Group Exercise Scenario Identification and Prioritization

Pooya Sarabandi Vice President - Global Head of Data Analytics and Exposure Modeling RMS, Inc.

Centre for **Risk Studies**



VERSITY OF MBRIDGE Judge Business School



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STRUCTURE OF THIS GROUP EXERCISE

- A. Demographics & interests
 - Characterizing the attendees here today
- **B.** Scenarios for individual classes of insurance
 - Priorities and guidance on the need for scenarios for specific lines of business
- C. Clash scenarios
 - Selecting candidate scenarios for managing multi-line risk
- **D.** Scenario methodology
 - Choices in designing scenarios

A. DEMOGRAPHICS AND INTERESTS



What line of business are you in?

- A. Insurance company
- **B.** Reinsurance company
- C. Intermediary or risk advisor
- **D.** Regulator or rating agency
- Banking or other financial services Ε.
- F. RMS
- G. Praedicat
- H. Cambridge team
- Other



If you are involved in insurance...

The area of insurance I am most concerned with is:

- A. Property
- B. Casualty Liability
- C. Energy
- D. Marine
- E. Aviation
- F. Clash or enterprise risk



What is your main geographical area of interest for applying scenarios? Rank your top 3

- A. US market
- **B.** Existing major insurance markets
- C. Emerging and high growth insurance markets to manage future exposure
- D. Specific territories where my company is different to the industry average



What is your main area of interest in applying scenarios? Rank your top 3

- A. Regulatory compliance or financial strength rating for risk capital
- B. Internal stress testing and exploration of ³³ poorly-understood risks
- C. Pricing and catastrophe loading
- **D**. Design of new insurance products

	21%
f	33%
	28%
	19%





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Β. **SCENARIOS FOR INDIVIDUAL CLASSES OF INSURANCE**



Which classes of insurance are scenarios most needed for? Rank your top 3, in terms of their importance to your organization:

- A. Casualty Liability scenarios for systemic mass torts across sectors of economy
- **B.** Marine scenarios for severe losses to hull, cargo, and/or marine liability lines
- **C. Energy** scenarios for severe loss to offshore and/or onshore insured exposure
- D. Aviation scenarios of large scale losses in airline fleets or aviation facilities
- E. War & Political Risk severe loss scenarios to political risk exposures
- **F. Specialty** severe loss scenarios to exposures in specialty lines
- **G.** Credit and Surety scenarios for systemic defaults of credit and surety contracts
- **H. Agriculture** scenarios for large scale losses to agriculture insurance exposures





What types of scenarios are most needed for casualty? Rank your top 3

- A. Latent bodily injury product liability resulting in large-scale clash
- B. Latent property damage product liability resulting in large-scale clash
- C. Multi-defendant D&O claims
- D. US-style property damage class actions are allowed in a European jurisdiction
- E. Latent environmental liability resulting in largescale clash
- F. Short-tail energy-related explosions or spills
- G. Courts disallow pollution exclusion
- H. Courts disallow anti-stacking provisions of integrated occurrence





What types of casualty-related multi-line clash events are most needed? Rank top your top 3

- A. Product-related occupational disease results in multi-defendant liability-workers' comp clash
- B. Large-scale consumer product liability results in multi-defendant product liability and D&O claims.
- C. Change in liability rules, such as easier class 18% actions, causes increased litigation in multiple liability lines
- D. Property and casualty clash due to industrial accidents after a natural disaster
- E. Property and casualty clash from energy activities causing earthquakes
- F. Property and casualty clash, including liability and workers' comp, from a large-scale terror event



C. CLASH SCENARIOS



Clash scenarios for 5 classes: property, casualty liability, energy, marine, and aviation

Prioritize the following for clash scenarios. Rank your top 3

- A. Hurricane and storm surge in Gulf of Mexico, US
- **B.** European wind storm
- **C.** Typhoon and storm surge SE Asia
- **D.** Japan earthquake and tsunami
- E. Multiple plane crash at hub airport
- **F.** Fire and explosion at major oil refinery



Clash scenarios for 5 + 3 classes: adding War & Political Risk; Specialty; Credit & Surety

Prioritize the following for clash scenarios. Rank your top 3

- A. Geopolitical Conflict in Middle East
- **B.** Geopolitical Conflict China-Japan
- C. Multi-Regional Power Failure (Solar Storm)
- **D.** Global Drought & Extreme Weather Pattern
- E. Financial Credit Crisis: Property Bubble



Scenarios for multi-line accumulations at individual high value locations

Prioritize the following for clash scenarios, Rank your top 3

- The largest maritime ports in each country Α.
- Β. The largest **airport facilities** in each country
- The largest **rail terminus complexes** in each country
- The largest **commercial property facilities** in D. each country
- The largest **retail malls** in each country Ε.
- F. The largest industrial facilities in each country
- The largest **manufacturing clusters** in each G. country
- The largest **business parks** in each country Η.
- The largest **construction sites/builders risks** in each country



Scenarios for multi-line accumulations at individual high value locations

Which types of events should be modelled for high value locations? Rank your top 3

- A. Major fire
- B. Terrorist attack
- C. Structural failure and collapse (design/construction error)
- D. Accidental explosion
- E. Natural catastrophe perils only
- F. Aircraft crash onto facility
- G. Toxic chemical escape or pollution incident
- H. Cyber-physical attack to cause damage

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D. SCENARIO METHODOLOGY



If scenarios could be assigned return periods, which return periods would be of most interest?

Rank your top 3.

- A. 10 year return period
- **B.** 50 year return period
- C. 100 year return period
- D. 200 year return period
- E. 500 year return period
- F. 1,000 year return period
- G. 5,000+ year return period

11%		
17%		
27%		
27%		
12%		
6%		
0%		



Which metrics of severity are the most useful benchmarks for a scenario? Rank your top 3.

- A. Loss as proportion of total insured limit or exposure in affected market
- **B.** Insurance industry loss relative to annual gross written premium
- **C.** Loss relative to average annual loss ratio
- **D.** Loss as a standard deviation of historical volatility of claims history





Which outputs are most useful for a specific scenario with a given narrative and variables? Rank your top 3.

- A. Best estimate, given occurrence
- **B.** Worst case, using pessimistic assumptions
- C. A high percentile in the distribution of all possible outcomes
- **D.** Several variants at different percentiles of the outcome distribution
- E. A full event set of thousands of variations of the scenario



THANK YOU FOR YOUR PARTICIPATION

