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Global trends in capital management

Presentation to the Institute of Actuaries of Japan

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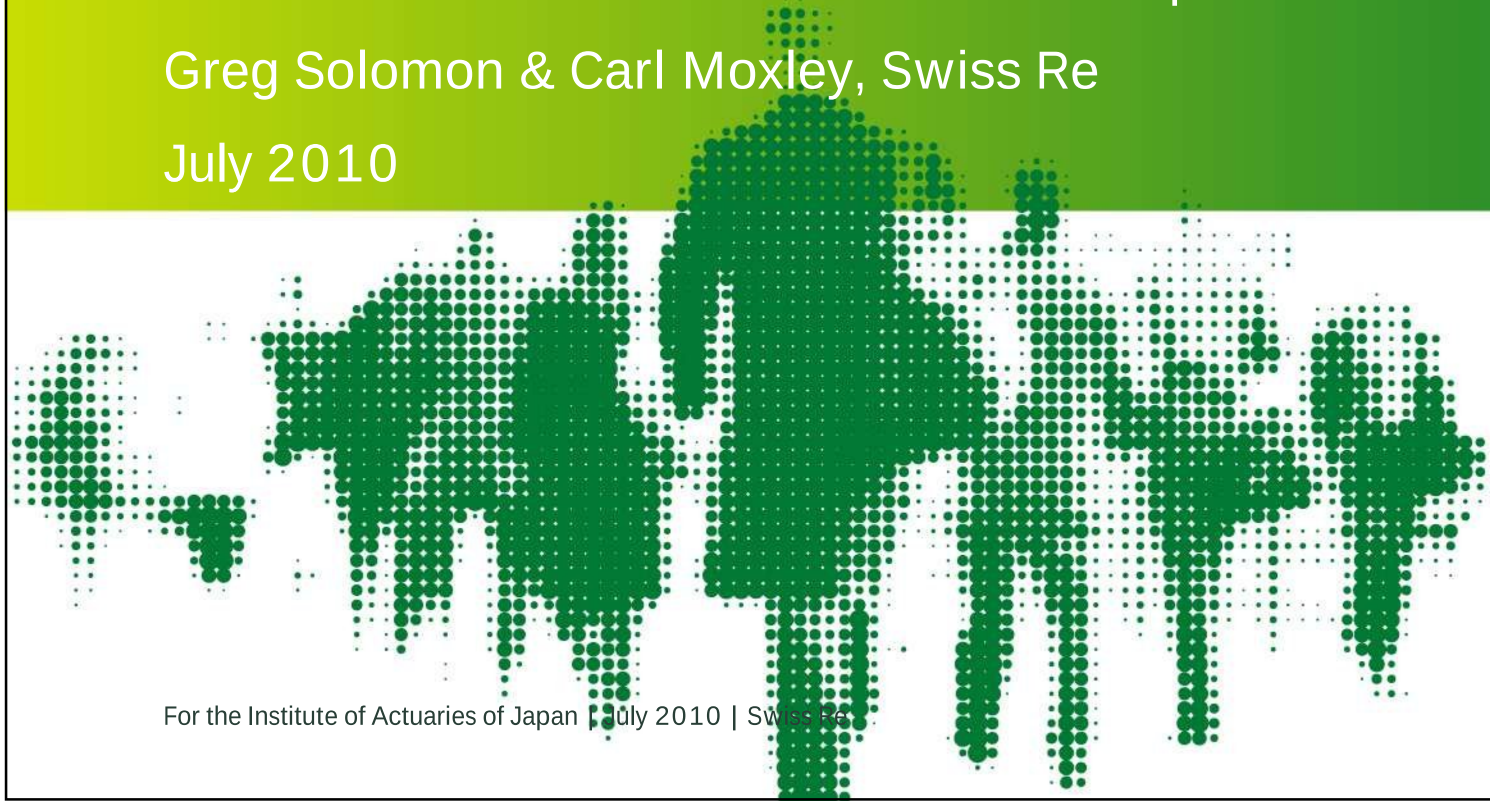

