

# ERM and the Impact of Solvency II on Insurers

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COMMERCIAL ADVANTAGE. MUTUAL BENEFIT

2010 EUROPEAN ENERGY CONFERENCE

# ERM and the Impact of Solvency II on Insurers

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EMB

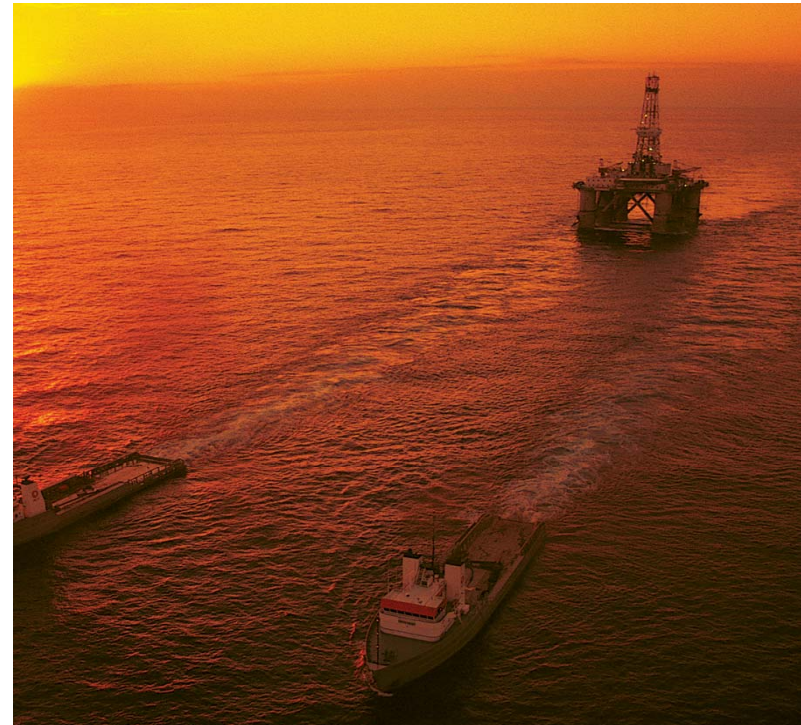


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# Agenda

- ERM and Solvency II
- How might it affect the insurance industry?



# ERM and Solvency II

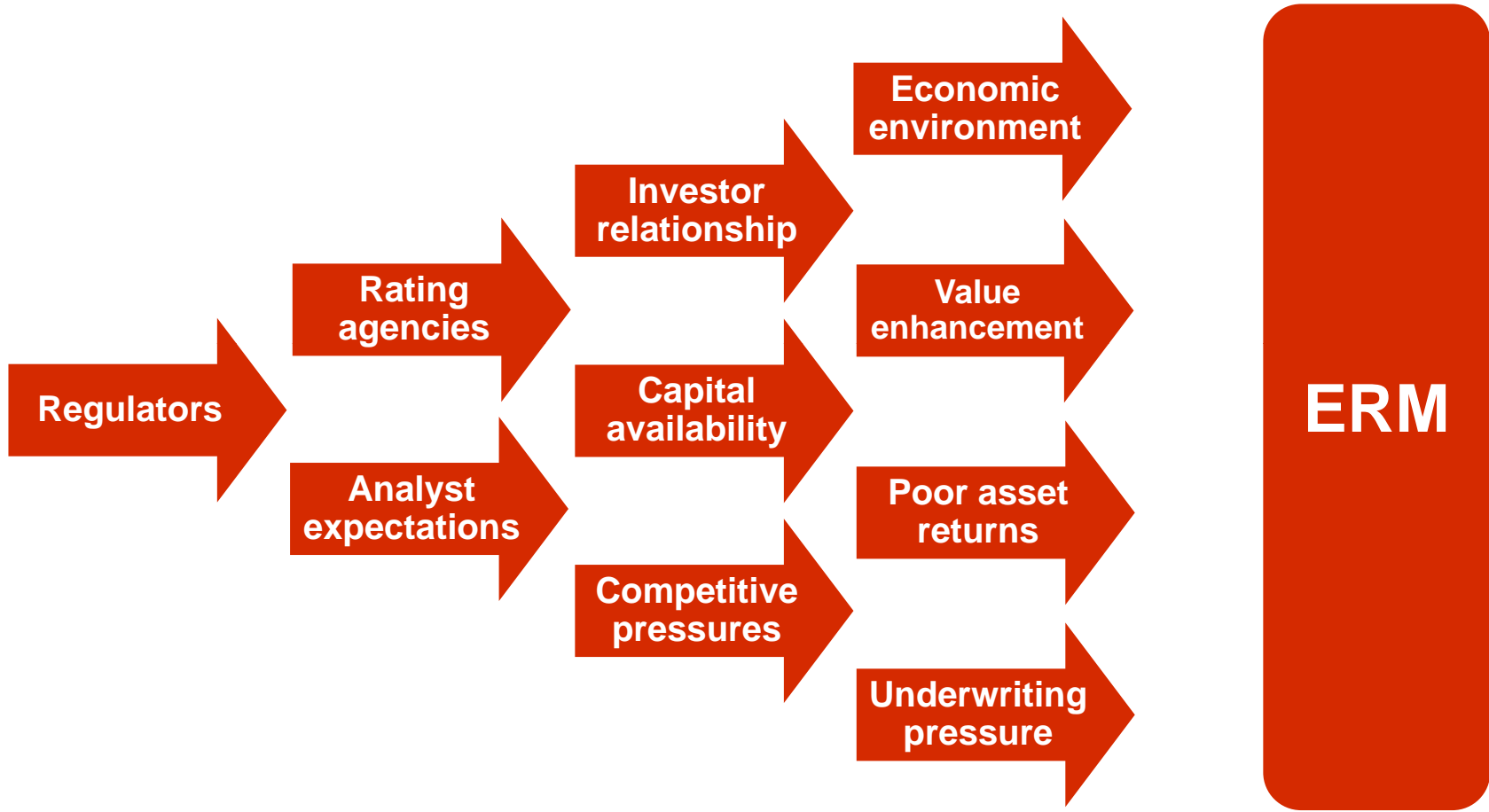
## What Is ERM?

