



# Facts & Figures Committee

Solvency II update

Phil Ellis

*September 15, 2008*

**“Solvency II is not just about capital.  
It is a change of behaviour.”**

*CEIOPS Chairman, Thomas Steffen  
launching the framework directive in July 2007*

# Solvency II update

## Structure of today's talk

- Reminder of the background
  - Progress in last year
  - Three pillars
  - Capital calculation
  - Implications for balance sheets
  - Governance and risk management requirements
  - Disclosures
  - Final thoughts
- 
- Anne to follow with implications for Marine Underwriters

# Solvency II update

## Background: The big questions

- Where? The European Union  
... but as a model for the world to follow
- What? Change view of risk management & solvency (Bal. Sheets)  
... but consistent with IFRS, so P&L too
- Why? Improve behaviour to manage and reduce risk  
... aiming for a coherent risk framework
- How? A change to internal procedures & modelling  
... but with the fallback of a standard model
- When? 2012  
... but impacts already beginning to be felt
- Who? Accountants, actuaries, analysts  
... and everybody, including marine underwriters

# Solvency II update

## The major themes

- Principles based, not rules based
- Risk sensitive economic approach
  - Market-consistent values for both assets and liabilities
  - No arbitrary implicit margins or restrictions
  - Recognition of diversification effects
- Alignment with latest risk management techniques
- Proportionality
- Capital add-ons only applied as the exception and not the rule
- Promotion of internal models
- Group supervision

