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# The Rise of Risk - Developments in Enterprise Risk Management in Insurers

Anthony Bice

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Section 1

## The rise of risk management

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**Risk management in the insurance industry faces many new challenges that trigger change – both out of necessity and opportunity**

**Regulators/legal**

- Solvency II
- Internal models "use test"
- CEIOPS Risk management issues paper
- SOX
- IAIS

**Shareholders/investors**

- MCEV reporting
- Cash over "value"
- IFRS/fair value
- Enhanced disclosure

**Market environment**

- Risk shifted from constraint to engine for growth
- Transparent asset protection products
- Innovative risk transfer opportunities

**European insurance industry**

**Ratings agencies**

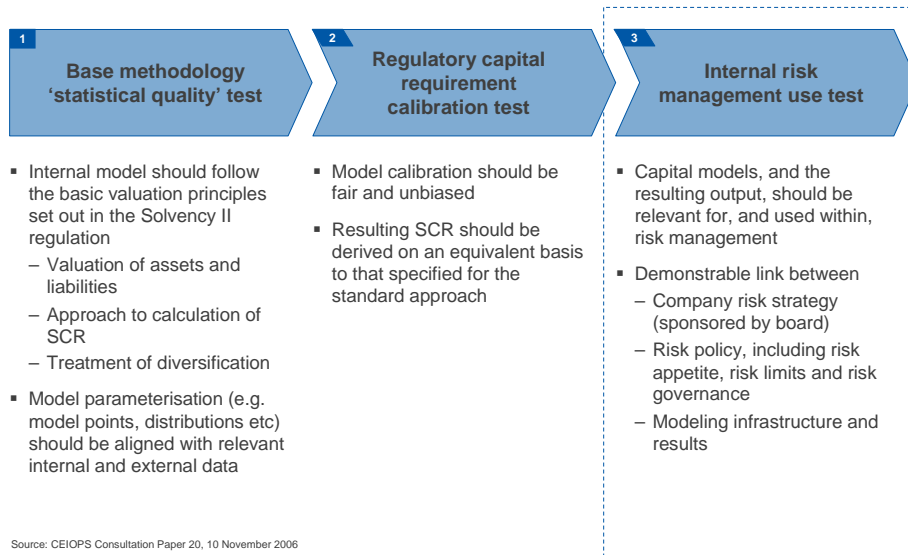
- Emergence of Enterprise Risk Management assessment from rating agencies (e.g. S&P)
- New capital models

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**A common requirement is that Economic Capital models be used for more than just solvency assessment – for example Solvency II’s “Use Test”**



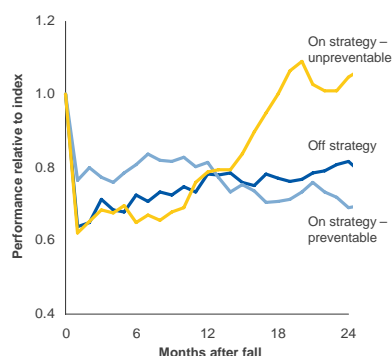
**The market shows “zero tolerance” to lapses in a financial institution’s ability to manage the risks it is taking**

**Causes of share price shocks (>20% fall in one month)**

Classification	Drivers of falls
On strategy – unpreventable	General market situation (31)
On strategy – preventable/controllable	<ul style="list-style-type: none"> <li>Profits warning (18)</li> <li>Concentrations (17)</li> <li>Loss of confidence in financial strength (6)</li> <li>Dividend cut (3)</li> </ul>
Off strategy	<ul style="list-style-type: none"> <li>Operational risk (5)</li> <li>Losses in unexpected markets (2)</li> </ul>

Source: Oliver Wyman analysis on 82 financial institutions who suffered 20% or greater drop in share price relative to the index in one month

**Impact of share price “shocks”**



Source: Oliver Wyman analysis on leading financial institutions around the globe for last ten years

**A risk appetite and ERM framework helps institutions to understand and manage volatility and hence avoid such shocks**

**Insurers who show how they link risk to strategy and decision making are preferred by investors – others can just fall off the radar screen**