- Insurers have always excelled at managing insurance risk
- Significant improvements have been made in managing other risks types (e.g. market, credit, liquidity, operational)
- In the past, risk management has been **siloes** and only tended to be concerned with **downside risk**
- Enterprise risk management (ERM):
  - Adopts a **“holistic”** risk assessment approach
  - Integrates risk management into all key business processes and allows consideration of **upside risk**

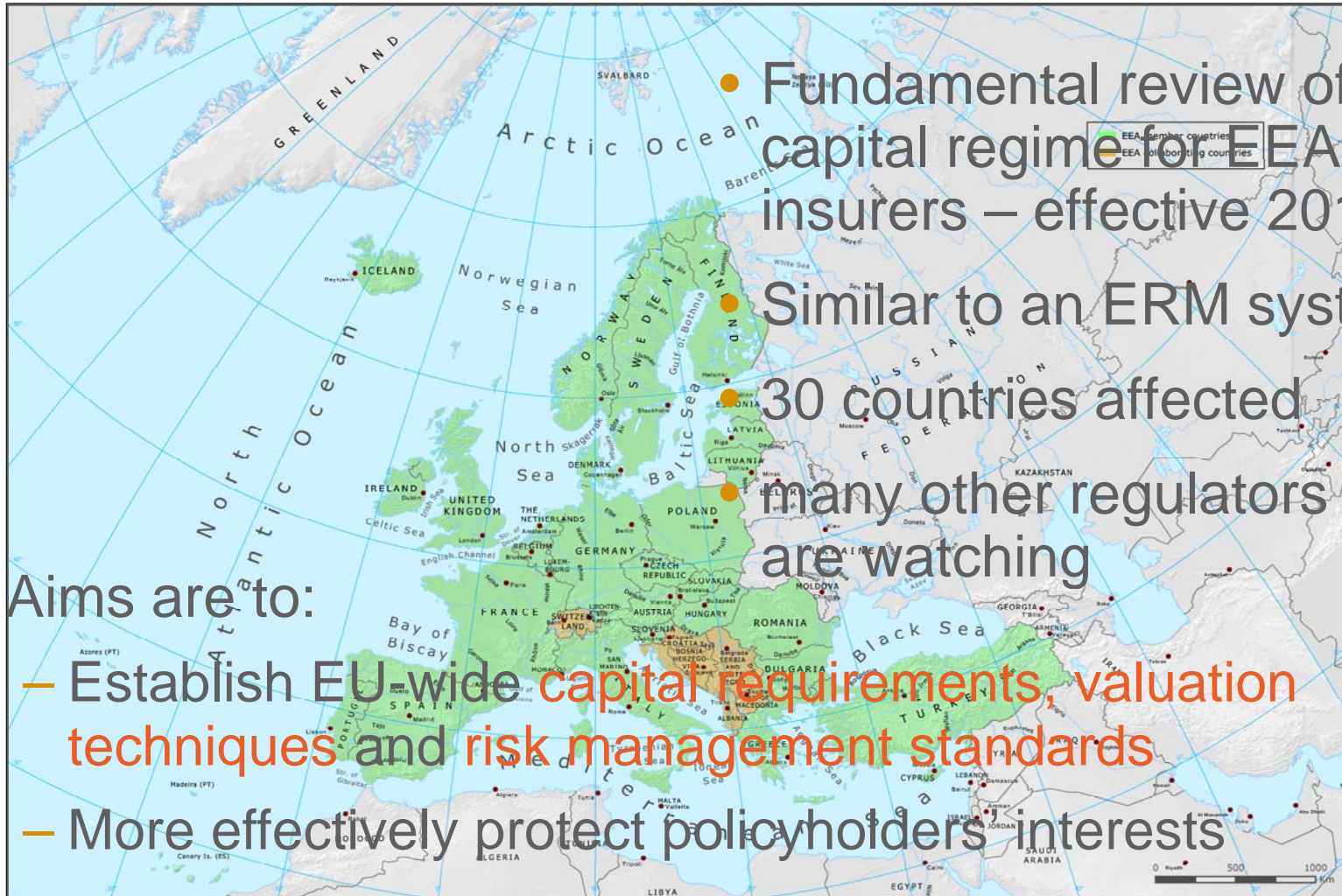
# What Are the Benefits of ERM?

