Solvency II and the Swiss Solvency Test– San Diego

Ming Roest

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Agenda

Introduction to Solvency II

Internal Models

Swiss Solvency Test

Industry Engagement

Impact on Insurance Industry

Solvency II – Supervisory Aims

- Establish solvency standard to match risks
- Encourage risk control in line with IAIS principles

- Harmonise across EU
- Assets and liabilities on fair value basis consistent with IASB if possible

- Practical approach
- 3 Pillar approach broadly consistent with Basel II

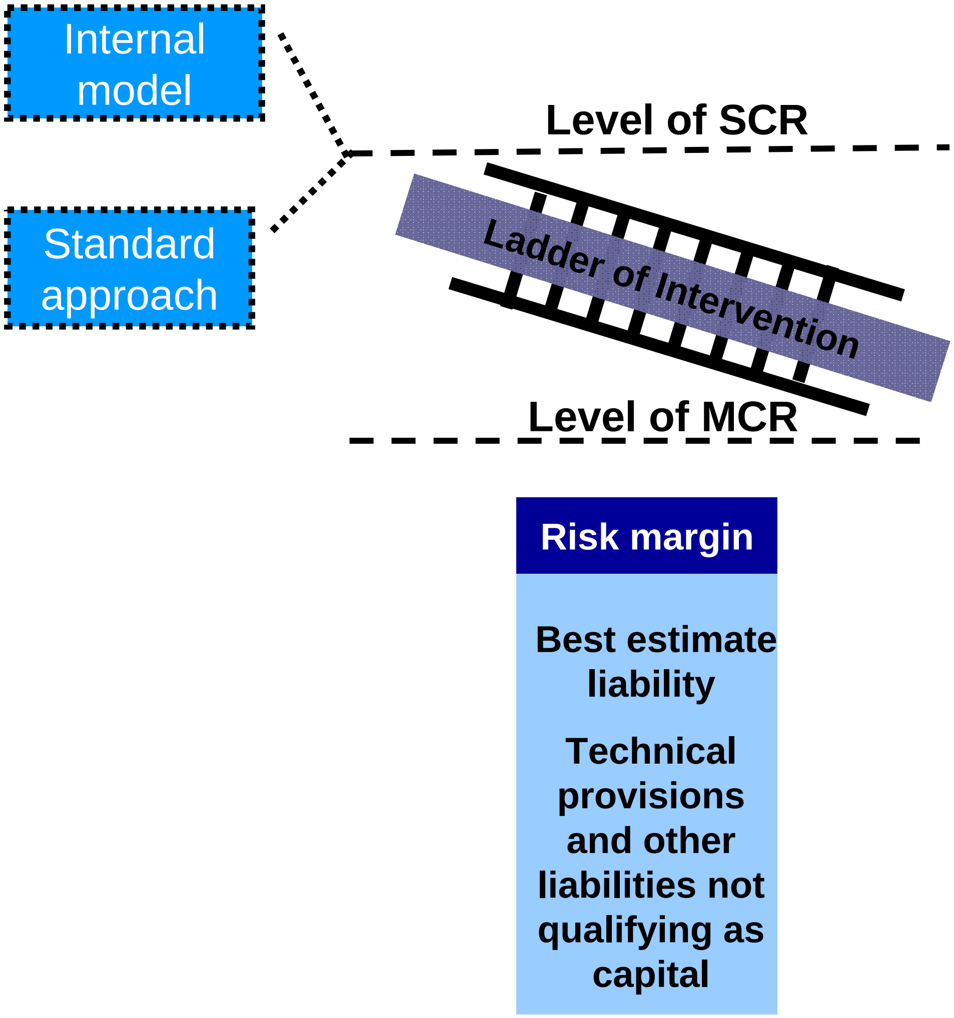
Solvency II – Three Pillars

Pillar 1 :
Technical rules for valuation of assets, liabilities and solvency margin (both SCR and MCR)

Pillar 2 :
Supervisory review process including individual capital adjustments having regard to effectiveness of risk management and corporate governance arrangements