Player	Oliver Wyman disclosure study		Morgan Stanley investor survey
	Linking risk to strategy	Linking risk to decision making	What is the best managed European insurance group? <sup>1</sup>
AXA	●	●	1
Allianz	◐	◐	2(=)
ING	◐	◐	2(=)
ZFS	◐	◐	4
Fortis	◐	◐	5
AVIVA	◐	◐	6
Prudential	◐	◐	7
AEGON	◐	◐	(not mentioned by respondents)
Generali	◐	◐	(not mentioned by respondents)

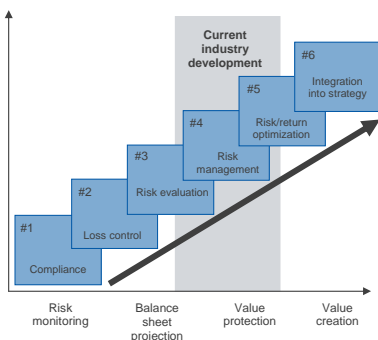
● Behind market      ◐ Market standard      ● Ahead of market

1. Ranked by number of mentionings by respondents as one of the three best-run companies  
Source: Oliver Wyman analysis of company disclosure, Morgan Stanley European Investment Survey (Vol. 2) Jan 2007, ranked using three choices per respondent

**Embedding and communicating a risk appetite and ERM framework has tangible impact on investor perception**

**While leading insurers have stepped up their risk management capabilities, many of the “laggards” still lack the ability to steer their business towards taking risks that are value accreting**

Insurers are moving up the risk-management capabilities curve ...