- All risks are managed
- Interactions between risk are quantified and managed
- ...leading to improved policyholder protection
- Risk opportunities are considered
- Better understanding of return on investment (capital)

# Demand for ERM Is on the Increase

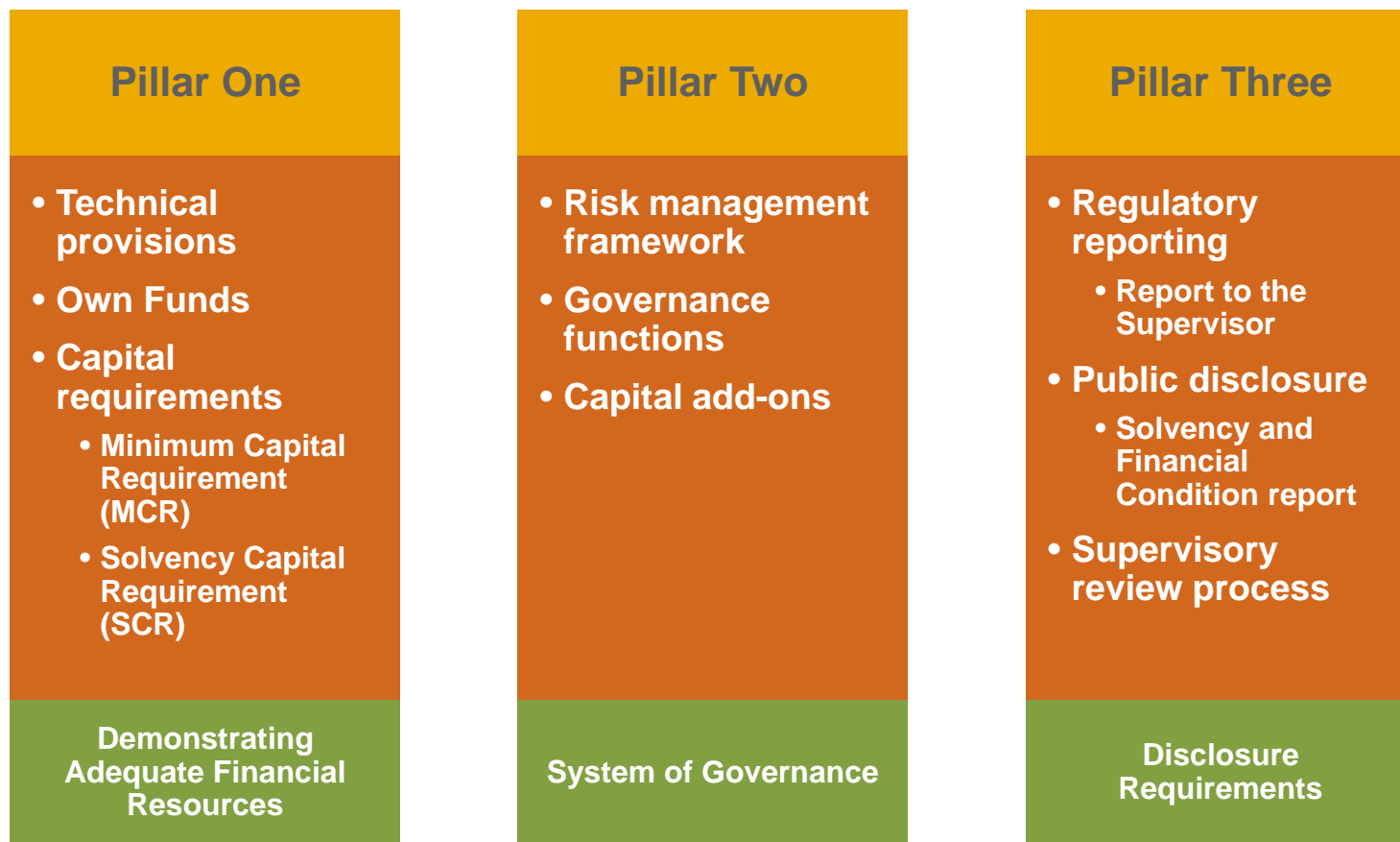


# Background to Solvency II



- Fundamental review of capital regime for EEA insurers – effective 2012
- Similar to an ERM system
- 30 countries affected
- many other regulators are watching
- Aims are to:
  - Establish EU-wide capital requirements, valuation techniques and risk management standards
  - More effectively protect policyholders' interests

# The Fundamental Three Pillars



# New Capital Requirements

- There will be two alternative approaches to calculating capital:
  - Standard formula
  - Internal model
- Standard formula capital is expected to be significantly greater than internal model capital
- The cost of developing and maintaining an internal model will not be insignificant for many firms

# Standard Formula Approach

	Motor, third party liability	Motor, other classes	Marine, aviation and transport	Fire and other damage to property	Third-party liability	Credit and suretyship	Legal expenses	Assistance	Miscellaneous non-life insurance	NP reins property	NP reins casualty	NP reins MAT
