Individual capital assessments

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Agenda

- What is an ICA?
- Regulatory framework
- Modelling approaches
- Interaction with the FSA
- Outcomes

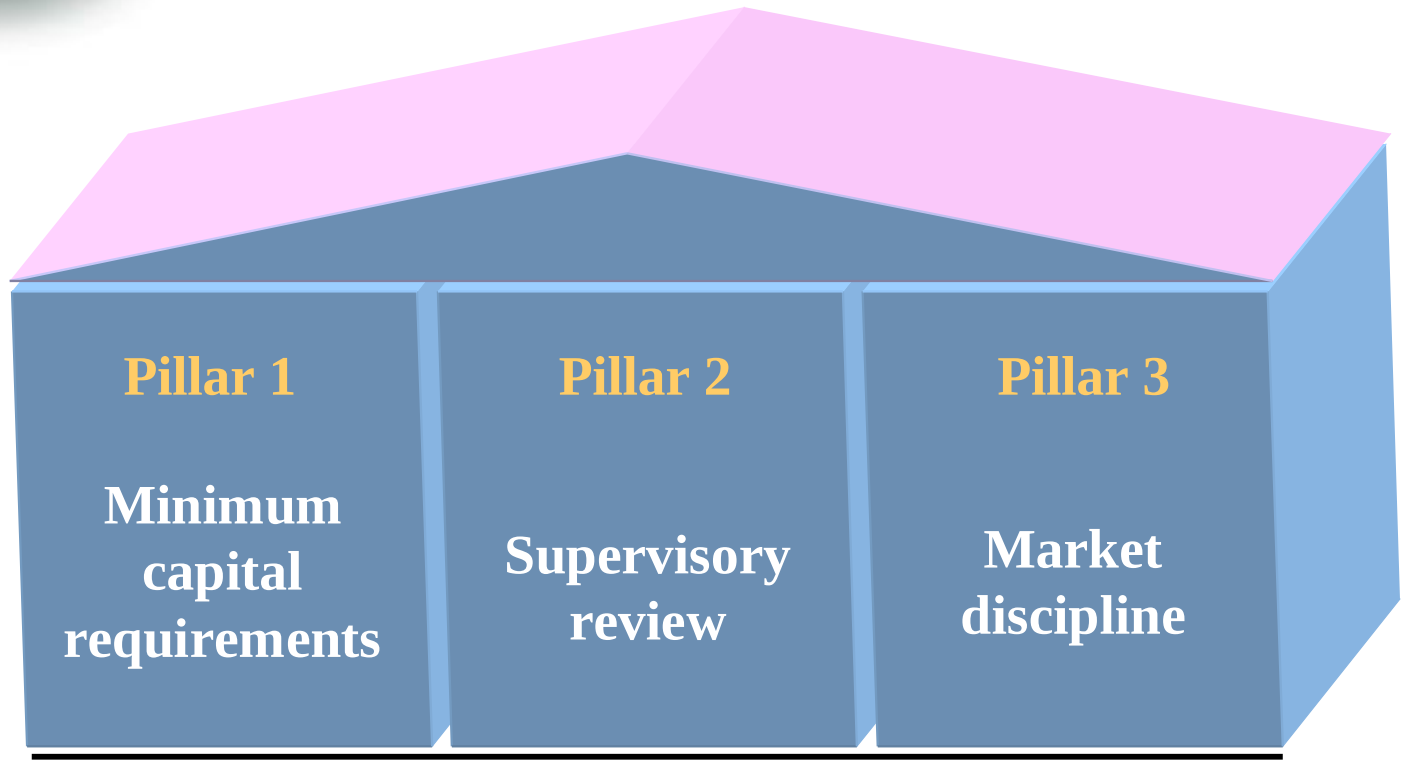
What is an ICA?

- Insurer's own assessment of the capital required for the risks faced
- All risks
  - insurance
  - market
  - credit
  - operational
  - liquidity
  - group
- 0.5% probability of failure over one year
- Appropriately higher probability over longer period

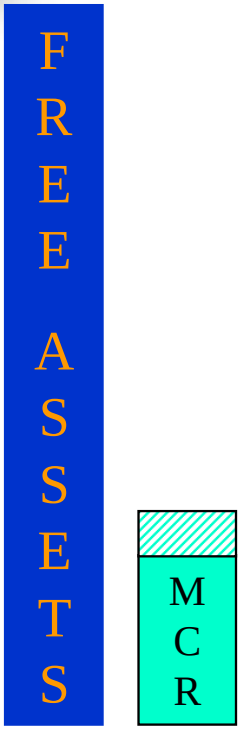
Regulatory framework

- CP190 (July 2003)
- PS04/16 (June 2004) set out final rules
- Applied from 1 January 2005
- FSA now suggest a 2 year timetable to review all ICAs
- How does ICA fit in?

