



SAI Annual Convention 8th June 2017

Descriptions of presentations

09:00 – 09:45

General Insurance Forum:

The Forum will provide an update from the General Insurance Committee and in particular on **Periodic Payment Orders**.

Life Assurance Forum:

This session will include a general update on matters being addressed by the Life Committee. It will be followed by the presentation below:

Predictive Mortality Modelling: A Twitter case study

Aisling Kennedy

Language expressed on Twitter characterises community-level health status and correlates with disease prevalence in defined geographical spaces. This presentation will demonstrate how, using machine learning algorithms for the analysis of tweets related to psychological status, cancer or cardiovascular disease, we can predict cancer/cardiovascular mortality for defined populations.

Pensions Forum:

The Pensions Committee will update members on the work of the Committee. **A presentation by the Pensions Authority will follow.**

09:55 – 10:35

Retrospective on Solvency II – How well has Solvency II met its objectives for the life insurance industry?

Aisling Barrett & Dick Rae

In November 2015 a working party of the Institute and Faculty of Actuaries was established with the aim of producing a sessional paper to consider Solvency II's objectives and assess the outcome of the final regulations against its key objectives.

The working party has looked at, and comments on, how well Solvency II has fared relative to its initial goals of improved consumer protection, harmonisation, effective risk management and financial stability. Two members of the working party will give an overview of the sessional paper. They welcome discussion and debate throughout.



You can't analyse data that you don't have

Jacky Fox

General Data Protection Regulation (GDPR) is more than a compliance issue. It is coming into force to regulate the collection, usage and retention of personal data, which includes the key data used by insurance companies for pricing and reserving. Organisations need to prepare by seeking consent to retain and process data outside current or historic contractual or regulatory obligations. Failure to do so will curtail their ability to analyse data for marketing and innovation purposes, such as developing new products or identifying target markets for cross selling, and may result in severe penalties. Preparation involves a lot more than changing policies and procedures, major IT refreshes may need to take place to support the new regulation and the clock is counting down to May 2018. This talk will highlight the impacts of GDPR on insurance companies and illustrate where the key challenges of implementation may lie.

The Duckworth-Lewis Method – Cricket's Solvency II Model!

Conor Byrne

Actuaries are used to measuring solvency by having contemporaneous values of assets and liabilities, however these are defined. Most sports to measure who is ahead operate similarly where both teams can score points, goals etc. at the same time. Cricket by its nature with each team batting in turn presents a different challenge when matches are cut short by weather and requires a method to establish which team is ahead in such circumstances. The talk will explore the evolution of thinking in this area and how the mathematical model underlying the current Duckworth-Lewis method addresses this problem.

No knowledge of cricket is necessary and the talk will be aimed at showing how a 'solvency model' can be developed in such circumstances.

The Wealth of Pensions (repeated at 14.15)

Kevin Murphy

Currently there is a significant focus on the distribution of wealth, but predominantly this analysis excludes pensions.

This presentation will:

- outline the global picture on the distribution of wealth
- outline the results of the first survey in Ireland of the distribution of wealth. (This excludes pensions)
- outline the complexities in valuing pensions as a form of wealth and suggested solutions
- summarise the results of the pension wealth calculation and its effect on the distribution of wealth in Ireland.



10:45 – 11:25

What I know now that I did not know then (repeated at 15:55)

Wayne Dam

This presentation captures the key lessons learned from 10 years of research on the use of predictive analytics in life insurance, identifying a wide range of predictive variables and their practical application, by means of a series of case studies.

Model Risk Management – Developing your strategies and approach

Abz Kotadia, Andrew Wood & Albert Winston

Model Risk Management (MRM) is a growing area of focus for regulators as balance sheet restatements and unexpected losses occur with regular frequency. The banking sector is arguably ahead of insurance firms with the US Federal Reserve supervisory requirement SR11-07 providing a framework for the holistic management of models. Global adoption of this standard continues and Insurance companies need to prepare for moving in this direction, especially if part of a wider banking group. There are many moving parts within MRM including governance, policies and procedures, inventory construction and management, validation and controls testing. Preparing to analyse your model estate requires careful integration of all the differing aspects and for insurance companies perhaps new considerations around model risk appetite and associated limit management.