SCR.NonLife.Corr												
Motor, third party liability	100%											
Motor, other classes	50%	100%										
Marine, aviation and transport	50%	25%	100%									
Fire and other damage to property	25%	25%	25%	100%								
Third-party liability	50%	25%	25%	25%	100%							
Credit and suretyship	25%	25%	25%	25%	50%	100%						
Legal expenses	50%	50%	25%	25%	50%	50%	100%					
Assistance	25%	50%	50%	50%	25%	25%	25%	100%				
Miscellaneous non-life insurance	50%	50%	50%	50%	50%	50%	50%	50%	100%			
NP reins property	25%	25%	25%	50%	25%	25%	25%	25%	25%	100%		
NP reins casualty	25%	25%	25%	25%	50%	50%	50%	50%	50%	50%	100%	
NP reins MAT	25%	25%	50%	50%	25%	25%	25%	25%	25%	25%	25%	100%

$$BSCR = \sqrt{\sum_{i,j} CorrSCR_{i,j} \cdot SCR_i \cdot SCR_j}$$

- >  $SCR_{mkt} = 100$
- >  $SCR_{def} = 20$
- >  $BSCR (mkt+def \text{ only}) = \text{Sqrt} \{$ 

$$\begin{aligned} & CorrSCR_{mkt,mkt} \times SCR_{mkt} \times SCR_{mkt} \\ & + CorrSCR_{mkt,def} \times SCR_{mkt} \times SCR_{def} \\ & + CorrSCR_{def,mkt} \times SCR_{def} \times SCR_{mkt} \\ & + CorrSCR_{def,def} \times SCR_{def} \times SCR_{def} \} \end{aligned}$$

$$= \text{Sqrt} \{ (1 \times 100 \times 100) + (2 \times 0.25 \times 100 \times 20) + (1 \times 20 \times 20) \}$$