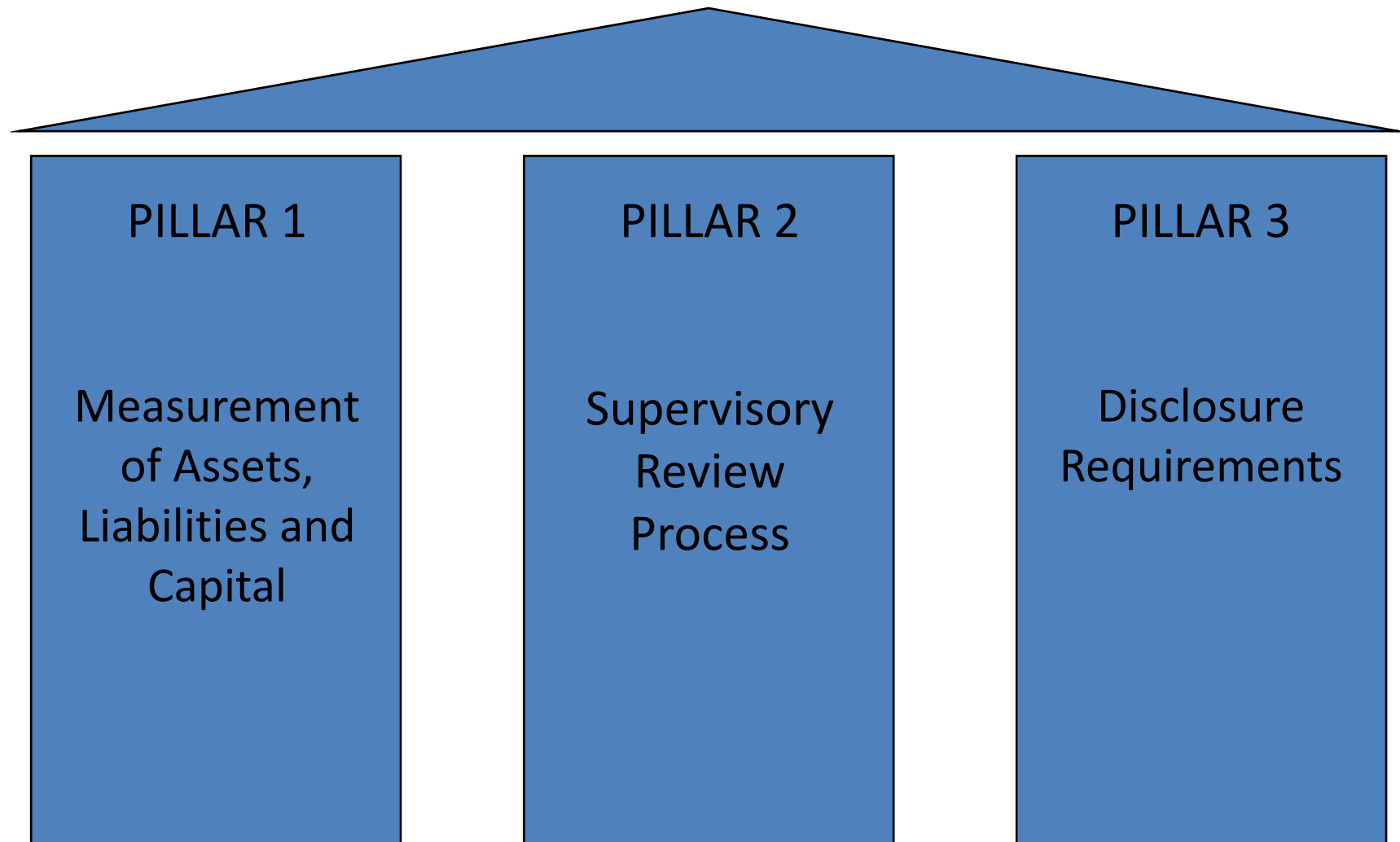
# Solvency II update

What's happened in the past year?

- Solvency II timetable confirmed
- QIS 4 completed ... and QIS 5 conceived for 2009
- In-fill of various details within framework (... still incomplete)
- Consideration of “Own model” approval process (eg UK FSA first publication due this month)
- Other worldwide regulators moving in similar direction
- IFRS progress, broadly in parallel
- Subprime crisis / credit crunch hit banking sector