Pillar 3 :
Public and private disclosures to the regulator

Solvency II – Main reference points

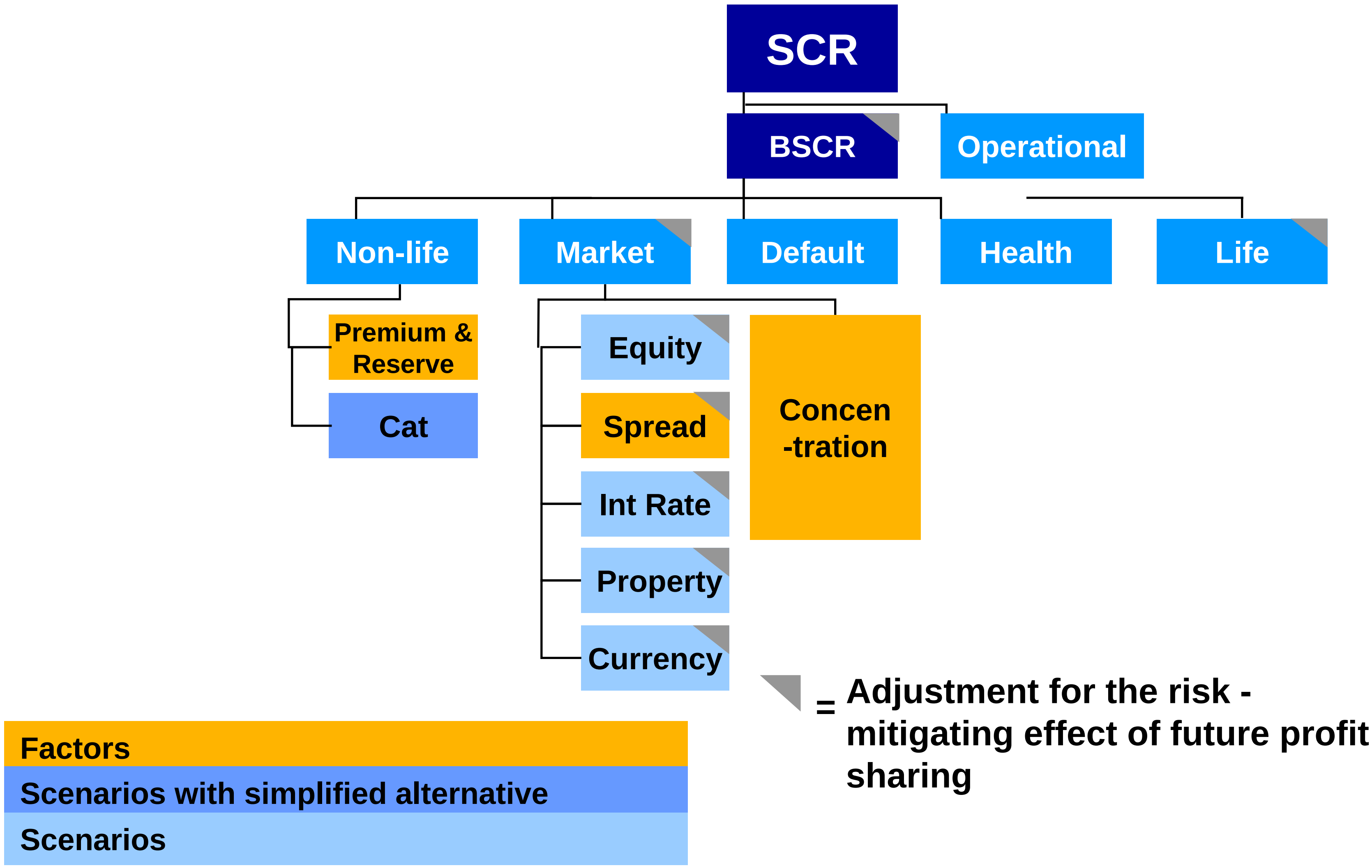


- **Technical Provisions** – amounts set aside to fulfil obligations towards policyholders and other beneficiaries; includes a risk margin
- **Solvency Capital Requirement (SCR)** –capital that enables absorption on significant unforeseen losses and gives reasonable assurance to policyholders (0.5% probability of ruin over a one year timeframe)
- **Minimum Capital Requirement (MCR)** –capital below which ultimate supervisory action would be triggered
- **Ladder of intervention** as available capital falls from SCR towards MCR

