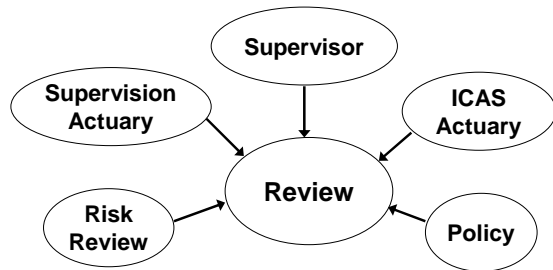




## A typical review process



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## Progress with the roll-out plan

▪ Submissions received	19
▪ Firm visits	13
▪ Reviews completed	9
▪ Panels	6
▪ Formal ICG given	3
▪ Numbers rejected	2
▪ Total due in by year end	25

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## Agenda

- Review process & progress
- **Information submitted by firms**
- Technical issues
- What does ICG look like?



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## Submission letter

- Purpose of the letter
- Three months' notice (currently)
- Coverage of ICA
- Specific requests
- Demonstration of extent to which ICA is embedded
- Format of ICA submission

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## A link between methodology and results

- Helpful when firms provide a link between methodology and results in tabular form
- For each fund and block of business...
  - Method used to calculate base liabilities
  - Risks identified and stresses applied
  - Capital requirement of each stress
  - Capital requirements after diversification
  - A link to the overall results

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## ICA by fund, ICG by entity & transferability of capital

- An ICA should be calculated for each sub-fund
- Important to understand where capital resources are required and located
- Diversification benefit across sub-funds requires careful justification
- ICG will generally be given at a legal entity level

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## Identification of major risks faced by your business

- A firm's ICA should be tailored to the risks it faces
- The submission to the FSA should explain how
  - firm specific risks have been identified
  - appropriate stresses have been researched, based on firm's experience

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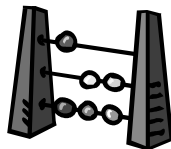
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## Agenda

- Review process & progress
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## Management actions – handle with care!

- Can these be taken?
- Would these be taken in reality?
- Practical implementation
- “Ripple” effects
- Think about scenarios

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### **“Use” test**

- The extent to which the ICA framework is embedded in the business
- Use is tested via 3 principal questions
  - Senior management engagement?
  - How are the ICA principles and models used for ongoing management purposes?
  - How are ICA results used to influence risk management goals and prioritise activity?

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### **Value of in force business**

- Methodology & assumptions
  - Not being prescribed but...
  - Relate approach to audited version where available and fully explain the reasons for any changes
- Explain the validation process
- Think about tax impacts under stress

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### **One year versus run-off**

- The standard is currently  $(1-0.005 \cdot T)$
- Annual solvency checks should be performed
- Nested stochastic simulation not widely employed yet, so -
- Approximations acceptable but err on the side of prudence

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## Insurance risk – scope for improvement

Catastrophe	Trend
Mis-estimation	Volatility

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## Operational risk

- A difficult area but expect to see rigour steadily improve
- “Bottom-up” approach required
- Loss data can provide a useful prompt but judgement will continue to be important
- Forward looking

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## Reinsurance

- Consider default but also downgrade risk
- Intra-group exposures should not be automatically dismissed
- Highly concentrated exposure, portfolio approaches unlikely to work
- Capital is not the only response

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## Service companies

- Service agreements may offer some protection but need to be careful and consider
  - Coverage – what's in and what's out?
  - Expiry – what happens next?
  - Stress – does the protection evaporate?

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## Diversification - Methodology

- Correlation matrix
- Economic scenario generators
- Advantages
- Disadvantages

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## Diversification – Correlation assumptions

- Data & general reasoning
- “Normal” condition correlations
- “Stressed” condition correlations
- Sensitivity testing of key correlations

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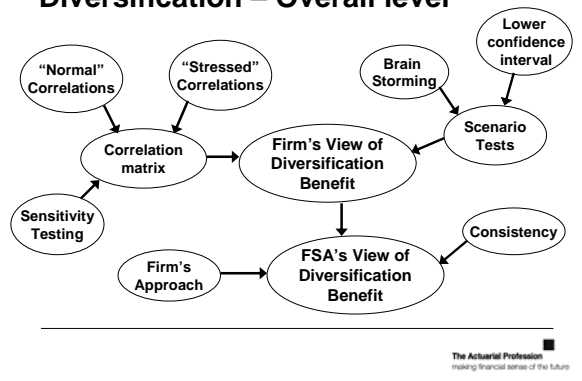
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## Diversification – Overall level



## Diversification - Scenarios

- Firms should investigate a range of combined scenarios
- Purposes
- Deriving suitable scenarios
  - Brain storming
  - Reduced confidence interval for each risk
- The FSA may request further scenario work

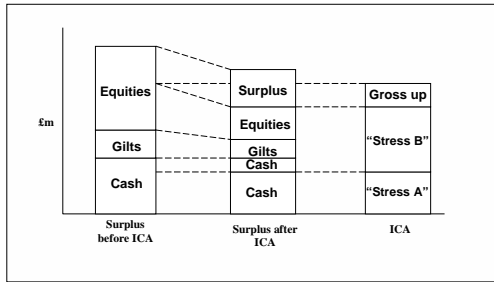
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## Non-linearity

- Occurs where combinations of events drive capital requirements
- Process for quantification
  - Identify scenario constituents
  - Reduce level of each (combined 1-in-200-year event)
  - Run each new stress individually and sum up
  - Run all together
  - Difference gives insights into non-linearity
- Problem is in setting the lower confidence interval for the stresses

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## Grossing up



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## Agenda

- Review process & progress
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- **What does ICG look like?**



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## Example expression of ICG

£m	Pillar 1 FSA Returns	Pillar 2 Analysis	Pillar 1 ICG Expression
Available assets	100	110	100
Liabilities	70	65	70
Available capital	30	45	30
Required capital	15 (LTICR)	35 (ICG)	20 (133% LTICR)
Excess capital	15	10	10

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## Post ICA effective date events

- Firm's circumstances may have changed since the ICA effective date
- Where material, may be factored into ICG decision
- ICA may need to be recalculated if the impact is not easily quantifiable

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## Format of ICG letter

- Summary of review items resulting in add-ons
- Expression of ICG in Pillar 1 terms
- The firm's responsibilities
- Expected period to the next assessment
- Appendix - further detailed feedback
  - Includes items not resulting in add-ons
  - Ranges for each ICG item

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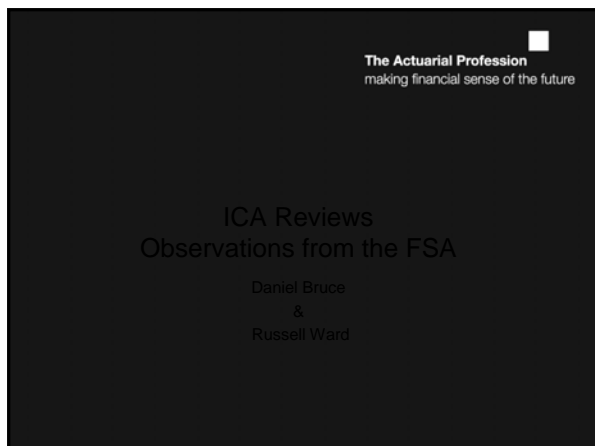
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