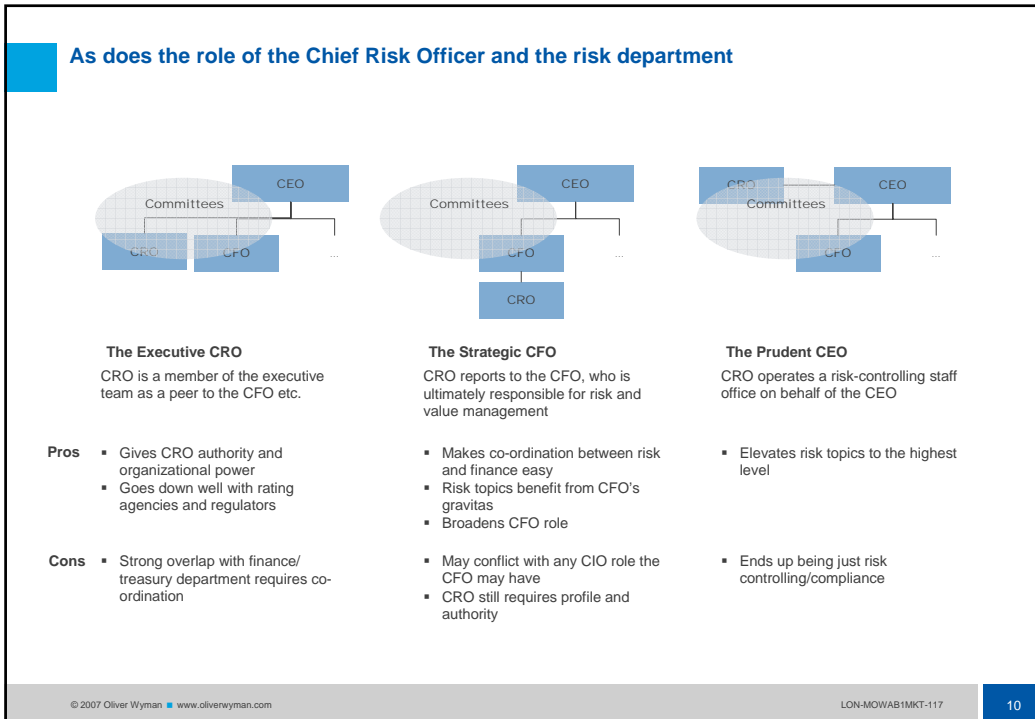
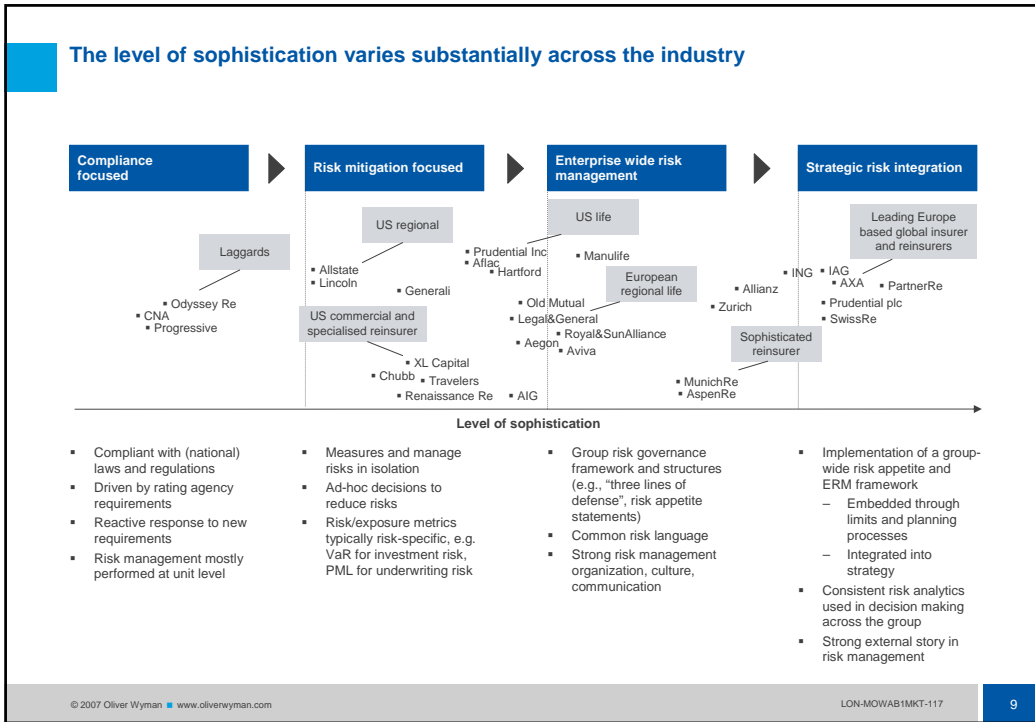


... but their focus has often been in pockets while the integration is still insufficient

- Although clear measurement framework developed at Group level, businesses remain unconvinced, so that the **framework remains theory, not practice**
- Unresolved **conflicts between economic metrics and other constraints** e.g. economic vs. regulatory capital, economic vs. IFRS profits
- Unclear **how to embed risk appetite** in the business via governance structure and limits
- Individual decision makers lack insight **how risk taking opportunities trade off against each other** from the Group's perspective
- **No clear communication to investors** e.g. how overall risk framework feeds into decision making, or where sources of value creation are

Source: Oliver Wyman analysis

**ERM is the consistent understanding, measurement and management of risk at all stages of the management process, throughout the organisation**



**S&P describe specific requirements for their ERM ratings in terms of five different categories, but ultimately, the goal is to make consistent risk/return decisions**

- Risk management culture**
  - “Focus is on an insurer’s risk tolerance, appetite and preferences – explicitly stated or implicit in behaviors, standards, limits and structures”
  - “Additionally, focus is on the insurer’s general quality of governance”
- Strategic risk management**
  - “Strong or Excellent strategic risk management is a driver of an overall Strong or Excellent ERM evaluation”
  - “To be rated Strong or Excellent, an insurer would need to demonstrate that in addition to a process to ensure satisfying the constraints from regulators, rating agencies, and internal views of capital, they have a process for choosing and rejecting potential options that have higher or lower risk-adjusted returns”
- Risk control process**
  - “Focus will be on evaluating those controls for an insurer’s full risk landscape, in accordance with the relevance of each respective risk type”
  - “One important component is the ability to learn from past losses”
- Risk and capital model**
  - “Focus is on the quality of processes that support the models used to provide risk information”
  - “The review assesses the underlying methodologies, processes and controls that ensure that output is timely, accurate, robust and appropriate”
- Extreme event management**
  - “Processes to imagine, track, prepare for, and learn from new risks that could emerge”