This talk will highlight the background to Model Risk Management, provide an overview of the US gold standard SR11-07, provide insurance companies a route to improve model management and illustrate where we expect the key challenges of implementation to lie.

Brexit: what next for Irish insurers?

Sean Smith & Ciara Regan

Following the outcome of the UK referendum to leave the European Union, many business issues and questions are now emerging. While the UK's process to separate may take a number of years, there will undoubtedly be a period of uncertainty, as the country plans its future—and as businesses and governments both inside and outside Britain assess the risks and opportunities which this unprecedented situation presents. This session will take a holistic look at the impacts of Brexit on the Irish insurance industry and touches on some of the things impacted insurers can be doing to prepare for change.

Does Teething really kill? A study of mortality trends over the past 100 years

Gill Laing

This presentation will look at trends from 1900 – 2016 and how things like war, infections etc. have affected them. Recent trends will also be covered including:

- An apparent slowing down of improvements in 2010 – 2016
- Why the past isn't a good guide to future trends in mortality
- Cancer, Heart disease, Antibiotic resistance and other interesting views on mortality trends from SCOR and their experts.



11:55 – 13:15

Year in Review and eye to the Future

Dervla Tomlin, President, Society of Actuaries in Ireland

Wider Fairways – not as far away as it appears

Donal Casey

Donal will chart the rather unexpected journey from his leadership roles in financial services to the world of professional golf and sports representation. The skills are more transferable than many might expect. Diverse contexts can often serve to highlight commonalities even more clearly.

This will be followed by the presentation of the SAI Awards for outstanding contribution to the Society.

14:15 – 14:55

The Irish non-life claims environment

Ronan Mulligan and Lakshmi Vishnampet

This session will provide an overview of the current claims environment in the Irish non-life market, which is a topic of great interest and debate in recent years. Ronan and Lakshmi will discuss the areas of challenge, lessons learned and what might be in store for the future. They will enhance this session with PwC's own experience in this area.

International Lapse experience in Life Insurance

Aisling Kennelly & Gavin Maguire

SCOR have a wealth of lapse experience data from across the world. This presentation aims to compare markets experience, impacts of the 2008 – 2011 financial crisis as well as looking at recent UK and Irish experience.

DC Pension Schemes – a challenge to current designs

Linda Travers

The population in Ireland is becoming more and more dependent on Defined Contribution (DC) provision to fund their retirement. This presentation considers typical designs of DC pension schemes and questions whether these are appropriate to provide an adequate retirement income for members.

The Wealth of Pensions

Kevin Murphy

Currently there is a significant focus on the distribution of wealth, but predominantly this analysis excludes pensions. This presentation will:

- outline the global picture on the distribution of wealth
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Life, the universe and everything: assessing the impact of IFRS17

Angela McNally & David Walsh

IFRS 17 is fast approaching and its influence will be wide ranging, impacting everything from financial reporting to systems to investor relations. 2017 is a good time to start to assess the impacts on your company and to build a plan that will allow you to implement the standard in the most efficient way for your business. A thorough impact assessment will support the development of a sustainable and optimal Target Operating Model, a comprehensive and realistic plan for the entire IFRS 17 implementation, as well as a robust budget for future phases of the implementation project.

So how can you systematically assess the impact of your business? This talk will bring you through some steps you could follow to assess the impacts on the key areas of your business and start to plan for full implementation.

15:05 – 15:45

Communicating in the Workplace

Lorcan Nyhan, a consultant in the training division of the Communications Clinic, will present a session on Communicating in the Workplace. His presentation will cover how to be understandable, memorable and to make an impact in every professional interaction.

The 4% rule (of thumb) – why it no longer makes sense

Barry Cudmore & Mark Grimes

Almost 2 years from UK pension reform – what does the sustainable income rate look like for those retiring today? How much income can they take without running out of money?

