing, where an actuary's analytical and risk management expertise adds considerable value.

"Actuaries have incredible mathematical, commercial and communication skills. Actuaries are using these skills to great effect in our business to build financial models to manage risk, measure profitability and build our business."

Mairead O'Shea
Senior Manager, Permanent TSB

Much Irish actuarial work is international in nature, providing Irish actuaries with a broad international outlook and experience.

"The Society of Actuaries in Ireland supports members in maintaining high standards of professionalism as well as excellent technical skills. We are proud of the strong reputation that Irish actuaries enjoy around the world and we aim to ensure that it continues to be well-earned."

Yvonne Lynch
CEO, Society of Actuaries in Ireland



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Actuarial Education in Irish Universities

In Ireland, most actuarial students complete a degree or other third level education as the first step to becoming an actuary. Following this, the majority of actuarial students work while studying for the exams of the Institute and Faculty of Actuaries.

6

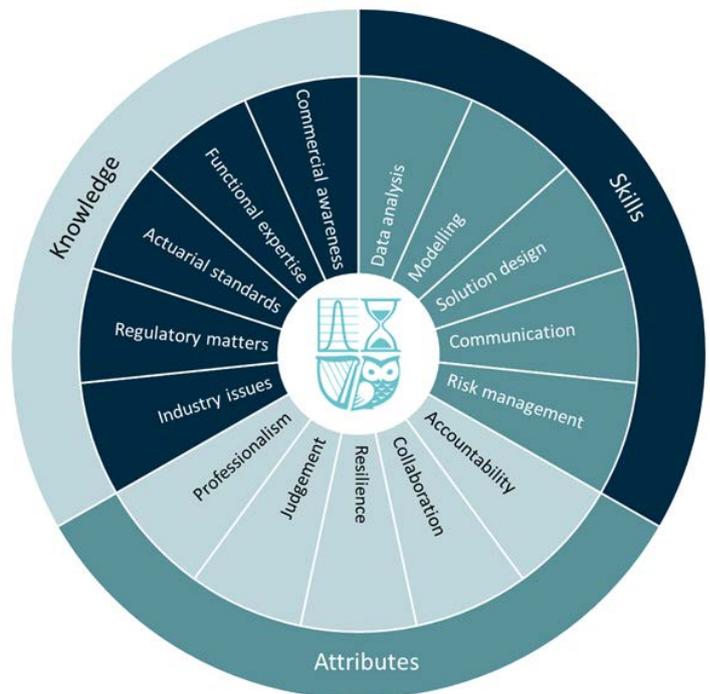
universities offering actuarial degree courses

120

university graduates entering the actuarial workforce in Ireland each year

Society of Actuaries in Ireland Competency Framework

The Society of Actuaries in Ireland has developed a competency framework comprising the knowledge, skills and attributes that actuaries typically draw on in their work.



"Multinational Insurance firms recognise the significant positive contribution of Ireland's actuarial profession to the performance and governance of the Insurance business across a broad range of functions."

The availability of high quality actuaries, from graduates to C level, is a significant factor in attracting, and retaining, firms here."

Aidan Holton
CEO, Monument

A Selection of Companies Employing Actuaries



The Society of Actuaries in Ireland is the professional body representing the actuarial profession in Ireland. The Society is dedicated to serving the public by fostering the highest standards of professionalism and competence in actuarial practice.

September
2019

Fellowship Ceremony February 2019

Since 2017, over 100 students have qualified after successfully completing all of the actuarial exams. The Society celebrates their success with Fellowship Ceremonies throughout the year. On 21st February 2019, the President, Maurice Whyms, welcomed 33 of these new qualifiers, together with their guests, to a Ceremony and Reception in the Royal College of Physicians in Ireland.



Names of New Qualifiers (Back to Front, Left to Right):

Ross Byrne, John Byrne, Wesley Hunter, Kailem Gourley, Matthew McCaffrey, Shane Costello, Niall O'Mahony, Eimear Tyrell, Thomas Feeney, Emmet Carr, Laura Curtis, Stephen Hughes, Rory Sloggett, Padraic McDonagh, John O'Hara, Sarah Manning, Rececca O'Connor, Sandra Heaslip, Declan Sharpe, Ian O'Donnell, John Kenny, James O'Regan, Lesley-Ann Carew, James Horan, Richard McKeon, Rachel Kelly, Sarah Whelan, Jesse Power, Sarah Boardman, SAI President, Maurice Whyms, Eoghan Murphy, Therese-Rose O'Doherty, Michaela Larkin, Shane Fitzgibbon.

Actuaries of The Future

I feel very grateful, very lucky and privileged to be part of the Bachelor of Actuarial & Financial Studies (BAFS) degree in UCD - a degree that attracts such an amazing bunch of students. These are students with great potential. Many become actuaries, and it's wonderful to see when they use this potential to expand the depth and breath of our profession, something that's not just good for them but also for us as a Society too.

At our Annual Convention last May, eight of the 1st and 2nd year BAFS students presented material from their group projects that investigated the wider usefulness of the actuarial skillset. If you missed the event, I'd recommend taking a look at the YouTube videos (please see the relevant links below).

I'd like to thank the Society for the opportunity that they gave to the students - for a number

of reasons. The videoing of the event enabled the students to get accepted and give their presentations virtually at the recent Actuarial Teachers & Researchers Conference in the UK in June. Their presentations were widely praised at the event.

Colm Fitzgerald



UCD Students

L-R: Louise Gannon; Marina Cunningham; Scott McElhinney; Krzysztof Wroblewski; Oisín Morgan; Ronan Coleman; Rebecca O'Mahoney. Absent from photo: David Watters.

ACTUARIES OF THE FUTURE – YOUTUBE LINKS:

Actuaries of the Future – Actuaries in Sustainable Development & Microinsurance: <https://youtu.be/SdqkqQlj-GQ>

Actuaries of the Future – Actuaries and Waste Management: <https://youtu.be/SLYrhxXRHUw>

Actuaries of the Future – Actuaries in Environment Finance: <https://youtu.be/olu3ojU0T-o>

Actuaries of the Future – Actuaries and Artificial Intelligence: <https://youtu.be/CjvbUDF6Q70>

Actuaries of the Future – Actuaries in the Energy Industry: https://youtu.be/ZTsQK9xLD_I

Actuaries of the Future – Actuaries in the Justice System - Calculating Criminal Punishment: <https://youtu.be/wlsieNHMo7k>



SAI President's Biennial Dinner

The SAI President's biennial dinner took place on Wednesday 8th February, hosted by Maurice Whyms at the Royal College of Physicians on Kildare Street. Maurice was joined by many members of the Society as well as guests from a range of organisations associated with the profession and the Society. The guest of honour for the evening was Fergus Finlay.

The occasion afforded Maurice the opportunity to extend a warm welcome to the assembled guests, especially those from Government, regulators, industry and other professions as well as the wider international community including Jules Constantinou, President of the Institute and Faculty of Actuaries.

Maurice's speech touched on a number of issues of particular relevance to the work of actuaries at the present time. He noted how actuaries have contributed to the successful implementation of the Solvency II regulatory framework, which has strengthened the operation of insurers and he welcomed how the Central Bank views actuarial reporting as a key tool in the supervision of the insurance industry. He commented on the Society's commitment to helping members to develop and grow their skills and knowledge to perform effectively in actuarial and risk management roles and to equip themselves for forthcoming changes to the Solvency II framework and the newly emerging IFRS 17.

The area of pensions has been especially busy with the Government's wide-ranging Pensions Roadmap along with the new IORP II Directive. While we await further details on a number of key initiatives, Maurice emphasised the critical importance of operating our unfunded state pension on a sustainable basis and highlighted concerns around the continuing downward trend in private sector supplementary pension coverage, with one recent study estimating coverage may be as low as 30%. The proposed new auto-enrolment scheme aims to address this coverage issue and, although there are still important design aspects to be thought through, Maurice stressed the need to keep a push on to make this new scheme a reality. He also welcomed the increased focus on governance and risk management that IORP II will bring about.

