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making financial sense of the future

ERM Open Forum on Strategic Risk
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Strategic Risk Landscape

27 October 2012

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Agenda

- Strategic Risk
- Strategic Risk in..
 - Regulation
 - Rating
 - Major Insurers
 - Recent Professional Papers
- Discussion

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Strategic Risk

An attempt at a definition

Land of Pensions

Literature generally uses this terminology to describe the risk of underfunding the pension scheme over the long term.

Land of Business (inc. Insurance, Industrials, Public Sector Organisations)

Arguably...

"the risk that the strategy that the business has decided to pursue is not achieved"

Strategy is (arguably)...

"the view of the business on how it should allocate **all** its scarce resources to stand the best chance of achieving its objectives."

The Business is (arguably)...

"the **agents** that have been appointed by the principals to achieve the principals desired objectives"

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Strategic Risk in Corporate Governance

Walker Report, FRC Corporate Governance Code

Monitoring and management of risk in a BOFI is not only a set of controls aimed at the mitigation of financial risk, as normally in non-financial business, but relates to the core strategic objectives of the entity.

Walker Report - 2009

A review of corporate governance in UK banks and other financial industry entities
Final recommendations
26 November 2009

"The board is responsible for determining the nature and extent of the significant risks it is willing to take in achieving its strategic objectives."

FRC – Corporate Governance Code – Section C - 2010



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Strategic Risk in Regulation

EIOPA

3.126. Strategic risk is a function of the incompatibility between two or more of the following components: the undertaking's strategic goals; the business strategies developed and the resources deployed to achieve these goals, the quality of implementation and the economic situation of the markets the undertaking operates in.

3.127. The resources needed to carry out business strategies are both tangible and intangible. They include communication channels, operating systems, delivery networks, and managerial capacities and capabilities. The undertaking's internal characteristics are evaluated against the impact of economic, technological, competitive, regulatory, and other environmental changes.

3.128. The overall strategy of the undertaking should incorporate its risk management practices. In this sense, the undertaking should have a process for setting strategic high-level objectives and translating these into detailed shorter-term business and operation plans.

CEIOPS (now EIOPA) – Level 3 Guidance - System of Governance - 2010



"CEIOPS expects that "the results of the internal model will be used in ... the setting of business strategy and "risk strategy"

CEIOPS (now EIOPA)
– Level 3 Guidance –
Use Test - 2010

Not "strategy risk" but worth noting. References to "risk strategy". Could perhaps inadvertently lead people to think that strategic risk is about using internal models for decision making.

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Strategic Risk in Regulation

IAIS, BaFin

"A clear distinction should be made between the assessment of current capital requirements and the projections, stress testing and scenario analyses used to assess an insurer's financial condition for the purposes of strategic risk management including maintaining solvency."

IAIS - Guidance on ERM for Capital and Solvency Purposes - 2008



"Strategic risk is the risk resulting from strategic business decisions. Strategic risk also includes the risk that results from business decisions that are not adapted to a changed economic environment. Strategic risk, as a rule, is a risk that emerges in conjunction with other risks. But it can also emerge as an individual risk. "

The "risk strategy" must address:

- the type of risk (which risks should be taken on in the first place?),
- the risk tolerance (what amount of risk is chosen?),
- the origin of risk (from where does the risk originate?),
- the time horizon of the risks (which risks in which time period are to be dealt with under the existing risk coverage?) and
- the risk-bearing capacity.