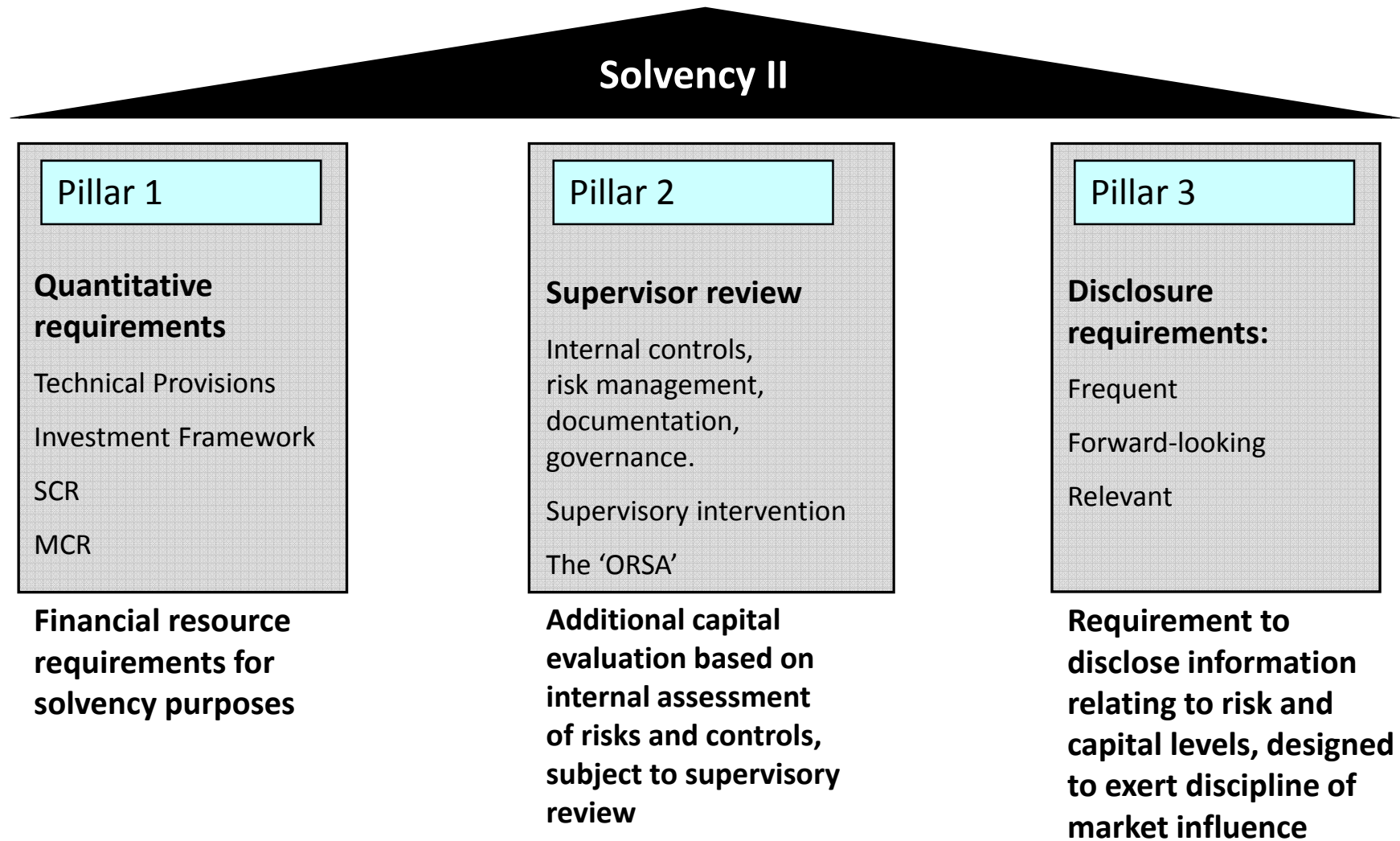
# Solvency II update

Structure: Three pillars (simple version)



# Solvency II update

## Three Pillars (reprise)





# Solvency II update

## The pillars in practice

Much of the market's initial concern was with **Pillar 1**

- Plans were more detailed, with “trial runs” QIS 1, 2, 3, 4, ...
- Potentially large, visible effects (“distortions”?)
- Marine business all in one big class (split prop and non-prop)

More recent focus has included **Pillar 2**

- Regulator aim is widespread embrace of ERM culture
- ORSA is set to be much larger than UK ICA analyses
- Potentially very significant changes to procedures
- Except in the very largest and/or smartest companies(?)

And some are now starting to really worry about **Pillar 3**

- Disclosures will be *much* more comprehensive than currently

# Solvency II update

## Pillar 1 - Basis of Solvency II Calculations

### Assets

- Market Values (or as close as possible)

### Liabilities

- Best Estimate Economic Values ( $\approx$  transfer cost)
- Discounted for Future Investment Return
- Loaded with a prescribed Risk Margin (cost of capital)

### Solvency Capital Requirement ( $\approx$ Minimum Capital)

- 1 in 200 chance of insolvency over one year horizon
- Reflects actual risk profile for company (realistic values)
- Either from complex set of cross-EU standard factors
- Or from agreed internal model

***All more realistic than what we're used to!***

# Solvency II update

## Solvency and Minimum Capital Requirements (SCR & MCR)

SCR by standard formulae for all European insurers *or* internal model

Current draft of standard model is not liked by many

- “too simple” and/or “too complex” (!)
- “Inappropriate for my business”
- “Geographical diversification more political than real”

Internal model approval process still unclear

- But *will* clearly be onerous
- And multi-faceted ... not “just a good capital model”
- And a huge task for the regulators

MCR is a lower “safety net” trigger for more active intervention

- Precise details still uncertain, but concept is clear

# Solvency II update

## (Reminder) Pillar 1 Impact on the Balance Sheet

- Very Simple Balance Sheet

Assets 100	Liabilities 70
	Capital 30

- Capital is Assets less Liabilities
- Regulator specifies minimum capital required