The objective for many defined benefit schemes involves the achievement of an orderly run-off of their liabilities and Maurice spoke about how this task was being made all the more difficult by the sustained low interest rate environment.

Mr Finlay, columnist, author and recently retired CEO of Barnardos, is certainly someone who isn't afraid of a new challenge. He had his very first meeting as a new director of the HSE the morning after the SAI dinner.

Fergus gave a warm and engaging speech and began by promising the audience he would give them a night off from Brexit. He covered

a number of areas, ranging from entertaining tales from his time in politics, involving one or two former Taoisigh, to the recent heart-warming story of how the Lakers Charity in Bray literally rose from the ashes following a fire and now provides a wonderful facility for hundreds of children with special needs.

Fergus focussed in particular on an issue which he believes does not receive sufficient attention, but which he felt could benefit from some forward-looking actuarial analysis. He spoke about disadvantaged children starting life in very dysfunctional environments and how frustrating it is that the State provides very limited and inadequate support in their critically important early years, while then having to spend far more on intervention at a later stage to address the problems that inevitably ensue. Aside from the very important social consequences of this approach, Fergus argued it also makes little sense from a purely financial perspective and represents an area where some quality financial analysis could add hugely to the debate. Against a backdrop where the Society has been promoting the benefits of volunteering in the not-for-profit sector, this one example certainly had one thinking whether there are more areas where the actuarial skillset and a long-term perspective could make a valuable contribution.

**Maurice Whyms,
SAI Immediate Past President**



Photos top of page: SAI President's Biennial Dinner Reception at the Royal College of Physicians, Dublin; L-R: Colm Fagan (SAI Past President); Prof. Niamh Brennan (HonFSAI); Sylvia Cronin (Director of Insurance Supervision, CBI) and Pat Healy (SAI Past President);

L-R: Fergus Finlay (Keynote Speaker) and Maurice Whyms (SAI Immediate Past President).

Photos bottom of page: L-R: Maurice Whyms (SAI Immediate Past President) and Clair Whymys; L-R: Ben Kemp (Institute & Faculty of Actuaries); Yvonne Lynch and Clifford Friend (Institute & Faculty of Actuaries); L-R: Olive Gaughan and Pat O'Sullivan (CEO, Life Insurance Association Ireland); L-R: Maurice Whyms (SAI Immediate Past President) and Tom Ross (HonFSAI).

An Interview with Sinead Browne



Sinead Browne - Boxing (2018)

Sinead Browne has been practising as an Actuary for over ten years now, first joining the SAI back in 2008 as a Student member. Her career has seen her working both in Ireland and the UK and she has presented at SAI events, most recently in the March 2019 Graduation Programme, speaking on the subject of Professionalism within General Insurance.

Sinead, what first brought you to the Actuarial profession?

I think my route to the actuarial profession is similar to a lot of my peers – I liked maths and a teacher told me that it paid well! The exams didn't faze me because I knew that most professions had some level of exams required for a professional qualification, so that was within my expectations. Compared to the time taken to become qualified and earn a full salary in other professions, an actuarial career even seemed to have quite a short lead-in. My motivation for continuing in the profession is far different to what brought me here but that's a different question!

Your ease of engagement with the new Graduates at our Graduation Programme was palpable. Do you enjoy public engagements like this, encouraging new generations to follow the Actuarial path?! I really enjoy any form of public speaking

and I think it's important to be part of these events, not just to contribute to the SAI but also to keep in touch with the new generation of actuaries to see what they are interested in and concerned about. They have seen a lot of technology-driven change over the last few years and they are most likely to be the people who will come up with innovative solutions to help actuaries thrive in the current ever-changing environment. I go to these events to share some of my knowledge and experience but inevitably end up learning from the participants and coming back energised and enthused: this is my evidence to support the hypothesis that there is no such thing as a selfless good deed!

Having had the pleasure to listen to you speak at the Graduation Programme, and hearing you network with some of our newest qualified members, it was obvious you have the passion and energy to complement your professional career with diverse extra-curricular activities. Travel was obviously one of your greatest passions. Can you give us some insight into your expeditions about the globe and how you feel that adds to or complements your professional career?

I've always loved to travel. I took part in a number of youth exchanges around Europe with my drama group on Easter and summer holidays while I was in school. Those experiences taught me how fascinating the

common human thread is – you can meet like-minded people anywhere in the world, regardless of cultural differences. Since then, I have taken every opportunity I can to travel, both solo and with my husband, and each time, I have returned with a new perspective in some way. I don't travel in a competitive way – while it is a fun exercise, my key goal is not to tick these countries off a list – I travel because I am fundamentally curious and the best learning experiences can be found outside your comfort zone. This is very relevant to the professional environment, where being curious and having a willingness to learn are some of the key traits of our most successful leaders.

You are about to go take a sabbatical again, where are you off to next?

Japan is our first stop for the Rugby World Cup. We have our fingers and toes crossed for Ireland but no matter what, it will be a great experience. Our plans post-World Cup are to travel around Asia for a while because it is a huge part of the world that we have yet to fully explore. A trip to Myanmar last year reawakened our long-held fascination with this part of the world and was the genesis behind our decision to leave our jobs and travel for an indeterminate period. The plan is not to have a plan – to allow us to fully absorb where we are rather than always thinking about what is next.

You are also a keen sportswoman. Tell us about your boxing career and the world of elite training.

I'm definitely not at the elite level but I really enjoy training with coaches who are. Our coaches are world champion kickboxers so they have a wealth of experience, which they are thankfully willing to share with us. Since coming to London, I have had 2 white collar boxing fights – one win and one draw - and the whole experience was incredible. As cheesy as it sounds, I have made friends for life – there is nothing like getting punched repeatedly by someone and lying on the floor sweaty and exhausted post-training to develop a culture of mutual respect.

We know we will see you return to our midst again soon. What will be next in your professional career?

I am not sure! The only thing I know for certain is that my next job will be determined by the people I will be working with as much as the actual work I will be doing. I have had the pleasure of working with fantastic people throughout my career and I realised a long time ago that nothing is too challenging if you have the right people beside you. Whatever I do, my aim is to bring a level of energy and enthusiasm to my role that will motivate and inspire others to come on a journey with me.

Interviewer: Sheila Normanly



Sinead - Shark Diving (Cuba, 2017)

The Actuarial Skillset: Expanding the Role of the Health Actuary in Developing Markets

At the Society's Annual Convention, two members, John Armstrong and Eamon Kelly, gave an outline of their work in developing markets over the last 25 years. They work with governments and international organisations on healthcare reform. In this Q&A, they give an overview of their work and what makes it different to traditional areas of actuarial work.



They have wide experience in both developed and developing health markets:

- **Europe [16]:** Albania, Belgium, Bosnia, France, Germany, Ireland, Italy, Kosovo, Latvia, Netherlands, Poland, Russia, Spain, Switzerland, Turkey, United Kingdom
- **Africa [10]:** Botswana, Egypt, Ethiopia, Kenya, Mauritius, Morocco, Nigeria, Rwanda, South Africa, Uganda
- **Americas [9]:** Belize, British Virgin Islands, Canada, Jamaica, Peru, Saint Lucia, Suriname, Trinidad & Tobago, United States
- **Asia [12]:** Bangladesh, Cambodia, India, Israel, Jordan, Pakistan, Palestine, Philippines, Qatar, Uzbekistan, Vietnam, UAE
- **Rest of World:** Australia

How did you first get involved in this type of work?

EK: After a career in the corporate sector that took me from Ireland to Australia, I took a year-long sabbatical in 2008 to run a health microinsurance program in the slums in Mumbai in India. After that I began to work primarily in developing markets as a freelance actuary.

I now work mainly in emerging & developing markets, from setting up inclusive insurance programs with NGO's, to consulting work with private insurers, and providing technical assistance to governments on major policy reform initiatives.

