Breakout Session Developing Best Practice Recommendations

Briefing from

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Centre for **Risk Studies**







BREAKOUT SESSION OBJECTIVES

- We would like the participants of this workshop to help us to identify key issues and recommendations for Best Practice in Scenarios Development and Usage
 - We will use these recommendations to structure a publication on Best Practice for Scenario Development and Usage
- We will break into three groups to have more detailed discussions
 - Be back here to report the group's recommendations at 4.30
 - Select a reporter from the group to present your findings
- For the purposes of this breakout session, assume that
 - this is aimed at the insurance industry
 - it is recommendations for use by insurers' internal modelling teams as well as third party modelers, such as model vendors and advisors
 - it is focussed on 'clash' across multiple lines of insurance, although it can also apply to individual lines of insurance





APPROACH

- We recognize that there are several ways we could tackle this development
- We could have split into groups to consider different use cases, such as:
 - First step for model development
 - Capital stress testing
 - Discussions with regulators and rating agencies
 - Underwriting and pricing
- However we decided to split the groups into three broad areas of recommendations:
 - Identifying Scenarios
 - Severity of Scenarios
 - Sensitivity Analysis for Scenarios
- Use these breakout topics as a lens to explore use cases





THREE GROUPS

- Group A: Identifying Scenarios
 - Meeting room: LT2
 - Chair: Jessica Schuler, Praedicat, Inc.
- Group B: Severity of Scenarios
 - Meeting room: Castle Teaching Room
 - Chair: Simon Ruffle, Cambridge Centre for Risk Studies
- Group C: Sensitivity Analysis for Scenarios
 - Meeting room: W2.01
 - Chair: Pooya Sarabandi, RMS





GROUP A: IDENTIFYING SCENARIOS

- Meeting room: LT2
- Chair: Jessica Schuler, Praedicat, Inc.
- Develop at least three prioritized recommendations for best practice in identifying and selecting scenarios to develop and use

Discussion points might include:

- Which are the most important multi-line scenarios to develop and test portfolios against?
- How many should be developed and run?
- How can we get confidence that selected deterministic scenarios represent the event universe?







GROUP A: FEEDBACK

- 1. Know your use cases
- 2. Common platform
 - For use cases within line
 - Across line
- 3. Identify exposure (internal and external)
 - To choose scenarios
 - Broad feed list created
- 4. Identify participants
 - Helps feed list
- Common data standard
- 6. Always search for breadth of scenarios/universe





GROUP B: SEVERITY OF SCENARIOS

- Meeting room: Castle Teaching Room
- Chair: Simon Ruffle, Cambridge Centre for Risk Studies
- Develop at least three prioritized recommendations for best practice in setting the severity levels of scenarios

Discussion points might include:

- What levels of severity make sense to analyze in a multi-line scenario?
- What return periods are implied by the severities of a deterministic scenario if a probabilistic model is not available?





GROUP B: FEEDBACK

- 1. Study Counterfactual
- 2. Make 'return period' understandable to C-suit
 - Make them believe in the scenario
- 3. Communicate uncertainty
 - In representation/return period
 - Break down different sources of uncertainty
- 4. Determine the audience of the scenario
 - Make implicit assumption explicit
- 5. Business Impact
 - Bias to the tail
 - Be plausible
- 6. We can go beyond; to the stochastically enhanced scenarios
- 7. We should all be more Bayesian!







GROUP C: SENSITIVITY ANALYSIS FOR SCENARIOS

Meeting room: W2.01

Chair: Pooya Sarabandi, RMS

 Develop at least three prioritized recommendations for best practice in conveying the sensitivity of results to assumptions made in scenarios

Discussion points might include:

What are the best ways to provide meaningful sensitivity analysis for users of these scenarios so that they can understand the drivers of losses both within and across lines?





GROUP C: FEEDBACK

- 1. Do sensitivity testing
- 2. Be clear about inputs and assumptions
- 3. Quantify if you can, dollar supplement with benchmarks (if available)
- 4. Do not miss out on qualitative inputs/assumptions





Breakout Session

Developing Best Practice Recommendations

Centre for **Risk Studies**





