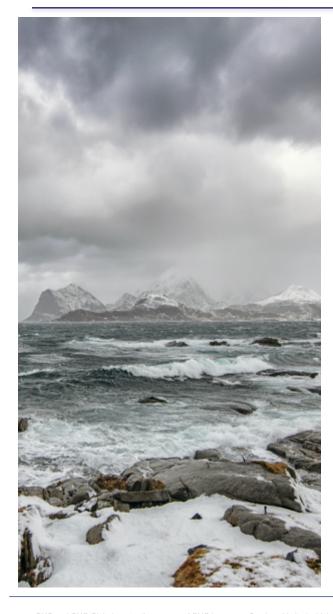


Introduction



- Bill Braniff
- Chris Holt
- Jerry Smith
- START
- CHC Global

Executive Summary



- Houston, We Have a (few) Problem(s):
 - The "Binary Problem"
 - The "Control" Problem
 - The "Problem Solved" Problem
 - The "Truth" Problem
- The Insurance Industry has Useful Perspective to Offer
 - Honest Risk Assessment
 - Event-Agnostic Resilience
 - Public-Private Partnerships
- We are in the eye of the storm
 - No "Return to Normal"
 - Concurrent Risks Will Manifest
 - Optimal Conditions for Malicious Actors + Heightened Vulnerability

The "Binary" Problem



- Win, don't lose
- Identify a threat, neutralize it

The "Binary" Problem



- Win, don't lose
- Identify a threat, neutralize it

We Need to Manage **Inevitable** and **Enduing** Hazards

We Need to Plan to Lose → Allocate Resources

To Resilience

The "Problem Solved" Problem



- Identify a Problem
- Solve the Problem
- Move On from the Problem

The "Problem Solved" Problem

- Identify a Problem
- Solve the Problem
- Move On from the Problem.

Inevitable Hazards Require Enduring

Resilience Mechanisms

- 2014: Ebola Outbreak
- 2016: Directorate of Global Health Security and Biodefense est. to Prevent Future Pandemics
- 2018: Directorate drastically downsized and consolidated into Counterproliferation Directorate
- 2020: US 2nd highest mortality per capita rate in the world (UK is #3)



The "Control" Problem



- Control borders (DHS)
- Control interest rates (the Fed)
- Control populations (Criminal Justice System)
- Control the battlespace (DoD)

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Managing Persistent Hazards Is About **Influence**, Not Control

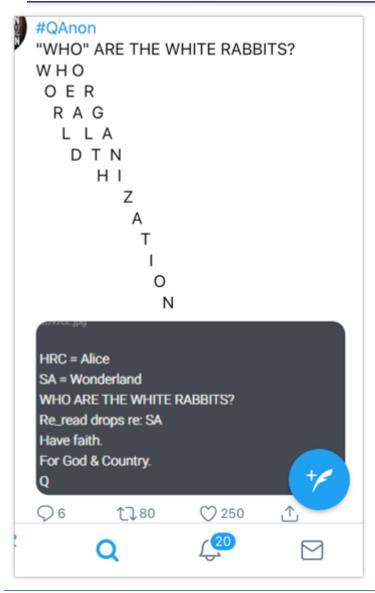
The Private Sector Wields **Cultural** and **Financial** Influences

The "Truth" Problem



- Super-Empowered Communicators with Few Ethical Standards
- Diminished Trust in Institutions and Experts
- Lack of Answers wrt Covid-19
- Profound Uncertainty

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We Need to Identify Psycho-social Incentives that Reward Truth



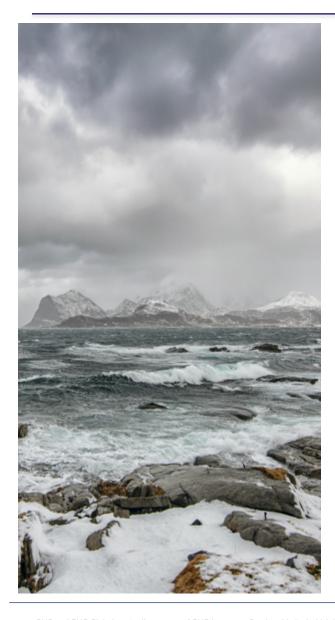
Why The Insurance Perspective?