# Solvency II update

## Simplistic Balance Sheet

- A simplified balance sheet

Assets 100	Liabilities 70
	Min Capital 20
	Free 10

If Min Capital is 20

Solvency ratio is  
 $30 / 20 = 150\%$

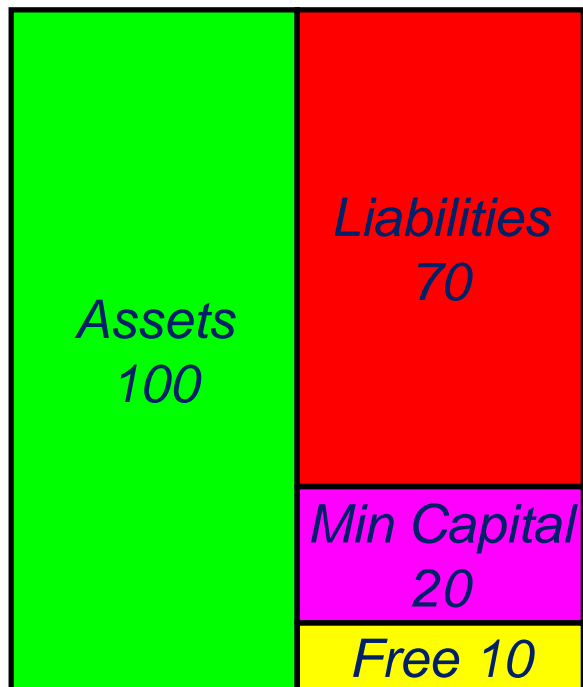
Solvency II changes  
each of:

- Assets
- Liabilities
- Min Capital (SCR)

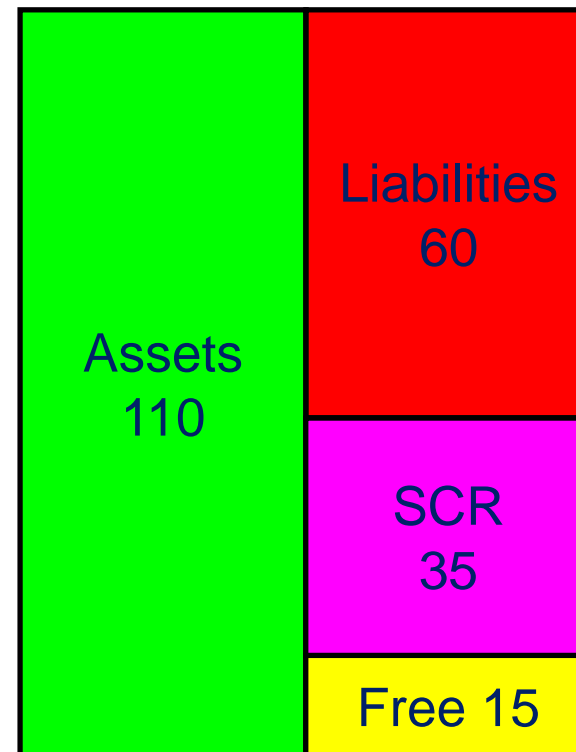
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## Balance Sheet Impacts - 1