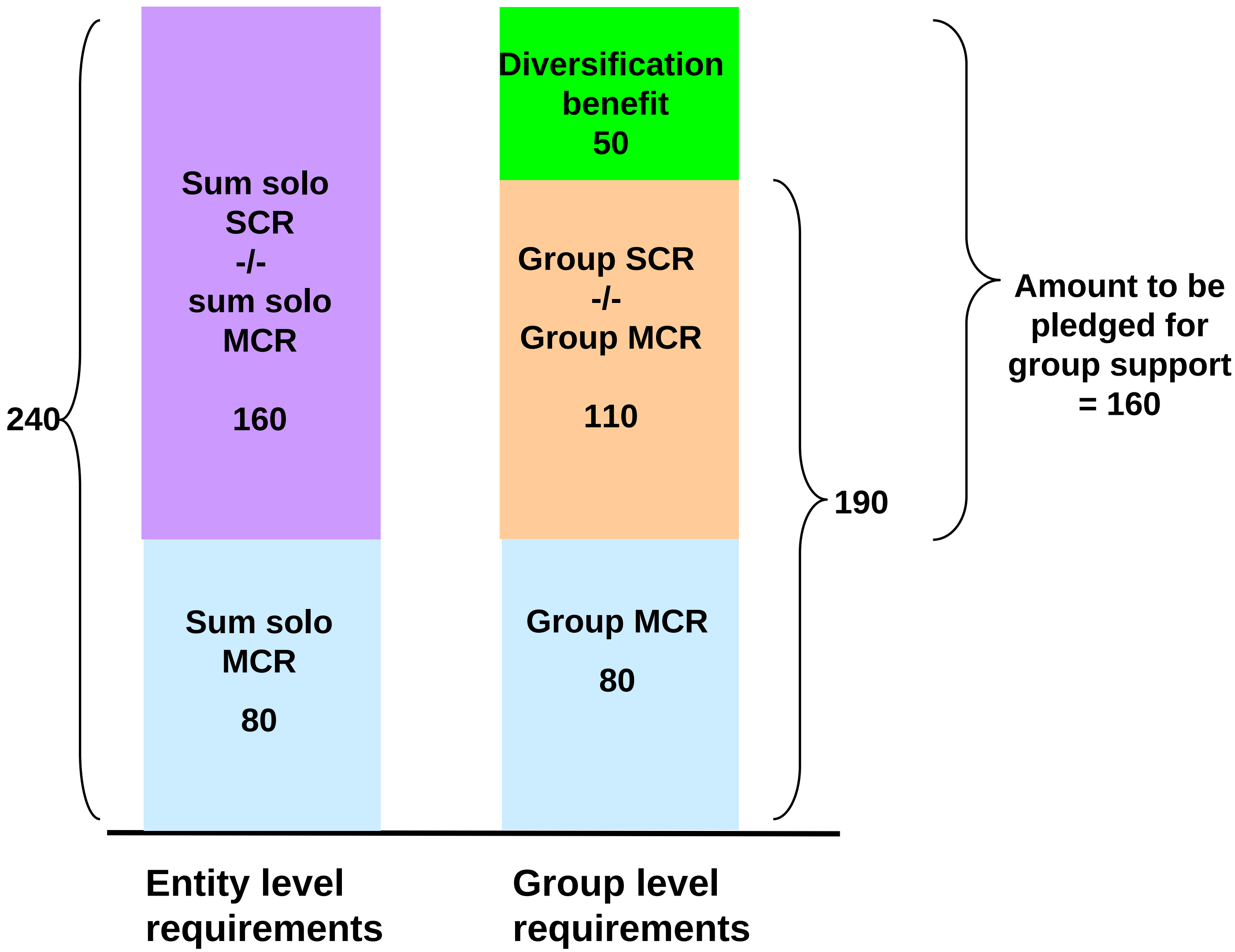
Valuation of assets and liabilities – on a market consistent basis