BaFin MaRisk - 2009

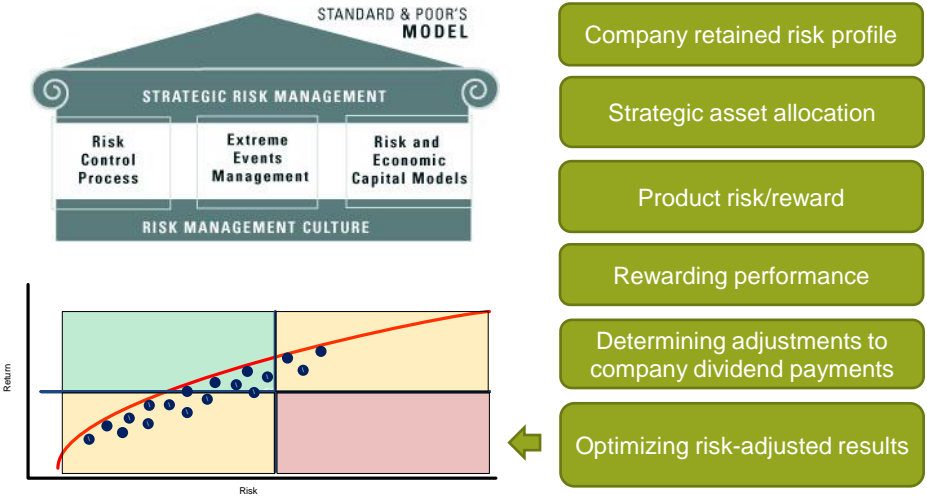


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Strategic Risk in Rating

Standard & Poor's ERM Criteria, 2006



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Strategic Risk Definitions (2008)

Allianz, Prudential, Old Mutual, Standard Life

| Company | Definition of Strategic Risk |
|---------------|--|
| Allianz | Strategic risk is the risk of an unexpected negative change in the company value, arising from the adverse effect of management decisions on both business strategies and their implementation. |
| Old Mutual | (Strategic risk is) the risk that strategic decisions will adversely affect future sustainable growth. |
| Prudential | Ineffective, inefficient or inadequate senior management processes for the development and implementation of business strategy in relation to the business environment and the Group's capabilities. |
| Standard Life | The Group defines strategic risk as the risks or threats to the achievement of the Group's corporate objectives. |

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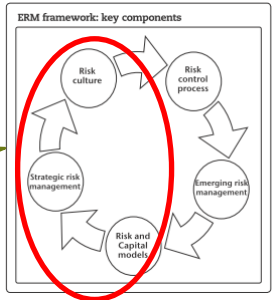
Where Strategic Risk Fits (2008)

Zurich, Standard Life



Zurich highlight risk transparency in their risk management framework and place strategic risk management at the summit of their framework.

Standard Life see strategic risk management as part of a cycle.

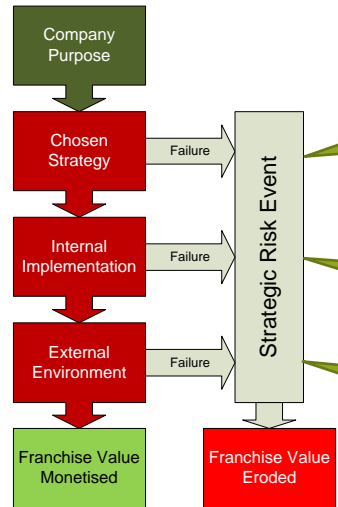


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Strategic Risk in Professional Publications

Actuarial Profession, Kelliher et al, 2011



Chosen strategy (ALM, M&A, New Business Choice, Mitigation) may just be wrongly conceived.

May also be an agency problem.

Poorly executed project. Employees not bought in. Unforeseen practical difficulties.

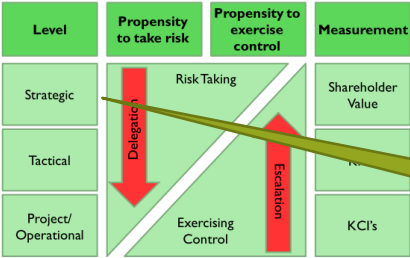
External environment moves adversely. Regulation / Tax / Cultural Change

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Strategic Risk in Professional Publications

IRM, Risk Appetite and Risk Tolerance, 2011



305 In considering the risks (or types of risk) that an organisation wishes to engage with or to avoid, it should take into account also the performance culture of the organisation, because this will determine the amount of these risks that individuals which take, and also the corporate ethics and behaviours that an organisation displays, because these will be important in determining the extent of risk taking and avoiding.

The paper talk of "performance culture" as key to deciding what risks gets taken or not.

The paper sees risk taking as something that is mainly exercised at strategic level and talks of the balance between risk taking and control.