Aegon Ireland, in conjunction with EValue, have undertaken research to better understand what a sustainable income rate in retirement looks like for those who've retired in the UK since April 2015.

The presentation will:

- Trace the history of the 4% rule
- Challenge some commonly held retirement income assumptions – and give more realistic projections around sustainable income levels in today's environment
- Outline market risks for today's retirees
- Discuss capacity for loss and how chance and probability are framed
- Discuss the impact of longevity and cognitive decline in planning for retirement income

Relevant for both UK, Ireland and international audiences, the presentation highlights the challenges in deploying a simple rule of thumb like 4% and shows how the economic forecasts have influenced income rates since April 2015.

The EU's PRIIPS rules: When can standardised risk measures go wrong?

Shaun Lazzari & Stuart Redmond

European regulators are aiming to standardise how the risk and reward profile of investment products ("PRIIPs") is communicated to retail investors. The prescribed risk measurement techniques to be used have been a hot topic between regulators and product providers, leading to a delay in the introduction of the new regulations.



This talk will explain the techniques used in the PRIIPs regulations to quantify the risks and rewards of an investment product, and explore with practical examples where alternative approaches may give rise to quite different measures of risk - thus setting-out the limitations of the PRIIPs approach to risk communication.

Capital optimisation under Solvency II

Kevin Manning & Sinead Clarke

Since Solvency II's implementation, capital optimisation has become a hot topic - but what does it really mean? In this presentation, Kevin Manning and Sinead Clarke will focus on four capital optimisation techniques and use case studies to demonstrate the tangible benefits of these techniques on the Solvency II balance sheet.

Self-assembling insurance claim models

Grainne McGuire

What is the best way to model loss reserve data (number of claims, paid losses, claim sizes etc.)? Chain ladder model is one approach but has a simple structure and often requires ad hoc adjustments to match the experience. Generalised linear models (GLMs) are another possibility – very flexible but time-consuming and expensive to fit. Grainne has looked at the use of penalised regression to automatically construct models of the loss experience, with promising results so far.

15:55 – 16:35

Unconscious Bias - *what is it, how does it impact us and what can we do about it?*

Mark Fenton

CEO & Founder, MASF Consulting Ltd.

'Unconscious bias' is bias that is automatic, outside our control and of which we are unaware. It triggers rapid assessments and judgments. The problem is that these are often incorrect, inaccurate or incomplete and result in all of us undermining others or undervaluing other views and opinions to the detriment of our role, our organisation and society as a whole.

The purpose of this session is to shine a spotlight on why we all have bias and what we can do to recognise it and lessen its impact. Unconscious Bias is intrinsically linked to trust and it is issues with trust that can have a detrimental impact on our workplace culture, leading to under-performance and inefficient and ineffective ways of working.

Emerging Trends in ORSAs & ERM

Tom Donlon & Colm Guiry

The ORSA, along with its predecessor the FLAOR, has been on the scene for a few years. Tom and Colm will share their experience of the emerging practices that make the ORSA a worthwhile exercise and a positive driver of ERM activity, as well as the pitfalls to be avoided.



Irish Pension Schemes use of LDI and impact on funding

Evelyn Ryder and Craig Keane

This session will give a brief overview of Liability Driven Investing for pension funds. With LDI being increasing used by Irish pension schemes Evelyn and Craig will outline what risks pension funds are managing and how they are accessing the investment. They will consider the impact of using LDI on pension funding, suggest how to allow for it in valuations with a focus on MFS funding proposals and risk reserve. In addition, they will look at some products coming to market that can be used in conjunction with an LDI mandate to improve portfolio efficiency.

IFRS17 worked example

Andrew Kay

This session will begin with a short introduction to the new insurance contract standard, IFRS17, including an update on current timelines. Following the introduction, the session will go through a detailed worked example showing how IFRS17 will be applied in practise for a sample life assurance product. The worked example will demonstrate the impact this new standard will have on companies' profit and loss and balance sheets and highlight associated implementation challenges.

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