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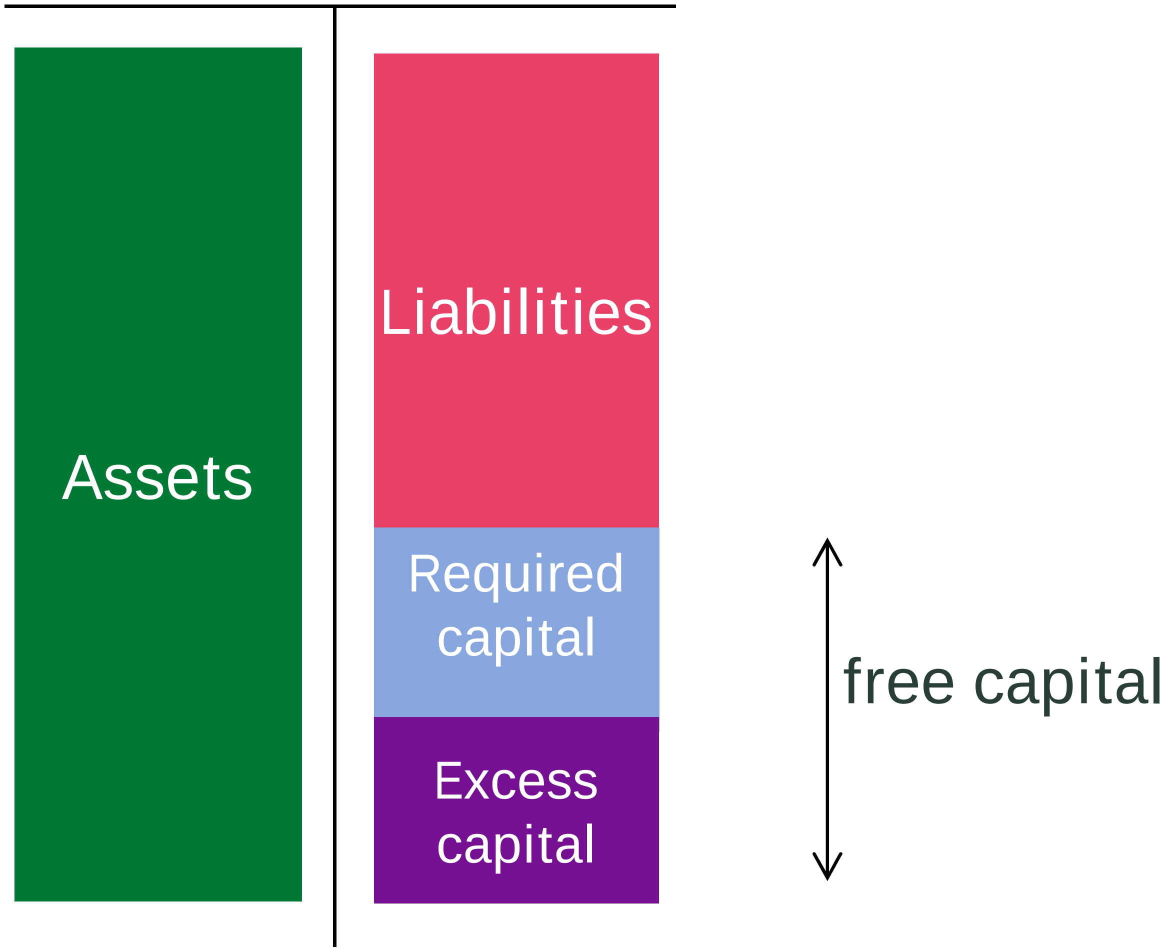
Introduction
Focus on capital

- What is capital
- Why is it needed
- Recent capital-driven events
- Solvency II – even outside Europe

Introduction
The life office balance sheet



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Demand for capital
Capital usage

- New business strain
- Published solvency
- Capacity for M&A (aggressive & defensive)
- Withstand adverse deviations
- etc.

