



FINANCIAL SECTOR ADVISORY

Operational risk Non-Executive Directors Seminar

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FINANCIAL RISK MANAGEMENT

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Agenda

1. What is operational risk
2. Why is it important, especially for you
3. How should it be managed
4. What are the key issues facing the insurance industry
5. Discussion



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What is operational risk?

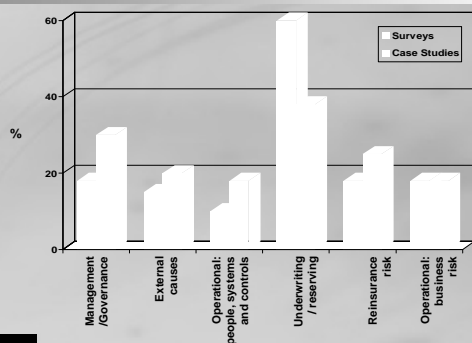
The risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events

Processes	<ul style="list-style-type: none">• Incorrect transaction capture, execution, settlement• Loss of client assets• Compliance issues	<ul style="list-style-type: none">• Stock lending errors• Accounting and taxation errors• Inadequate record-keeping
People	<ul style="list-style-type: none">• Unauthorised or insider trading• Fraud• Employee illness and injury	<ul style="list-style-type: none">• Discrimination claims• Compensation, benefit, or termination issues• Organised labour activity
Systems	<ul style="list-style-type: none">• Hardware, software, or telecommunications failure• Unavailability and questionable integrity of data	<ul style="list-style-type: none">• Unauthorised access to information and systems security• Computer hacking or viruses
External events	<ul style="list-style-type: none">• Operational failure at suppliers or outsourced operations• Fire or natural disaster	<ul style="list-style-type: none">• Terrorism• Vandalism, theft, robbery



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FSA OP20 – Practical lessons from recent “failures” of EU insurers



Why is this important for you?

Non-executive directors

- Provides insight on where and why Operational Risk capital is needed
- Ensure a robust exhaustive framework to deal with operational loss events
- Feedback on the quality of the management by highlighting areas of concern not well controlled
- Ultimately provides evidence for reducing capital requirements



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Operational risk management requirements

Immediate requirements

- Enables the organisation to calculate the ICA in a short period of time
- Performs rigorous analysis of risk exposure through top 10 risks list and through potential econometrics
- Elaborates analytical review of control environment then followed by efficient action plans to improve its effectiveness
- Combines qualitative and quantitative assessments
- Incorporates results from stress testing and scenario analysis to increase accuracy of the ICA



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Operational risk management requirements

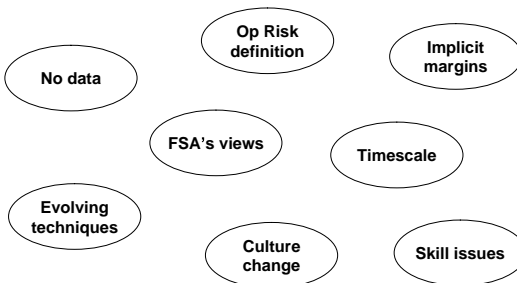
Long term objectives

- Implements a scientific, reliable methodology to analyse and quantify risk exposure and tolerance
- Provides the management with an accurate, detailed and easy up-to-dating reporting tool
- Ensures a robust exhaustive framework to deal with operational loss events
- Can provide relevant feedback on the quality of the management by highlighting areas of concern not well controlled



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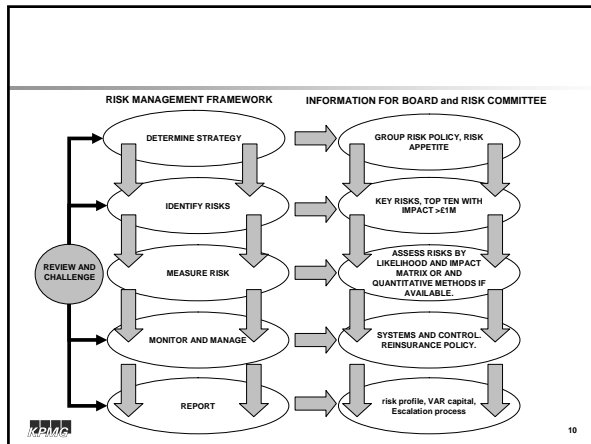
The challenges