JA: Back in the mid-1990s, while studying as a health economist in the United States I was asked to work with some of the international organisations based in Washington DC. When I came back to Ireland I began a traditional

health actuarial career, but I have continued to devote as much time to international development work as I can.

My first project was in Jamaica, undertaking some foundation work for establishing a state-run National Health Insurance system, which was introduced some years later. Since then I have worked in over 25 countries all around the world.

What are your motivations for this work?

EK: I started in this sector as I wanted to try and find a way to use my skills in a manner that could lead to some positive impact on people's lives. I like the variety of the work and the challenges of working in different countries with many different stakeholders (many of whom have never heard of an Actuary). Sometimes I wonder about the real impact of my work, but there have been a number of initiatives that I am proud to have

been part of and that are still running in a sustainable and impactful manner.

JA: My motivation is somewhat similar to Eamon's. Of course, when I was younger, getting the opportunity to travel to places I might not otherwise get to see was exciting. This is still the case, but over time, seeing how my work can have a real impact on benefiting a wider population has become the central motivation. Of course, it should be understood that sometimes the policy work that you undertake does not get implemented, or may take many years to get implemented.

Could you tell us more about the nature of the work?

EK: The technical focus of the actuarial work often covers familiar areas like product & benefit design, pricing, capital management and reinsurance. However, the problems in those areas might be less familiar.

In my experience, there is often limited local technical capacity, so there is usually a need for capacity building. This can take time but is worth the effort as it helps create more sustainable solutions. Another challenge is the fact that solutions for one country can't simply be lifted into another. The best solution is one that is developed from the ground up, from and for that specific context.

JA: My work has been varied. Examples include estimating the cost of providing specific new benefits to the population (e.g. creating access to certain drug therapies) or projecting the cost of introducing a national health insurance programme.

I am often part of a cross-disciplinary group of experts, perhaps including doctors and medical experts, public health experts, senior officials and policy experts from both the Ministries of Health and Finance, together with health economists and, of course, actuaries. Working with such a diverse group provides a fascinating opportunity to gain more knowledge in areas outside your expertise.

How is the work different from traditional actuarial work? What are the specific skillsets required?'

JA: On one level the skillsets required are no different than those required by all actuaries in their work in Ireland. However, what is different is how these skills are applied. While communication skills are crucial in all actuarial work, this is perhaps even more pronounced in these projects where local counterparts are unfamiliar with our profession and what we do. Communicating proposed solutions in non-technical language is essential. Similarly, stakeholder management is crucial. You are dealing with choices that can lead to real impacts for people. You also need to keep your independence, while managing the expectations of other stakeholders who may be politicians or political appointees.

EK: The key difference is the need to develop simple solutions to complex problems, that can be easily implemented, and to be able to communicate them clearly and effectively. It's

very important to consider the context and operational aspects of a programme, as you can develop a 'perfect price estimate' that will be quickly inadequate if operations are poorly managed.

It's important to think creatively and bring things back to first principles to develop simple solutions. When I first went to work and live in India (where I was managing a community-based health insurance program), I was often presented with a problem and then expected to supply the solution when I didn't know what it should be. My approach was to bring things back to first principles and let the solution emerge that way. I often felt that I needed to "unlearn" what I had known before, except the core principles of insurance.

One of the benefits of being an actuary is understanding how the many aspects of insurance interact with each other and how a problem in one area (such as sales) can lead to issues in another area (such as claims).



Photos from top, left to right: Technical Assistance (TA) programmes undertaken by Eamon Kelly in Afghanistan (2019); Jakarta (2019); Trinidad & Tobago (2019); Zimbabwe (2019) and Vietnam (2015).

The donors/beneficiaries in each case were respectively: [USAID/Ministry of Public Health] (Afghanistan); [DFID/AITRI/OJK] (Jakarta); [DFID/Insurance supervisors in the Caribbean] (Trinidad & Tobago); [DFID/A2ii/IPEC] (Zimbabwe) and [USAID/Vietnam Social Security/Ministry of Health] (Vietnam)

Tell us a little about some of the problems and practical issues you have come across in your work.

JA: Data gathering is a bigger problem in this environment. Often primary data, from the ground up, will need to be collected as no other data exists. This will involve survey work; hunting down data from many disparate sources; and being prepared to get your hands dirty in compiling and manipulating data. Paper patient records are still commonplace and may need to be transcribed into useable form for analysis.

There are also challenges arising from being the only actuary allocated to a project. There are always situations when you would welcome the input of a colleague and there are times when formal review is required from a professional point of view. I have often used my wider actuarial network to help solve this challenge.

EK: As an actuary you may be employed directly by an international development agency or indirectly via a development consultancy who have their own specific objectives. Those objectives will often need to be balanced against those of local government and non-governmental stakeholders, such as the public, ministry of finance, healthcare providers and others.

As John says, data is usually a critical issue. Often systems are manual or at early stages of transition to digital. In some markets there is a split type of market with mass presence of mobiles and some digital infrastructure alongside traditional paper-based systems.



John Armstrong, Consultant Actuarial Scientist (European Union Project) to the Ministry of Health and Wellness - Saint Lucia

Can you tell us a little about the case studies you presented?

JA: The two case studies I presented sought to bring out how actuarial skills can help tackle important topics while presenting opposing outcomes: one success and one less successful.

The first was a project I did in Bosnia Herzegovina in the late 1990's shortly after the war in the former Yugoslavia. I was asked to come up with a method to disperse government health funds between the cantons in the Federation of Bosnia Herzegovina. This was considered a tricky, and controversial, assignment, not least because the 10 cantons had ethnically diverse population profiles. The Dayton Peace Agreement had not succeeded in addressing this issue. Using various statistical measures, such as age profiles, income distributions and illness prevalence, I was able to get an agreed approach from each of the cantons to disburse funds. Twenty years later, this is the single project of which I am most proud.

The second case study dates from the 2000's when Jacob Zuma, just before he became South African President, proposed the introduction of national health insurance (NHI). I was part of a team reviewing the projected costs, which were very high, with the aim of trying to facilitate a compromise. It is a source of disappointment to me that still no NHI arrangement has been introduced in South Africa, with limited debate on a more realistic proposal. However, since our Convention in May the South African government has finally produced a draft, albeit from what I can see, an imperfect legislative Bill to introduce NHI.

EK: The two case studies I presented were about very different projects I worked on; the design and set-up of a new inclusive insurance project in the slums of Cairo and technical assistance to an existing large-scale social health insurance scheme in Vietnam. The case study from Cairo, Egypt, was a composite health and life insurance product for low income people living in the urban slums. This began with institutional assessment, detailed client and market research up to pilot launch, roll out and evolution to family cover. The product was initially launched in late 2015 on a small scale (less than 10,000 persons insured) and is now transforming to cover families with target coverage of over 1 million people. I was able to use my actuarial skills to provide advice at various stages of the project, well beyond the pricing dimension.

The second case study is from Vietnam, where I have been working and advising the Ministry of Health and Vietnam Social Security for over 3 years as they implement policy reforms and a new management information system for the Social Health Insurance scheme. I have also advised on financial planning and costing of major changes to the health insurance law. This involved working with huge datasets (e.g. Ho Chi Minh province has over 14 million outpatient visits in one year) and with multiple government and non-government stakeholders over an extended period of time.

What lessons and insights would you share with actuaries who would like to do non-traditional work?

JA: Non-traditional work is a great opportunity to learn new things, an opportunity I would encourage you to embrace. It will be worthwhile both for your professional and personal development. As for lessons learned – remember that you won't know all the answers, and remember especially that you are a guest in the country and are working with people who have considerably more expertise than you do on their own health system.

EK: I would recommend getting involved in work of this nature. It will challenge you to think laterally and creatively to address real world problems. It's very important (especially in health) to consider stakeholder incentives and behaviours, as poor behaviours can totally undo any 'super actuarial work'. But it is worth remembering that insurance can actually be a very positive force for good, if designed from the customer perspective and implemented well.