- Based on Recognition that Bad Things Will Happen
- Enduring Mechanism that Responds to Recurring Problems
- Financial incentives for good behavior (e.g, safety features)
- Blunts the psychological and social impact of uncertainty and fear
- Transfers some risk from public to private sector
- Incentivizes the collection and analysis of more and better data



Insurance Sector



- Around \$6.3Tr in global revenues / premiums
- A useful indicator of national stability
- Brings knowledge and data
- Harmonises internationally
- Is a regulator of risk financing
- Strong engagement with governments
- Public-Private Partnerships are routine
- Mature products and markets for:
- Political Risks
- War, Terrorism and Political Violence
- · Kidnap for Ransom / Piracy
- Cyber

Risk and Capital

Risk Capital

The Client is seeking to Share Risk

Buying Groups

Intermediary

Product

Financial Structuring

Capital is seeking a Return on Investment

Industry Bodies Insurance Brokers Insurance Companies

Response Providers

Service Providers (Re) Insurance Companies

Risk Bonds & Securities

Sovereign Wealth Funds

Central Banks

Return to Basics – The Four Ts



(Consulting, Data, Analytics)

Transfer

(Insurance)

Impact / Severity / Consequence

Terminate

(Legislate)

Tolerate

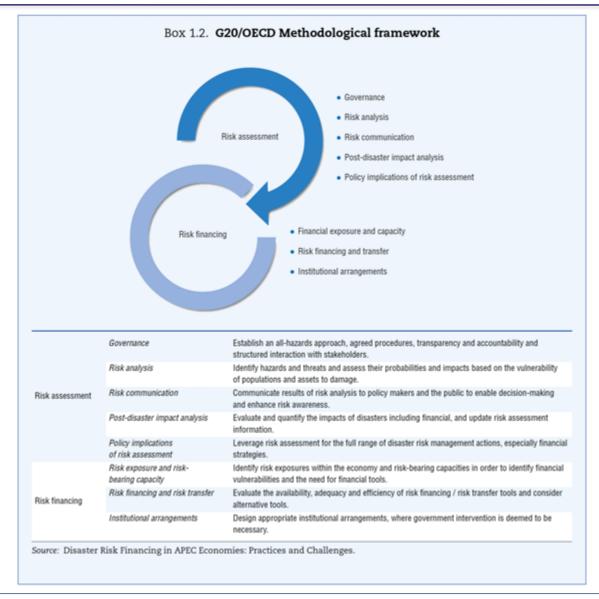
(Regulate)

Treat

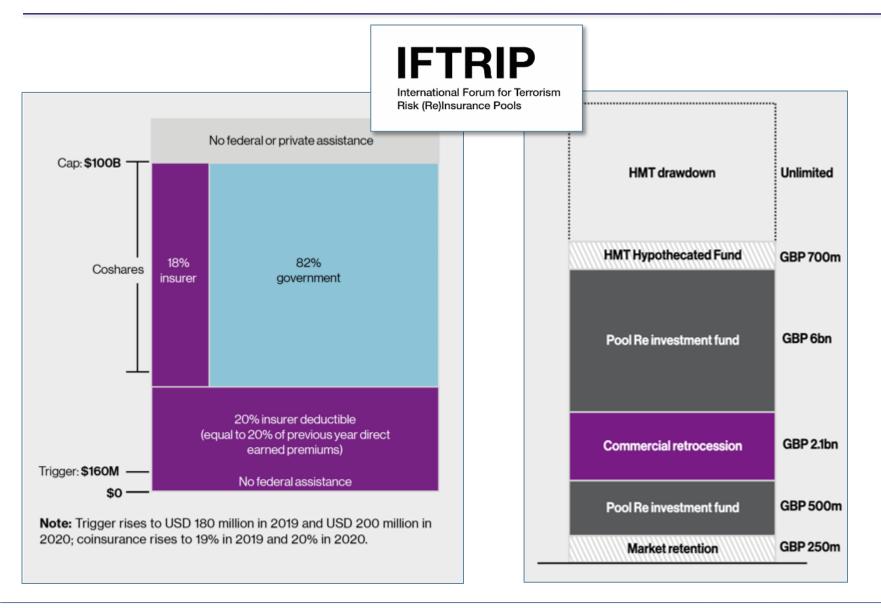
(Mitigate & Respond)