Source: Standard & Poor’s; Oliver Wyman analysis

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**Over 85% of insurers were given a Weak or Adequate ERM assessment by S&P**

**ERM-scores 2006 (241 insurers in total)**

Region	Weak	Adequate	Strong	Excellent
Europe	0	83	15	2
US/Canada	5	85	8	2
Bermuda	10	30	50	10
RoW	15	74	8	3

**Comments**

- Relatively high ERM quality in Europe compared to US or rest of the world
- Adequate is the largest category with 81% in 2006
- Most of the large global insurers are Strong or Excellent, and some have already been upgraded due to their ongoing ERM programmes
- S&P expects that 15% of the insurers with an Adequate rating will move towards either Strong or Excellent in the next three years

Source: Standard & Poor’s

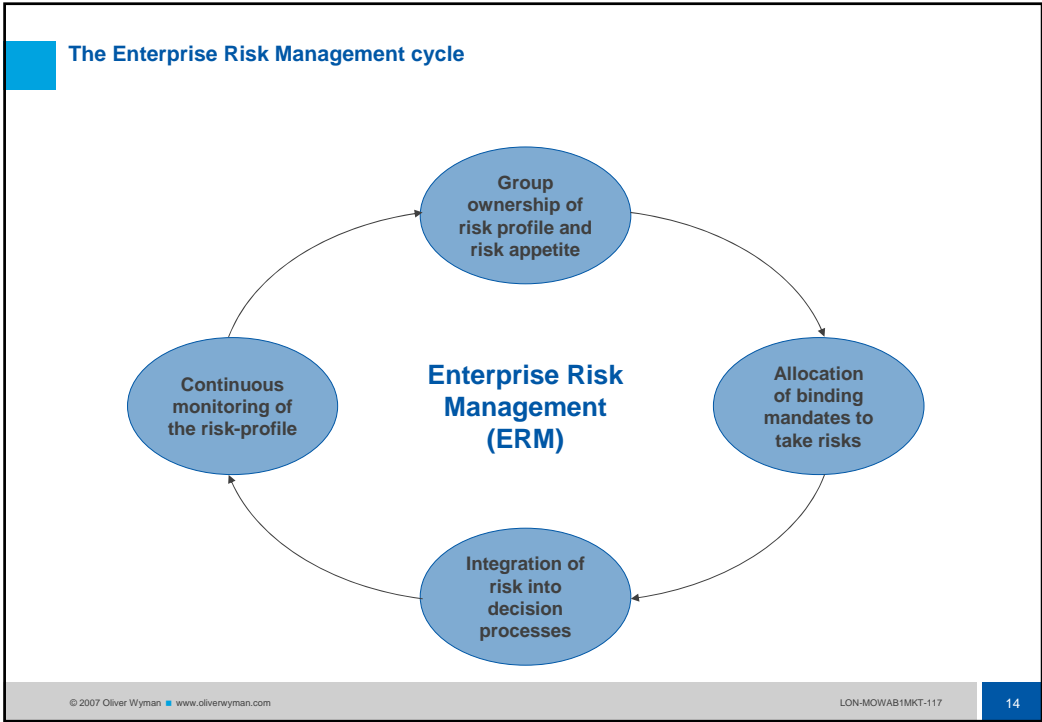
**ERM is now receiving a lot of attention from regulators, rating agencies and investors and many insurance companies do not or barely meet expectations**

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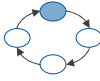
Section 1

# Enterprise Risk Management for Insurers

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**Industry practice is developing around four dimensions to risk appetite**