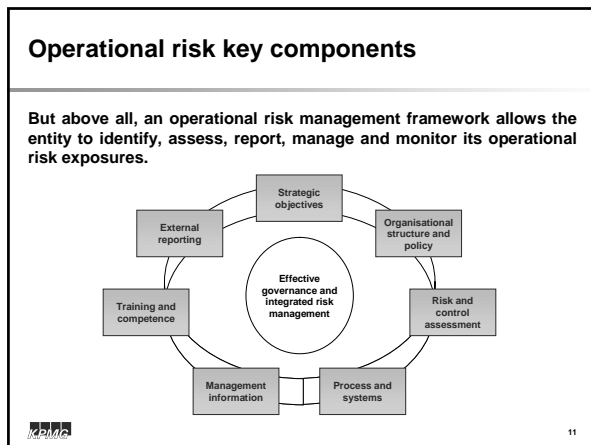


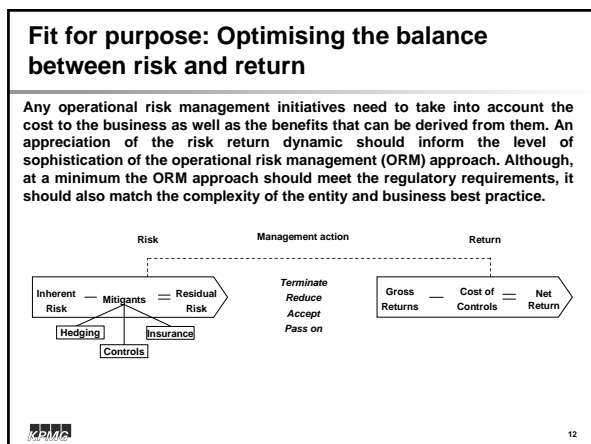
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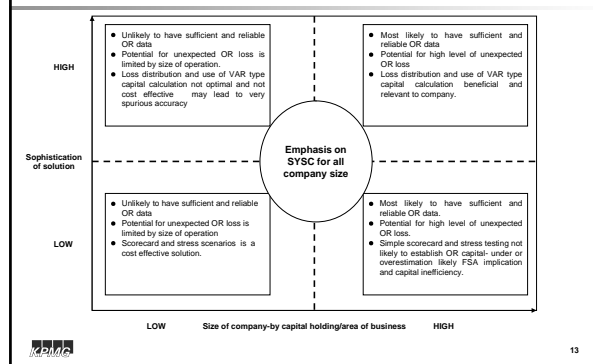
How is operational risk managed in practice?