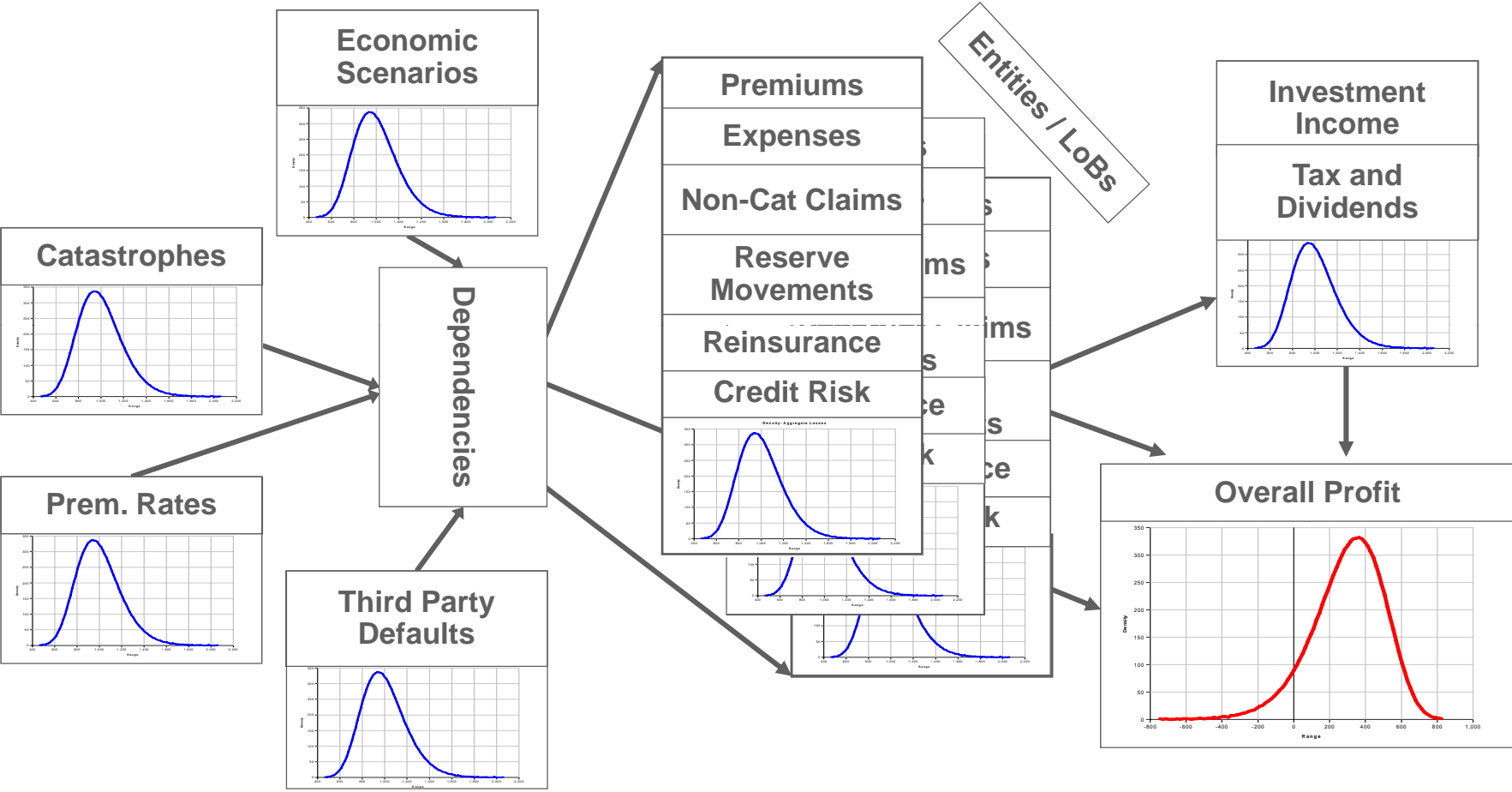
$$= \text{Sqrt} ( 10,000 + 1,000 + 400 )$$

$$= \text{Sqrt} (11,400) = \underline{106.8} \quad \text{assuming } 0\% \text{ correlation} = 102.0$$