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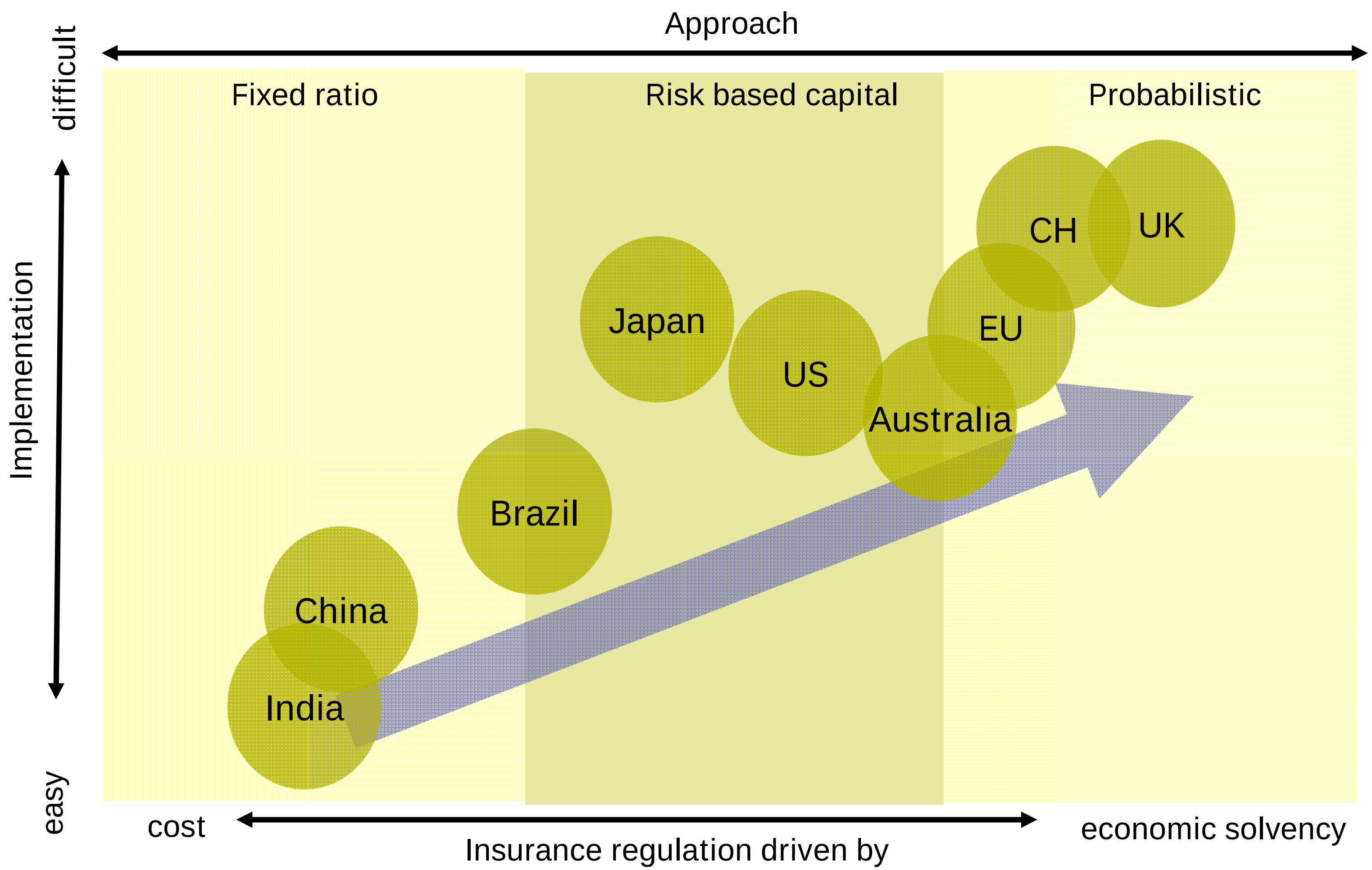
Determining capital requirements
Capital convergence



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Determining capital requirements
Three different perspectives

- Regulatory capital
  - measuring solvency
  - more conservative
- Ratings capital
  - S&P, Moody's, Fitch ...
  - attempts to be realistic
- Risk capital
  - internally calculated
  - the most realistic?

Determining capital requirements
Using all three perspectives

- The importance of each to the company
- Costing insurance products
  - maximum of (regulatory, ratings, risk)
  - average of (regulatory, ratings, risk)
  - most relevant of (regulatory, ratings, risk)
- Can make big difference to competitiveness of products

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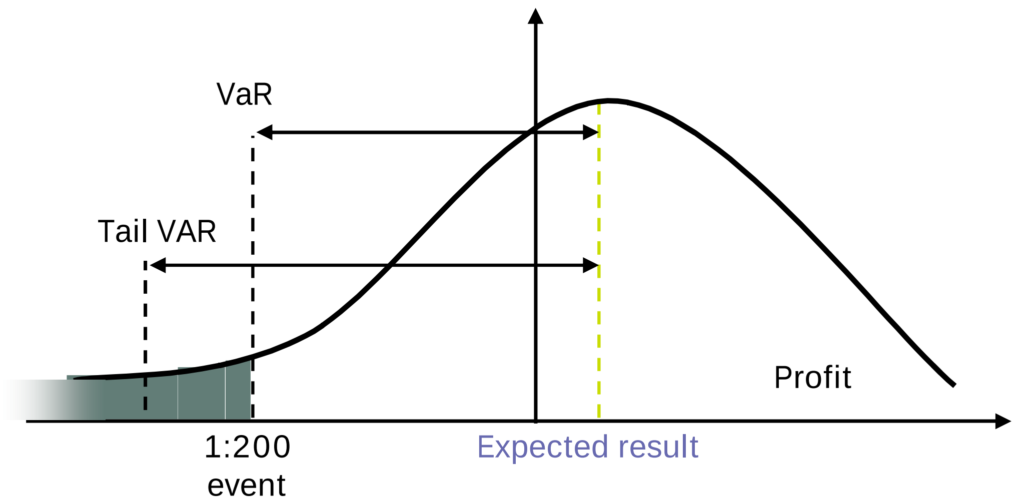
Determining capital requirements
Calculating risk-based capital