Interviewer: Brian Donnellan

For a link to the presentation delivered by John and Eamon, click on the links below

- [Presentation: Health Actuaries in Developing Markets: Techniques & Financing Models](#)
- [Podcast: Health Actuaries in Developing Markets: Techniques & Financing Models](#)

¹The new SAI Competency Framework provides an important reference for actuaries on this general topic. This is available at <https://web.actuaries.ie/about/sai-competency-framework>



Society of Actuaries in Ireland

Seminar for New Students

Date: Wednesday, 2nd October 2019

Venue: Radisson Blu Royal Hotel, 8 Golden Lane, Dublin 8

Gain an insight into the actuarial exams, the profession and working and studying as an actuary

Times:

- Registration & Tea/Coffee: 2.30pm - 2.45pm
- Seminar Commences: 2.45pm - 5.30pm
- Drink & Finger Food Reception: 5.30pm - 7.00pm

This is a free event open to:

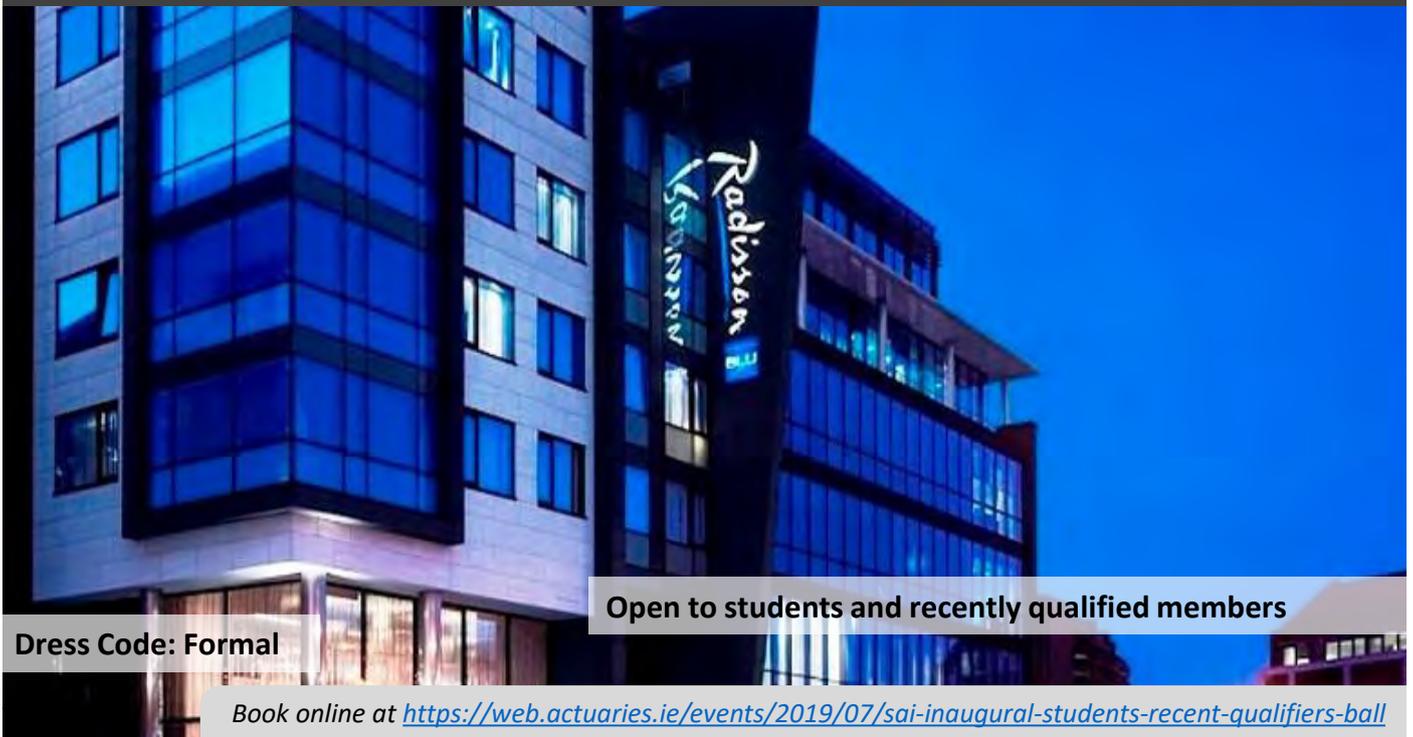
- Students who have joined the Society during the last year
- Students who intend to commence the actuarial exams, but have not joined the Society as yet

Book online at <https://web.actuaries.ie/events/2019/08/seminar-new-students>

SAI Inaugural Students' & Recent Qualifiers' Ball

Date: Friday, 1st November 2019 at 7.00pm

Venue: Radisson Blu Royal Hotel, 8 Golden Lane, Dublin 8



Open to students and recently qualified members

Dress Code: Formal

Book online at <https://web.actuaries.ie/events/2019/07/sai-inaugural-students-recent-qualifiers-ball>

Banking and Aviation Finance Committee

UPDATE ON THE COMMITTEE'S WORK IN PROMOTING THE ROLE OF ACTUARIES IN AVIATION FINANCE AND BANKING.



The Banking and Aviation Finance Committee is a sub-committee of the Wider Fields Committee.

This article provides a summary of the progress of the Banking and Aviation Finance Committee in relation to its objective by chronicling the presentations, networking opportunities, and papers organised by the committee over the period from June 2018 to June 2019.

The remainder of the article is divided into two parts: (i) Aviation Finance and (ii) Banking.

AVIATION FINANCE

In relation to the area of aviation finance, the committee's objective is to help forge links between the traditional actuarial world and the universe of aviation finance.

June 2018

Aengus Kelly, Chief Executive Officer, AerCap gave a presentation to the Society which provided the audience with an overview of the aircraft leasing industry in Ireland, the competitive landscape, and its impact on the Irish economy. Aengus outlined the growth in air travel, aircraft supply and demand, and the key business principles which make AerCap the global leader in aircraft leasing and the largest owner of commercial aircraft in the world.

October 2018

A member of the committee, Yuecong Wang (Adia), organised the committee's first networking event, at which participants were given an opportunity to meet actuaries and accountants working in the banking and aviation finance industries. Participants moved between eight stands to listen to a short presentation from the banking or aviation speaker at each stand. Each presentation was followed by a brief question and answer session. Speakers shared their

experience of how they transitioned from mainstream actuarial work to roles in the aviation finance and banking industries.

November 2018

Ruth Kelly, Chief Executive Officer, Goshawk, one of the world's leading aircraft leasing companies, spoke about the company, the sector and the role for actuaries in aircraft leasing.

December 2018

Two members of the committee, John Caslin and Jane Gleeson, wrote a paper entitled "Selling Aviation Debt Securities to EU Insurance Undertakings. A salesperson's dream or not?" and presented the paper to the Society on 5th December 2018. The paper briefly explored the attractiveness of aviation debt securities for the asset portfolios of life and non-life insurance undertakings and the Solvency II issues for EU insurance undertakings investing in certain types of aviation debt securities.



January 2019

The main conclusions of the above paper relating to Solvency II issues for insurance undertakings were presented by John Caslin and Donal O'Brien to the Airline Economics Growth Frontiers Conference, which was held in Dublin on 21st January 2019. The paper was received very positively and certainly got profile in the aviation finance industry. All borrowers like competition for their funding needs. Airlines and aircraft lessors are no different. They are always looking for diversification of the sources of funding. There is now a realisation in the aviation industry that issuing debt securities which would be suitable for matching annuity liabilities may be an alternative source of debt funding.

April 2019

John Caslin participated in the keynote investor panel 'How to align the interests of European investors with issuers at the Ishka

conference Investing in Aviation Finance: Europe' in London on 10th April 2019. The panel was chaired by Joseph McGinley, Head of Investor Relations, at Aercap.

June 2019

Joe O'Mara, Head of Aviation Finance & Leasing, KPMG Ireland outlined Ireland's very strong position in the leasing end of aircraft financing and posed the question 'Where to next for Ireland in this space?' Joe also covered the significant anticipated funding needs of the industry over the next 20 years.

