Emerging Risks Scenarios for Risk Management

Briefing Notes for Panel Discussion 2

Response: How Should a Business Monitor Emerging Risks & Manage Their Occurrence?

Alan Laubsch, Chairman

Chair: Alan Laubsch, Director & Head of Risk Products, Financial Networks Analytics
Jonathan Clark, Head of Business Solutions & Syndicate Claims Management and Member of SCOR Emerging Risks Groups for P&C claims, SCOR SE
Kay Haggis, Group Head of Operational Risk and Head of Catlin Emerging Risk Committee, Catlin
Matt Harrison, Syndicate Exposure Manager, Hiscox
Jeremy Hindle, Head of Enterprise Risk Aggregation, XL

(1) Crisis management,

(2) Early warning indicators, and

(3) Portfolio management strategies.

Questions:

(1) Crisis management

As in most challenges, preparation matters. If you find yourself at the starting line of a triathlon wondering what to do, it won't work out well. But unlike sporting events, crises are much more stressful and unpredictable, and it's less obvious how to best prepare.

According to Wikipedia, three elements are common to a crisis:

a) a threat to the organization,

b) the element of surprise, and

c) a short decision time.

Peak Performance

During a crisis, fear and stress interferes with decision making, as we saw in the GFC. And yet, perhaps there is something we can learn from how top athletes are able to make rapid decisions and perform in high stakes environments. Bloomberg recently published an article titled "Traders Beat Market Indexes Borrowing Tools From Sports" where it describes an increased trend of coaching for traders. Programs start by facing cognitive biases (e.g., risk myopia, overconfidence, loss aversion, endowment effects), provide performance feedback in multiple dimensions, and use peak performance psychology to boost performance under stress.

1. What are some essential practices for organizations to be better prepared to respond to crises?
    - And what are common pitfalls?

Crisis management is a team sport: social dimensions

1. How can organizations develop a culture of risk management, and what are key attributes?
2. What are some effective ways to conduct war games / simulations which provide individual and collective feedback?
3. I'd like to think most will advocate pro-active risk management, although in reality there is much organizational inertia. It starts with our social nature ("don't go against the crowd). How do we encourage contrarian thinking and avoid the dangers of herd mentality / group think?

4. To take the opposite polarity of contrarian thinking, there is "the wisdom of crowds." When do we listen to it, and at what point do we go against the crowd and be contrarian?

Adaptive leadership

1. What style of leadership helps organizations thrive in crisis situations?
    a. Due to the need to for quick decision making, leadership is crucial, and but at the same time it’s important to empower employees in the front lines act based on the best information they have. A great case study of this is Walmart’s response to Hurricane Katrina: As Katrina approached, Wal-Mart CEO Lee Scott gave a message directly to his senior staff and told them to pass it down to regional, district, and store managers: “A lot of you are going to have to make decisions above your level. Make the best decision that you can with the information that’s available to you at the time, and, above all, do the right thing” As a result Walmart employees were effective at coming to the broader community’s rescue as top-down FEMA failed to respond in a timely manner.

Communication and information flow

1. Communication and information flow is critical to manage crises, and this goes for both structured and unstructured information. Many banks experienced large losses from subprime positions they did not know they held. What are some effective ways that organizations harness and communicate information to more effectively respond to crises?
    a. For example, Swiss Re discusses their use of an internal social network to gather risk information.
    b. GS and JPM have daily risk meetings that are attended by traders, risk managers, and sr management including CEO.
    c. In the mid 1990’s JPM instituted a reverse stress testing program to harness intelligence from traders.

Governance

1. What governance structures enable organizations to effectively respond to crises? Which ones hinder?
2. How do we get the benefits of an independent and integrated risk function: does risk management serve as government, policeman, or advisor?

(2) Early Warning Indicators

There’s ever growing research that highlights leading indicators for systemic risk. And yet there are always false positives. What are some effective ways to work with early warning indicators? How do we separate signal from noise? What are some pitfalls, and how do we prevent from being whipsawed by constantly changing signals in a ocean of big data?

According to J. Gharajedaghi (1999), "Learning results from being surprised: detecting a mismatch between what was expected to happen and what actually did happen.” How can organizations best adapt and learn from surprises, or outliers?

1. Who can we learn from? What are some interesting examples of firms which have integrated early warning signals into decision making?
    a. As an example, JPM and GS organize meetings are organized to focus VaR outliers. GS exited subprime in Dec 2006 after observing 10 days of VaR outliers in its Mortgage business… “when reality (P&L) tells us something different from our risk models, we listen to reality.”
1. And what were some of the failures… firms that did not listen to reality?
    b. In contrast, other firms stubbornly clung to their backward looking risk models during the GFC, despite ample evidence that there was a regime shift. These same firms were ones that decided not to mark to market subrime CDO positions using proxies because they felt their own structures were superior to the market and therefore relied on internal theoretical valuation models.

(3) Portfolio management strategies at each stage of a crisis

Phase 1: Pre-crisis: low visible risk and market complacency, as hidden risks build up

Crises evolve in distinct stages, and are often characterized by rapid phase transition that are as different as war and peace (risk on / off). Potential risks often build up beneath the surface for years, before emerging in a rapid phase transition, as we have recently witnessed in Ukraine. As in medicine, prevention is the best cure.

1. How can we do a better job managing risks while they are still in their potential form, and there is a level of control? How can risk managers convince senior management and shareholders that it can be worthwhile buying umbrellas in summertime, with no clouds in sight?

Robert Shiller and Nouriel Roubinin warned about bubbles in the housing market and financial imbalances from 2005… but selling risky assets at that point would have incurred close to two years underperformance. Being right early can be more career limiting than being wrong with everyone else.

1. How do we balance the need for short term performance and herding against long term risk mitigation (and career risk!). How do we encourage more contrarian and counter-cyclical strategies to prevent the kind of herding monoculture that has led to the GFC?

Phase 2: Emerging Crisis: escalating outliers

2. And as systemic risks emerges as outliers, small at first, how do we best learn and change our portfolio strategies in the light of escalating but ambiguous signals?
3. What are some effective ways to reduce key risks in a portfolio, using hedges as well as insurance / tail options? Simple or complex instruments?
4. Reverse Stress Testing has emerged as a practice championed by the BOE and other regulators. The goal of RST is to uncover key vulnerabilities that can kill the firm. How can firms use RST to proactively mitigate risk as crises emerge?

Phase 3: Crisis. Irreversible tipping points crossed.

1. And as we enter a full blown crisis, how can we avoid the pitfalls of individually focused risk management strategies that end up backfiring and exacerbating systemic risk (e.g., rushing through the same exit, liquidity hoarding, fixed stop-loss and VaR limits)?
2. Collaborative strategies offer the most promise for mitigating systemic risk. This includes working with partners as well as competitors. Successful example can be seen in payment, trading, and settlement infrastructure. The instant sharing of bank cybersecurity attack data and analysis by Palantir. And historical crisis management examples, such as the joint bailout of LTCM by major creditors as facilitated by the Fed.
   a. How might collaborative strategies work during a crisis situation?

Lead and change the world

1. Instead of simply adapting to a crisis situation, there is a potential for transformation through leadership, especially in the area of designing better mass collaboration platforms. What are some of your ideas around the evolution of collaborative risk management platforms?

Reasonable people adapt themselves to the world. Unreasonable people attempt to adapt the world to themselves. All progress, therefore, depends on unreasonable people." ~ George Bernard Shaw