- Formula-based approach
  - e.g. 4%(reserves) + 0.3%(sum at risk)
- Risk-based capital is more meaningful
  - $\sqrt{(R_1+R_8)^2+(R_2+R_3+R_7)^2}+R_4$
- VAR (value-at-risk) or Tail-VAR



Demand for capital
2008/9 capital crisis

- Lots of structured deals, reinsurance & banking
- Less capital-intensive products / withdraw products
- Close to new business
- Government intervention
- CP market dried up
- Ratings triggers
- Impact on CDS ...

Demand for capital
Tools for providing capital

- Government bail-outs
- Equity / demutualisation
- Sale of business / Admin Re®
- Insurance-linked securities
- Financial reinsurance / new business financing
- Debt / sub-debt / contingent loans
- Stop-loss covers (particularly for risk-based capital)
- Traditional quota share reinsurance
- Various hybrid solutions
- etc.

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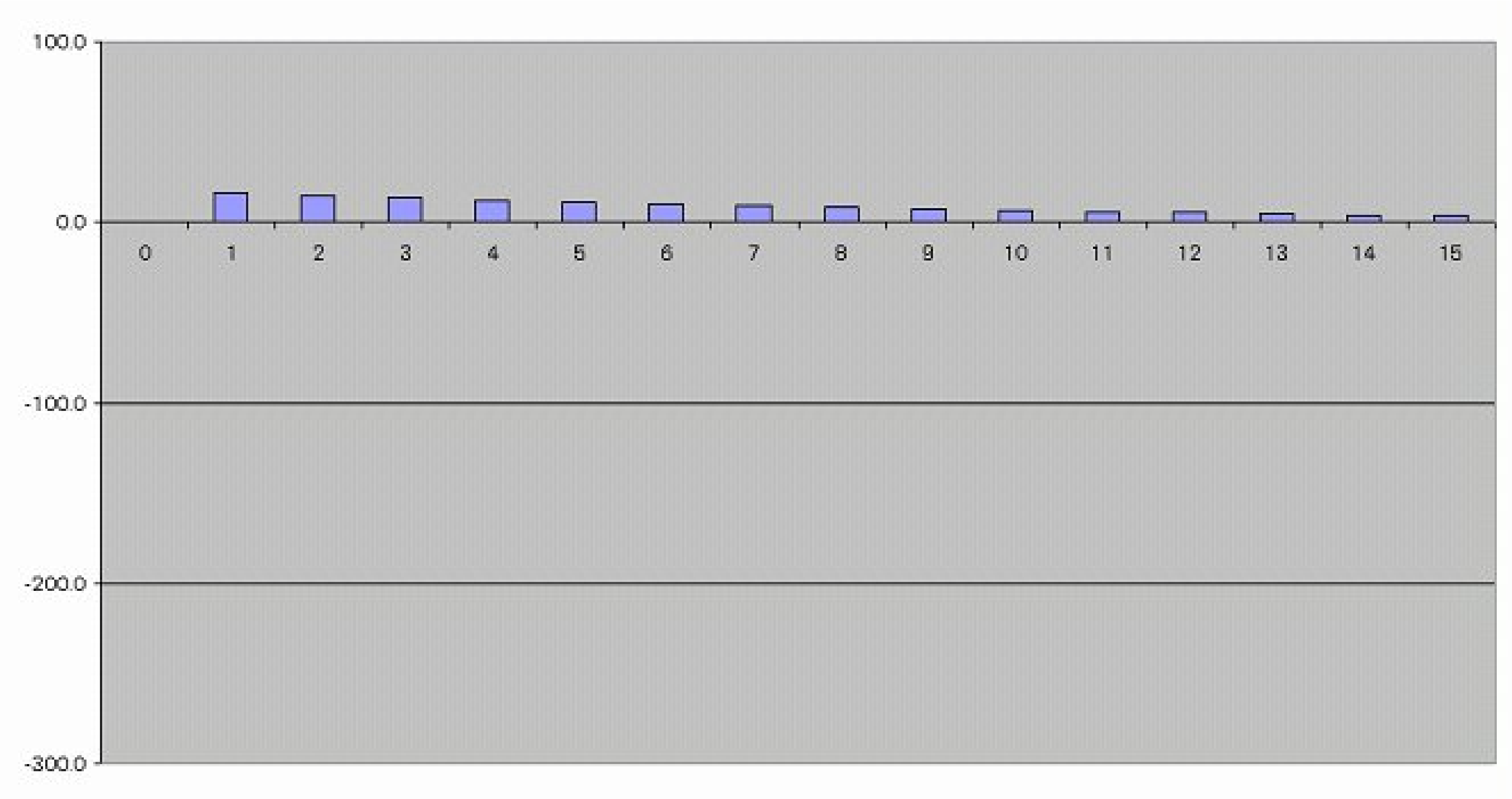
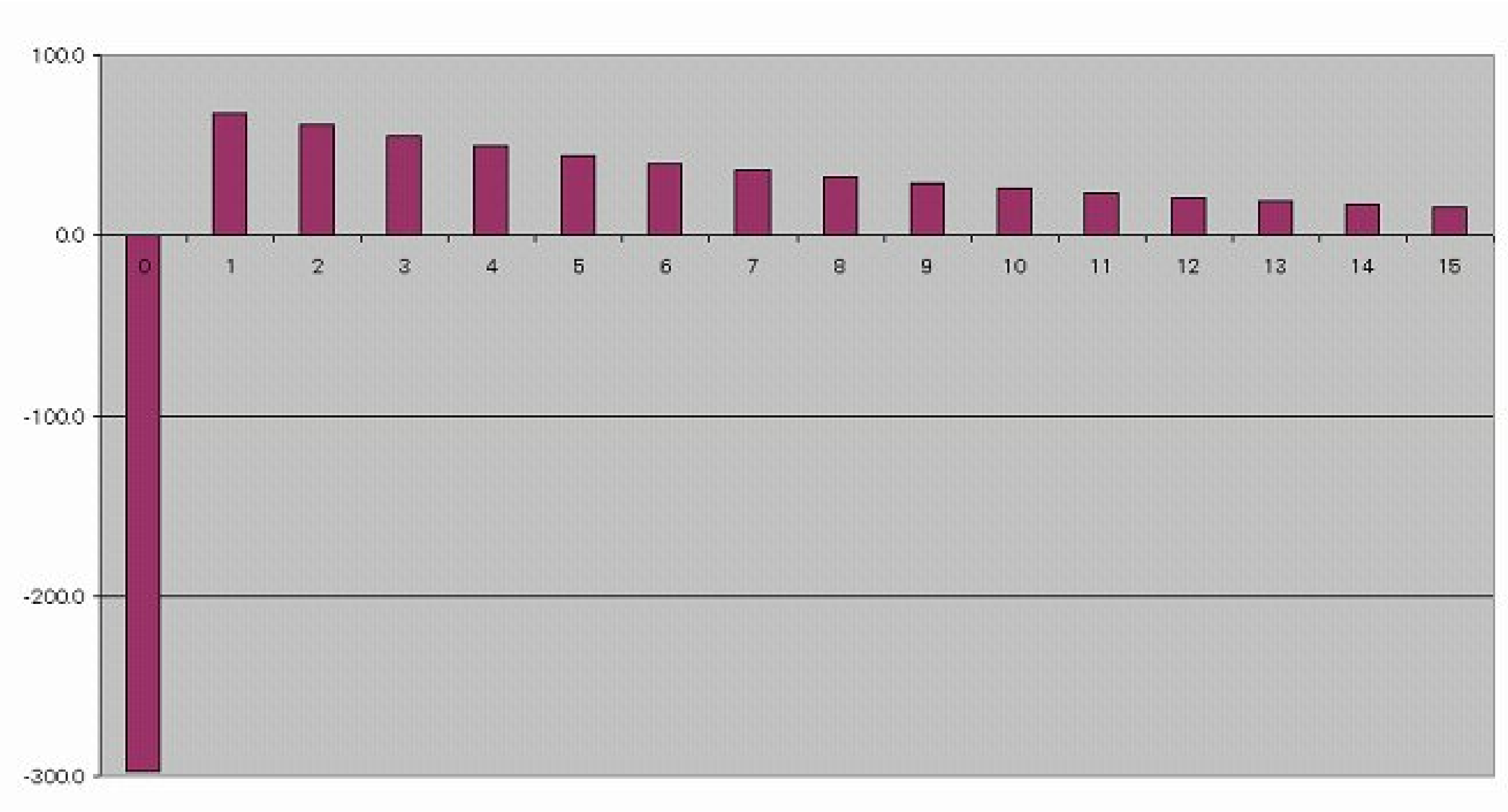
Demand for capital
Characteristics of insurance capital

- Can impact on different 'perspectives' of capital
- Group capital
  - admissibility
  - fungibility
- Liquidity / Duration
- Tier 1 -vs- Tier 2 -vs- Tier 3
- Implementation
  - size & cost
  - time required