	Risk appetite elements	Benchmarking insights
<b>Adequate capital level</b>	<ul style="list-style-type: none"> <li>Maintain regulatory requirements (e.g. FCD)</li> <li>Maintain rating (e.g. S&amp;P)</li> <li>Meet target economic requirements (Risk capital)</li> </ul>	<ul style="list-style-type: none"> <li>All peers monitor regulatory solvency</li> <li>Additionally, it is industry standard to monitor EC and rating-capital adequacy</li> <li>Leaders have a quantified comfort zone for capital</li> <li>Rating capital is not normally part of risk appetite</li> </ul>
<b>Stable profitability and growth</b>	<ul style="list-style-type: none"> <li>Keep up stable earnings</li> <li>Keep up stable EV growth</li> </ul>	<ul style="list-style-type: none"> <li>The trend is to integrate accounting and economic profit, with quantified comfort zones</li> <li>Risk appetite is typically on an aggregate level, and not split by sources of risk to profit</li> </ul>
<b>Sufficient liquidity</b>	<ul style="list-style-type: none"> <li>Maintain dividend cover</li> <li>Maintain debt cover</li> </ul>	<ul style="list-style-type: none"> <li>Apart from ratings considerations (banks), liquidity has not been a focus of risk appetite developments</li> <li>The technical challenges to do so are large</li> </ul>
<b>Sound reputation</b>	<ul style="list-style-type: none"> <li>Corporate governance and citizenship</li> <li>Consistent deliverance on promises</li> <li>Reputational risk</li> </ul>	<ul style="list-style-type: none"> <li>Although recognized as a consideration, usually not articulated in risk appetite; normally covered by "Policies &amp; Guidelines"</li> <li>Existing statements relate typically to "past burns"</li> </ul>

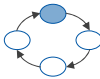
Source: Oliver Wyman benchmarking study

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**Risk appetite is being integrated into business processes at both operational and strategic levels**



**1. Link to business operations**

- Translation of group's risk tolerances into limits on more manageable risk indicators
  - Risk type, product type, business unit, etc.
- Monitoring limits using risk dashboard
- Escalation procedures for breaches
- Regular reporting of trends to senior management
- Contingency plans for risk transfer where appropriate

**2. Link to strategy and growth**

- Optimisation of risk/return within tolerances through
  - Strategic planning
  - Budgeting, i.e. allocation of scarce resources (e.g. economic capital)
  - Optimal utilisation of excess capital
  - BUs optimising via ALM, product design, and risk selection/transfer
- Proactive external communication

**Group's risk appetite**

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**Focus on controlling within risk appetite**

