

GIRO 2010

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Solvency II Reserving

What will you be doing differently?

Are Technical Provisions important?

***“Probably the
fundamental
part of the
Solvency II
calculation”***

- CEIOPS QIS5 Presentation Aug 2010



What TP's elements are changing under Solvency II?



Agenda

- Key changes in basis
 - Premium provisions
 - Risk Margins
 - Contract boundaries
 - Binary events
 - Segmentation
- Potential impact of changes
- Professional issues & governance
- More items to consider
- Summary / Questions

**“It is not the strongest of
the species that survive,
nor the most intelligent,
but the one most
responsive to change”**

Charles Darwin

Fundamental Change in Basis

Current Basis	Solvency II
Undiscounted	Discounted
Margin for prudence	No margin for prudence
No risk margin	Risk margin
Limited latent claims allowance	“All possible” claims included
ULAE	ULAE + overheads + investment costs
Incepted contracts	Legal obligation basis
Deterministic methods	Cashflow basis - possibly stochastic

- Reinsurance recoverables on similar basis to gross
 - but with expected counterparty default adjustment

Change in Basis - Premium Provisions

- Premium Provisions and UPR are very different
- Linked to contract boundaries
- Consideration of cash flows
 - expected future claims and expenses
 - less expected future premium receipts
 - both gross and for reinsurance
- May be negative
 - recognise future profits
- Simplified example from working party illustrates point

	UK GAAP	Solvency II
Assets	82	42
Cash	42	42
Receivables	40	
Liabilities	68	14
Claims	18	18
UPR	50	
Premium Prov		(4)
Profit	14	28

driving the difference

Change in Basis – Risk Margin

$$\text{CoCM} = \text{CoC} \cdot \sum_{t \geq 0} \text{SCR}_{\text{RU}}(t) / (1 + r_{(t+1)})^{t+1}$$

- NOT a prudential safety margin
- NOT a discretionary item
- NOT a tool to manage surplus/profits
- NOT a large portion of TPs
- Many technical challenges
 - debates on methods
 - expect further developments

