



The Actuarial Profession

making financial sense of the future

ICA implications

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Current Issues in Critical Illness

2 December 2004

Agenda

- Background on the ICA
- The ICA process
- FSA's stated position
- Business implications

FSA high level rules

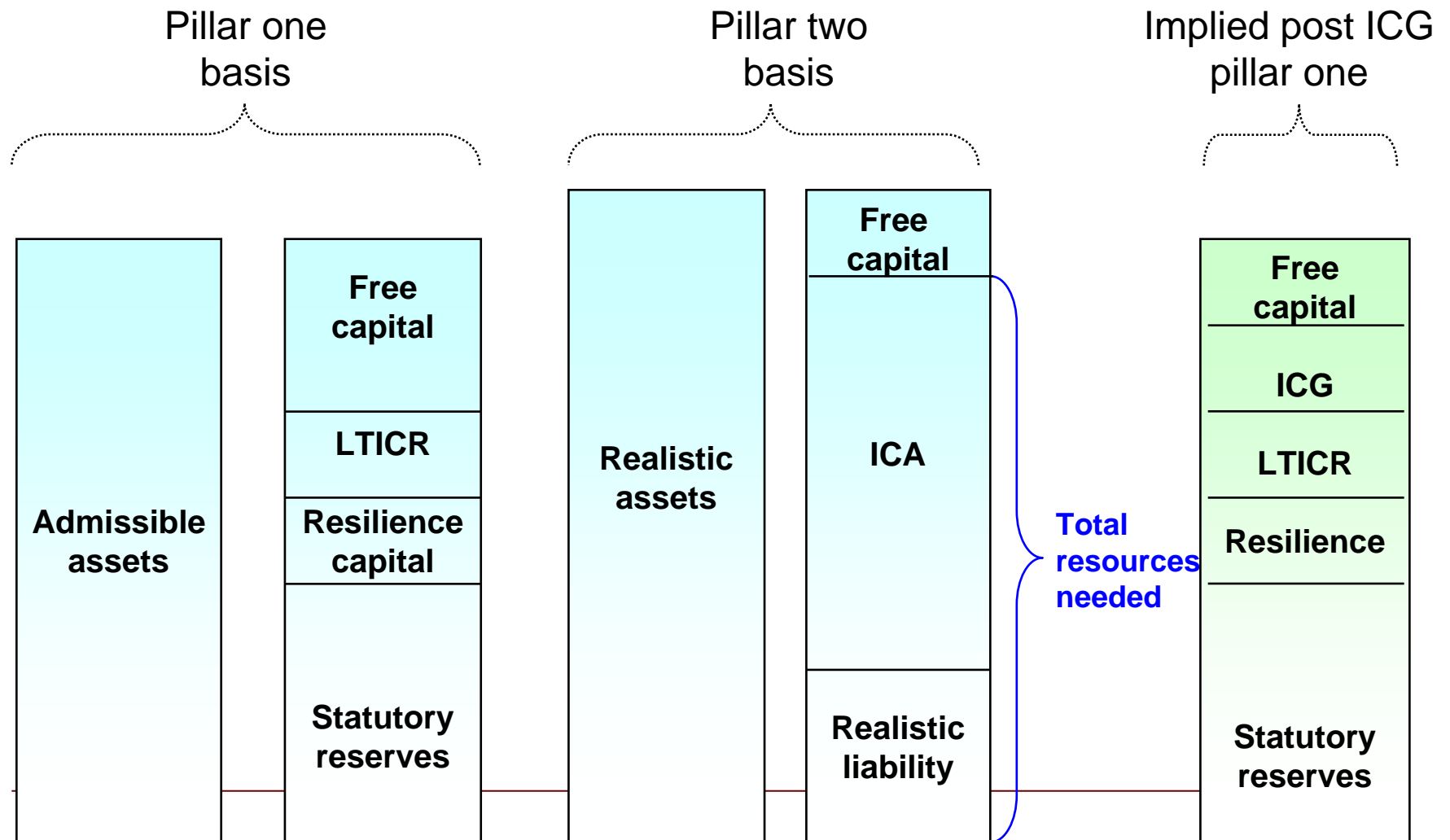
PRU 1.2.22R

- " A firm must at all times maintain overall financial resources, including capital and liquidity resources, which are adequate, both as to amount and quality, to ensure that there is no significant risk that its liabilities cannot be met as they fall due"