- Assets
  - Hedgeable assets at realisable market value
  - Non-hedgeable assets at estimated realisable value
  - Illiquid or non-tradeable assets on a prudent basis
- Liabilities
  - Hedgeable risk (largely financial): market price or market-consistent basis
  - Non-hedgeable risk (most insurance risk):
    - — discounted value of the best estimate cash-flows using risk-free yield curves for discounting
    - — Most likely cost of capital approach (as applied in the Swiss Solvency Test) to calculate risk margins

Calculation of the SCR - Modular approach



Potentially a major change to group supervision – Diversification and Fungibility of capital

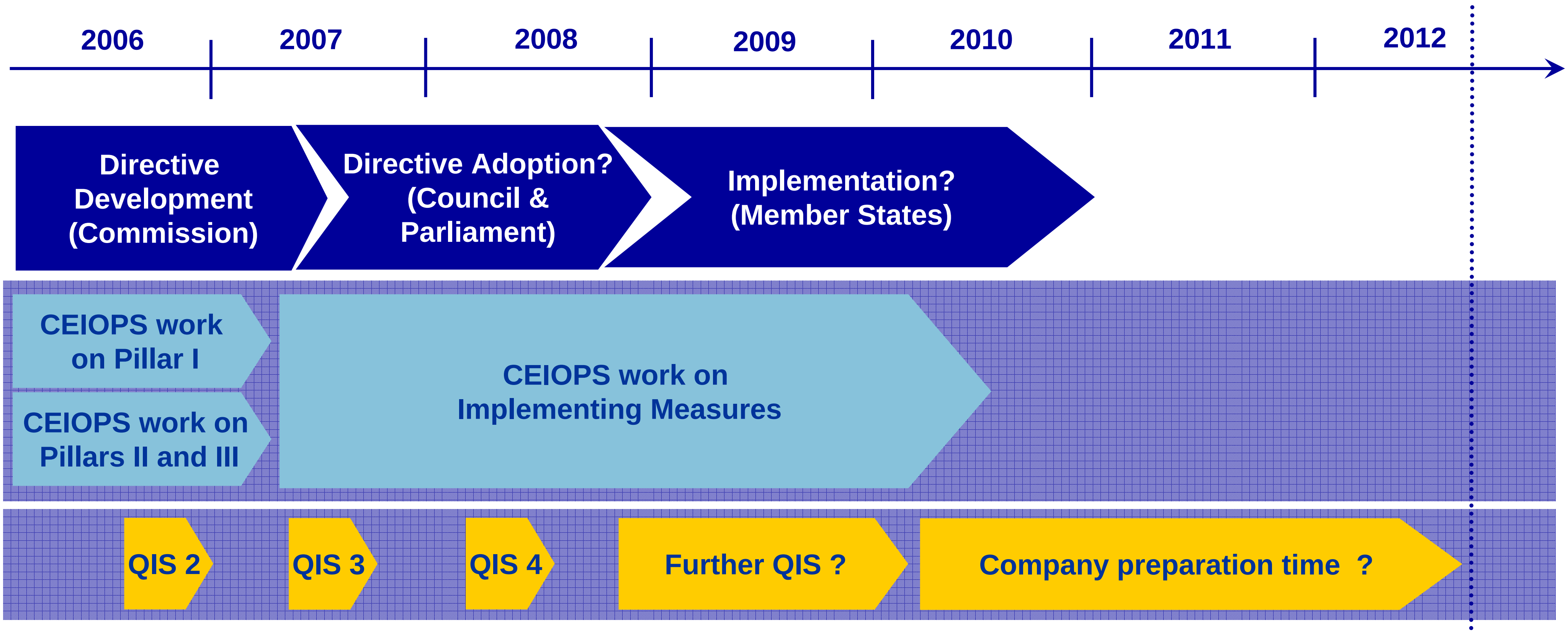


- Sum solo MCRs = 80 is the minimum amount of capital which needs be held at entity level
- Assuming that the solo entities hold 80 only, the insurance holding company needs to hold 110 of capital only (190 – 80)
  - No capital needs to be held which correspond to the diversification benefits