Supervision of financial services



Capital requirements



HISTORY

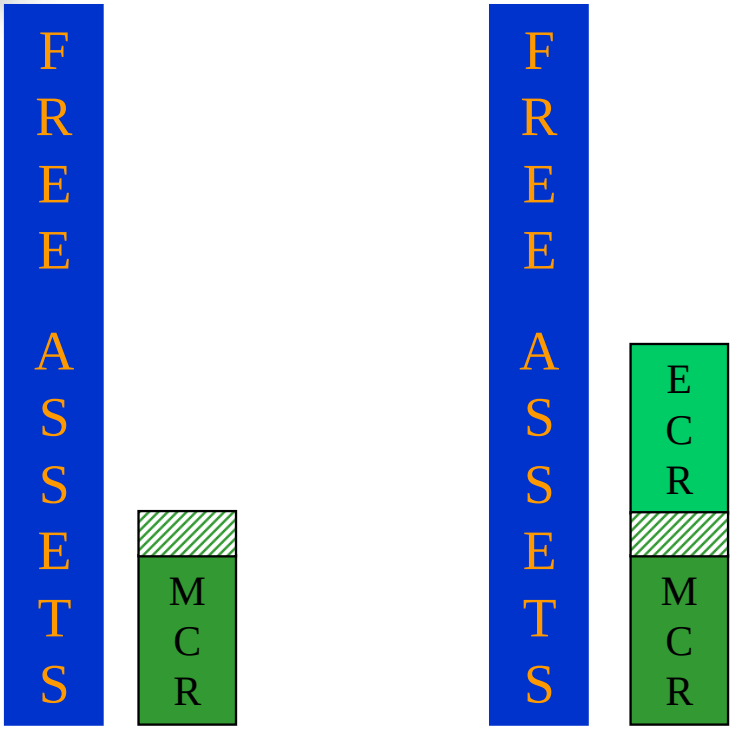
PILLAR 1

PILLAR 2

EU Solvency 1 – January 2004

- Minimum solvency requirement - €2m / €3m
- Premiums – higher of written or earned
- Premiums and claims – 50% load for liability classes
- Break points (16%/18%, 23%/26%) updated
- Reinsurance – 3 year average
- Discount – deducted from available solvency

Capital requirements



HISTORY

PILLAR 1

PILLAR 2

Enhanced Capital Requirement

Sum of two elements

Asset risk charge

+

Insurance risk charge

Risk charge for each asset category

Land and Buildings	7.5%
Bonds	3.5%
Equities	16%
Policyholder debtors	4.5%
Cash	0%
Reinsurers' share of technical reserves	2.5%

Risk charge for each premium and reserving category (direct business)

Premiums:	Motor	10%
	Property	10%
	Liability	14%
Reserves:	Motor	9%
	Property	10%
	Liability	14%

Enhanced capital requirement

Class	Premium	Factor	Capital
Motor		10%	
Property		10%	
Liability		14%	
…			
Total			**A**

Class	Reserves	Factor	Capital
Motor		9%	
Property		10%	
Liability		14%	
…			
Total			**B**

