

## **Day 1 – Sunday 1 June**

- 17.00 – 19.15 Registration and Drinks Reception
- 19.15 – 19.30 Chair's Opening Address and Welcome
- 19.30 – 20.15 **Plenary 1:** The Economic Impact of the Scottish Referendum (TBC)  
**Speaker:** Alistair Ross, Pinsent Mason
- 20.15 – 22.00 Buffet Dinner and Networking

## **Day 2 – Monday 2 June**

- 08.30 – 09.00 Registration (for those who did not register the day before)
- 09.00 – 09.05 Welcome
- 09.05 – 10.30 **Plenary 2:** Title TBC  
**Speakers:** Professor Richard Werner, University of Southampton
- 10.30 – 11.00 Morning refreshments
- 11.00 – 11.50 **Workshop A**

### **A1: Heavy, Models, Light Models and Proxy Models**

While the basic concepts of simulation-driven capital modelling will be familiar to a number of practitioners, the challenge remains as to how to revalue a balance sheet in thousands of different scenarios within a short space of time. Proxy models are used to bridge the gap between the demand placed on cashflow models and the limited technology providing it. In this presentation we discuss some of the latest developments and a number of practical issues to consider when it comes to choosing, designing and implementing a proxy model.

**Speakers:** Members of the Proxy Models Working Party

### **A2: Influencing Culture to Deliver Better Risk Outcomes**

This session will cover external Headwinds - a) Regulatory & market expectations including SII Challenges to success - Top 5 and others Getting it right - Definition, Enablers, Process & Outcomes EY approach Insurer Case study - Culture influencing Strategic Initiatives, Risk appetite, Developing Talent & Agile internal Model governance

**Speakers:** Neal Writer and James Tufts, Ernst & Young and Kevin Borett, Unum

### **A3: Stock Market Crash Prediction Models**

This presentation will give an overview of existing techniques used to predict stock market crashes such as P/E ratio, W.Ziemba's Bond Stock Earnings Yield Differential Model (BSEYD) and the disorder detection model of Shiryaev, Zhitlukhin and W. T. Ziemba

**Speaker:** Sebastien Lleo, NEOMA Business School

### **A4: Meeting the Challenge of Periodical Payment Orders**

How would you invest to meet a contingent, deferred, wage inflation linked, guaranteed, impaired whole-life annuity? General insurers have to when faced with a Periodical Payment Order. In this interactive workshop we will debate the valuation and investment challenges presented by PPOs and ways to resolve them.

**Speakers:** Anthony Wright, The Medical Defence Union, Scott Jamieson, Kames Capital and Sarah MacDonnell, Lane Clark & Peacock

#### **A5: The Trend Towards “Non-Traditional” Long-Dated Investments by Life Insurers**

This session will present the initial findings of the “Life ALM – non-traditional assets” working party. It will focus on the following areas:

- New types of investments being considered by insurers
- Why we are seeing this trend taking place
- Data and modelling challenges
- Managing new investments
- Education of insurance professionals

**Speakers:** Members of the Non Traditional Assets Working Party

#### **A6: TBC**

**Speaker:** TBC

11.50 – 12.00 Transfer time

12.00 – 12.50 **Workshop B**

#### **B1: In Pursuit of Meaningful Operational Risk Quantification**

In recent years, operational risk quantification practitioners have explored several avenues: RCA scorecards, data-driven “Loss Distribution Approach” and scenario based approaches. Many lessons have been learned. Sensitivity to modelling assumptions and the hidden subjectivity of LDA are better understood. Unfortunately the “use” test remains tenuous. We propose the next steps on the journey, how to draw on the lessons learned, how to tackle remaining challenges and how to achieve robustness and consistency in model outputs

**Speakers:** Mark London and Gareth Mee, Ernst & Young

#### **B2: Credit Risk Modelling: What Can Insurers Learn From Banks?**

The Bank of England/ PRA has increased its focus on credit risk within the insurance industry. This talk will contrast current banking and insurance risk approaches and highlight key lessons that insurers can learn from banks, covering modelling granularity, sources of data, and leading indicators of credit risk

**Speakers:** Vijay Krishnaswamy, Hymans Robertson and Stephen Makin, Stephen Makin Consulting

#### **B3: Why Should the CEO Care About Emerging Risks?**

The identification and management of risks is a central part of most businesses today, with actuaries at the forefront. Risk management tends to focus on the large key risks that companies are facing at the time – such as market, operational, insurance, and reputational.