100% correlation = 120.0

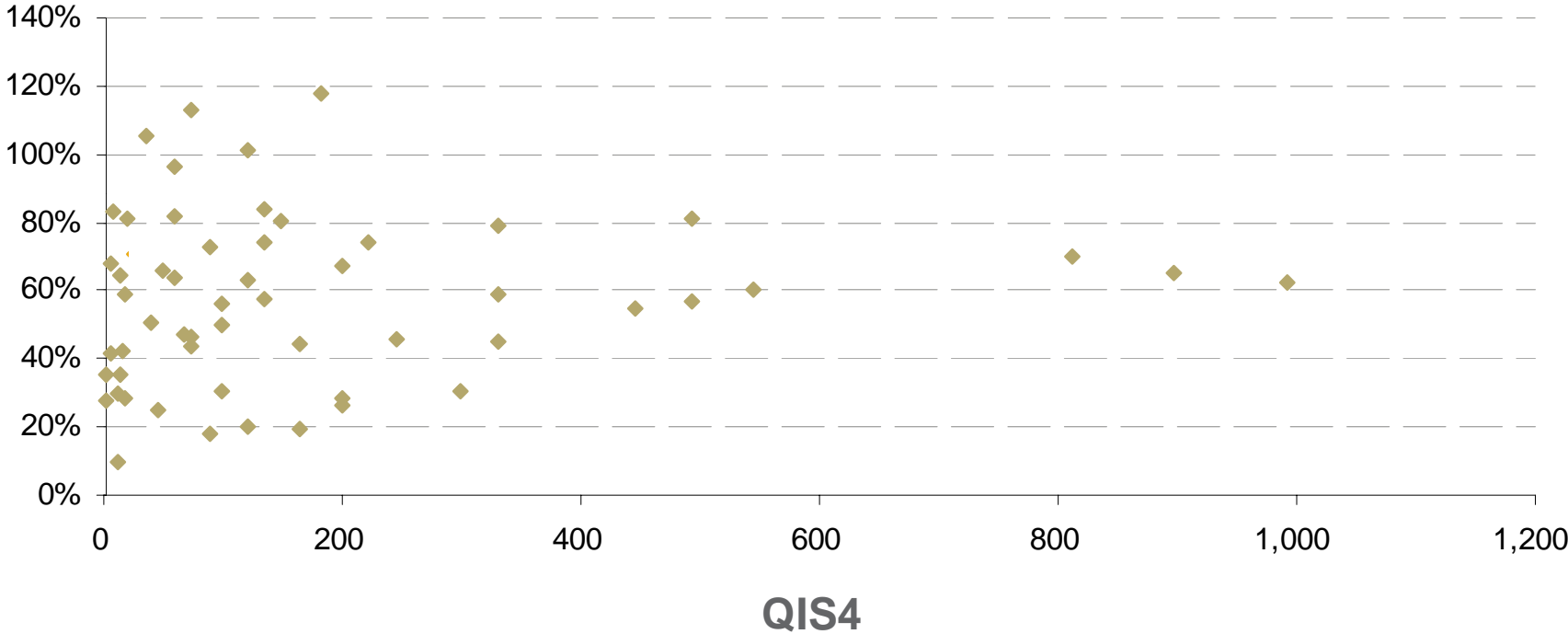
A mostly formulaic, although not straightforward approach