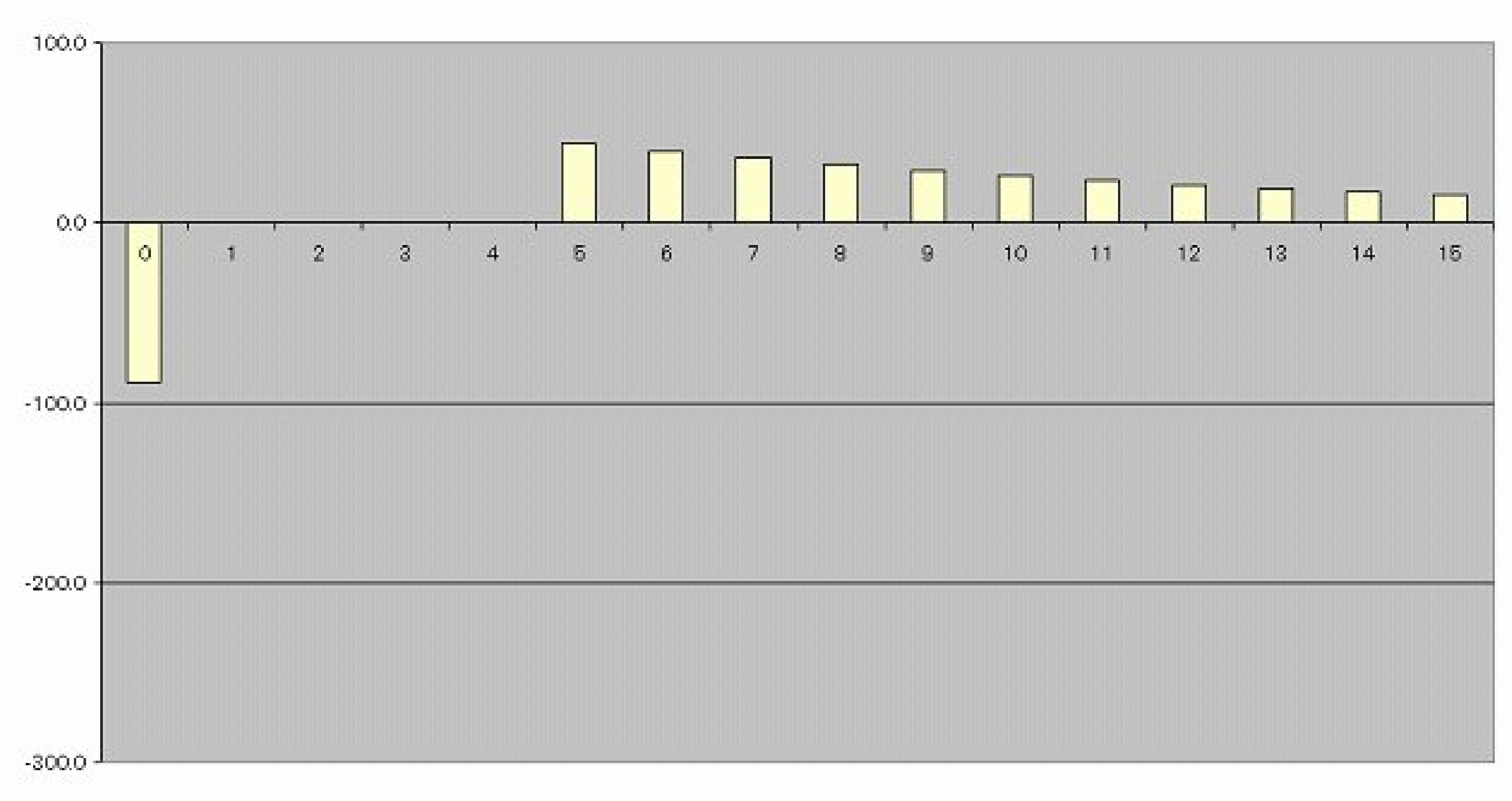
Demand for capital
New Business Financing – spread profits



Demand for capital
New Business Financing – regulatory profits



Demand for capital
New Business Financing – post-finance profits



Solvency II Introduction

- European scope
- Timeline
  - started early 2000
  - implement 1 January 2013 (maybe)
  - consistent calibration and feedback process
- Economic principles, risk-based assessment of assets and liabilities
- Full interaction of risk management and capital
- Solvency II (as a concept) reaches Asia