However, as well as spending time on their biggest risks, organisations need to focus on emerging risks. Emerging risks are those risks which have the potential to have a significant impact, but may be unlikely to occur, poorly understood, hard to quantify and not allowed for in pricing, reserving and modelling.

In a resource constrained world, it can be difficult to find the time and money to focus on emerging risks, when there are bigger more imminent risks to worry about. This session considers why failing to consider emerging risks is a mistake and why a successful CEO should care about emerging risks.

**Speakers:** Members of the Emerging Risks Working Party

#### **B4: Optimising the Solvency II Balance Sheet**

S2 is becoming more certain and closer and insurance companies are beginning to consider the S2 balance sheet. We describe and analyse the full range of bank, reinsurance and management action tools available to companies to optimise the S2 balance sheet

**Speaker:** Scott Eason, Societe Generale

#### **B5: Working Party Presentation TBC**

**Speakers:** Members of the Working Party

#### **B6: Professional Skills Workshop**

**Speakers:** TBC, IFoA Professional Skills Content Development Working Group

12.50 – 13.50 **Lunch and Exhibition**

13.50 – 13.55 **Transfer Time**

13.55 – 14.15 **IFoA Presidential Address**

Phillip Scott, Past President – IFoA

14.15 – 15.35 **Plenary 3: Panel Discussion: Meeting the Needs of the Customer in the New Normal**  
Panellists TBC

15.30 – 15.35 **Transfer Time**

15.35 – 16.25 **Workshop C**

#### **C1: Balancing Oversight with Insight from the Risk Function**

Risk management is crucial to providing assurance that the business has considered what might go wrong. But to add value the risk team also need to add insights that can help to be more efficient and ensure risks are rewarded. This session discusses practical insights about the challenges and opportunities to build a high performance risk function that balances oversight and insight

**Speaker:** Neil Cante, Millman

#### **C2: Cybersecurity Risk Management**

Cyber threats are becoming increasingly important as a form of emerging risk for many companies. The purpose of this paper is to:

- Identify a suitable conceptual framework for cyberrisk RM within a broader ERM framework
- Review current developments in Cybersecurity laws, regulations in US and UK
- Examine risk disclosure practices
- Examine recent trends in the insurance market, relative to developments in comparable jurisdictions eg US and Australia

**Speaker:** Paul Klumpes, Nottingham Trent University

### **C3: How the FCA May Apply Behavioural Economics in Regulating Firms**

FCA Paper OP1 "Applying Behavioural Economics at the FCA" flagged Behavioural Economics as a tool the FCA will use in regulation. This session is an interactive introduction to Behavioural Economics, exploring how biases impact financial decisions made by consumers, firms and regulators. Practical examples of how Behavioural Economics can be used by firms to improve outcomes for customers are given.

**Speaker:** Kathy Byrne, Askis Limited

### **C4: Infrastructure – Where is the Value Added in Infrastructure Debt and Equity Investments for U.K. Insurers?**

Global infrastructure investment needs are estimated to exceed \$500bn per annum in 2015, and the ABI emphasized the role that U.K. insurance companies can play as providers of long-term capital to the sector, with a potential investment of £25bn. Beyond such broad observations and statements, insurers must carefully analyse the role that equity and debt financing of infrastructure should play in their investment portfolios.