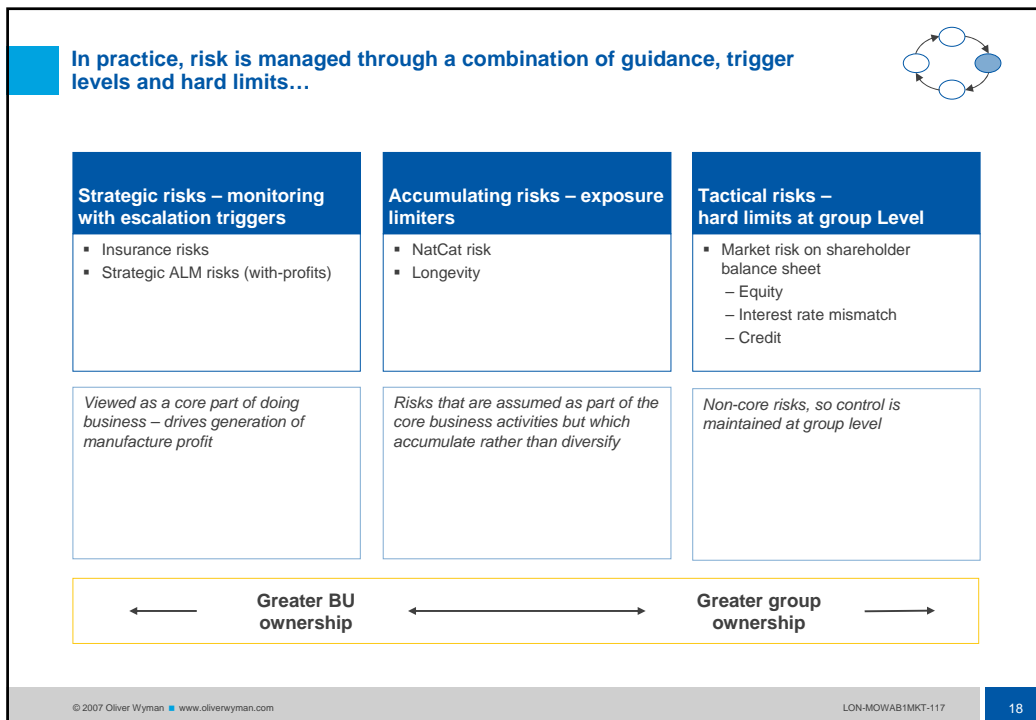
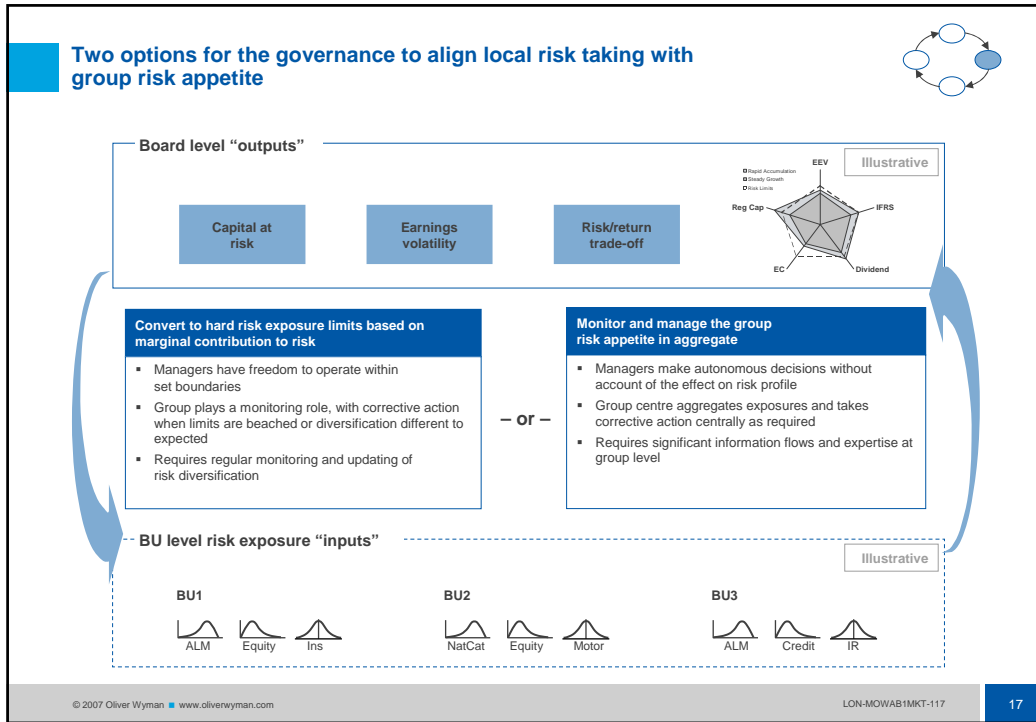
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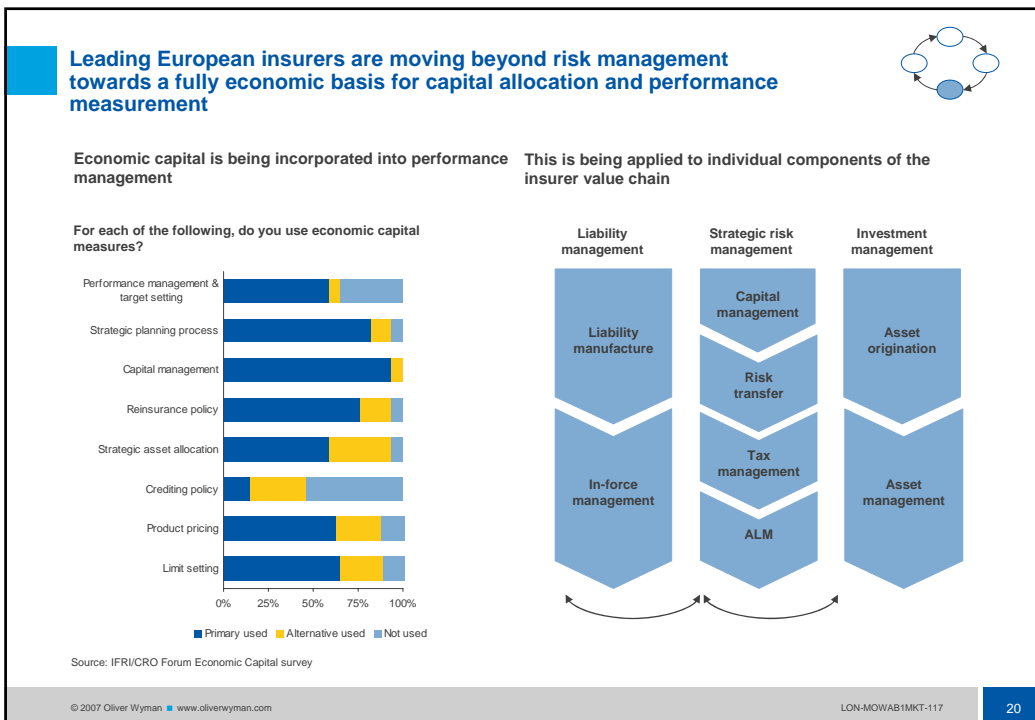
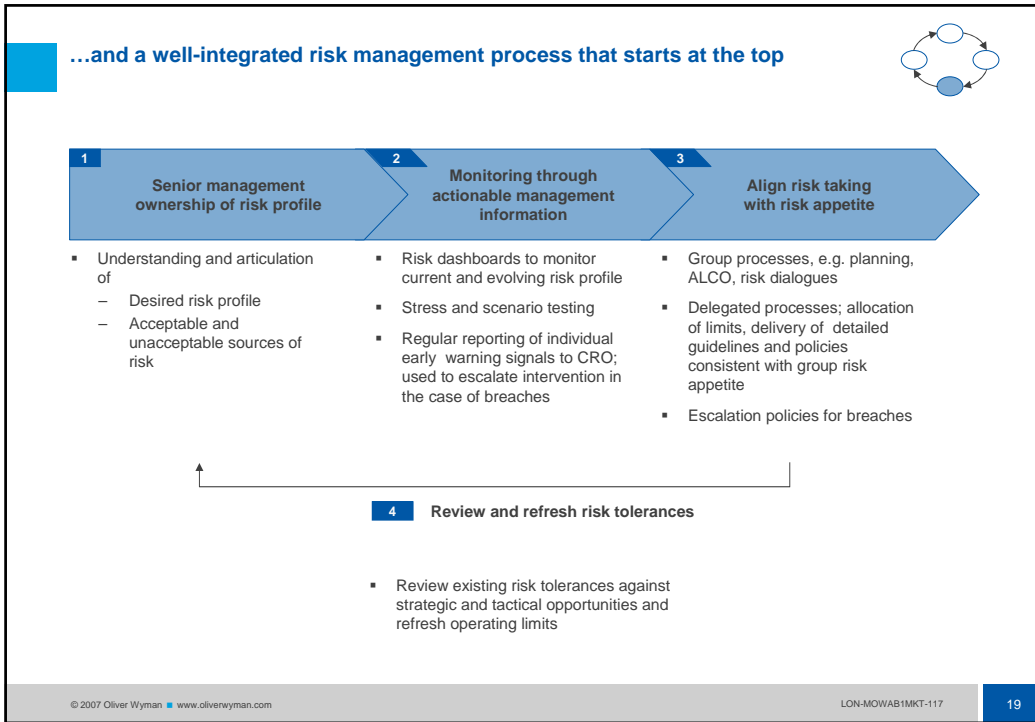
**Focus on value optimisation**