However…

Solvency II is a negotiation

Solvency II – Expected Timeline



EU Commission recently indicated that end 2012 is the likely implementation date

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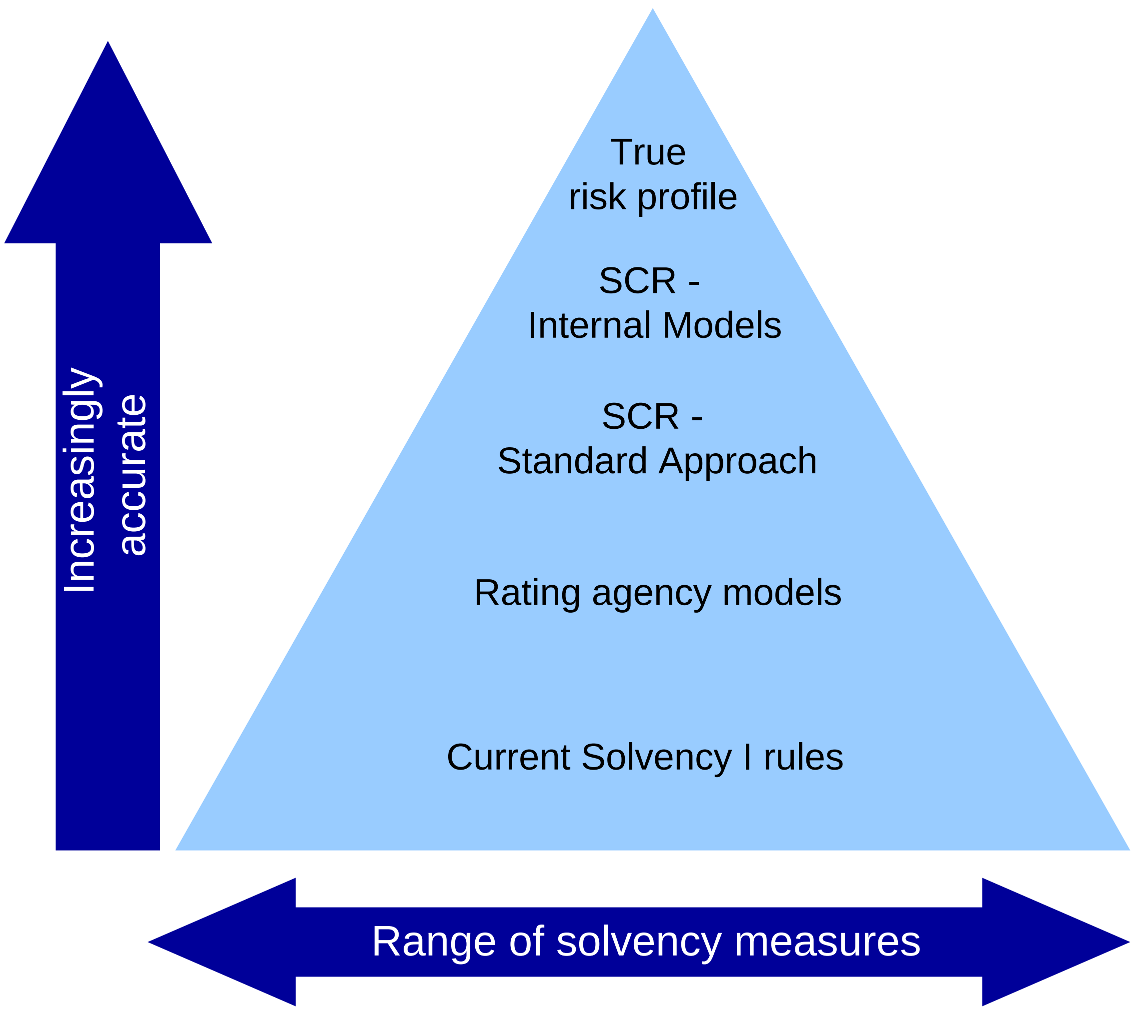
From Solvency I to Solvency II
towards a coherent economic approach