In this session we will discuss the return potential of different segments of the infrastructure debt and equity markets and practical challenges that insurers must overcome when investing

- Equity vs. debt – as institutional flows, is there value left in infrastructure debt?
- Private vs. public infrastructure investments – what is the illiquidity premium offered by private loan and equity compared to public bonds and equity?
- Alternative types of infrastructure investments – the case of U.S. municipal bonds
- Addressing regulatory constraints for infrastructure investments: matching adjustment and capital requirements

**Speaker:** Etienne Comon, Goldman Sachs

### **C5: Dynamic Hedging – Challenging the Norm**

Insurers have typically adopted a fairly 'static approach' to hedging but it is now widely recognised that there is no such thing as a 'perfect' hedge and any hedge will need to be managed over time as liability assumptions, market conditions and regulation change. The session will challenge the traditional approach to hedging in two areas.

To start we will look at annuity firms who typically adopt a passive approach to hedging interest rate, treating it as "unrewarded risk". In contrast, LDI mandates for pension funds often take a more active and dynamic approach to managing risk.

In the second half, we will look at variable annuity and traditional with-profits business where the liabilities can be complex and path dependent. The typical hedging approaches used by variable annuity providers are more dynamic and frequently assessed, compared to the strategies traditionally employed by with-profit funds.

In both sections we will contrast the different hedging approaches used, understand the reasons for the differences, and see what lessons can be learned for ALM best practice.

**Speakers:** Members of the Dynamic Hedging Working Party

### **C6: Modelling the Illiquidity Premium and Other Components of Credit Spreads**

Investment in the corporate bond market can be broadly divided up into short-term investors and long-term investors such as life insurers and pension plans. The session will discuss the different components of credit spreads.

- How might we define the illiquidity premium?
- How do we calculate the illiquidity premium and how does it depend on specific covariates?

- What other factors beyond expected credit losses contribute to the credit spread and is it possible to quantify these factors?
- How does the decomposition of the credit spread depend on the holding time?

**Speakers:** Andrew Cairns and Paul van Loon, Actuarial Research Centre and Heriot-Watt University

16.25 – 16.30 **Transfer Time**

16.30 – 17.30 **Plenary 4:** Title TBC

**Speaker:** Nick Leeson, Formerly of Barings Bank

17.30 – 19.30 Leisure Time

19.30 – 20.00 Networking event and drinks reception

20.00 – 23.00 Conference Dinner

22.00 – 22.30 **After Dinner Speaker:** Q&A Session with Nick Leeson, formerly of Barings Bank

### **Day 3 – Tuesday 3 June**

09.15 - 10.15 **Plenary 5:** CIO Panel Discussion

**Speakers:** Alastair MacDonald, Towers Watson, Ian McKinlay, Aviva and TBC, Prudential M&G

10.15 – 10.45 Morning refreshments

10.45 – 11.45 **Workshop D**

#### **D1: FRC Guidance on Risk Management**

A new Working Party is being established to consider the profession's response to the current FRC consultation on guidance to directors on risk management, internal control and the going concern basis of accounting. The Working Party will provide an overview of the new FRC guidance and discuss the opportunities that this will bring for actuaries.

**Speaker:** Colin Ledlie, Standard Life Investments, Chair of the FRC and Risk Reporting Working Party

#### **D2: Landscape of Risk Transfer Solutions**

This session will focus on a range of risk transfer solutions which can play an integral role in the capital and liquidity management of life insurers:

- Traditional risk transfer solutions: proportional and non-proportional reinsurance
- Non-Traditional risk transfer solutions: insurance swaps and insurance-linked securities
- Exotic solutions: contingent reinsurance and bilateral swaps
- Discuss structural aspects and benefits of each category
- Discuss the impact Solvency II will have on these solutions

**Speaker:** Alexandre Tzenev, Swiss Reroe

#### **D3: Longevity in the Age of Austerity**

This talk will examine:

- How have trends in longevity changed since the financial crisis?
- What role has economic austerity played?
- What does an analysis of global longevity trends and economic growth show?

**Speakers:** Richard Willets, Partnership

#### **D4: Non-Traditional Asset Investing Within Annuity Portfolios – Doing it in Practice**

This session will give a comprehensive assessment of the practical issues faced by annuity funds when investing in loans: - Relative merits of different loan sectors. - Evaluating how loans fit into an overall portfolio investment strategy. - Assessment of different routes to gaining market access. - Practical challenges involved, including governance, pricing and monitoring.