*Current Position (150%)*



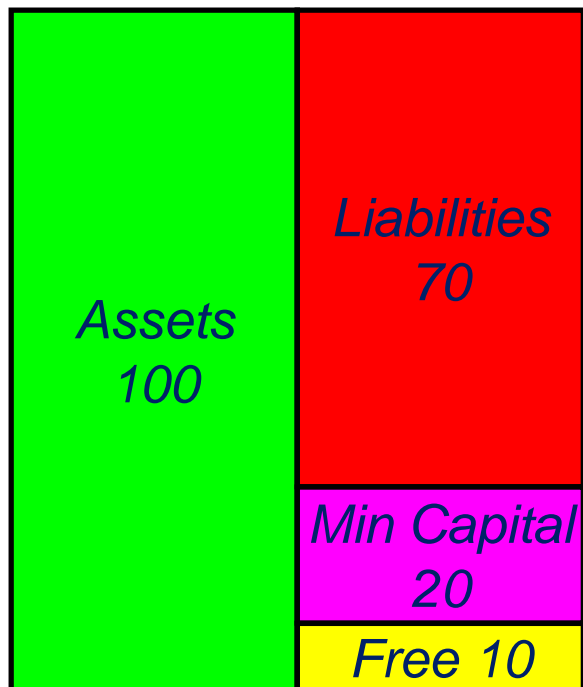
*Solv II – “Plausible” (143%)*



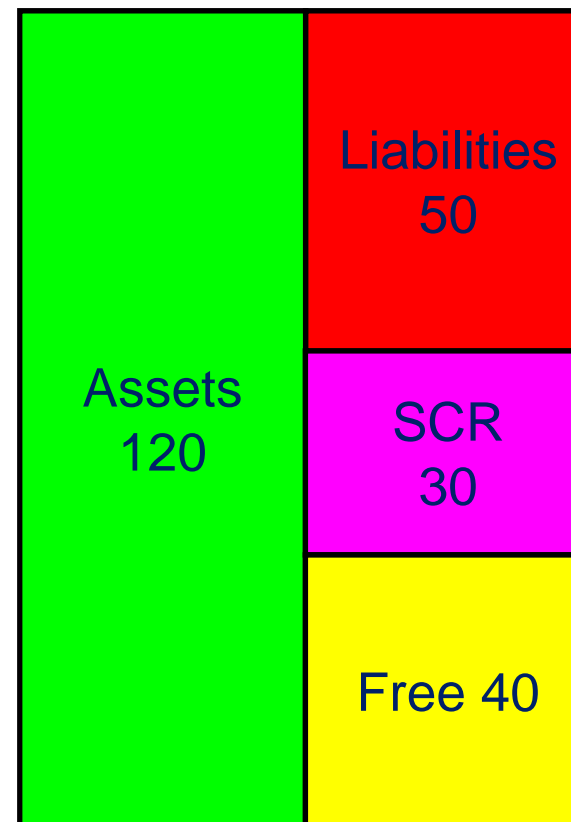
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## Balance Sheet Impacts - 2