BANKING

In relation to promoting the role of actuaries in banking, the committee's objective is to help forge links between the traditional actuarial world and the banking industry.

November 2018

As part of a joint presentation organised by the Banking and Aviation Committee and Enterprise Risk Management Committee, Lynda Carroll, Head of Capital Allocation & Risk Based Pricing and Niall Dillon, Head of Capital Management at Allied Irish Banks plc, shared their latest insights on recovery and resolution in the banking industry with reference to regulatory issues. Developing a link between actuaries in banking and actuaries in traditional insurance work, Bridget MacDonnell, a consulting actuary, working at Milliman reviewed developments in the insurance industry in the one-year period since EIOPA issued its opinion regarding the need for a harmonised recovery and resolution framework for insurers across Europe.

June 2019

In a very engaging presentation entitled 'The Integrated Digital Economy is coming to every business', Fergal Coburn of Allied Irish Banks plc outlined his views on the pace of change in the digital world and how companies must be prepared for the undoubted impact on their survival.



Update from the Data Analytics Committee



Niall Mulvey and Jean Rea presenting at the SAI Life Forum 2019; Pedro Ecija Serrano presenting at the Annual Convention

In keeping with the increased focus and interest in data science and analytics, there were a number of events on the SAI calendar featuring data analytics.

Earlier this year at the Life Forum, Niall Mulvey from Hannover Re and Jean Rea from KPMG presented on the practical application of data analytics in a life insurance setting. The session proved to be very popular, with excellent attendance, which demonstrates the interest in this area. Jean opened the session with discussion of the current actuarial operating environment, which supports the case for use of broader tools and enhanced analytics within day to day actuarial work. She went on to discuss the modern actuarial toolkit, emerging skill sets given the rise of data analytics and data science programs, before moving onto R and how to get started. The remainder of her session focused on practical application of R to actuarial work in KPMG, which included Life BEL valuation models, calculation of non-life premium and reserve risk USPs, including statistical testing, visualisation using ggplot and reporting, using Rmarkdown.

For the second half of the session, Niall discussed application of data analytics to actuarial work in Hannover Re, in particular focusing on multivariate and GLM (Generalised Linear Models) analysis. Niall gave an overview of the techniques available for multivariate analysis including principal component analysis, singular value decomposition as well as useful principles such as Ockham's Razor. Niall discussed some of the theory and approaches to fitting these models, as well as motivation for using these techniques. Niall concluded his session with a practical example of calibration to CMI '08, which demonstrated selection effects and the ability to assess

variable importance through explanation of variance.

The SAI Annual Convention included a number of sessions in relation to data analytics, including a session presented by Pedro Ecija Serrano entitled 'Making the Most of a Data Science Team'. This session was recorded and is available on YouTube at <https://youtu.be/wHdEp8F00wU>.

All Convention sessions were well attended, including Jean's session entitled 'R for Senior Actuaries' where she provided live demonstrations of applications of R in KPMG's actuarial work including Rmarkdown for reporting of Solvency II technical provisions, statistical analysis in the context of USP calculations and statistical testing of underlying assumptions and a 'Shiny' app for calculation of visualisation of reserve uncertainty. Other sessions included the session on 'Good Practices in the Application of Predictive Analytics', presented by Eileen Burns & Eamonn Phelan. A session on 'Predictive Analytics: Validating the Black Box' was presented by Eoin Ó Baoighill & Eibhlín O'Kane. All sessions are available by podcast from the SAI website.

In April, Gráinne McGuire presented a cross-over event between data analytics and general insurance, showing how the LASSO (a form of regularised regression) could be used to automate the general insurance claims fitting process. This was illustrated using simulated and real data. A lot of the talk discussed the importance of feature engineering and getting this right – the LASSO model is only as good as the inputs it is given. Following questions after the talk, Gráinne has put together a tutorial on how to fit the model discussed to one of

the simulated data sets discussed in the talk. All the code (in R) and outputs are available at <https://grainnecguire.github.io/>

Other talks falling under the theme of data science included a pair of introductory talks – 'Demystifying Data Science' (Donal McGinley and Conor Byrne) and an 'Introduction to Artificial Intelligence' (Donal McGinley), which provided an overview of the field as well as a more targeted introduction to deep learning. Both talks included some examples of Python code for Pythonistas keen to try out some of these techniques and are a good addition to the set of technical 'how to' talks available, which also include the introductory R talks given by the R working group during the year (topics covered included an introduction to R, graphing tools and statistical modelling).

Finally, the first data analytics professionalism event was held over lunchtime on 11 June, facilitated by some members of the data analytics committee (Esther Coleman, Darren Tuohy and Gráinne McGuire). The event attracted a lot of interest across the spectrum of Society members. Professionalism and ethics in data science and analytics were considered through a couple of case studies. The first considered people analytics – specifically its use in HR to screen resumés of job applicants – and worked through a scenario where data biases and pressure from management led to undesirable outcomes. The second looked at the area of predictive policing and teased out some of the ethical issues there. Given the focus on data ethics in the global community following various scandals, there is considerable potential for actuaries to add to the conversation.

Jean Rea and Gráinne McGuire

Non-Life Pricing Seminar 2019

Actuaries were not disappointed with the content and insights provided at the Non-Life Pricing Seminar held on Thursday, 27th June at the Alex Hotel.

The Society acknowledged the huge contribution from Cecilia Cheuk, who chaired the sessions, and all of the event organisers. The success of the event was in no small part due to the wonderful contribution from all of the event speakers: Andrew Smith, Graham Wright, Richard Clarkson, Matthew Brophy, Eoin Ó Baoighill, Edward Roche, Ben Symington, Simon Warsop and Chris Gibney.

Meddling With The Modelling – Who Knows Best?

Ben Symington & Simon Warsop set the scene with a comparison of the relative merits of the statistical modelling journey and explored the hypotheses that we should either rely on expert judgement or models and not combine the two.

With the fundamental driver behind modelling progression being identified as increased predictability, they argued that this evolution has detrimental effects on a much wider range of model measures, such as interpretability and speed of execution. This raised some questions for discussion – do ‘better’ models drive better outcomes? And what do we mean when we say ‘better’ and for whom? Moving on to experts and models, the presenters then used a bias exercise to convince the audience that 17-year-old drivers were better than 45-year-old drivers, a motion which a number in the room bought in to and built on.

This was then revealed as a bias exercise and linked to the findings back in 1954 of Paul Meehl. One of his experiments showed that

even when medical clinicians saw the output of the statistical models in making their diagnosis, they were still less accurate than the models, with bias clearly at play.

The last part of the presentation considered broader model implications, focusing on customer outcomes as a key area receiving ever-increasing scrutiny from a number of angles.

In summary it was concluded that:

1. *Evolving models is essential, but...*
2. *We rarely know how to overlay expert judgement onto model output*
3. *We are highly likely to get better outcomes by focusing on the customer.*

Our judgement and expertise are key to ensuring that models are valid and fit for purpose.

Unstructured Data - Getting started with Image Recognition & Text Analytics

Edward Roche (Munich Re Automation Solutions) and Eoin Ó Baoighill (Milliman) spoke about uses of non-structured data in insurance. Eoin gave examples of how image recognition can be used to derive new rating factors. While more difficult to work with than data currently used, it can give additional insights to improve pricing. He brought us through typical image recognition modelling workflows, including storage, pre-processing, transfer modelling and real-world constraints. Lastly, simple sample code for getting started with face recognition was included. Edward spoke about text analytics use cases. He outlined common techniques, ranging from simple word matching to full natural language processing. Implementation can be done in many ways, including off-the-shelf tools, R and Python. He included a table showing

practical entry points to natural language processing, depending on current knowledge and requirements.

Intro to Markov Chains Monte Carlo and Excess of Loss Pricing

Chris Gibney provided an entertaining introduction to Markov Chain Monte Carlo (“MCMC”).