Likelihood / Frequency / Probability

G20 Approach – Disaster Risk Financing



Protection Gap Entities





Imperative 1 - Honest Risk Assessment





Imperative 2 - Event Agnostic Resilience



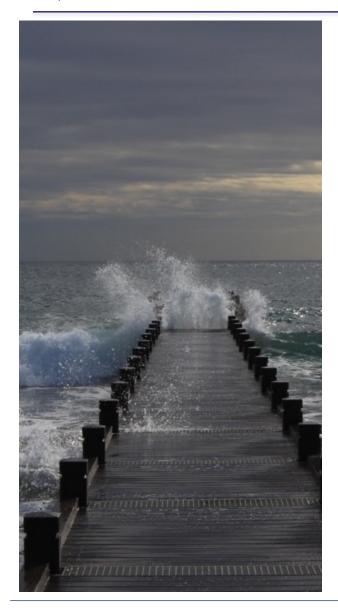
- Events may have a variety of causal factors
 but the crises consequences and outcomes have common factors
- Immediate impacts include loss of access to 'normal' workspaces, reduction in ability to communicate at a speed and detail expected.
- TESCO supermarket: 2016 'Doomsday' Crisis scenario. 30 people on the HQ site usually housing 6,500 workers.

Imperative 3 - Public-Private Partnership



- Requirement for Public-Private coordination:
 - Cyber sector (social media platforms / hosts)
 - Critical National Infrastructure (CNI)
 - Risk Financing
- Influencing of public behaviours
- Adopting shared preparation and response paradigm:
 - Disease surveillance
 - Public health laboratories
- Coordinated interoperability:
 - Information / intelligence sharing

Question 1 – What does our future look like?



- Current conditions
 - 1,000,000+ deaths and wartime levels of debt
 - IMF suggests \$28tn in lost output
 - Experience of restriction of movement
 - Mass redundancies
 - Loss of confidence in leadership
 - Decline and recovery figures, out to 2022
- Economic conditions intimately tied to the pandemic's fate
- Novel approach to knowledge economy production
- K-shaped recover to drive strategic issues:
 - Global poverty / income disparity
 - Democratic deficit
 - Climate change

Question 2 – Are we ready for a concurrent crisis?



- Disease:
 - Influenza pandemics; 1957, 1968
 - Coronavirus outbreaks; 2002, 2012, 2015
- Sea level change (WEF):
 - Affecting ~10% global population by 2100
 - Mixed assessment of Global South movement
- Water poverty (UNwater):
 - 2.2b people lack access to proper drinking water
 - 4.2b people lack access to proper sanitation
- Migration (IOM):
 - 258m international migrants, with 25m refugees
 - 19m displaced by disasters in 2017
- Hostile Cyber (Sophos, Sonicwall):
 - 2020: 2.3t attempts, 3.2b malware attacks,
 - 51% Orgs ransomware, all sectors
 - Demands are increasing
 - Working from home increasing vulnerabilities

Question 3 – How are we exposed to malicious actors?



- Participant motivational factors:
 - Individual psychological
 - Social and political
 - Ideological / religious
 - Cultural marginalisation and trigger mechanisms
 - Group dynamics and charismatic leadership
 - Social media and dark web
- Vulnerable governments
 - Focus elsewhere
 - Risk communication challenges
 - Influence immaturity?
- Vulnerable populations
 - Uncertain and fatigued
 - Opinionated and communicative



Concluding Remarks



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