INTERVIEW

TAKING A WORLD-WIDE VIEW

The Institute and Faculty of Actuaries Fellow and Chief Actuary of Mercer in the UK, Charles Cowling, will take up the year-long Presidency International Actuarial Association on 1 January 2024. Although most of his working life is focussed on pensions, over the next year he will be looking at the bigger picture around international actuarial professionals and some of the big challenges that are affecting the actuarial profession globally.

INTERVIEW BY **JENNIFER BAKER**

As the role of actuaries continues to develop in new geographies and industries, what are your views on the global actuary and how important are they for the future of the profession?

'I think they're really important. The actuarial professional is expanding into a number of different areas. Banking being an example of an area where actuaries previously hadn't been involved, but in certain countries around the world are increasingly involved. One of the great advantages of a global profession is the ability to learn from different countries and see how progress is being made in one area in one country. Asking how we could learn from that and apply it elsewhere. So when actuaries gain expertise in one part of the world, we could share that understanding and knowledge globally and apply it elsewhere.

Actuaries have also been collaborating and working together on a number of global issues and that's increasingly the case – the most obvious examples are perhaps climate change and pandemics. With Covid19, we saw a rapid growth in the need to understand and to analyse the statistics, the projections, and the likely impact of this virus. And of course, actuaries are experts in managing lots of data in coming up with statistical and financial projections and a lot of their systems were ideally suited for pandemic modelling. It's not just to model the spread of the impact of the virus itself, but also how economies and countries respond. And actuaries uniquely combine that expertise around data modelling, statistics, investments and finance.

Climate change is another area where a lot of the impact is ideally linked to the work of actuaries. Not simply modelling what is happening in the weather, but how you take >

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steps to mitigate the impacts of climate change. So insurance has a huge role to play in that.

Finally, as actuaries get more involved in investments and working with large investors, like insurance companies and pension funds on their portfolios, they are looking at the environmental impact of how large investors are invested around the world.

Actuaries are also beginning to look at the United Nations' 17 sustainability goals globally as well – in particular there are a number of issues related to water. Sometimes it's water shortage, sometimes it's too much water and the implications of that, both in terms of insurance and society. So increasingly, actuaries are working together globally in new areas and applying their skills.

CHARLES COWLING

You've talked a lot about what are the possibilities, the hopes and the aspirations of the profession, but what challenges do you see?

'The whole world faces challenges in lots of areas, and we're not immune from those challenges. I think some of our traditional areas are not flourishing as they once were. So in my particular area, which is defined benefit pension schemes, the trend is away from providing those sorts of pension arrangements. Likewise, in insurance, the days of the large life companies providing with-profit type insurance policies, which required a lot of actuarial support, are moving away.

But as the traditional areas dwindle, other areas are coming to the fore and inevitably, that sort of change provides challenges and threats. Looking a bit further into the future, I think one of the biggest changes is AI. Artificial Intelligence, not only within the actuarial profession, but across many professions, poses a number of significant challenges. Some of those are around how we use it – putting data into an AI, bots >

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or programs, means you lose control of it. Who knows where that data ends up in the global world of AI. And that's a real challenge.

There are also professional issues around AI. The actuary, like many other professions, rightly places a high degree of importance on professional judgement. As AI improves, we're going to get into the blurry area of when we effectively start relying on the judgement of AI. It's something we're already seeing in the medical profession, where AI is being used for things like cancer diagnosis, and has been shown to be statistically more reliable than doctors. Under such circumstances, which doctor is going to override the AI diagnosis based on their professional judgement? So I think the whole debate around AI is something that we're going to have to grapple with. AI is coming and we've just got to work out how we're going to manage it.'

What does the development of the global actuary mean in terms of new skills and education? You said yourself AI is coming if it's not already here, will actuaries have to learn how to work alongside it, rather than against it?

'I think it very much has to be that. And I hope it's the same for most professions. The optimist in me thinks that AI will do a lot of the heavy lifting or the boring bits, and allow us to do the more interesting problem-solving stuff. And I think there are huge opportunities there.

I think for actuaries their core skills of statistics, of risk, of economics and finance, and data analysis are going to be needed for whatever problems the world is facing in the next 40 or 50 years. The requirements to be skilled in understanding mathematics, finance, risk and data are not going to go away – if anything, the world seems a riskier place. And there is a need for people who can understand that and help companies or individuals or governments mitigate that risk.

I think an area that actuaries are going to have to develop, as well as the ability to work alongside AI, is greater flexibility in how to apply the skills we've got to all sorts of problems. Rather than the sort of training I had, which was very deep in a particular area of actuarial science, I think the actuaries of the future are going to have to be more flexible and apply their skills in different areas. So imagination and creativity in looking at different problems is going to be increasingly important.

Another area, which again, actuaries have been getting a little better at, but we're not necessarily known for, is communication skills. It's a challenge. You have actuaries and others who understand the deep complexity of the models that they're building – at least I hope they do – and the nature of the problems that they're solving. But they don't always have the ability to communicate that deep mathematical statistical risk knowledge, to the layperson who has to make the decisions.

It's a really important role. And it's not limited to actuaries, you can apply this to all sorts of >

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deep technical areas of work. Scientists have to be able to be good at communicating their knowledge to others, to the politicians, leaders of corporations and so on, who are making decisions.'

Is a global actuary more involved in social and economic development and working for the wellbeing of society compared to the traditional actuary? Is that something that has shifted or changed over time?

'Absolutely, yes. I think actuaries have a really important role to play in supporting and promoting the wellbeing of society. And I for one, am very keen to see actuaries do that. I think, to some extent, we've always had that within our charter. If I look at the Institute and Faculty of Actuaries, there's always been a strong public interest role of the profession to be acting in the interests of the common good.

I think what's changing is that a lot of the questions we're being asked to address are ones where the wellbeing of society is at stake. Things like climate change, like some of the work we're doing on water sustainability, like modelling pandemics and mitigating pandemic risk, are being driven by a global society recognising the need to manage and mitigate these sorts of risks. So I think it is inevitable that the actuary will have to get more involved in those areas, and will be working on projects that have very much at the heart of them, protection of the wellbeing of society. But I think that goes hand-in-hand with a very long-established professional ethos to look after the public interest.'

Is the global actuary more involved in governance roles and as support for the governments or for other stakeholders/decision makers compared to the traditional actuary?

'I think actuaries have an understanding which makes them well suited to getting involved in governance. Although they are getting involved in governance roles, I still think it's fairly low key and fairly minimal. I'd like to see more of it, particularly in areas that have an obvious risk mitigation or actuarial elements.

One of the things that actuaries have done for many, many years in pensions and insurance is struggle with the governance of how you make decisions, and struggle with how you balance the different stakeholders and their interests. Actuaries have to come up with decision-making processes that are not just appropriate, but support wider society's interests. That experience, together with the skill set of actuaries in risk management, means that we are well placed to be able to help governments and other stakeholders look at their decision making and governance processes. We are seeing some of that, but I think we could see more. Sadly, I don't think it's always the case that those in power welcome lots of additional governance and checks and balances. It depends a little bit on where you are, which again provides challenges for the global profession, because ethics and professionalism is not consistent the world over.' <