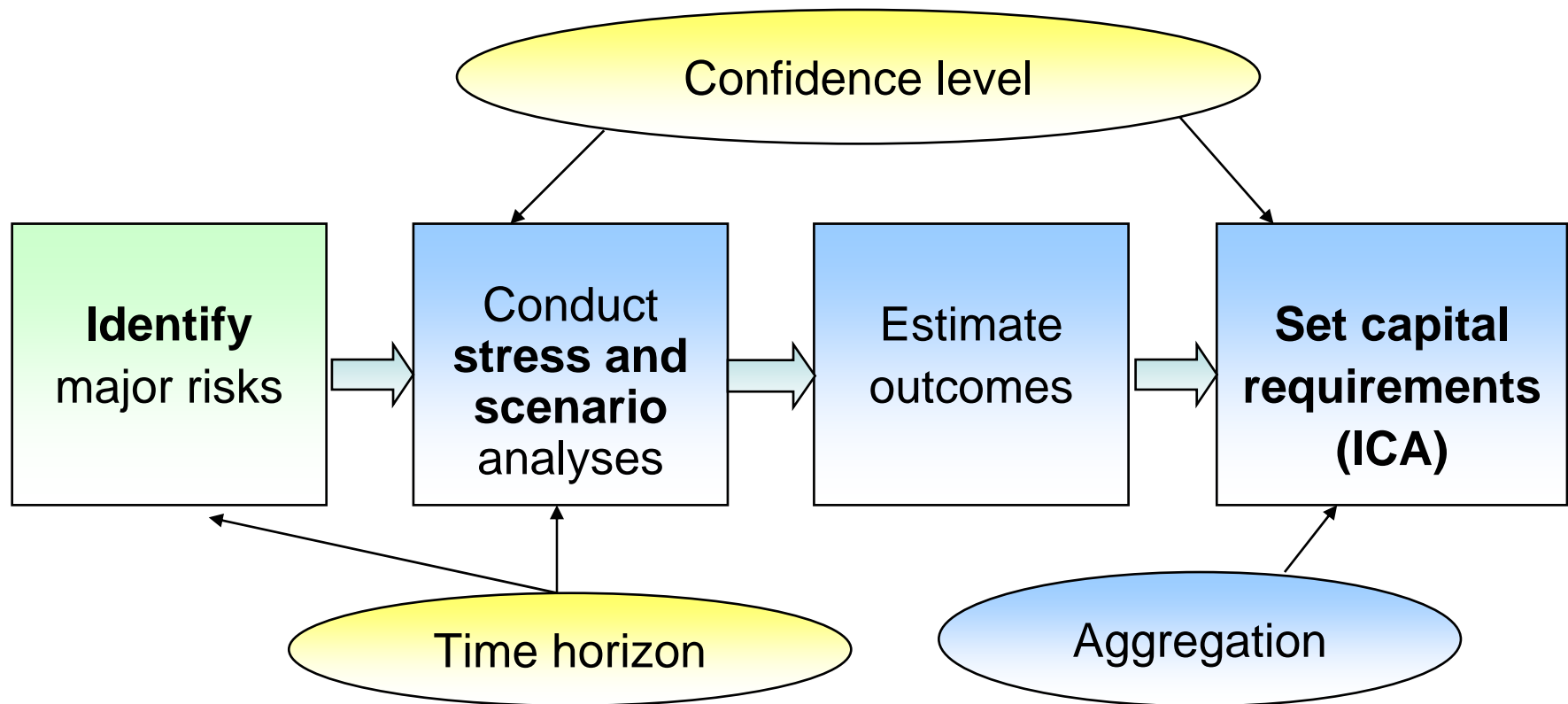
PRU 1.2.35R

- " For each of the major sources of risk identified ... the firm must carry out stress and scenario analyses that are appropriate to the nature of those major sources of risk, as part of which the firm must:
 - (1) Take reasonable steps to identify an appropriate range of realistic adverse circumstances and events...
 - (2) Estimates the financial resources the firm would need.."