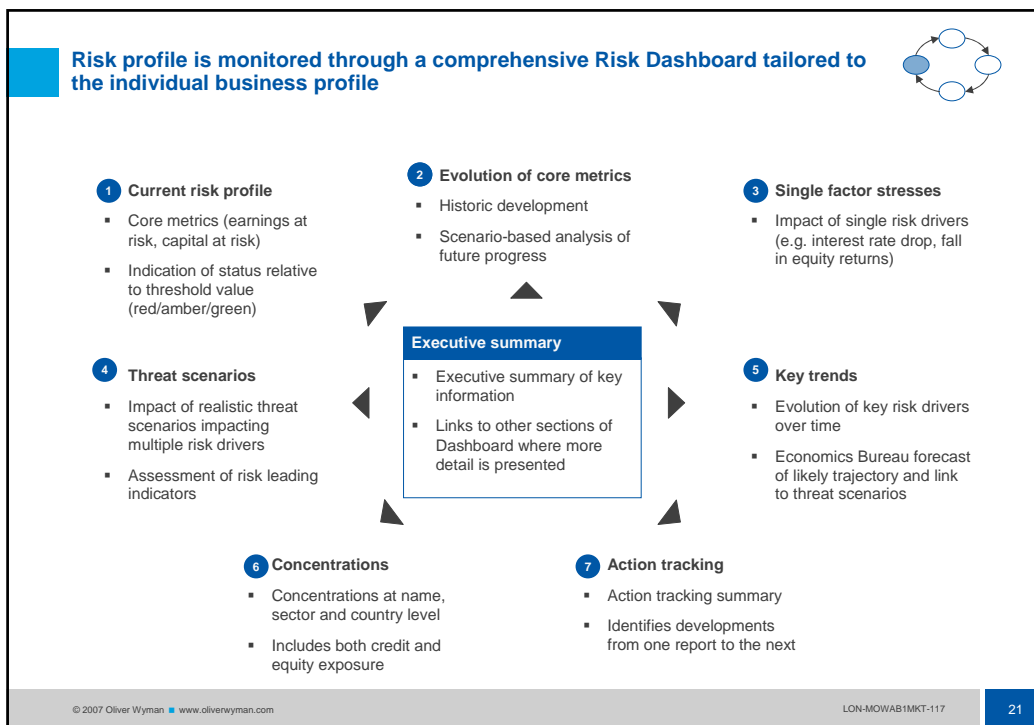
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Section 3