**Speakers:** Stephen Birch, Hymans Robertson and Alec Innes, Managing Director, Commercial Banking, Lloyds Banking Group

#### **D5: Panel Discussion – How Will Your Margin Sourcing Strategy Work in a Stressed Environment?**

Are you sufficiently prepared for central clearing of OTC derivatives? EMIR and the requirement to clear OTC derivatives has created a demand for cash and high quality securities to act as margin. We will present a panel discussion moderated by Mercer discussing how to meet the margin requirements associated with centrally cleared derivatives. The panel will consist of a mix of sell-side representatives and industry practitioners and will focus on two key areas:

- Management and optimization of internal margin inventory
- Trading approaches to source margin from external sources

**Speakers:** Stuart Catt, Mercer and Panellists TBC

#### **D6: Professional Skills Workshop**

**Speakers:** TBC, IFoA Professional Skills Content Development Working Group

11.45 – 11.50 Transfer time

11.50 – 12.40 **Workshop E**

#### **E1: Model Risk: Daring to Open Up the Black Box**

The financial crisis exposed weaknesses in the development, use, over-reliance and understanding of models within financial services, particularly banking. Insurers have recently started to enhance their treatment of model risk as part of their ERM frameworks and as part of the lead-in to Solvency II. This presentation considers:

- A simple, clear definition of model risk
- How the risk culture of an organisation can affect attitude to model risk
- Criteria for assessing materiality of model risk
- How existing risk management frameworks could be used to manage model risk
- Practical case studies to bring this to life from the theoretical space
- Good practice around governance and control of financial models

**Speakers:** Members of the Model Risk Working Party

#### **E2: Happy Birthday Conduct Risk!**

A session reflecting on the FCA and the impact they have had on the industry as we 'celebrate' their first birthday, covering:

- Review of FCA's approach to conduct regulation – business model analysis and thematic reviews
- Developments in conduct risk management
- Moving the corporate thinking on conduct risk from reactive to proactive
- How businesses are changing the way they manage conduct risk and changing their approach to deliver value rather than add cost

**Speaker:** Sandy Trust, KPMG

### **E3: Working Party Presentation TBC**

**Speakers:** Members of the Working Party

### **E4: Tail Risk Theory and Practical Application**

Avoiding large losses is key to achieving investment goals. Individual tail risks come and go, but investors need a systematic framework to evaluate them over time. We focus on:

- Building the framework
- Constructing and assessing scenarios with real life examples based on current markets.

This interactive session will include attendees anonymously applying the framework discussed and comparing how differently delegates estimate events such as a Eurozone Crisis or Chinese Hard Landing might impact markets.

**Speaker:** John Roe, LGIM

### **E5: Insurance Asset Management – Challenges, Opportunities and Trends**

This session will cover:

- Insurance regulatory outlook.
- Economic outlook.
- Challenges facing insurers and their asset managers.
- Insurance asset management opportunities.
- Future trends and conclusions.

**Speaker:** Bruce Porteous, Standard Life

### **E6: Is the “1 in 200” the New “Normal” Event**

This presentation will cover the difficulties of modelling tail events in risk based capital work. Look at the merits of using the Economic Scenario Generator (ESG) to stochastically model market and credit risks and help quantify capital requirements. There will also be a discussion on the limitations of the data and assumptions used to model these risks, in particular when considering credit and illiquidity risks

**Speaker:** Andrew Smith, Deloitte LLP

12.40 – 13.40 **Lunch and Exhibition**

13.40 – 13.45 **Transfer Time**

13.45 – 15.00 **Plenary 6:** Bitcoins and Non-Standard Currencies (Title TBC)

**Speaker:** Izabella Kaminska, FT Alphaville

15.00 – 16.00 **Plenary 7:** Limits to Growth (Title TBC)

**Speakers:** TBC, Members of the IFoA Resources and Environment Board

16.00 – 16.30 Chair's closing remarks

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