In his light-hearted presentation, Chris set the scene by explaining the pitfalls of the traditional reinsurance pricing approach – the frequentist approach. Because of the non-linear nature of reinsurance – there’s no loss until there’s a big loss! – small changes in the underlying pricing assumption can have a big impact on the reinsurance pricing. Chris argued that this gearing effect is best modelled using a Bayesian Framework – it allows us to cleanly incorporate any parameter uncertainty. MCMC makes this easy.

After Chris demonstrated his linguistic skills and explained the MCMC algorithm in 3 languages – English, Maths and R – he then took the audience through a (largely) hassle-free live demonstration of the MCMC algorithm in R. During this demo, Chris highlighted the key model diagnostics to be mindful of when using MCMC.

Throughout the presentation, Chris stressed the value of using R (or any not-Excel software). Chris is a big proponent of R (primarily because it is free!) and suggested getting started in R by taking a really simple task you do in Excel and trying to replicate it in R. All code used in the presentation is available on the SAI website.

Call For Volunteers: SAI Maths Tutorials Project 2019/20

Over the past five years, we have delivered maths tutorials to DEIS schools, i.e. schools that are identified by the Department of Education as requiring extra funding. A big ‘thank you’ to members who previously volunteered for this project and we are very grateful that many of them will continue their involvement for 2019-2020. It is important that we get new volunteers each year, as that is the only way this project will continue to develop.

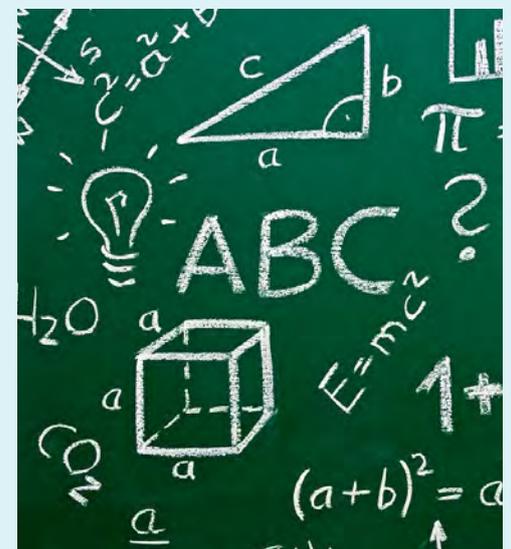
The aim of this project is to target students who may require extra tutoring in Maths in order to gain a higher grade, but who may not be in a position to avail of grinds. The tutorials will be group based, with students attending from a number of different schools around Dublin.

This year, we also plan on reaching out to charities in Dublin so that we can also contact students in non-DEIS schools who may also need tutorials.

Further details are available at <https://web.actuaries.ie/students/maths-tutorials-higher-level-leaving-certificate-201920>

How to volunteer: Please let the Society know if you are prepared to get involved by emailing: events@actuaries.ie.

Please also see the [Volunteering Section](#) of our website for details of this and other volunteering opportunities in the Society.



Life Forum 2019

The Life Forum has become an ever-growing annual event in the SAI calendar, so much so that we have to host it in the Convention Centre to ensure you all get a cup of tea between sessions. We had 302 attendees at our 2019 event on the 6th March, which is a large proportion of the approximately 500 Fellows who declare themselves as Life actuaries on the SAI members directory. The Life Forum agenda offered 20 speakers across 7 separate sessions and we also had an update on current Life Committee activities. Session topics covered included Part VII transfers,

recovery and resolution planning, data analytics, IFRS17, global trends in underwriting, Life HoAF hot topics and balance sheet management under Solvency II.

It is a joy to be involved in such a professional event, covering deep technical topics presented by experts. It is even more impressive when we remember all speakers volunteer their time and expertise – so a sincere thank you to all involved in organising (including speaker 'recruitment!'), presenting, preparation logistics and delivering the

event on the day. In the feedback, attendees commented that speakers were well prepared and knowledgeable on their subject; that the whole event was very well organised; hearing different voices/views through panel discussions was welcome; there was quite a good mix of topics; and the event was 'enjoyable'. We even got 21 'likes' on the [SAI LinkedIn page](#), which is an infinite percentage increase on the number of LinkedIn likes for the 2018 Life Forum.

Mike Claffey



L-R: Viviana Pascoletti & Clara Regan; Declan O'Neill; L-R: Joanne Lonergan; Olive Gaughan; Andrew Kay; L-R: Niall Mulvey & Jean Rea; Delegates networking at the Life Forum 2019; L-R: Eoghan Burns; Brian Grimes; Aileen Cleary; Mike Claffey

The Irish Insured Lives Mortality Investigation

Emmet Thornburgh and Shane Prendergast, on behalf of the Demography Committee of the Society of Actuaries in Ireland, explore the mortality experience of Irish insured lives.

Insurers writing business in Ireland have a range of UK industry mortality tables and Irish population mortality tables available to them, but which ones best reflect the experience of the Irish insured market?

A recent study by the Demography Committee of the Society of Actuaries in Ireland provides insight into insured life experience in Ireland. The study involved aggregating and analysing experience data over the period 2009-2015 for a range of annuity and assurance products which were sold to lives resident in Ireland.

The combined coverage of the contributing insurers represented the majority of the Irish insurance market.

The investigation was centred around an analysis of crude mortality rates against published mortality tables in both Ireland and the UK. While the data is very representative of the Irish insurance market, there are some limitations to the results, due to the size of the dataset. This is particularly the case when considering results by individual segments, such as by age band or year. Owing to these data limitations, the committee did not try to fit tables to the results.

Individual companies will continue to look to their own experience when setting assumptions. Nonetheless, this study will

support actuaries working with Irish lives and provide them with an additional source of reference for consideration.

The Irish Insured Lives Mortality Investigation (IILMI) is the third such study completed by the Society of Actuaries in Ireland over the past decade. Similar analyses were performed on annuitant and assured lives in both 2009 and 2014.

An article summarising the results and conclusions of the 2019 IILMI study features in the August 2019 issue of The Actuary magazine. The full IILMI report is available from the Society's website [here](#)

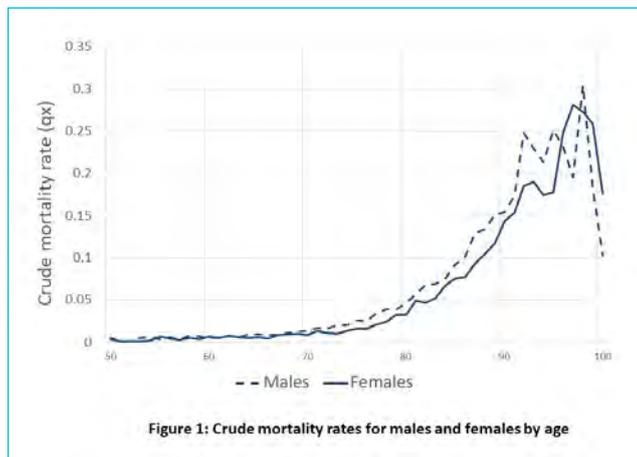


Table Description	Central Year	Males		Females	
		Table Name	A/E	Table Name	A/E
CMI, Normal Retirement, Pensioner Lives	2000	PNML00	73.0%	PNFL00	84.0%
CMI, Combined, Retirement Annuitants Lives	2000	RMC00	83.0%	RFC00	103.0%
CMI, All Pensioner Lives	2008	PML08	93.0%	PFL08	101.0%
CMI, Self Administered Pension Schemes, All pensioners (excluding dependants), Lives	2007	S2PML	79.0%	S2PFL	90.0%
Irish Population	2011	ILT 16 (M)	75.0%	ILT 16 (F)	86.0%

Figure 2: Actual over expected result against industry benchmarks

Be Kind, Unwind

The SAI Annual Convention is typically designed to make us better actuaries but one session was aimed at helping us become better human beings.