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Solvency II
Aims

- Enhance policyholder protection
- Better match to the true risks of an insurance company
- Consistency across financial institutions
- Principle-based but without undue complexity
- Assessment of an insurer's overall solvency situation
- Two-level approach to capital requirements
  – Solvency Capital Requirement (SCR)
  – Minimum Capital Requirement (MCR)
- Harmonise quantitative and qualitative supervisory methods

Solvency II
The three pillars

Pillar I Quantitative requirements	Pillar II Qualitative requirements	Pillar III Market discipline
■ Minimum capital requirement ■ Solvency capital requirement	■ Corporate governance ■ Internal control processes	■ Supervisory disclosure
■ Standard approach ■ Internal model	■ Risk management function ■ Asset & liability management	■ Public disclosure
■ Risk dependencies		
■ Risk mitigation	■ Supervisory review process ■ Supervisory powers	
■ Technical provisions	■ Safety measures ■ Solvency control levels	

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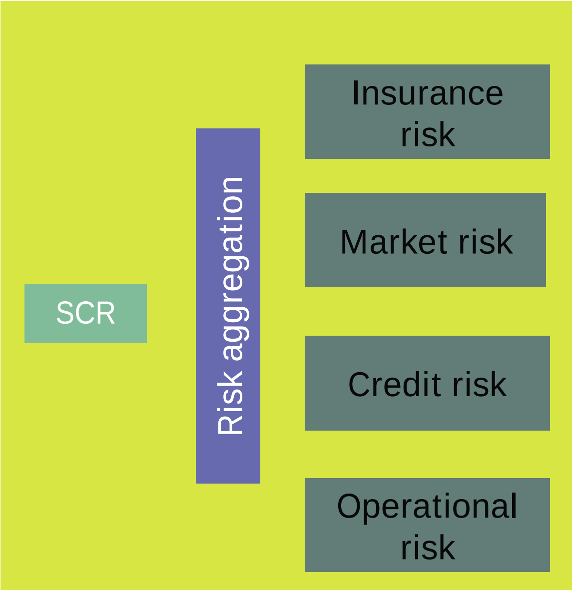
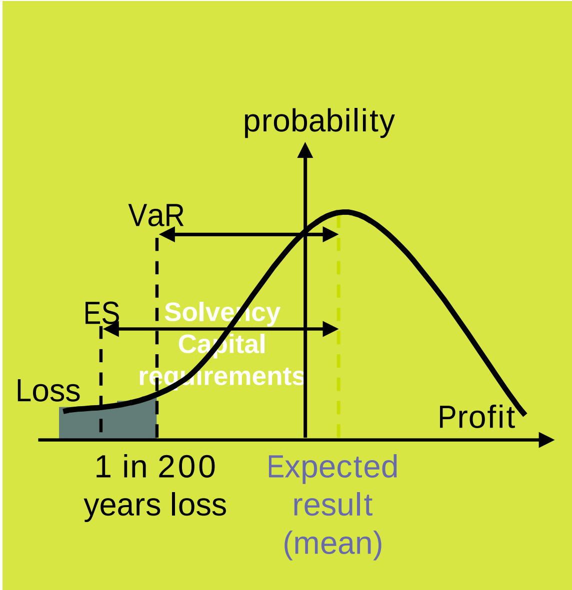
Solvency II
The key elements

Consideration of all risk categories



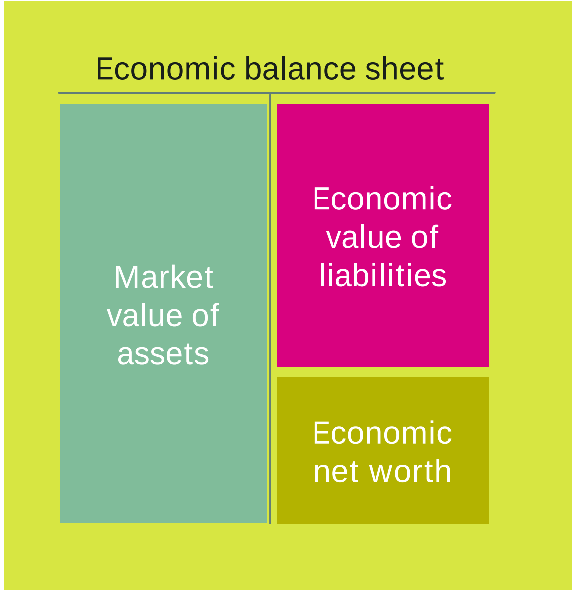
The Solvency I regime only considers the insurance risk and in some extent the market risk