Operational risk capital: a solution “fit” for the company

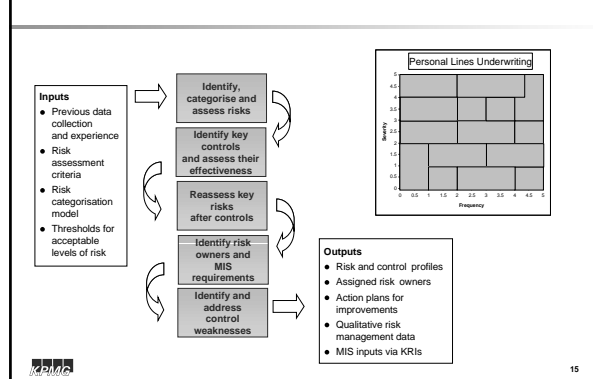


Risk and control assessment: Quantitative methodologies

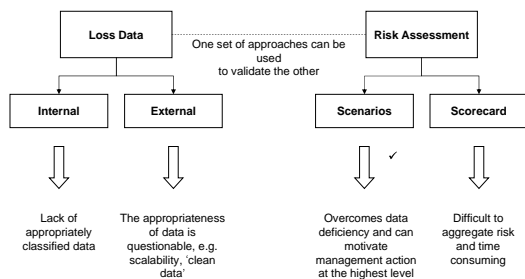
Loss distribution approach	Scenario analysis	Scorecards
<ul style="list-style-type: none"> The institution estimates the probability distribution functions of the single event impact and the event frequency for the next (one) year using its internal data, and computes the probability distribution function of the cumulative operational loss 	<ul style="list-style-type: none"> Draws on the knowledge of experienced business managers and risk management experts to derive reasoned assessment of plausible (severe) losses Scenarios variables are stressed to see how they would fluctuate 	<ul style="list-style-type: none"> Converts the qualitative scorings of risk (frequency and impact) into quantitative amounts by assigning parameters and sanitisation to the scorings

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Score card/scenario analysis process



Risk and control assessment: Quantitative methodologies- a pragmatic solution



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Scenario analysis: Key strengths and weaknesses

Strengths	Weaknesses
<ul style="list-style-type: none"> Identification of the largest risk exposures 	<ul style="list-style-type: none"> Firms have to prove either through data or research that unexpected losses have been modelled and stressed
<ul style="list-style-type: none"> Potential integration of insurance, market and credit risks for enterprise-wide solutions 	<ul style="list-style-type: none"> As the prioritisation of Critical Operational Risk Drivers ("CORDs") is a 'top down' approach, the analysis will inevitably focus on the high impact, low frequency events that usually manifest themselves at a corporate level rather than at a process level
<ul style="list-style-type: none"> Allows for integration of internal and external loss data as it becomes available 	<ul style="list-style-type: none"> Results will vary according to the participants and the comprehensiveness of the expert challenge

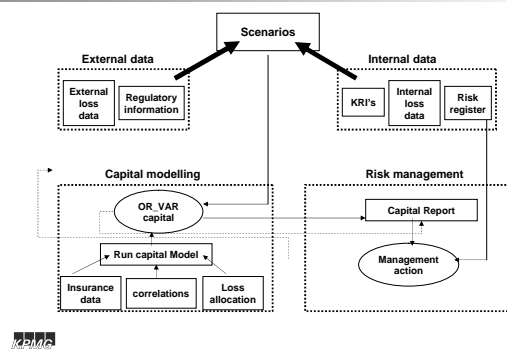


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Issues and Challenges

Operational Risk within and Integrated capital modelling framework



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Issues to be considered

Sponsorship and culture	<ul style="list-style-type: none"> Is there a dedicated sponsor to support the requirements? Are the Board fully aware of the business impacts? Is there visible management buy-in/consensus throughout the organisation? Has the project been incorporated into business planning and budgeting?
Risks	<ul style="list-style-type: none"> Have the risks categories and their potential impacts been identified and fully understood? Has sufficient time been allowed to meet these requirements? Has the interaction between risk categories been understood and dealt with?
Data	<ul style="list-style-type: none"> Have likely data sources been identified?
Project management	<ul style="list-style-type: none"> Have overlaps and synergies between projects been identified? Are there conflicting priorities between projects? Are projects being coordinated under a formal programme?
Resources	<ul style="list-style-type: none"> Are there adequate resources to meet the required deadline? Do the resources available have the necessary skills and expertise? Is there an appropriate training programme tailored for all levels across the organisation?
Organisation	<ul style="list-style-type: none"> Is there a strategy in place to communicate the implications and any related process changes? Does the reporting structure support implementation and the required changes? Is the impact on performance management and measurement understood?
Product development	<ul style="list-style-type: none"> Is there a strategic plan to determine business mix and to support product development in the new environment? Has the impact on product mix and pricing decisions been considered?

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