# Integrated Modelling Approach



# Implications of Standard Formula

Impact of Selected Standard Formula Increases – QIS4 to 18 Nov 09

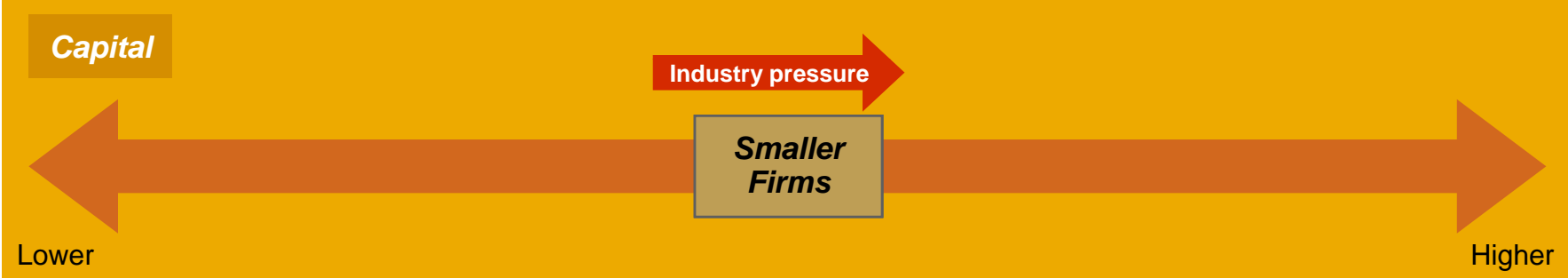
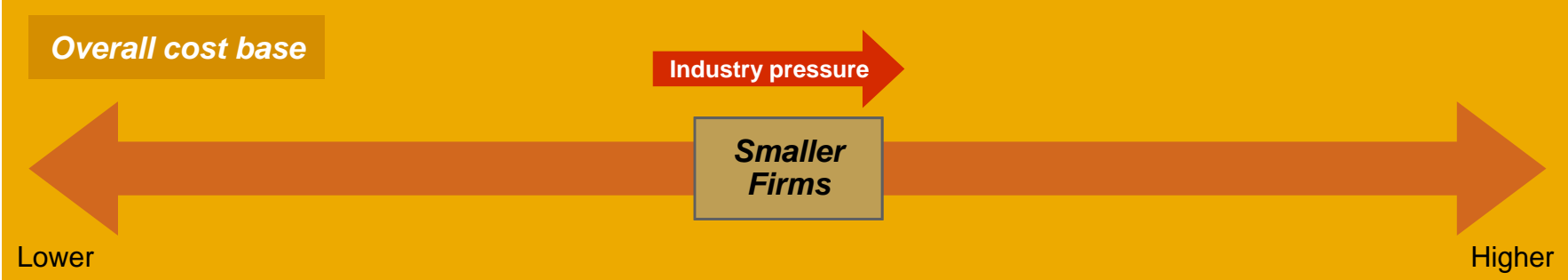


How might it affect the insurance industry?

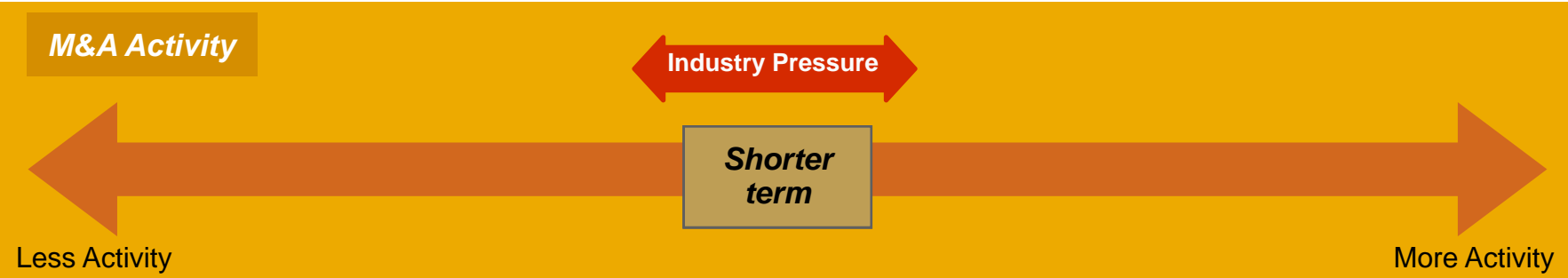
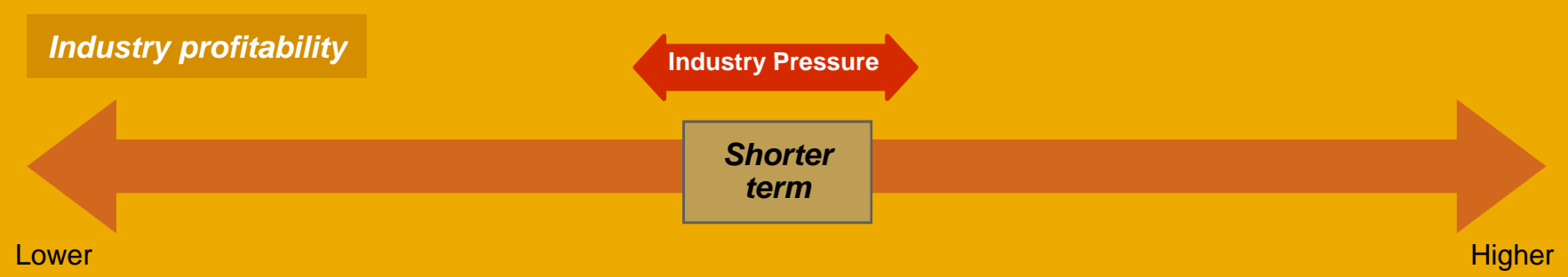
## Implications for Company Ratings (S&P)