Probabilistic risk measurement



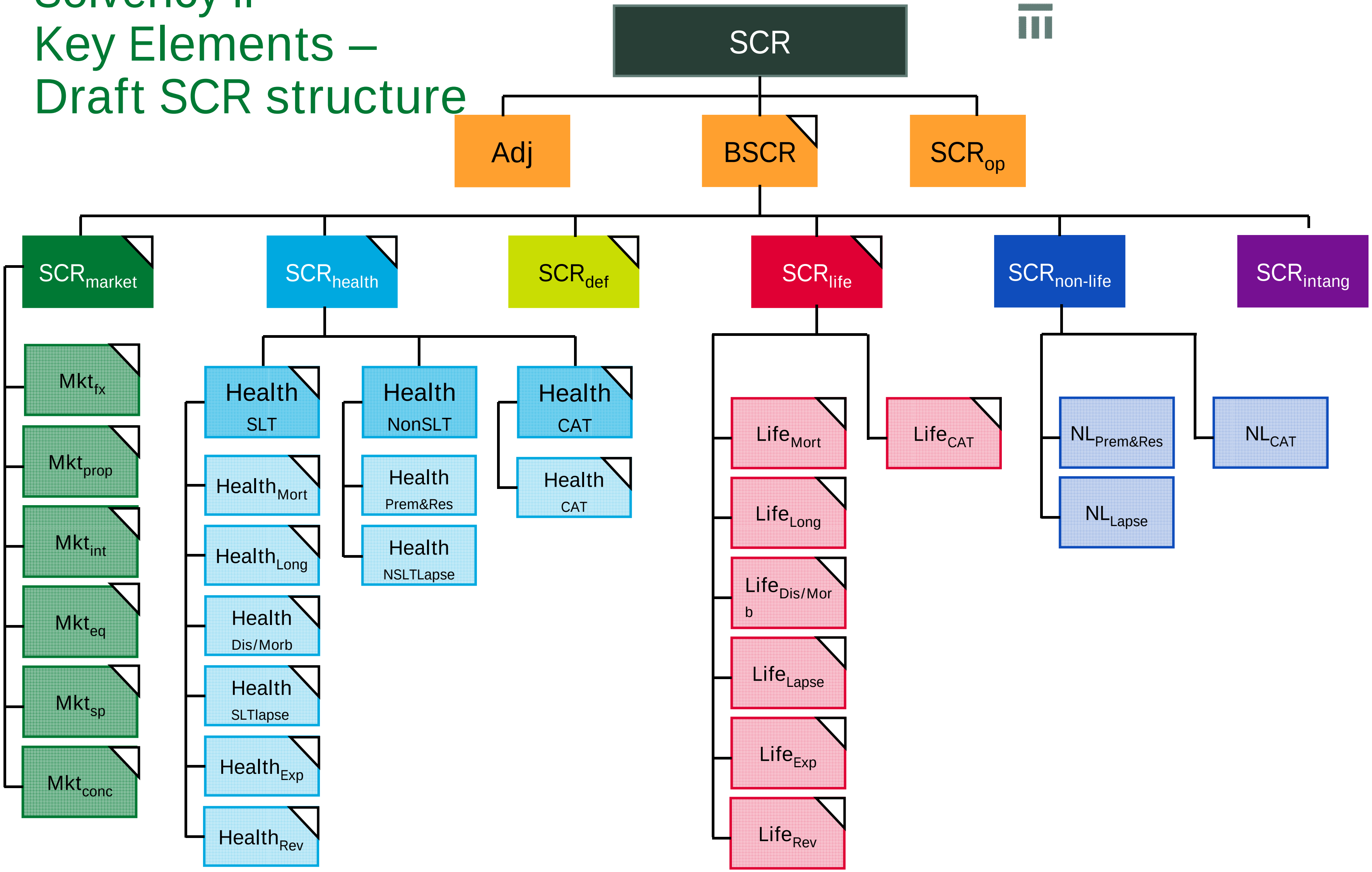
Solvency II risk measure will be based on a Value at Risk (VaR) level of 99.5% which is equivalent to a 0.5% target default probability, and specifies a time horizon of one year

Economic balance sheet



- Introduction of market-consistent valuation of balance sheet items
- Increased volatility of balance sheet items expected

Solvency II
Key Elements – Draft SCR structure



Solvency II
Technical considerations

- 1:200 year capital coverage
- One year time horizon
- Diversification
- Future profits as fully admissible Tier 1 capital?
- Annuity business/liquidity premium
- Standard model -vs- internal
- Capital solutions

Conclusion

- Capital is important: there are many reasons why a company manages its capital
- Which type of capital and when: their relative importance drives companies' decisions
- Global crisis further emphasised the importance of capital
- Europe is moving to a more realistic view of capital with clear interaction with risk management: Asia and other regions are expected to do similarly in due course

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Thank you

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