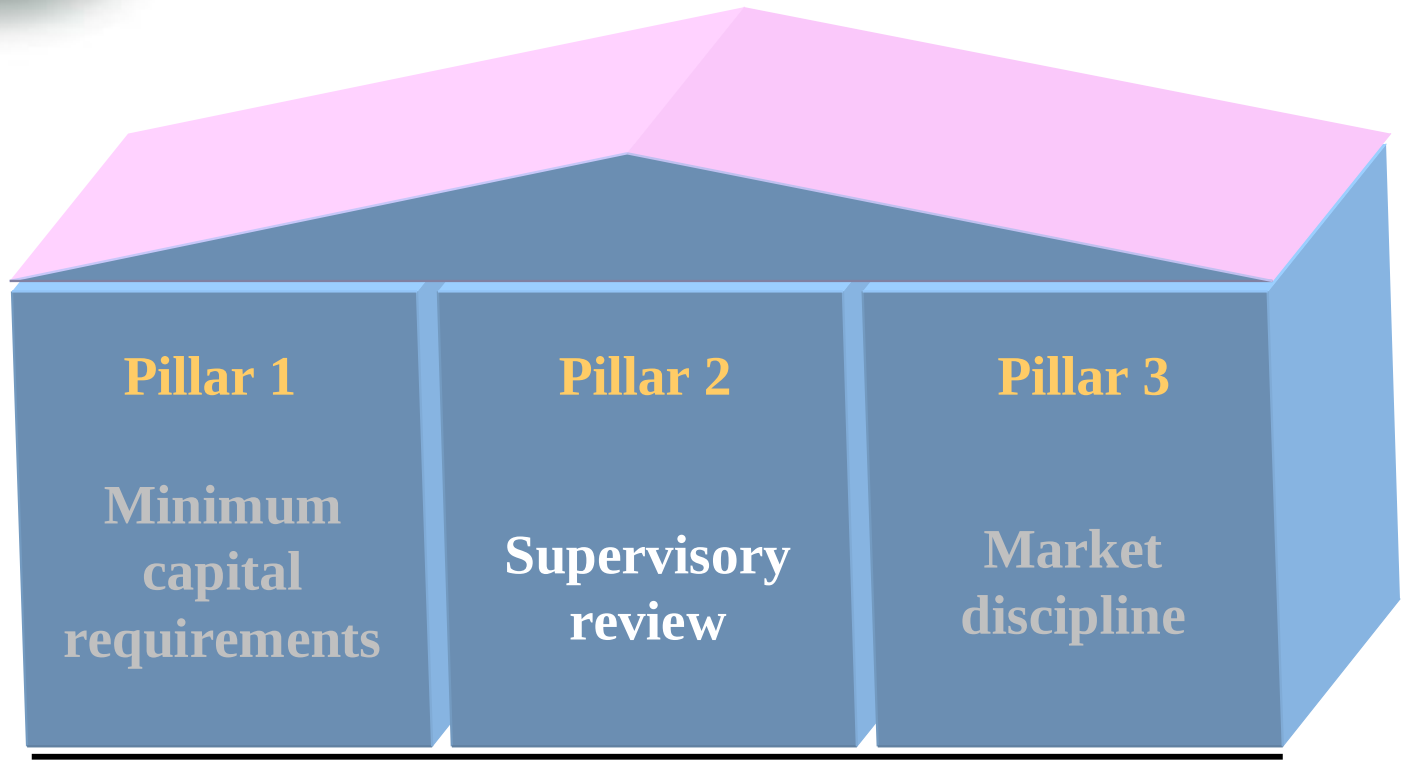
Asset	Amount	Factor	Capital
Equities		16%	
Cash		0%	
Bonds		3.5%	
…			
Total			**C**

Capital required = A+B+C

How do capital requirements change?

- Industry : MCR £5.9 bn
  ECR £13.3 bn
  Capital £20.6 bn
- Motor : ECR ≈ 2 x MCR
- Liability : ECR ≈ 4 x MCR

Supervision of financial services



Capital requirements rules

As from 1 January 2005, firms must:

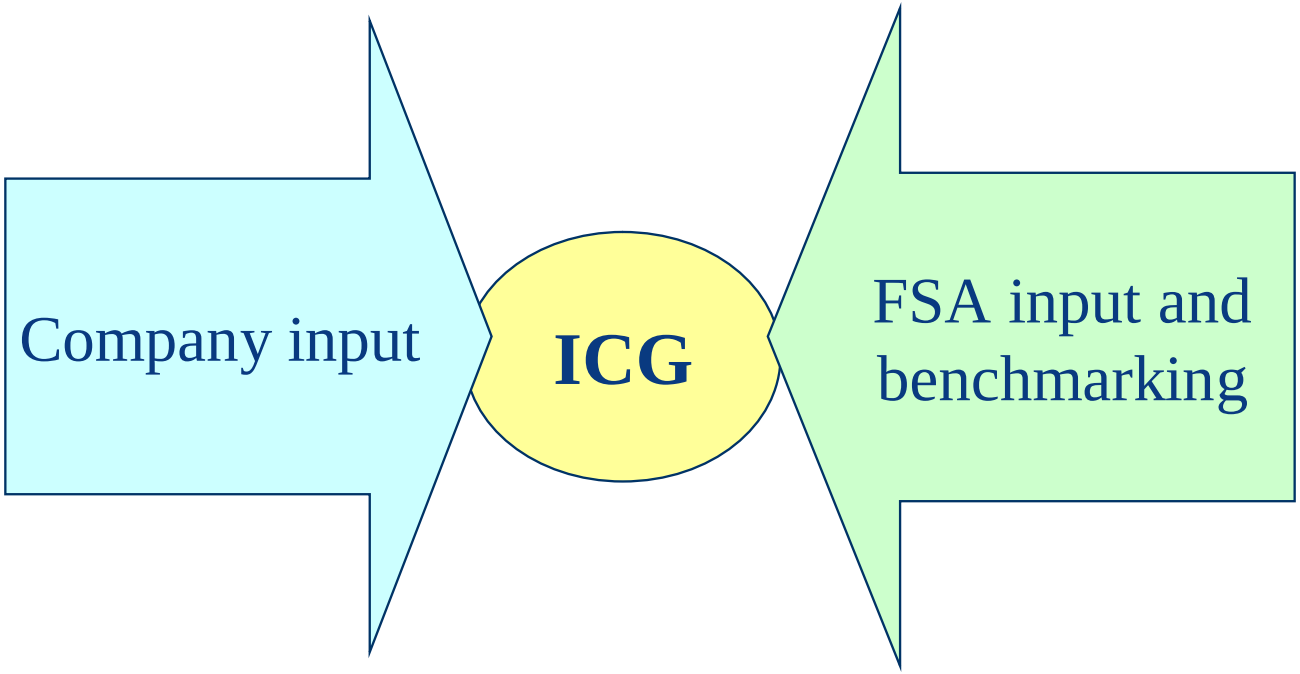
- Have sufficient capital
- Know how much is sufficient
- Know the major risks
- Stress and scenario test the risks

Individual Capital Assessment

Companies to provide to the FSA:

- Current position
- History
- Capital adequacy review
- Major risks by FSA category
- Results of stress / scenario testing / modelling
- Answer as percentage of ECR