**Who will
calculate the
risk margin?**

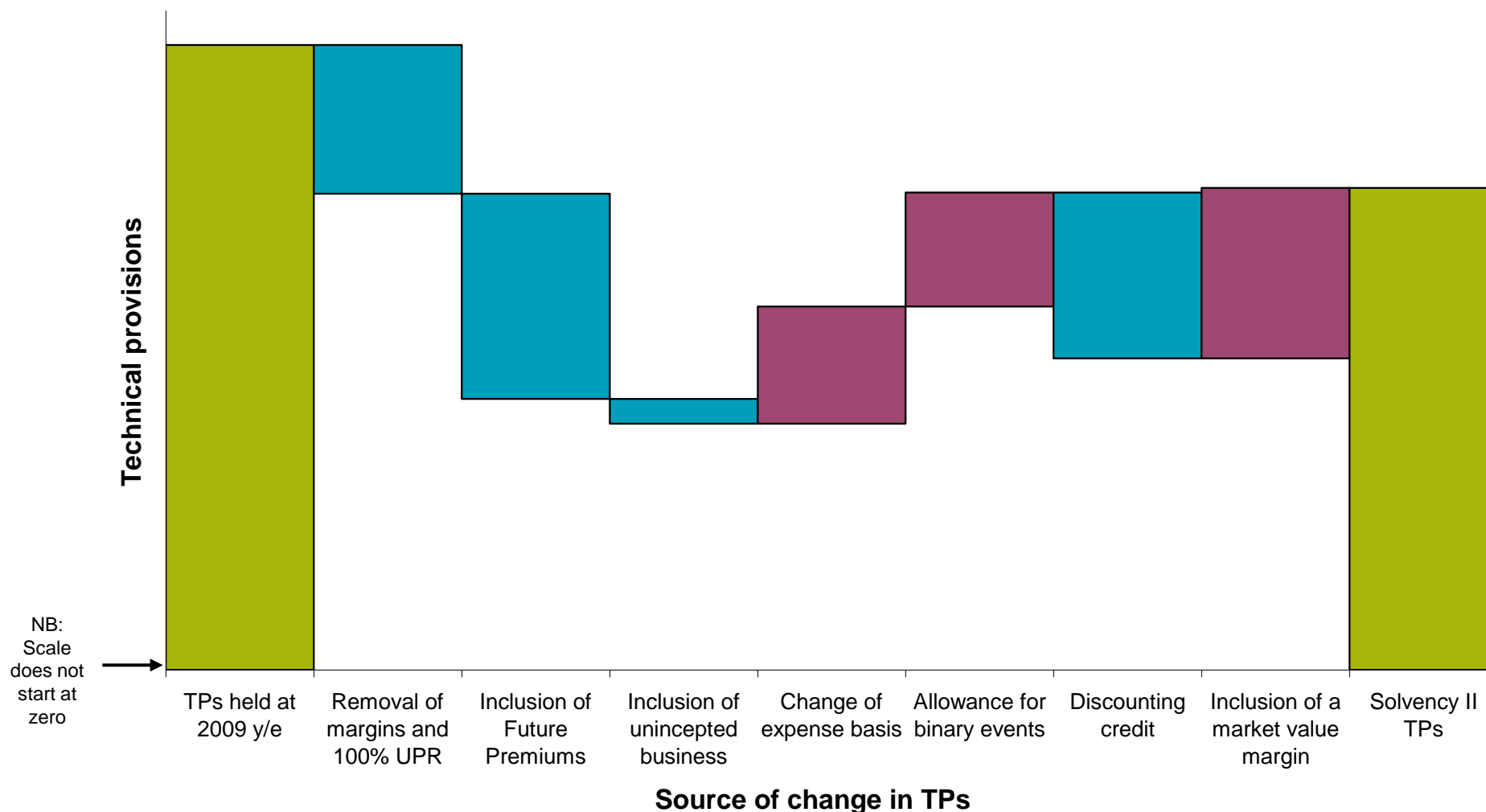
Change in Basis – Contract Boundary

- Based on **legal obligations basis**
 - ends when “unilateral right” to change terms of policy
 - portfolio approach to assess “unlimited ability to change”
- Must be consistent with any internal model
- Can include unaccepted contracts
 - especially 1 Jan renewals
- More complicated for delegated authority / binders
- Different to IFRS exposure draft
- Reinsurance will have own challenges
 - consider the **principle of correspondence**

Change in Basis – Segmentation

- Solvency II LoBs are high level minimums
- **Homogeneous Risk Groups** remain key for projections
- Requirement to split by currency
 - different risk free discount rates and link to currency risk
- Unbundling of contracts
 - Non-life, health and life
 - impact on Motor business, PPOs and annuities?
 - substance over form
- Allocations will be required
 - more granular than current approaches

Potential Impact – Lloyd's latest workingstill in progress!



Source: Lloyd's QIS5 workings – included for illustration only

Professional Issues – Actuarial Function – formal requirement

Framework Directive Article 48

Insurance and reinsurance undertakings shall provide for an effective actuarial function to:

- a) ***coordinate the calculation of technical provisions;***
- b) *ensure the **appropriateness of the methodologies and underlying models** used as well as the **assumptions made** in the calculation of technical provisions;*
- c) *assess the **sufficiency and quality of the data** used in the calculation of technical provisions;*
- d) ***compare best estimates against experience;***
- e) *inform the administrative, management or supervisory body of the **reliability and adequacy of the calculation of technical provisions;***
- f) *oversee the calculation of technical provisions in the cases set out in Article 82;*
- g) *express an opinion on the overall underwriting policy;*
- h) *express an opinion on the adequacy of reinsurance arrangements;*
- i) *contribute to the effective implementation of the risk management system referred to in Article 44, in particular with respect to the risk modelling underlying the calculation of the capital requirements set out in Chapter VI, Sections 4 and 5 and to the assessment referred to in Article 45.*

Professional Issues – Governance

- Actuarial Function will inform the management of an undertaking on
“reliability and adequacy of the calculation of technical provisions”
- Can management really book any other number than the actuary's (for Solvency)?
- Who will be found responsible if technical provisions are inadequate?



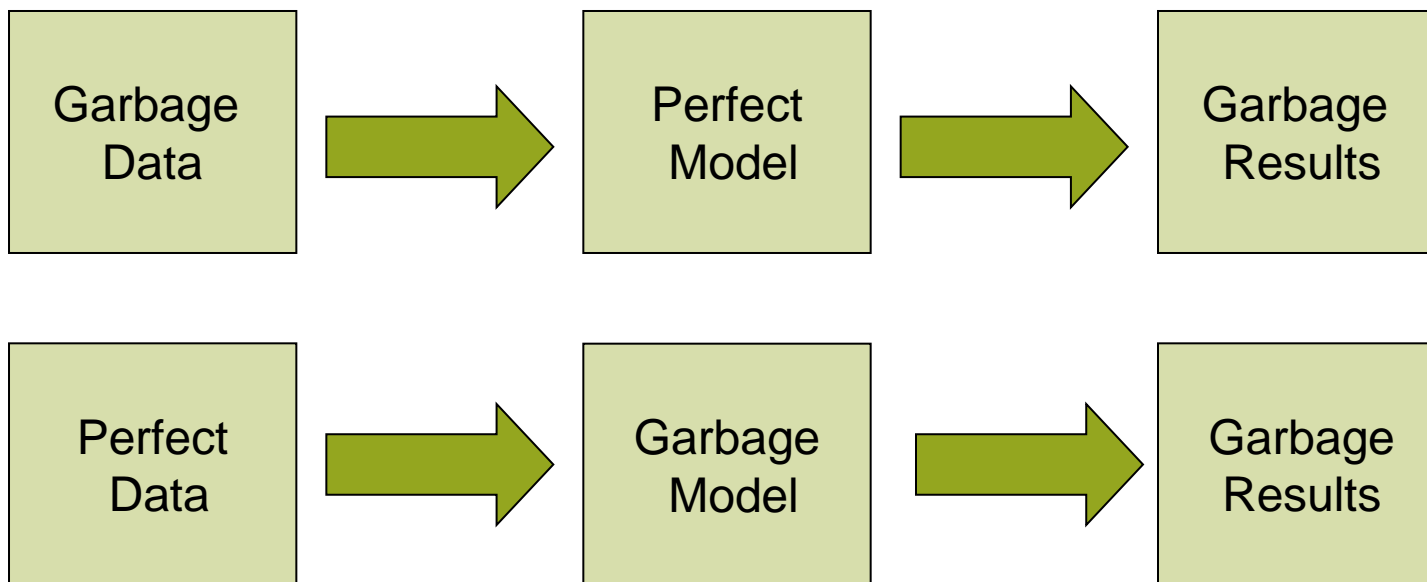
Professional Issues – Governance (cont.)