- Supervisory capital adequacy should become much more relevant for determining ratings of EU insurers
- Currently S&P do not expect that an extensive reassessment of capital is required...
- ...but negative rating actions may be required:
  - Competitive position
  - Operating performance
  - Financial flexibility
- “[the latest Standard Formula capital requirements] would likely result in widespread and extensive raising of capital across the European insurance industry”

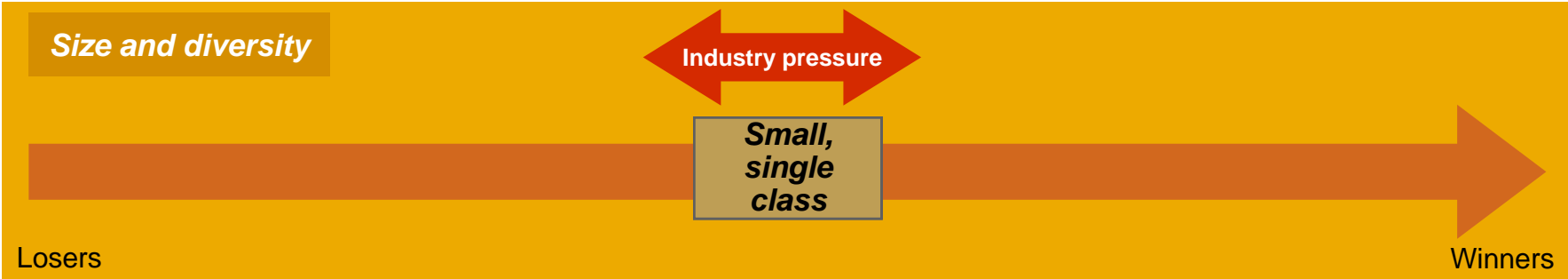
# Possible Micro Level Effects?



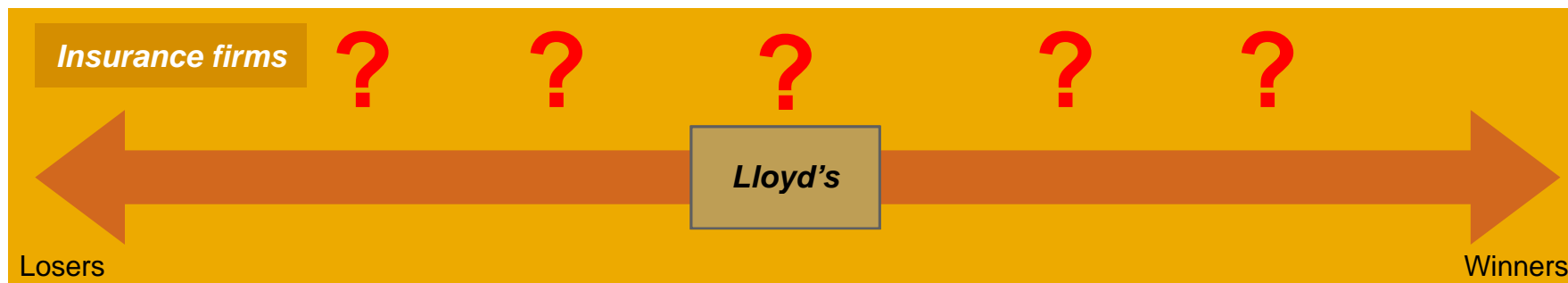
# Possible Macro-Level Effects?



# Winners and Losers?



# Winners and Losers?



- Macro factors:
  - Interpretation of requirements by individual regulators
  - Resource availability within individual regulators
  - Status of current regulation (e.g. ICAS)
  - Landing place for 3<sup>rd</sup> country regimes
- Micro factors:
  - Business written (type and mix)
  - Average size

# Summary of Market Dynamics

- Each effect will present opportunities and threats
- Even firms well placed in most areas should now think strategically about the probable shifts in market dynamics
  - The market will gear-up in different ways, so the landscape will change
  - Technically weaker firms will either improve (gaining ground in a critical insurance competence) or be vulnerable to acquisition
- Understanding capital drivers is likely to be a crucial element of the Solvency II savvy insurance firms
  - Risk adjusted return measures feed into strategic decision making process
  - Risk transfer arbitrage opportunities will be identified and actioned
- Broad Board level experience will be essential but technical expectations upon individuals will rise