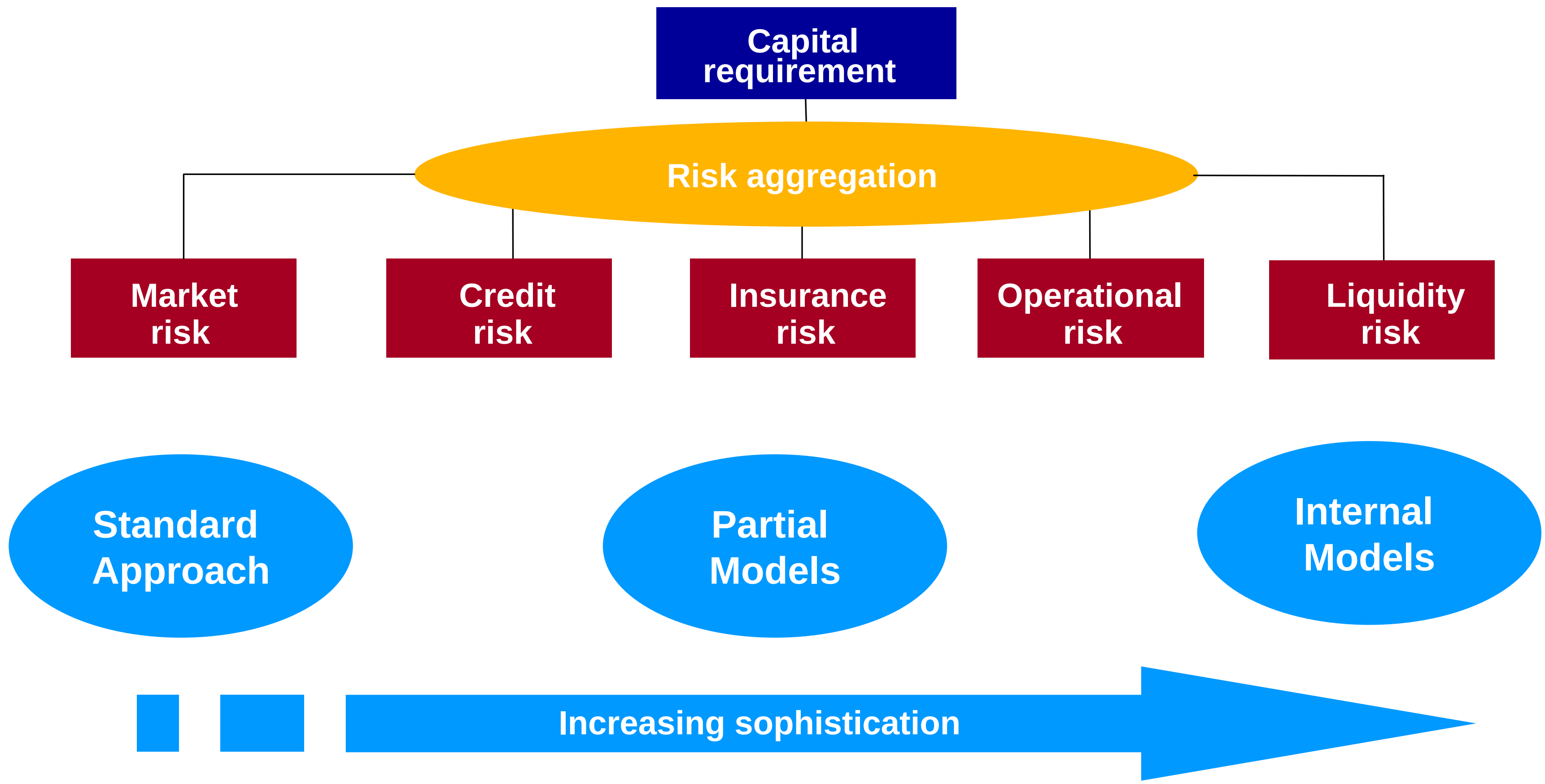
Future

- Consistent view on solvency measures across all parties
- Discussions with supervisors and rating agencies focus on accuracy of internal model and quality of risk management

Current situation

- Multiple ways of assessing solvency which are not always consistent and can even contradict each other
- Not aligned with best practice internal risk management

Solvency II models do not need to be complex …



… but, simple approaches may require more capital to be held

Why an Internal Model?

