Prevention is Cheaper than Cure:
A Real Return on Op Risk Investment

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Op Risk Turkey
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The Nature of Risk
Some Recent Examples

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Some Risks you cannot Prevent, only Mitigate…

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Other Risks Happen, but you can Avoid them…

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Most Tail Risk is Self-Created and Preventable (1)

Kerviel appeals the ruling that he has to pay €4.9bn back. He told judges the bank had known about his exorbitant trades in 07 and 08 and turned a blind eye as long as they made money. He said he was a scapegoat, describing himself as a hamster in an ever-spinning wheel of an unscrupulous financial system run on greed and profits.

Most Tail Risk is Self-Created and Preventable (2)

UBS $2.5bn loss, 3 other co-workers were aware in the summer of 2011 that Adoboli had loss-making positions in the umbrella account, which they had also used.

"UBS was my family and every single thing I did, every single bit of effort I put into that organisation, was for the benefit of the bank. That is everything I lived for," he said as he dabbed his eyes with a paper handkerchief in the witness box of court three at Southwark crown court. "To find yourself in Wandsworth prison for nine months because all you did was worked so hard for this bank."

"I'm devastated but in the end the reason I'm most sad is because these losses weren't the result of dishonesty or fraudulent behaviour. It was the result of a group of traders who were asked to do too much with too little resource in a market that was too volatile. I wish that we had stopped to take stock of where we were."

UBS

Most Tail Risk is Self-Created and Preventable (3)

'Dude, I owe you big time. Come over one day after work and I'm opening a bottle of Bollinger'

Barclays Libor scandal, $470m fine, FSA's Lord Turner states: 'A cultural tendency to be always pushing the limits of the rules, there was a culture of gaming, it had to change'

Barclays has replaced its CEO and Chairman

Separately it has now become embroiled in an energy trading scandal

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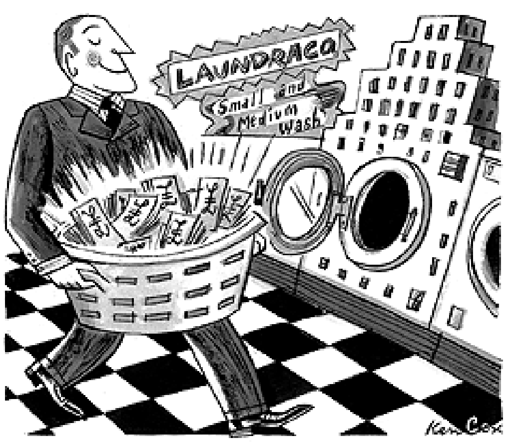
Most Tail Risk is Self-Created and Preventable (4)



HSBC will incur an estimated $1.5bn fine, described by US lawmakers as 'a money-laundering conduit for drug kingpins and rogue nations'

Standard Chartered, $340mn fine, alleged by the NY DFS to have 'schemed to hide 60,000 transactions valued at about $250bn which breached sanctions with Iran.'

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Most Tail Risk is Self-Created and Preventable (5)

Knight Capital $440mn loss on high frequency trading due to software release problem.
Knight had to be bailed out by other market participants, losing much of its independence.

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How to Manage Risk?

An Example from Motor Racing

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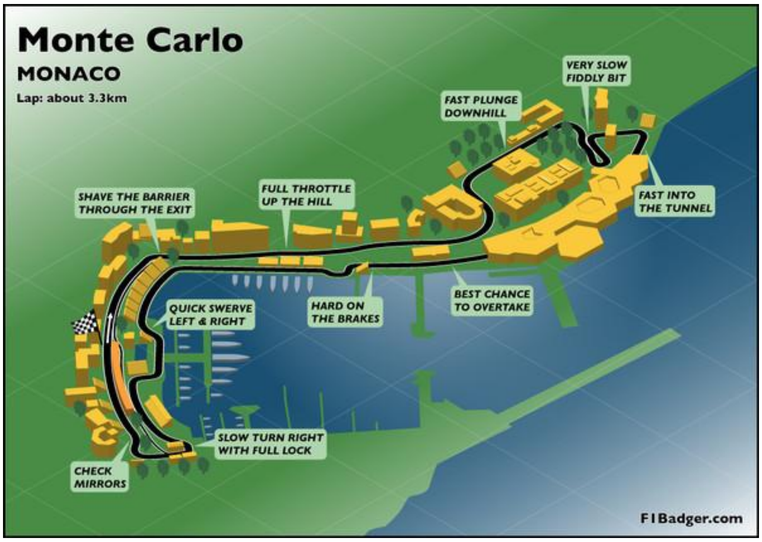
Establish the Top Down View

Start with the big picture, don't get stuck at ground level from the beginning. The Board and senior management are the ultimate clients: they need a high level risk map.



Top down it's clear where the crash corners and big risks are, and what you have to do about them and what controls should be in place…

You can also see the lower risk opportunities where you can overtake the competition

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Determine the Risk Tolerances

Model the processes from start to finish and determine the points of risk where you need to collect data and where the expected amber and red warning zones should be.

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Collect and Analyse the Risk Data

Monitor the data – in bank speak 'KRIs and incidents' – and calibrate the expected tolerances. For live processes the data must be monitored real time, but other risk information can be analysed periodically or ex-post. It doesn't require an army.