## Achieving best practice

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**In order to achieve a best practice ERM framework, insurers are looking at their capabilities and ambitions in four key areas**

<p><b>1. Models for measuring and analysing the overall risk situation</b></p> <ul style="list-style-type: none"> <li>▪ Coverage of "risk map" by standardised models: insurance risk (life and non-life), ALM risk, market risk, credit risk (investments, re-insurance), catastrophe risk, business risk, operational risk</li> <li>▪ Aggregation method and management of diversification method</li> </ul>	<p><b>2. Implementation into operational environment</b></p> <ul style="list-style-type: none"> <li>▪ Integration of risk measurement</li> <li>▪ Establishment of the risk management "idea" within the organisation</li> <li>▪ Ongoing development of risk models</li> </ul>
<p><b>3. Governance and instrument for managing risk</b></p> <ul style="list-style-type: none"> <li>▪ Committee structure</li> <li>▪ Internal risk reporting</li> <li>▪ Organisational structure within risk management</li> <li>▪ Risk appetite, risk tolerance and limit system</li> </ul>	<p><b>4. Group-wide use of risk information for risk/ return decisions</b></p> <ul style="list-style-type: none"> <li>▪ Integration of risk management into strategic steering</li> <li>▪ Impact of risk management on incentive systems</li> <li>▪ Impact of risk management on pricing, product design and profitability measurement</li> <li>▪ Impact of risk management on investment management</li> <li>▪ External risk communication</li> </ul>

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