- Raises some very serious questions:
 - will actuaries find themselves under additional pressure?
 - will actuaries need extra protection?
 - who is going to provide that?
- Actuarial functions must show some “independence”
 - will company structures change?
 - does this mean actuaries can’t be part of “management”?
- Also no longer need to “be” a formally qualified actuary
 - what will happen in practice?
 - what will “actuarial” standards look like?

More Items to Consider – Data

- Actuarial Function will assess the:

“sufficiency and quality of the data”



More Items to Consider – Data (cont.)

- Do not underestimate
 - the relevance of data.....
 -and the challenge this poses
- Any new method will need new data
 - binary events / unincepted contracts
 - is the data available?
- Legacy systems can be inflexible
 - quality has always been an issue here

Stress Reduction Kit



Directions:

1. Place kit on FIRM surface.
2. Follow directions in circle of kit.
3. Repeat step 2 as necessary, or until unconscious.
4. If unconscious, cease stress reduction activity.

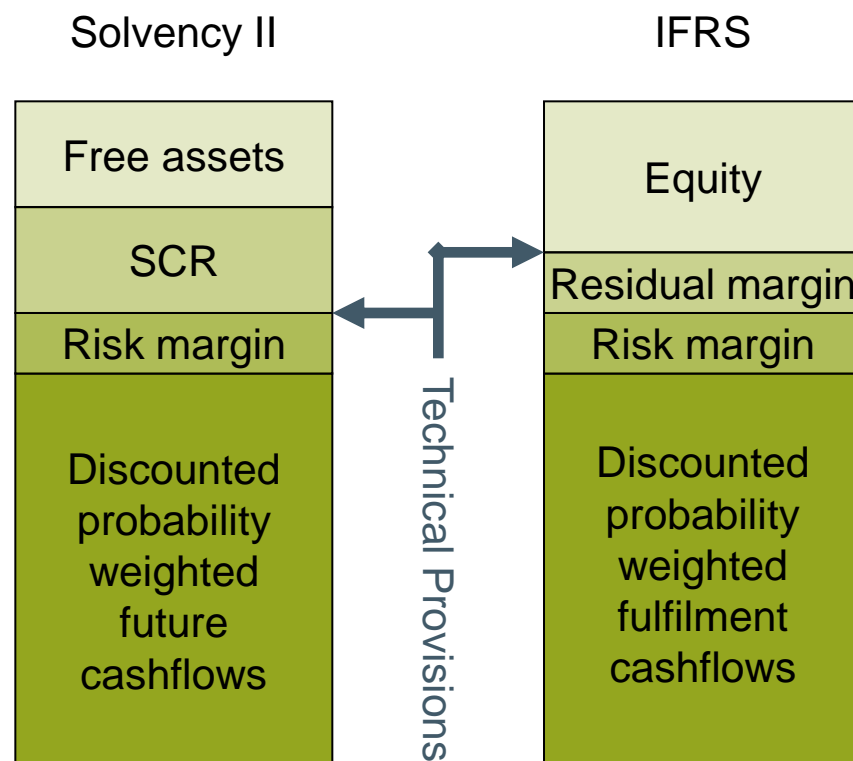
Data requirements will need addressing now

More Items to Consider – Validation

- Another part of Actuarial Function's role
 - assessing assumptions, methods and experience**
- Actual v Expected
 - claims provisions and premium provisions
 - and other elements of TPs
- Analysis of Surplus
 - unwinding of discount & risk margins?
- Need to assess whether methods and models are appropriate
 - could this lead to a change in methods?

More Items to Consider – Reconciliation with Accounts

- Requirement for Technical Provisions on two different bases
 - Solvency II &
 - UK GAAP / IFRS
 - reconciliation
 - double the work?
- IFRS Exposure Draft
 - double the development?
 - systems issues
 - reconciliation
 - governance



Summary

- Technical Provisions are “the” fundamental part of Solvency II
Important to anyone involved in Solvency II
- Will see a number of key changes to TPs
 - impact will be very significant in places
- Actuarial function brings some serious additional questions
- Many major challenges remain
 - binary events / risk margins / data / contract boundaries
- There are other items to consider
 - links to IFRS / validations / systems

Do not underestimate the work involved

Questions or comments?



The views expressed in this presentation are those of the presenters.