Ireland has one of the highest rates of mental health illness in Europe. In 2016, 18.5% of the Irish population were recorded as having a mental health disorder¹. At the convention, these statistics were given life by Michael Fitzgerald's honest and moving description of what it was like to walk a mile in his actuarial shoes. With humour and candour, Michael's presentation on 'Enhancing Mental Outcomes for Those We Work With' took us on a musical journey through a life impacted by depression and offered guidance on how to positively influence the mental health environment of those we interact with and be better work colleagues.

While one might argue with some of Michael's feelings on music albums ([Bruce Springsteen](#) isn't that bad), no-one could argue with the feelings expressed in this discussion of mental health and the part that we all play in the mental health of those around us. Plato told us "be kind, for everyone you meet is fighting a hard battle" and Michael brought that battle to life with his presentation, helping us see the person, not the illness. He reminded us of the impact we have on those we work with due to the amount of time that we spend with them. Offhand remarks that may be forgotten instantly by the speaker may continue a cruel life in someone else's mind. Equally, we sometimes underestimate our positive impact on others and don't always appreciate the powerful impact that a kind word can have.

No actuarial convention is complete without the actuarial control cycle and Michael delivered. He demonstrated how the control

cycle could be applied to employee wellbeing within business models. Just as he encourages actuaries to develop empathy, compassion and kindness for others, he recommends that business models be developed that include the objective of meeting employees' wellness needs. The control cycle can then be used to monitor and assess the effect of the business model on employees' wellbeing.

The poet [Maya Angelou](#) taught us that "people will forget what you said, people will forget what you did but people will never forget how you made them feel". How people felt about what Michael shared was clear from the emotive standing ovation that drew the session to a close. His parting words were a call to action: be kind to one another. You can start by listening to and sharing his podcast.

Alcarine Power

¹ <https://www.irishtimes.com/news/health/ireland-has-one-of-the-highest-rates-of-mental-health-illness-in-europe-report-finds-1.3707073>

European Congress of Actuaries 2019



'Application of Data Science in Insurance – from Hype to Reality' - Bence Zaupper (PwC Ireland)

ECA 2019 Vinery Tour (Quinta de Catalvos) - Bence Zaupper

The 3rd European Congress of Actuaries organised by the Actuarial Association of Europe (AAE) was held on the 6th and 7th June in Lisbon. Three of the presentations featured Irish actuaries:

- Application of Data Science in Insurance – from Hype to Reality: Bence Zaupper (with Jan-Magnus Moberg)
- Solvency II Pillar 1 Benchmark: Tony O'Riordan (with Thomas Béhar)
- Very Long-Term Historical Investment Return Data – What Can We Learn from Looking Back 200-750 Years into History?: Colm Fitzgerald

A number of other members of the Society attended the Congress, which provided a wide range of presentations on topics covering Life Insurance, General Insurance, Pensions, Litigation, Investment, Data management and Regulatory issues.

Some of those who attended have given us their views (and some photographs) of the Congress:

The ECA 2019 conference was a great networking opportunity for actuaries across Europe with over 200 attendees. In addition to traditional actuarial topics such as mortality trends, Solvency II and IFRS 17, the conference covered a number of wider fields relevant to actuaries, such as data analytics and risk management.

The conference was very well organised, attendees could follow the program and make connection with each other using the conference app. The gala dinner was held in a spectacular venue, Quinta de Catalvos, in a farm South of Lisbon and included a wine tasting and a guided tour.

Bence Zaupper

ECA 2019 broadly followed the format of the SAI and IFoA Conferences, with plenary sessions at start and end, shorter slots (30 minutes)



ECA 2019 - Gala Dinner Venue (Quinta de Catalvos)

between with a choice of subjects, and plenty of breaks with chances for networking and a handful of stands from professional providers.

The subjects were pretty familiar ones including SII and IFRS17. The plenary with Gabriel Bernardino was interesting.

Attendance was naturally more continental European. This influenced some of the topics. For example, there was a session on how German life insurers are dealing with long term guarantees.

Mark Wharton

My main take-away was a comment from Gabriel Bernardino, who said that ESG issues are likely to be the biggest ones facing not just the Actuarial Profession but all professions over the next 10-20 years.

I attended the more eclectic talks - one was really good, an actuary who moved into data analytics. It was the 'Full Stack Actuary' talk.

Overall I know the conference was a big success. Fully booked, 250+ delegates. They had a great wine tour and meal after the first day too. Very enjoyable.

Colm Fitzgerald

The highlights of the conference were the presentations during the plenary sessions. Paul Embrechts (Emeritus Professor of Insurance Mathematics at ETH Zurich) discussed Extreme Value Theory and its practical applications and analytical tools in risk management. Paul has written several books on this topic which I'm sure are bedtime reading for Risk managers.

Footballer mortality (i.e. elite athlete mortality) was also considered in a presentation from Onofre Simoes (University of Lisbon). Onofre considered, over a long period of time, the mortality of the Portuguese international footballers and the Spanish national team.

He compared their mortality experience to population mortality. Interestingly, mortality was not affected by the playing position of each player in their respective team. However, the Portuguese players seemed to exhibit better mortality compared to their Spanish equivalents and compared to normal population mortality.

The end of day one was completed by a visit to Quinta de Catalvos winery, an hour outside Lisbon. We were all cautioned by Esko Kivisaari (Chair of the AAE) to remember when drinking that "Enough is not Enough and Too Much is Too Much"! With this in mind we enjoyed a wine filled evening with our fellow actuarial colleagues.

Day 2 commenced with Gabriel Bernardino, Chairman of the European Insurance and Occupational Pension Authority (EIOPA) presenting a wide-ranging discussion of the current supervisory landscape. Gabriel fielded a wide range of questions from the audience including cyber risks, supervisory use of data and poor financial management by particular companies.

The final plenary session was by Darrel Scott (Board member of the International Accounting Standards Board) who presented a talk on IFRS 17 and its implementation. Darrel's knowledge of this topic was impressive.

In summary the conference provided a valuable insight into the current actuarial issues in Europe. The conference provides a worthwhile opportunity to meet and discuss issues with our fellow European colleagues.

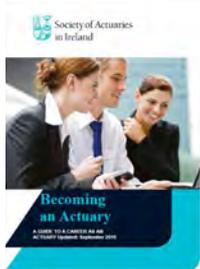
John Logan and Nigel Tennant



'Survival Curves for Portuguese Football Players' - Onofre Simoes (University of Lisbon)

Student News

'BECOMING AN ACTUARY' BROCHURE



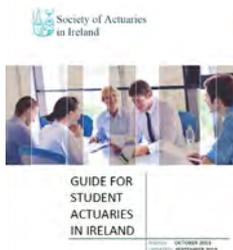
The latest version of the 'Becoming an Actuary' Brochure should provide any potential actuarial students with all of the information they will need to begin their career as an actuary.

This brochure is available on our website at <https://web.actuaries.ie/about/so-how-can-i-become-actuary> or

<https://web.actuaries.ie/about/brochures> and covers information on the following:

- About Actuaries
- Why become an Actuary?
- Where do Actuaries work?
- Actuarial Exams
- Actuarial Students
- Society of Actuaries in Ireland

GUIDE FOR STUDENT ACTUARIES



The Guide for Student Actuaries in Ireland is a very useful resource for student actuaries. The guide is available on our website at <https://web.actuaries.ie/about/brochures> and covers information on the following:

- The Society of Actuaries in Ireland
- The Institute & Faculty of Actuaries (IFoA)
- The Actuarial Exams
- Planning your Study
- Personal & Professional Development
- Working as a Student Actuary – useful tips

Thanks to the Recent Qualifiers Committee for updating the brochure and guide to incorporate key updates, including changes to the IFoA Curriculum.