*Current Position (150%)*



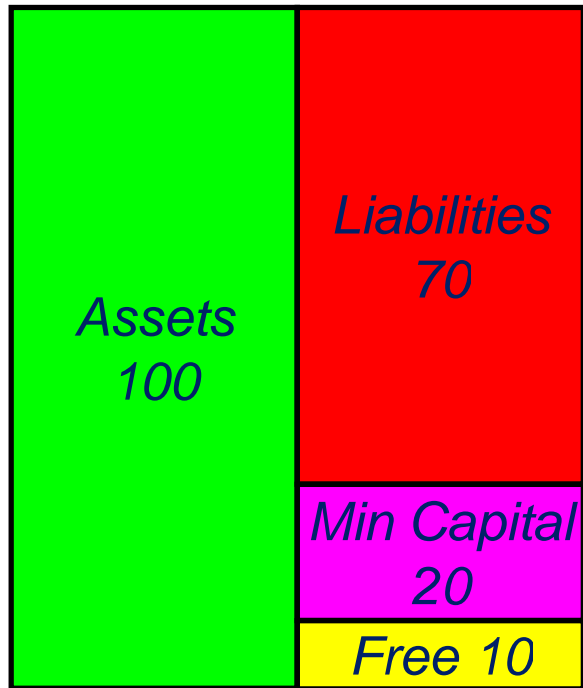
*Solv II – “Good” (233%)*



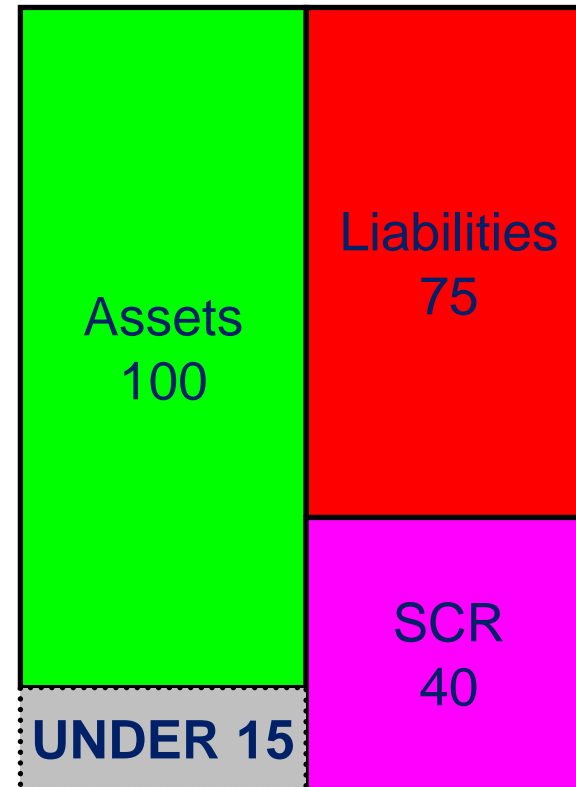
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## Balance Sheet Impacts - 3

*Current Position (150%)*



*Solv II – “Bad” (62%)*





# Solvency II update

Who are the winners?

Relative Solvency Position improves where:

- Asset Valuations currently well below market values
- Liability Valuations currently well above best estimates
- Reduction for discounting exceeds risk margin addition
- SCR increase is relatively small
  - nature and scale of risks small
  - and/or risk controls excellent
- Some impacts are “guessable” from outside a company
- Others may be very hard to spot in advance
- Large companies may well gain (recognition of diversity)
- Group regulation should also get much easier

# Solvency II update

## Sensitivity of SCR to changes

SCR reflects all risks, valued at extreme probabilities(!)

- Time horizon is one year
- A key driver is prospective rating levels
  - If rates have cycle +/- 20% around the mean
  - Then SCR may vary by 2.5x over cycle (say)
- Self-correcting mechanism
- Reduce volumes of risky and/or unprofitable lines at bottom  
(A key element of SCR is new business risk)
- But lines do not move perfectly in phase with each other
- Pressure within companies on poorest rated areas