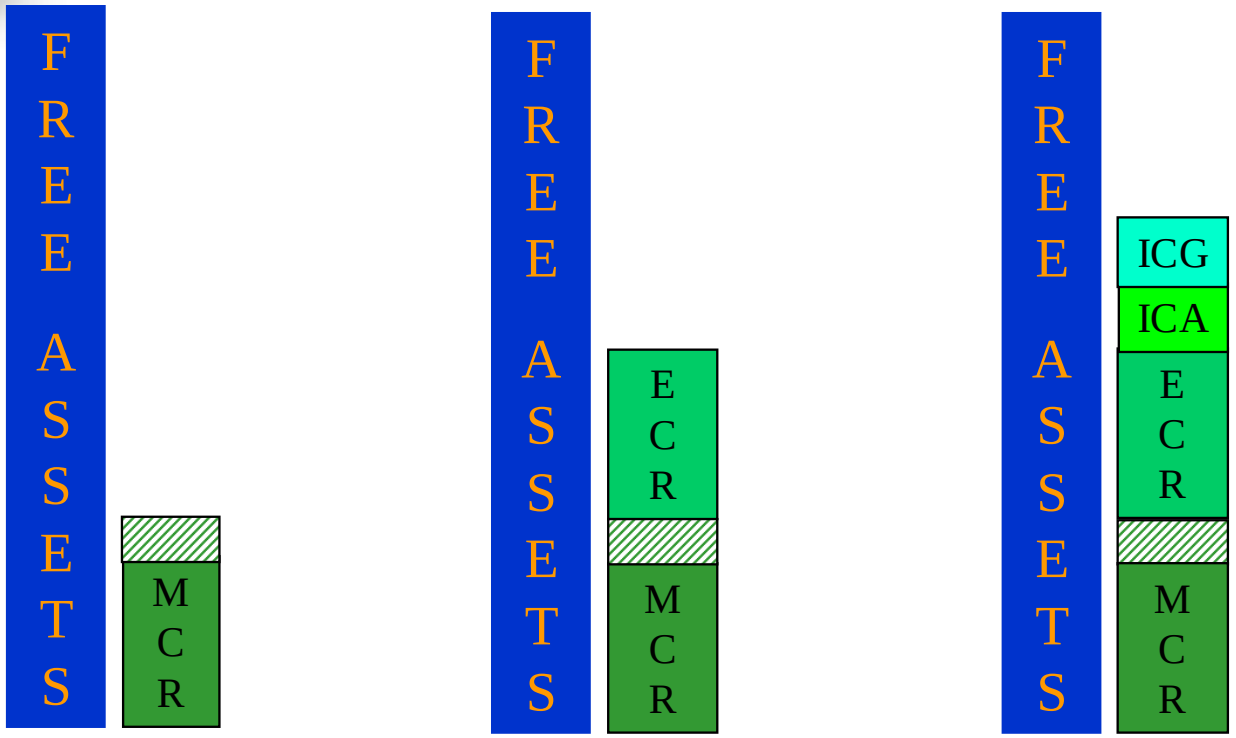
Individual Capital Guidance



Definitions

- MCR – minimum capital requirements
  - EU minimum solvency requirement
- ECR – enhanced capital requirement
  - solvency requirement determined mechanistically by the new rules
- ICA – individual capital assessments
  - the company's assessment of the capital it requires
- ICG – individual capital guidance
  - the FSA's assessment of the capital the company requires

Capital requirements



HISTORY

PILLAR 1

PILLAR 2

Modelling approaches

- Risk register
- Overall approach
- Timescale
- Insurance risk
- Market risk
- Credit risk
- Liquidity risk
- Operational risk
- Group risk
- Correlations
- Management actions

Risk register

- List of risks
  - owners
  - controls
  - quantification
- Logically, a key input into capital modelling
- Link to modelling is not always clear
- Quality varies greatly (SOX)

Overall modelling approach

- Stochastic model for most material insurers
- Insurance, market almost always covered by model
- Credit and operational sometimes in model
- Liquidity and group rarely in model
- Smaller insurers use stress tests
- Larger insurers should use stress tests alongside their stochastic model
- One large insurer used stress tests as their main approach and built a stochastic model as a check

Timescale

- One year at 0.5% probability
- Three to five years at 1.5% to 2.5% probability
- Need to allow for run-off at end of projection period

Insurance risk

- 5 to 50 classes
- Attritional, large, catastrophe
- Underwriting cycle modelling
- Reserve variability
- Many companies using benchmarks for variabilities rather then their own assessment

Market risk

- Most companies have used one of the consultants asset models in their ICA
- Strong consensus on appropriate stress events for most asset classes
- Many companies have limited market risk

Credit risk

- Various approaches from stochastic models to simple stress tests
- Need to look at possible future exposures not just current exposures
- Stress event not expected value of defaults
- Broker default

Liquidity risk

- Usually simple stress tests eg catastrophe event
- Very few companies hold any capital for liquidity

Operational risk

- Various approaches from stochastic models to simple stress tests
- Having a good risk register and controls is key in this area
- Most companies are using stress tests
- Operational risk capital is often set as a percentage of the other risks (typical range 5% to 20%)
- Often a key area of discussion with the FSA

Group risk

- Many UK companies are part of US groups
- Seems to be an area of concern for FSA
- Is UK subsidury dependent on parent for services, control environment, expertise?
- Brand risk?
- What if parent was to fail?
- Group reinsurance purchasing