Optimal Capital Requirements

- Company-specific data and underwriting processes can be captured
- Can be customised to an individual company's risk profile and risk management processes
- Recognition of group diversification effects

Competitive advantage

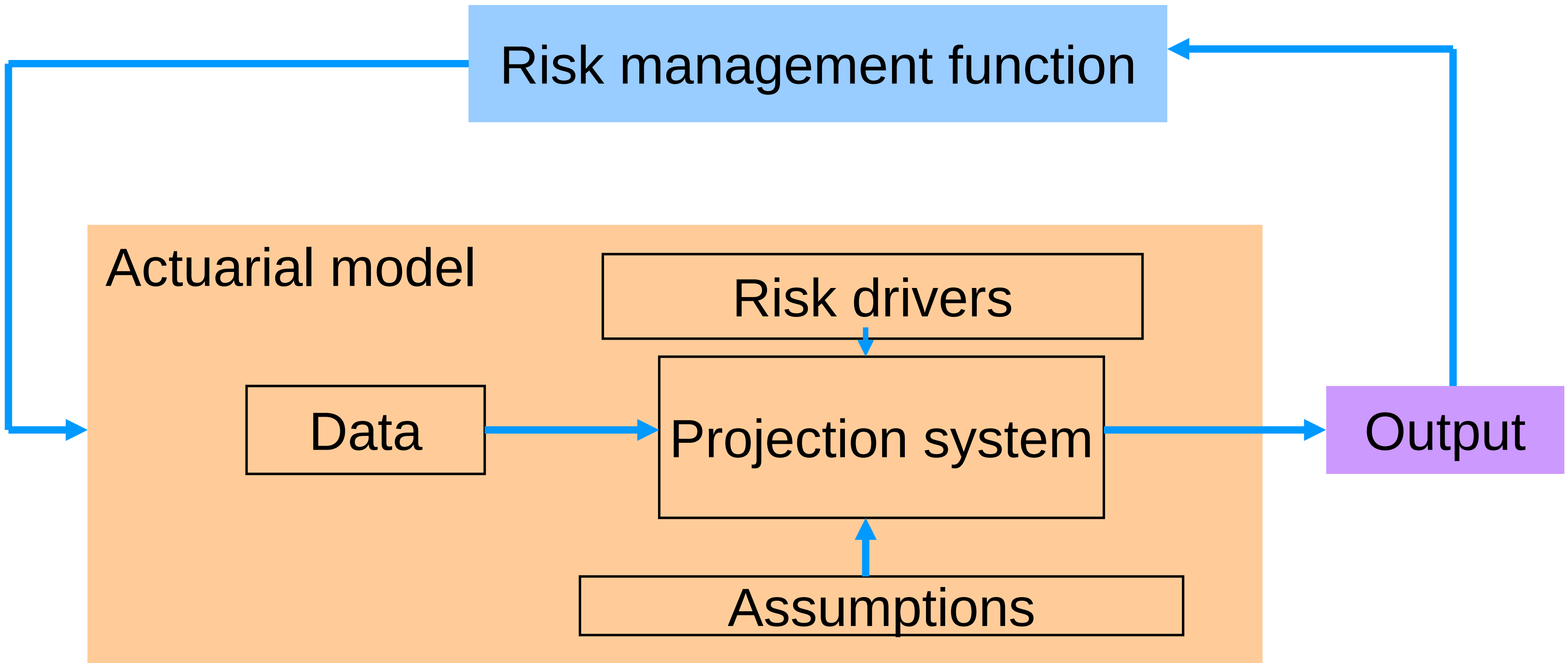
- Improved pricing and management of risk
- Rating agency requirements are increasingly taking into account results of company internal models

Internal Risk Management

- Provides information about distribution of outcomes and not single reference point
- Enables a capital allocation process
- Performance management