We manage what we measure. Risk should therefore expect to constantly refine its measures.

Too much data, or incorrectly specified data, creates noise.

Old or stale risk data that isn't useful for analysis creates a 'data graveyard', a distraction in the risk management process.

Bring the Data to Life

There's potentially lots of data, but what do the engineers and the driver really need to know? Data needs to be synthesized.

How should real time controls be designed and what buttons will need to be pushed and when?

Connecting the data to necessary actions is where Risk has the most value to add.

Limiting the Impact of Tail Risk

Data helps business performance and understanding of expected loss. But tail events happen, either because people or systems are fallible, or simply due to events out of our control. Safe and resilient business model design will mitigate the impacts of tail risk.

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How to Implement?

What Works and What Doesn't

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Assessing and Quantifying Risk

What Works?	What Doesn't
• Risks by business, product, process	• Sarbanes Oxley, backwards from bal. sheet
• Risk or Audit independently facilitate	• Business Self-assessment techniques only
• Brainstorming sessions, workshops	• IT toolsets only, which junior staff populate
• Allocating top down, diversification	• Aggregating bottom up, double counting
• Controls clearly owned, categorised	• Unclear dependencies, no control design
• 96^{th} percentile (1-in-25 yrs)	• 99.9^{th} percentile (1-in-1000 yrs) and beyond
• Some assumed tail correlation	• Impacts uncorrelated, or fully correlated
• Controls in place, several fail at once	• Inherent and residual risk calculations
• Effectiveness of control environment	• Mechanical scoring techniques, no data
• Relevant external events, case studies	• Scaled external data without storyline
• Supporting data: internal losses, KRIs	• Qualitative analysis only, audit issues only
• Expected management mitigation	• Assumption of no management response
• Test to destruction ('reverse stress')	• All losses affordable, a managed result
• Resolution scenarios, living wills	• No client protection, low wind-down costs
• Liquidity & capital modelled together	• Less conservative conf. levels for liquidity
• Causal drivers of risk, cultural factors	• Correlations not described or understood

Businesses need to own the assessment of their risks but capital and its internal allocations must be determined independently by the risk experts (not the CFO)

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Dealing with Incidents and Losses

What Works?	What Doesn't
• Risk Appetite	• Unrealistic budgets
• Trader mandates	• Unclear responsibilities
• Appropriate limits	• Thresholds too high, too low
• Early identification	• Cover-up, fear of blame game
• Expected loss tolerance	• Inadequate daily risk monitoring
• Scenarios for stress loss	• Lack of management action triggers
• Quantification of impacts	• Franchise impacts not acknowledged
• Independent investigation	• Management silos, information control
• Identification of causes, correlation	• Attributing everything to external factors
• Ownership, acceptance, approval	• Unclear cost allocation, mispriced risk
• Historical loss patterns / analysis	• Lack of data, no corporate memory
• Understanding control failings	• Poor cross-functional perspective
• Prevention and remediation	• Inertia, no change to processes
• Recoveries and mitigation	• No recourse, failure to follow up
• Learn and move on	• Knee jerk response, over-reaction

Culture is often a causal or contributory factor in the size of a loss: a positive and open risk culture mitigates losses, a weak or abusive culture will exacerbate them

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Risk Governance and Risk Committees

What Works?		What Doesn't
• CEO attendance		• Risk and Compliance only
• Board accountability	⟷	• Accountable to Excom only
• CRO has access to NEDs		• CRO only reports to the CFO
• All areas submit reports		• Exempt / out of scope activities
• Broad investigative powers		• Lack of independent resources
• Packs three days in advance		• Late papers or same day reports
• Risk highlights themes, concerns	⟷	• Data dump of stats and breaches
• Recommends risk appetite limits		• Soft or non-quantitative measures
• Reviews / approves ICAAP, RST, ILAA		• Risk silos, inconsistent aggregation
• Focus on early warnings and trends		• Loss data only, poor risk indicators
• Approves major business changes		• Ex-post view, audit committee style
• Assesses implementation status		• Grinding through the issue logs
• Themed reviews of each area	⟷	• Static, focus on standard reports
• Management presentations		• 'No dirt on me', non-participation
• Comments attributed		• Late, minimalist minutes

Risk committees are a critical point of transparency and information escalation: if they aren't working properly, problems will lie hidden or kept behind closed doors

Articulating Risk

Not just the internal stakeholders… also regulators, rating agencies, financing providers, insurers, counterparties and clients / investors and of course shareholders, so use pillar 3 well

Shareholders and other stakeholders are often kept in the dark about the size of bets Boards are taking. Why can't Boards be more transparent about their risk appetite, not just their capital at a point in time? It's only fair to shareholders to let them know what ride they could be in for.

Almost certainly, many Boards breached their risk appetite thresholds during the crisis. Many did so inadvertently because they grossly underestimated the risks they were exposed to, but others wilfully made business and strategic bets that were well in excess of their stated risk appetite, with all sorts of knock-on implications for operational risk.

The CRO should stop Boards and senior management from being inconsistent, or worse, self-delusional about their approach to risk. Disclosing the Board's risk appetite is one step towards achieving this.