Individual Capital Guidance (ICG)



ICA process



Identification of risks

- Market risk
 - Typically yield curve, but sometimes pension scheme
- Credit risk
 - Changes in credit spread
 - Reinsurance counterparty
 - Broker commissions
- Insurance risk
 - Mortality/morbidity – consider concentrations of exposure
 - Persistency
 - Expenses

Identification of risks

- Liquidity risk
 - Not usually significant
 - Group risk
 - Operational risk
 - Ombudsman/compliance
 - Outsourcing
 - Fraud
 - Technology/systems
 - Incorrect data etc
- Care not to
double count

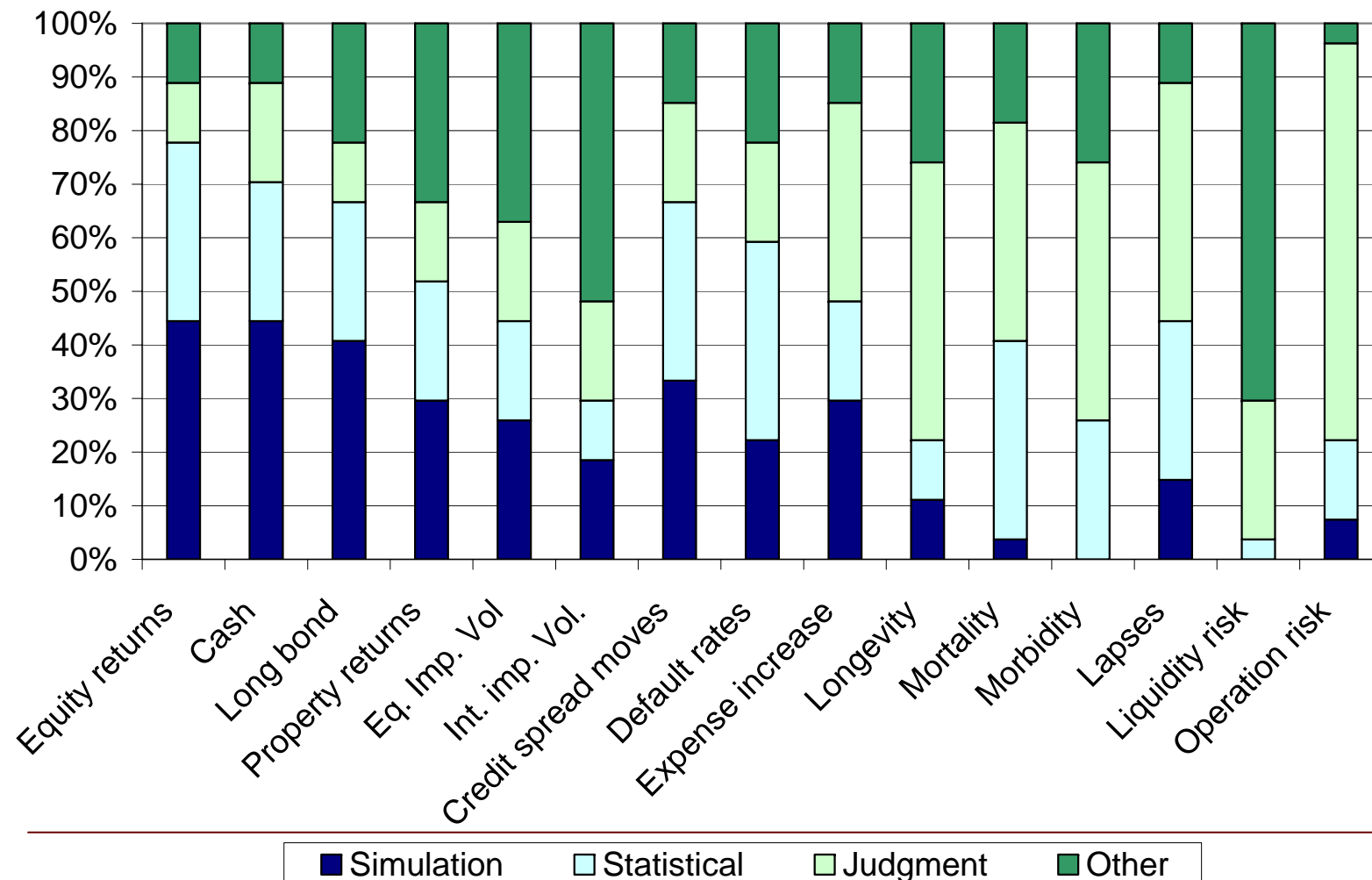
Developing stress tests/scenarios

FSA guidance/GN46 and GN47

- Stochastic models
 - Common for market risks, but less so for others
- Statistical analysis
 - Requires "clean" and relevant historical data
- Expert views

- Can consider management actions
 - Are premium rates really reviewable?