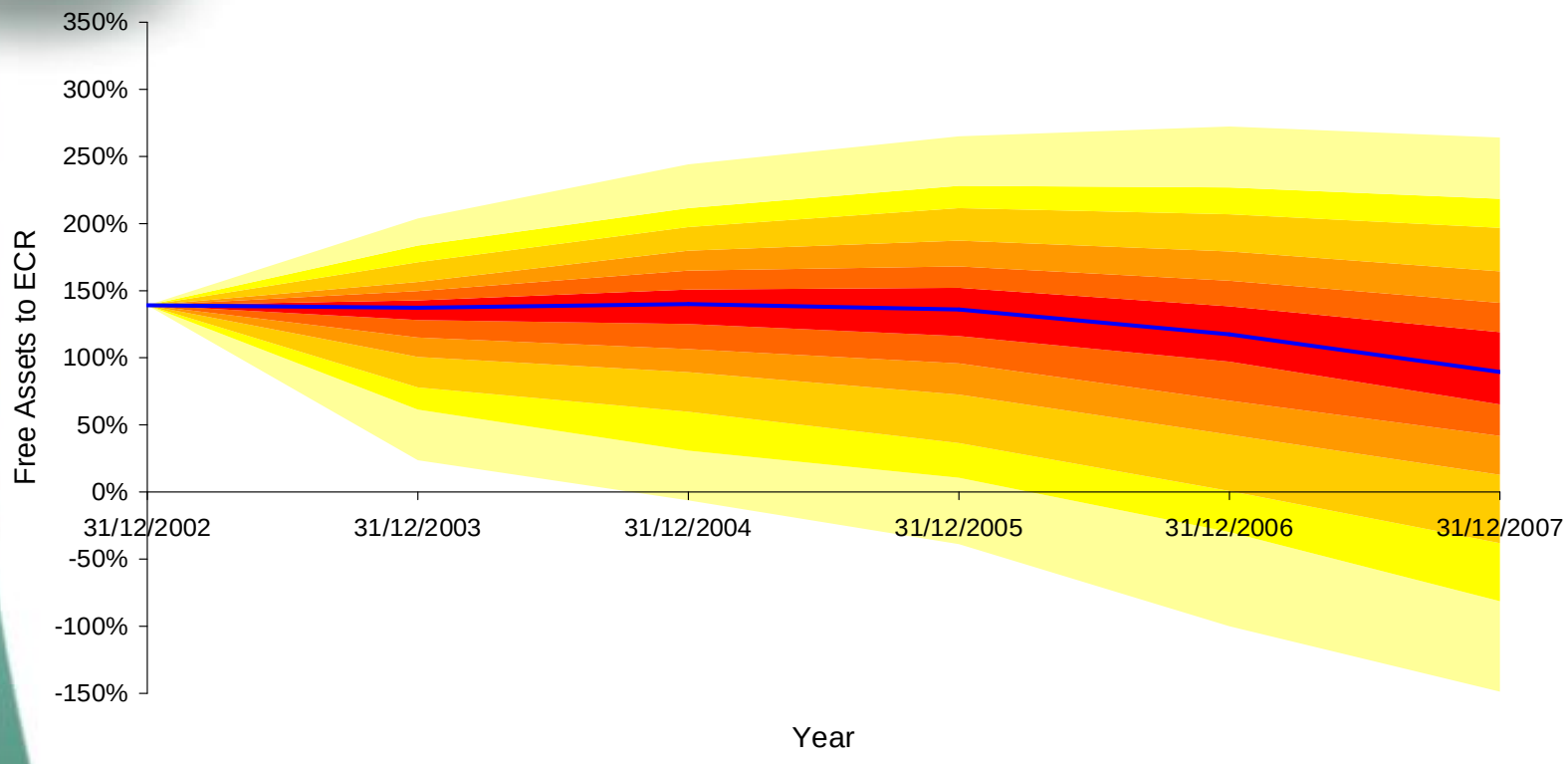
Correlations

- Within insurance risk
  - between classes of business
  - between reserving and underwriting risk
- Between risks
  - market and insurance
  - credit and insurance
  - operational and insurance etc etc
- Varying practice

