

Cambridge Centre for Risk Studies Seminar 20 March 2014

Emerging Risks Scenarios for Risk Management

Discussion Topics for Panel Discussion 1 Good Practice for Managing Emerging Risks Trevor Maynard, Chairman

Chair: Trevor Maynard, Head of Exposure Management and Reinsurance, Lloyds Rowan DouglasManaging Director Willis Analytics, Willis Dr. Robert Muir-Wood, Chief Research Officer, RMS John Scott, Chief Risk Officer, Zurich Global Corporate, Zurich Insurance Group Dr. Markus Wadé, Senior Risk Manager, Integrated Risk Management, Munich Re

Introduction - Trevor Maynard, Lloyd's of London

- Lloyd's takes emerging risks seriously: Asbestos cost the insurance industry USD 150bn including around a third in legal fees.
- We have had an emerging risks team since 2007 and have published many reports on a wide range of subjects: Nano technology, pandemics, HRT, Behavioural issues, climate change etc
- Our definition of Emerging Risk is: "an issue that is perceived to be potentially significant but which may not be fully understood or allowed for in insurance terms and conditions, pricing, reserving or capital setting"
- RDSs Lloyd's has run a scenario process since 1995 covering risks such as Space weather, Marine collisions, Terrorism, Natural Catastrophes and Liability
- Special interest group: We run a group of market practitioners with backgrounds from Exposure Management, Actuarial to Underwriting. They, review our work. Suggest future research. Have regulator presentations from wider experts (some in the audience today!)
- Process: research; report; discuss; lobby; scenario; model

Panellists introduction

In your three minute introduction please could you:

- Say what your definition of "emerging risks" is
- Please stick to three minutes I think the general discussion will give you plenty of opportunity to develop your favourite comments





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Proposed questions

Q1: Many major events seem to arise from a series of "impossible" connections. The terrible World Trade Centre attacks required terrorists to:

- successfully hijack four planes with limited weapons
- fly the planes with little training
- exploit weaknesses in the WTC design which caused them to fail
- do this for both buildings in one attack
- of course destroy the planes

Before it happened this scenario would have seemed ludicrous. Other emerging risks scenarios often appear the same. How do you convince policyholders, underwriters and senior management to take these scenarios seriously?

Q2: Human imagination is awesome – yet we often struggle to think through implications in complex systems (such as ecosystems or economies). We are continually surprised by actual events and how they can sometimes cluster. How do you mitigate this human weakness in practice to ensure your scenarios are broad enough?

Q3: Real events often involve multiple disciplines such as:

- · losses from a variety of classes of business
- legal issues
- complex claims/ loss adjustment issues
- reserving difficulties in the absence of clear trends
- economic effects such as inflation

In practice how do you ensure that your horizon scanning activities take account of the various points of view and knowledge of key stakeholders?

Q4. There is significant uncertainty around traditional catastrophe model results – particularly for hazards with a limited set of recent events. Californian Earthquake for example. For less well researched risks such as space weather or Cyber risks it is event harder to assign probabilities to scenarios:

Are scenarios any use without a sense of the probability of their occurrence?

What is the appropriate insurance industry response in the face of this uncertainty? Do you believe that company Boards consider this at present?

Q5. To what extent can the insurance industry be a force for good in society – in particular to assist with understanding risks and help prioritise mitigation activities?

Q6. There are many dimensions relevant to emerging risks. How much could they cost? How soon could they occur? What is their likelihood? How are the risks changing over time. **How do you rank emerging risks?**

Q7. What will be the impact of "Big Data" and the ability to analyse it on horizon scanning activities? Are you looking at this actively?





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Q8. It can be painful to discover a strongly held view is mistaken. Psychologists tell us people will actually find ways to avoid such discoveries through denial. They call this "cognitive dissonance" and those involved in emerging risks management should be aware of this and other similar behavioural issues such as herding and anchoring of assumptions. Do you believe that an open risk culture which encourages staff to challenge the status quo is essential within the insurance industry? How close are you to achieving this?