Definition of an Internal Model

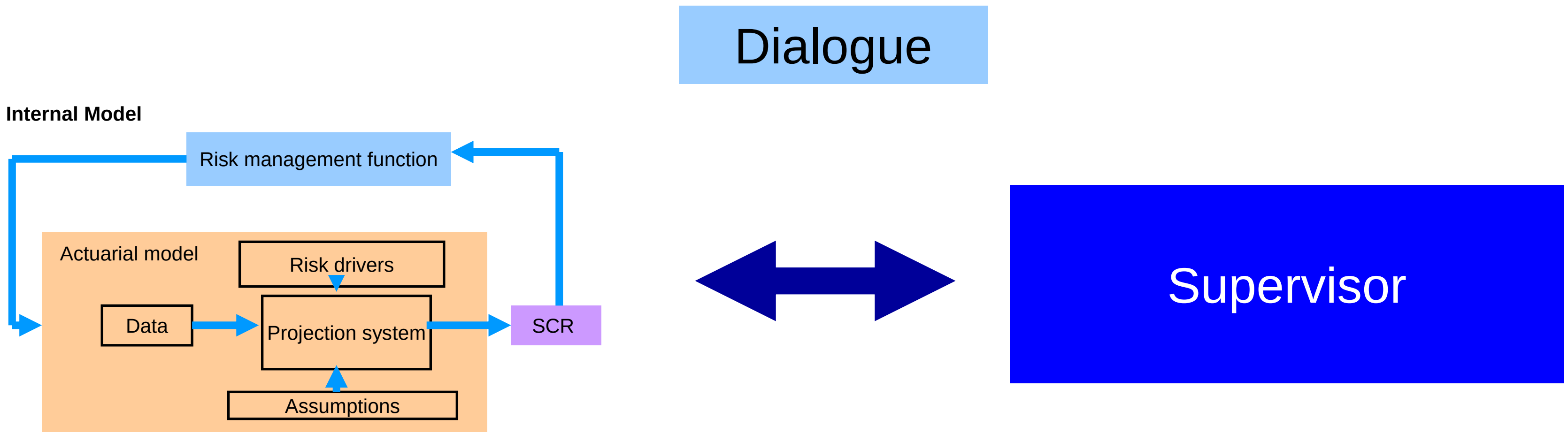
Internal Model



Internal model approval – 3 tests

Statistical Quality test	Calibration test	Use test
■ Model is sufficiently accurate and stable ■ Sound actuarial techniques ■ Should capture the material risks ■ Data is accurate and consistent ■ "Back-testing" should be carried out ■ Sensitivity testing ■ Proper documentation	■ Has the SCR derived from the model at the appropriate level? ■ Is it comparable across undertakings	■ The actuarial model is used within risk management ■ Board of directors is involved ■ Business is controlled and main risks are identified/managed via the use of the internal model ■ Requirements are regularly reviewed

Approval process – a challenge for both the industry and the supervisory authorities



- Supervisor responsible for approval process
- Supervisors will need to acquire skills
- Capital add-ons may be applied (but not expected to be the norm)
- Cherry-picking to be avoided

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The European Commission believes that Solvency II will be beneficial

- The Commission expects that Solvency II regime will have a positive outcome:
  - Economic Risk Based Approach
  - Compatibility with International Accounting and Insurance regulation
  - Benefits for stakeholders
    - — **Industry**: Increase Competitiveness, Risk Mitigation Tools and Diversification
    - — **Supervisors**:Sharing tasks between Solo and Group Supervisors
    - — **Policyholders**: Uniform and Enhanced level of protection and increased confidence
    - — **The Economy**: More efficient allocation of capital

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How Solvency II will affect the industry?

- Need for more formal governance, systems and controls
- Need to develop internal models that are integrated with business decision-making
- More consolidation possible
- Increased public disclosures
- Capital strength could become more important to primary insurers' ability to write business

How Solvency II will affect the insurance industry in the US

- Solvency II forces companies to focus on risk management
  - Companies with internal models will have competitive advantages
  - Use test – models will be embedded in the organisation
- It is expected that US companies will follow and will have increased focus on risk management