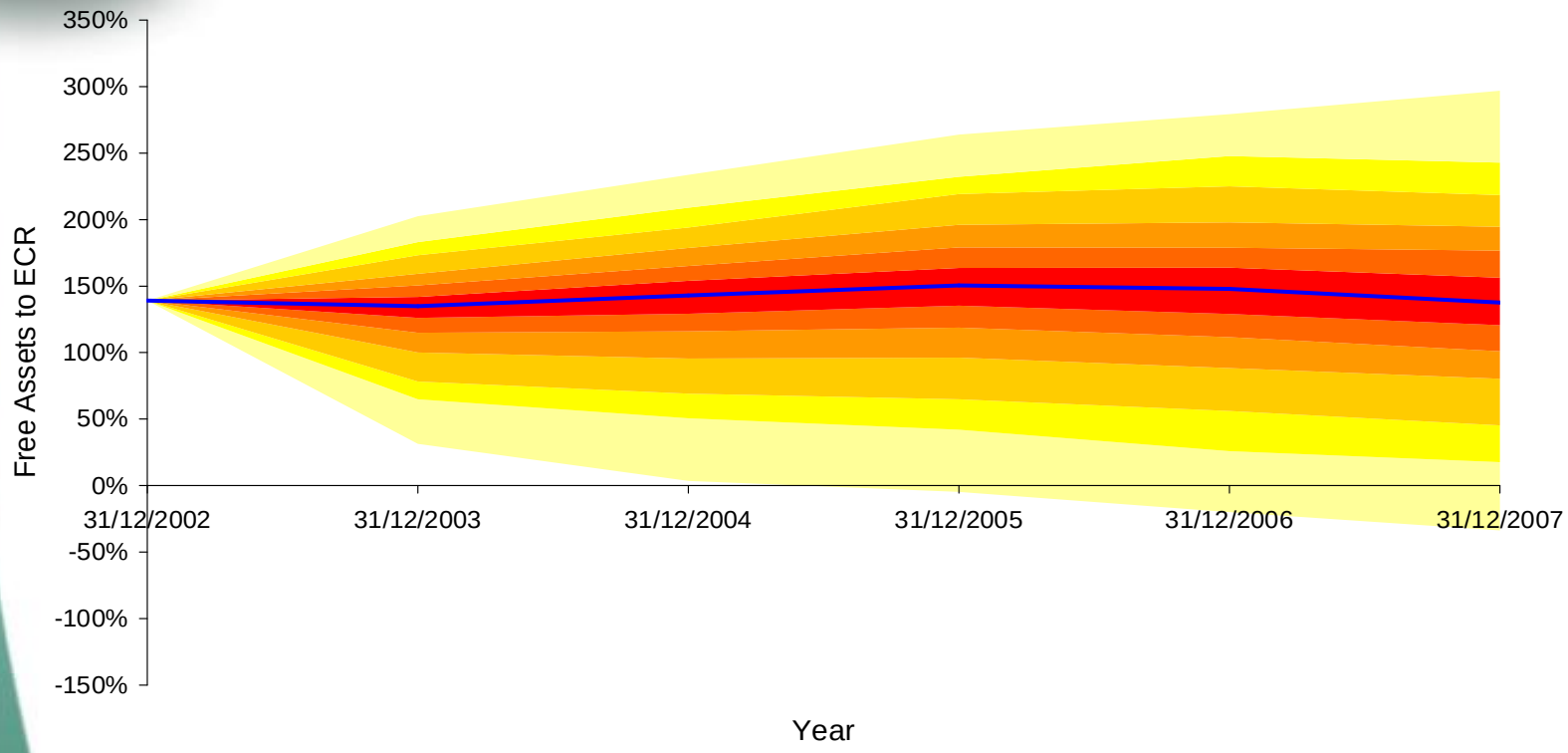
Management actions

- In the event of adverse experience, will management take actions that should be reflected in the model?
  - If a class produces poor underwriting results, will rates be increased or the class put into run-off?
  - If solvency is threatened, will volumes be reduced or asset risks reduced?
- Often the capital required is very sensitive to these rules
- FSA expect to see a high standard of documentation demonstrating that the rules will be followed and that appropriate procedures are in place to identify the triggers
- Delays

Without decision rule



With decision rule



Interaction with the FSA

- FSA's target is 6 months from ICA submission to ICG
- In practice, they have fallen behind this timetable with many insurers taking 8 to 12 months
- Seems to be focused approach by FSA

FSA process

- Company receives request for ICA
- Company submits ICA 3 months later
- FSA perform initial review
- Written questions
- Meeting between FSA and company
- FSA initial view
- Preview to company
- FSA panel process
- Formal notification

FSA process

- ARROW risk visits seem to be a key input into ICA process
- Companies with a poor handle on their risks and/or controls have an uphill struggle with ICA
- “Use test”
- Board review and challenge

Outcomes

- ECR is used as a benchmark for almost all ICAs
- ECR calibrated to a large diversified insurer
- ICGs have typically been in the range 100% to 180% of ECR with some outliers
- Average ICG 120% to 130% of ECR
- Average ICG 110% to 115% of ICA

Comparison with published credit rating

	Ratio of actual capital to ECR
AAA/AA	201%
A	142%
BBB	95%

Outcomes

- Non-investment grade insurers are likely to have major problems
- BBB rated insurers are likely to find ICG is similar to the capital they have – may constrain management

UK market capitalisation

The new FSA rules are a business critical issue:

- Given the free assets of UK companies:
  - 15% fail ECR
  - 30% fail ICA/ICG
  - 40% will need to alter their business strategy
- Extra £2½ billion capital required by market
- Business strategies may change
- European super-equivalence

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