Methodology used

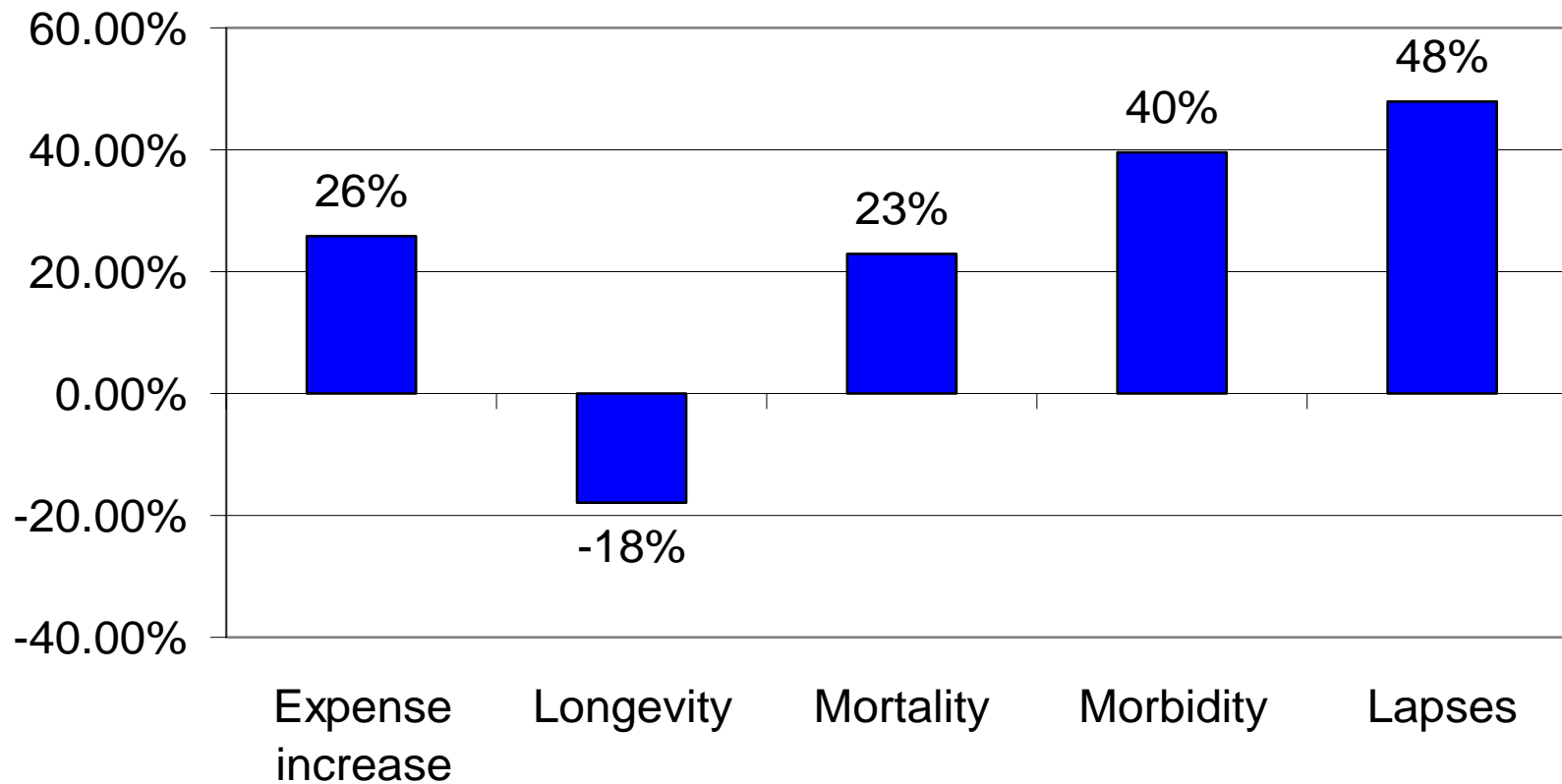


Source: Watson Wyatt September/October 2004 ICA survey

Scenario based approach to CI

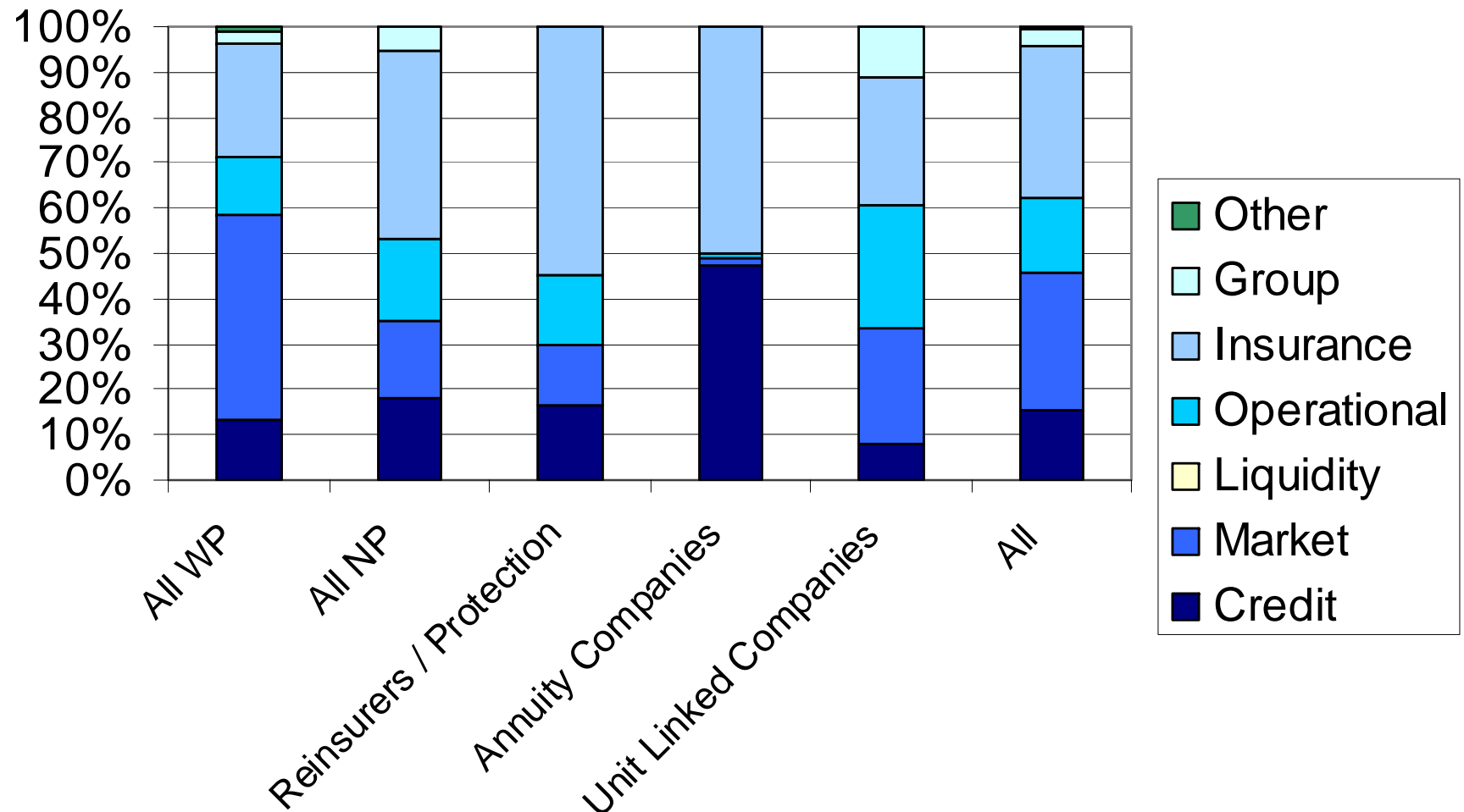
- Increased availability cancer screenings
⇒ Increased detection rates
- Increased availability of cardio-vascular treatments and increased incidence resulting from higher levels of obesity
- Higher incidence of other claims
- Try to find data to support scenarios derived