THE STUDENT SOCIETY COMMITTEE 2019/2020

Committee Chair: Ben Dennessen

Treasurer: Eavan Gleeson

Communications Officer: Niall Mc Groarty

Ordinary Committee Members: Nicole Feery, David Purcell, Stephen Brennan, Michael Crowley, Jane Gormley and Alison Kelly

To keep up to date, check out our Facebook page: www.facebook.com/StudentSocietyofActuariesIreland

If you wish to contact any of the committee members, click on the Member Directory for their details or email the Society at info@actuaries.ie

UCD BAFS AWARD

Congratulations to James Malone who was the best performing student in the 2018 final year actuarial subjects in the Bachelor of Actuarial and Financial Studies in UCD. Maurice Whyms presented James with the Society of Actuaries in Ireland Medal for this great achievement.



L-R: Professor Brendan Murphy, Maurice Whyms, James Malone

STUDENT SOCIETY EVENTS

The SAI Student Society held a quiz on Thursday 23rd May in Dicey's Garden. We had a phenomenal turn out for the event, thank you to all who made it an enjoyable night. Massive congratulations to David Mulvihill, Colum O Byrne, George Mawhinney and Ben Elland, who navigated their way through the picture rounds and Dingbats to come out on top. Thank you also to Acumen Resources for sponsoring the event.

The next two events in the student calendar are:

- [Welcome Day \(Seminar\) for New Students](#)
- [Students' & Recent Qualifiers' Ball](#)



Student Society Quiz Night

SAI Golf Society Events in 2019

Hello to all fellow golfers and actuaries, My Captain's Day took place very recently on Thursday August 29th at Corrstown Golf Club in North County Dublin. I'm thrilled to be able to say that an enjoyable day was had by all the participants. There are a few key ingredients required to ensure a successful golf event, not all of which are within the control of the organiser. The weather behaved, (windy but dry), the course was in great condition, the food was excellent and most important of all the company was superb. I certainly enjoyed hosting for the day.

After dinner, the first order of duty fell to Piers Segrave-Daly to present the prizes to the winner and runner-up in the matchplay competition. Many congratulations to John O'Connell who won the event for the 2nd year running, narrowly defeating Dermot O'Hara in the final.

Next up was the presentation of prizes for Captains day. 1st prize was taken by Neil Guinan, with a remarkable display of golf, scoring 45pts off a handicap of 10. The full list of prize winners is set out below.

The final piece of business was to mention our upcoming match against the Scots, expected to take place in late October, and to name my successor, and I was delighted to be able to announce that Kevin Begley will be the SAI Golf Society Captain for 2020.

My final words would be to echo sentiments expressed by Neil in accepting his prize on the night, which were to encourage those of you who are on the fringes of the golf society to become more involved if possible to ensure its ongoing success.

Yours in Golf,
Raymond Leonard

SAI Golf Society Captain 2019

PRIZE WINNERS 2019

Matchplay Winner, John O'Connell.
Runner-up, Dermot O'Hara.

Captain's Day

- 1st place** Neil Guinan 45pts
- 2nd place** Jane Gleeson 38pts
- 3rd place** Piers Segrave-Daly 36pts
- Front 9** Duncan Robertson 20pts
- Back 9** Raymond Leonard 19pts (C/B)
- Par 3s** Colm Fitzgerald 15pts
- Par 5s** Bryan O'Connor 12pts (C/B)
- Nearest Pin** Eoghan Burns
- Longest Drive** Neil Guinan



L-R: Raymond Leonard, Piers Segrave-Daly and John O'Connell: Winner of the Matchplay 2019



L-R: Raymond Leonard, Piers Segrave-Daly and Dermot O'Hara: Runner-Up of the Matchplay 2019



L-R: Raymond Leonard and Neil Guinan: Winner of the Captain's Day 2019



L-R: Raymond Leonard and Jane Gleeson: Runner-Up of the Captain's Day 2019



L-R: Raymond Leonard and Piers Segrave-Daly: Third Place - Captain's Day 2019

On the Move

Students:

Catherine Johnston moved to **RSA**
Daniel Alkin moved to **Irish Life**
Darren Brick moved to **New Ireland Assurance**
Holly Rankin moved to **Ernst & Young**
Laura McAteer moved to **Irish Life**
Rebekah Vickery moved to **Allianz Insurance**
Kevin O'Rourke moved to **Irish Life**
Joseph du Toit moved to **Allianz Care**
Andrew Whelan moved to **CACI**

Fellows:

Pedro Ecija Serrano moved to **Grant Thornton**
Andrea Marelli moved to **SCOR Reinsurance**
David O'Shea moved to **KPMG**
Luca Pataconi moved to **Irish Life**
Conor Callaghan moved to **Milliman**
Mairead Loughlin moved to **Australian Prudential Regulation Authority**

Avril Wilkinson moved to **Hansard**
Donna Whelan moved to **Irish Life**
Billy Galavan moved to **Standard Life**
Brian Fitzgerald moved to **Aviva**
Susanne Ryan moved to **Axa XL**
Mehdi Benyebdri moved to **Moonloop**
Jane Seward moved to **Willis Towers Watson**
Svilena Dimitrova moved to **RGA International Reinsurance**
Alan McDonagh moved to **SCOR Global Life Reinsurance**
John Bolger moved to **Deloitte**
Paul Regan moved to **Utmost**
Jordi Posthumus moved to **Hannover Life Reassurance Company of America (Bermuda)**
Deirdre O'Regan moved to **SCOR Global Life Reinsurance**
Mirian King moved to **Allianz Global Life**
Catherine Murphy moved to **Axa XL**
Gearóid Moran moved to **Irish Life**
Marian Keane moved to **Version1**
Conor J Byrne moved to **MetLife**

Best Wishes

Best wishes and a big 'thank you' to Emily O'Gara and Louise Preston, who left the Society's team recently. Both plan to take some time out before taking on new roles. We enjoyed working with them and are very grateful to both of them for their huge contribution.

Welcome to our new joiners - Tony Jeffery, our new Professional Affairs Manager, and Simeone Golden, our new Events & Member Services Coordinator. We have also appointed Sheila Normanly, who joined us on a contract basis last year, to a permanent position as IT & Member Services Coordinator. We wish Tony, Simeone and Sheila the best of luck in their new roles.



Society of
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in Ireland

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Society of Actuaries in Ireland



RISK MANAGEMENT PERSPECTIVES CONFERENCE

11 OCTOBER 2019
AVIVA STADIUM
DUBLIN

OPEN TO MEMBERS & NON-MEMBERS

DELEGATE RATE €290

Book online here www.actuaries.ie/events
<https://web.actuaries.ie/events/2019/08/risk-management-perspectives-conference-2019>



Society of Actuaries in Ireland

Risk Management Perspectives Conference - Agenda

"Sharing Insights and Scanning the Horizon in Financial Services Risk Management"

8:00 – 8:45	Registration & Coffee Break	
8:45 – 9:00	Welcome and introduction	Sean Casey, SAI President
9:00 – 9:35	Macroeconomic Update	Loretta O'Sullivan, Group Chief Economist at Bank of Ireland
9:35 – 10:10	5 simple questions to understand culture	Paul Harwood, CFO, Holloway Friendly
10:10 – 10:45	The Risk Agenda in a Consolidator Business	Lukas Ziewer, Group Chief Risk Officer at Athora
10:45 – 11:15	Coffee Break	
11:15 – 11:50	Risk: Industrial Waste or Raw Material?	Dr Declan Jackson, Director of Government Affairs, Insurance Ireland
11:50 – 12:25	The Actuary, The INED and The Regulator: What's really going on around here?	Ruairi O'Flynn, Independent Non-Executive Director
12:25 – 13:00	Managing Marine Risk Accumulations	Dr Sarah Bourke, CEO, Skytek
13:00 – 14:00	Lunch	
14:00 – 14:45	Panel Discussion: Solvency II Review	Tony O'Riordan (New Ireland), Jason Wiebe (RGA), Andrew Candland (CBI)
14:45 – 15:20	Risk Management – An Investment Firm Perspective	Grellan O'Kelly, CRO, Davy Group
15:20 – 15:55	Climate change: are you ready?	Carol Storey, Sustainability and Climate Change Actuary at PwC
15:55 – 16:00	Closing Remarks	Sean Casey, SAI President