The paper distinguishes between 3 types of risk:

- Directly discernible risks
- Visible through science risks
- Virtual risks

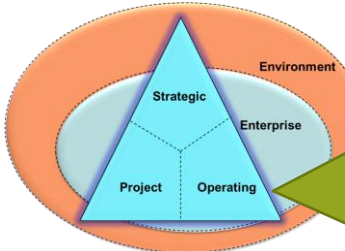
Adams 2001

- **Directly discernible** risks are those that we are culturally attuned to managing on a day to day basis. These are often basic risks, which might have quite literally life and death consequences, but which we cannot imagine not existing. We manage them automatically.
- **Visible through science** risks are those that benefit from a significant amount of data which informs managers how they should be controlled. Typically there are professional disciplines that ensure that these risks are managed effectively, and the availability of the appropriate skill base may well determine the appetite of the organisation to engage with these risks.
- **Virtual** risks are those for which there is comparatively little prior personal or institutional knowledge and where the range of outcomes is almost impossible to determine. As a consequence there is frequently little agreement as to how the risk should be managed.

Strategic Risk in Professional Publications

StratRisk, IOA, ICE, University of Bristol, 2006

Substantial project behind the "Guide for Directors Report" involving many interviews, use of complexity science to analyse results and playback and confirmation to senior management.



The project finds that strategic risk emerges from the day to day risks of a company. For a general industrial this would be OpRisk and Project Risk (but we could add in Credit, Market, Demographic etc.)

In the language of complex adaptive networks "strategic risk" is an *emergent property* of the system. It is therefore a separate concept yet it is quite different in nature to business risks. It therefore requires system thinking approach.

The project finds that strategic and business risks are influenced by the enterprise (environment) and the (external) environment but that human perceptions and behaviour are principal causes of strategic risk.

Strategic Risk in Professional Publications

StratRisk, IOA, ICE, University of Bristol, 2006



| Feature | Survey Findings |
|-------------|--|
| People | Strategic risk strongly linked to individual behaviour. |
| Perception | Experience, learning and openness are important in managing strategic risk. |
| Performance | Strategic risk needs to be linked to organisational purpose. Upside as well as downside. |

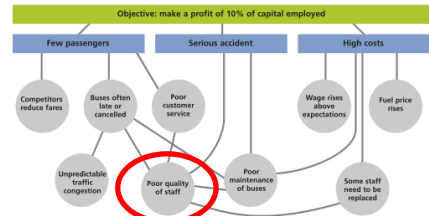
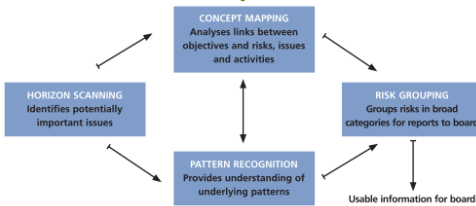
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Strategic Risk in Professional Publications

StratRisk, IOA, ICE, University of Bristol, 2006

The paper proposes complexity science as a useful toolkit in dealing with strategic risk. Four techniques given prominence are: concept mapping, horizon scanning, pattern recognition, risk grouping.



Concept mapping captures soft (i.e. human) risks than can be the root cause of more tangible risks

Techniques such as concept mapping are used to identify critical risks which can threaten the strategic objectives of the firm. In this example from the paper poor staff quality is the most important risk to control for achieving strategic objectives.

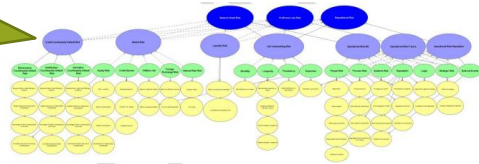
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Strategic Risk in Professional Publications

A Review Of The Use Of Complex Systems Applied To Risk Appetite And Emerging Risks In ERM Practice, 2011

The paper builds on techniques first introduced in StratRisk and shows how to build an insurance risk appetite framework using a systems approach with tools from complexity theory (a complex adaptive network).



A Bayesian Network Analysis is used to quantify aggregate risk (including allowance for non-quantifiable risks.)

Bayesian Network Analysis is used to understand which parts of the system is driving the aggregate risk distribution.

Sessional Meeting on 28 November 2011.

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Summary

- Themes Emerging...
 - Quantitative (Risk Quantification) / Qualitative (Culture)
 - Internal Risk (Agency / Implementation) / External Risk
 - Reductionist Approach / Systems Approach
 - Risk Taking / Internal Control
 - Opportunities / Threats
 - Obvious / Calculable / Unknown Risks
- Is Strategic Risk
 - An emergent property of a system?
 - Reducible to quantifiable distribution?

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