Sample of average stress tests



Source: Watson Wyatt September/October 2004 ICA survey

Composition of the ICA



Source: Watson Wyatt September/October 2004 ICA survey

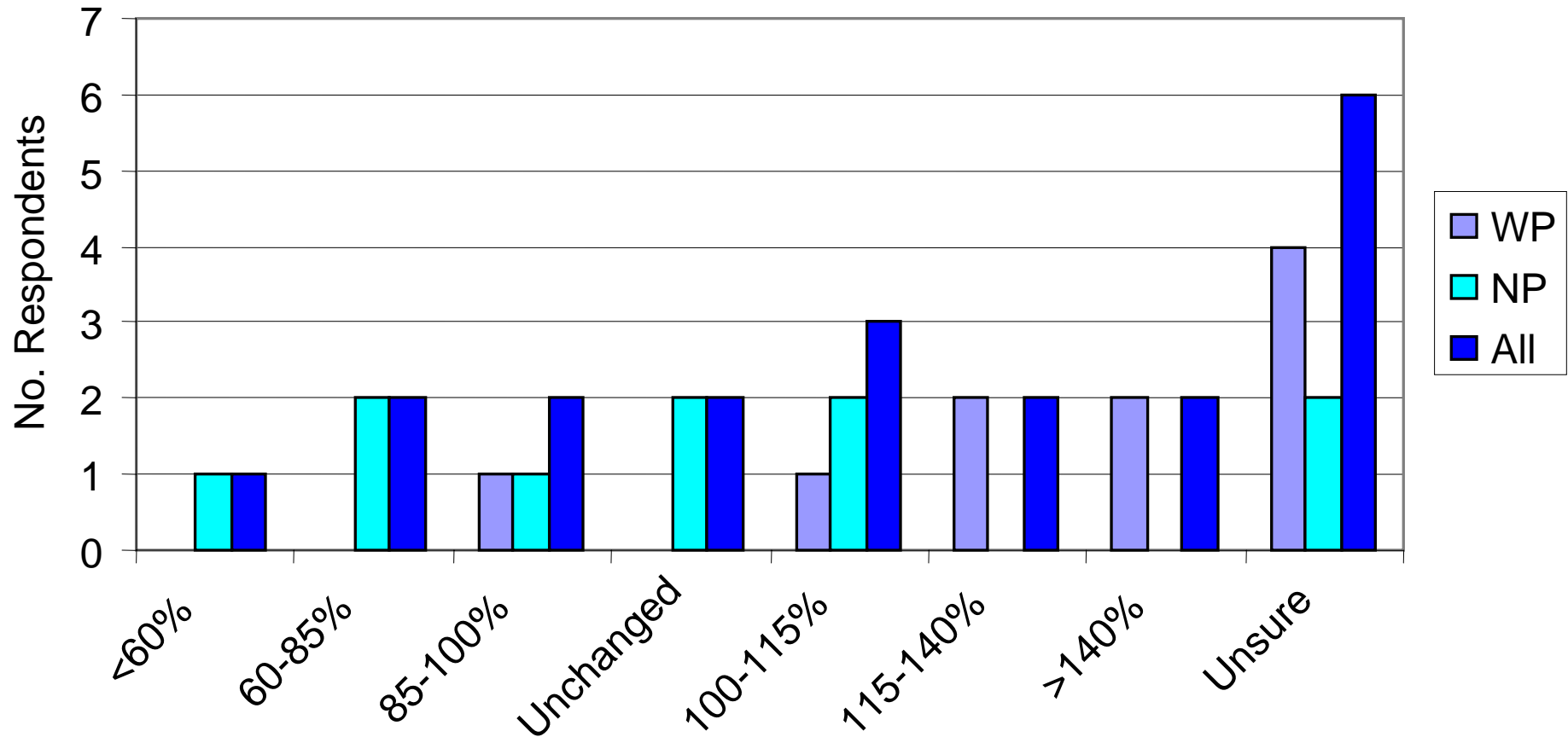
Aggregation of capital

- Simultaneous scenario run
- "Sum of squares"
- Summation
- Correlation matrix

Capital			Eq	Int.	Prop.	Cred	Eq vl	Mort	Lps	Op
Equity	40	Equity	1.0	-0.2	0.5	0.5	0.7	0.0	-0.5	0.6
Interest	10	Int.	-0.2	1.0	-0.1	0.3	0.0	0.0	0.1	-0.1
Property	5	Prop	0.5	-0.1	1.0	0.2	0.5	0.0	0.0	0.2
Credit	5	Credit	0.5	0.3	0.2	1.0	0.0	0.0	0.0	0.2
Equity vol	10	Eq vl	0.7	0.0	0.5	0.0	1.0	0.0	-0.4	0.5
Mortality	5	Mort	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Lapse	10	Lapse	-0.5	0.1	0.0	0.0	-0.4	0.0	1.0	0.0
Operational	15	Op	0.6	-0.1	0.2	0.2	0.5	0.0	0.0	1.0
Total	100									

Caution in considering non-linearity effects

Size of the ICA (relative to CRR)



Source: Watson Wyatt September/October 2004 ICA survey

FSA's presentation to the ABI (1)

- FSA's review to check:
 - All significant risks considered
 - Consistency with business plan/capital planning
 - Justification of stress tests/scenarios
 - Management actions assumed
 - Correlation approach taken
 - How the Board has satisfied itself with the ICA
- Discussion with firms is key

FSA's presentation to the ABI (2)

- ICA increasingly important in M&A discussions etc
- Expectation that firms will **modify and improve** processes over time
- Consider how good firms' data sources are
- Consider degree of independence of risk assessment from risk taking
- Difficult areas are operational risk, defined benefit pension schemes and subsidiaries
- Firms must set their own risk of ruin
- Instantaneous shock OK for now => 1 year projection

FSA's likely information request

1	Business profile of the firm + business environment
2	Projected business plans, financial position and capital needs
3	ICA as a proportion of the CRR
4	Historical development of the firm and implications for the future
5	<p>A detailed review of the capital adequacy of the firm</p> <ul style="list-style-type: none">■ rationale of period/method for of capital assessment■ analysis of current capital level and movement■ future capital requirements and outlook■ identification of major risks within each category■ quantitative results of stress and scenario tests + sensitivities
6	Identification of reasons for differences in ICA and CRR
7	Extent of use of internal models within business

Business implications

- Monoline business writers may be disadvantaged
- Potential incentives to diversify reinsurance
- Possible opportunities for future waivers
 - Although Solvency II currently mentions SV floor
- Consider response to adverse events
- Improved risk controls and processes
 - Statement of risk appetite, limits and risk policy
 - Reinforces need to formalise review of premiums process
 - Improved data capture

ICA may have less immediate impact, but surrounding effects are important