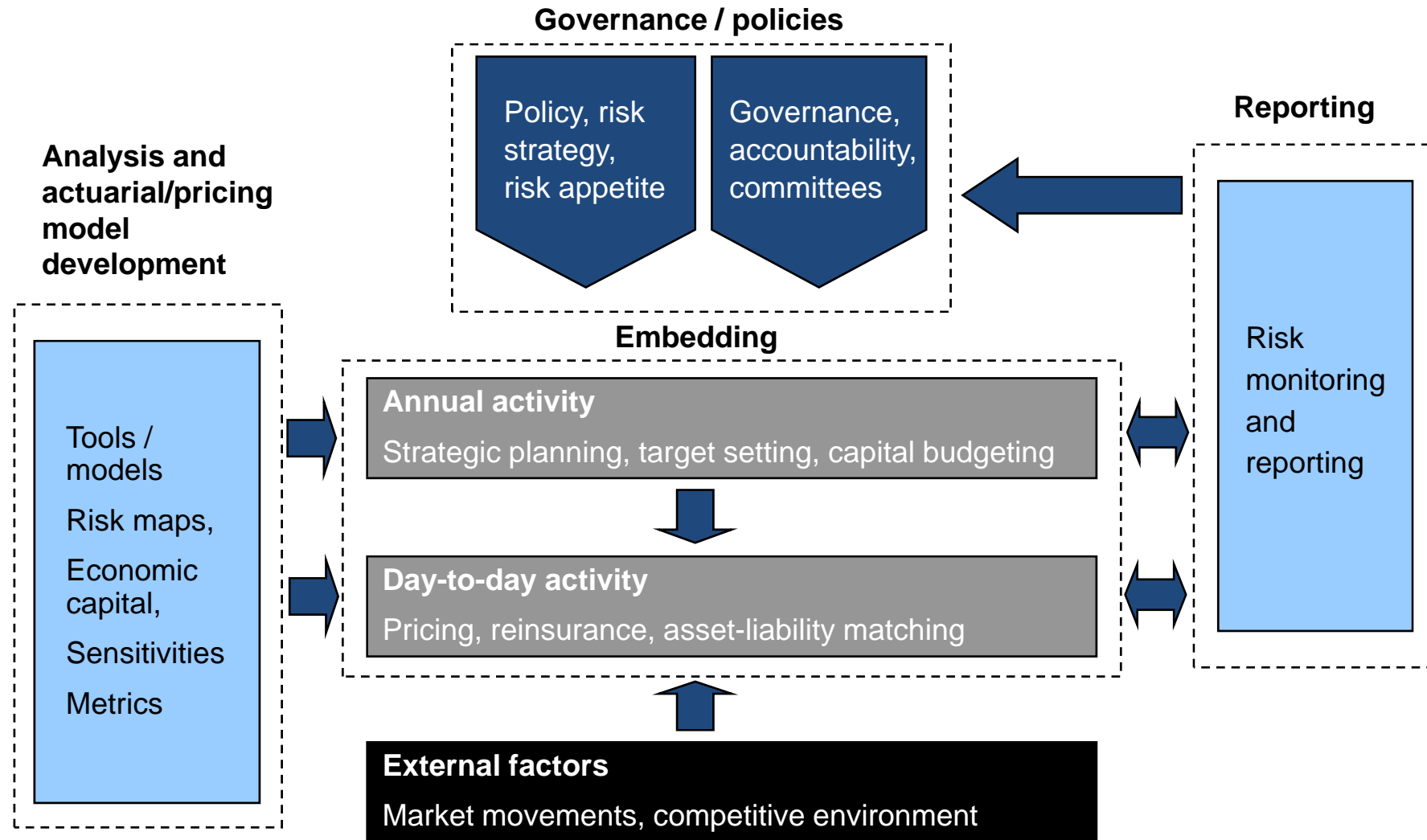
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## Pillar 2 – Conditions governing business

- Firms need to have in place an effective system of governance which provides for sound and prudent management of the business
  - Specific requirements for risk management, internal controls, the actuarial function and control over outsourcing arrangements
- Clear articulation of risk strategy and appetite is required with associated limits on exposures and activities
- Firms must have in place an effective risk management system:
  - Including the strategies, processes and reporting procedures to monitor, manage and report the risk exposures of the company
  - Integrated into organisation structure and with contingency plans
- Demands on data quality and flexibility are onerous

# Solvency II update

## Illustrative Internal Model Framework



# Solvency II update

## What impact from “The Subprime Crisis”?

- Basel II banking regulation is the template for Solvency II
- Similar 3 pillars, same philosophy
- The subprime crisis is recognised as a widespread model failure
- Bank losses and write-downs total over \$500billion (?!)
- High profile company failures
- But this is not thought to invalidate Enterprise Risk Management(!)
- ... Insurers will just have to do it better

# Solvency II update

## Pillar 3 Disclosures

Annual, publicly available reports on solvency and financial condition

Include information on:

- Risk profile
- Governance systems
- Nature & performance of business
- Approach to valuation
- Approach to capital management

... Details and market practice to emerge over time

Regulatory Plans & Procedures still not final  
Big demands on insurers and regulators  
Will change the way we “play”  
“Proportional” enough for smaller companies?  
Possible EU political compromises?  
Other world regulators going same way  
  
Good to be ready for this as early as you can!

Comments and Questions are welcome

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