



Institute
and Faculty
of Actuaries

PPO Working Party Update

Sarah MacDonnell, LCP



Update from the PPO Working Party

- Five years in - where are we now?
- Areas for further focus
- 2014 Workstreams

Five years in

- Four papers

2010	2011	2012	2013
<ul style="list-style-type: none">• Case Studies of Recent Court Cases• Projections of a GI Company• Assumptions• Impaired Life Mortality• Reserving Methodology• Capital Issues• Pricing• Reinsurance• Operational Challenges• Risk Mitigation	<ul style="list-style-type: none">• Best Estimate Reserving• Solvency Capital Required• Mitigation Options for Underwriting Stop Losses and other aggregate reinsurance• Industry Pools• Role of the FSCS	<ul style="list-style-type: none">• Impaired Life mortality update• Liability limits• Reinsurance• Ogden tables version 7 and mortality improvements• Ongoing reserving	<ul style="list-style-type: none">• Survey of Members' Views• Impaired Life investigations

Industry Survey

So where are we now?

Diversity

Size/Business mix

- Motor proportion
- International Group
 - Composite

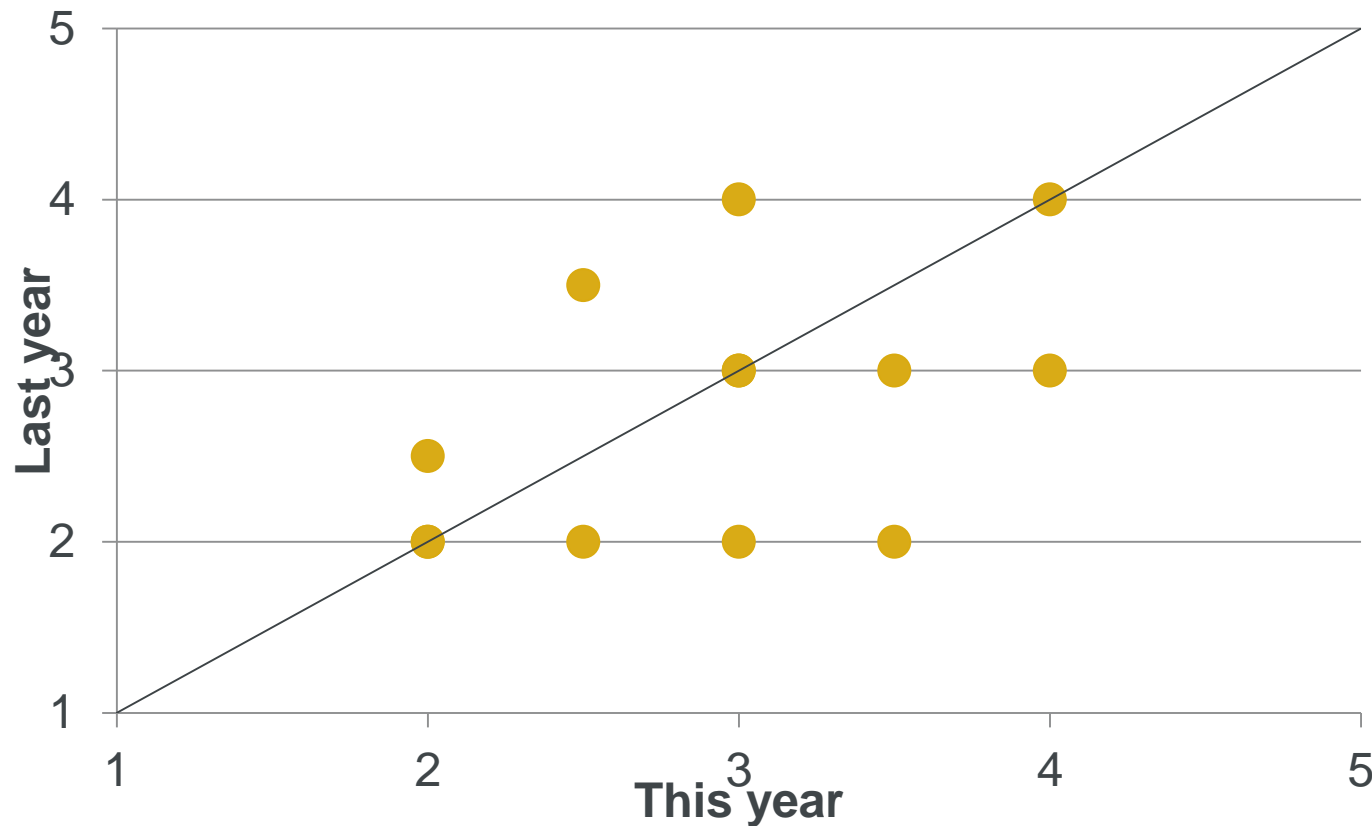
Demographics

Risk attitude/appetite

Outlook

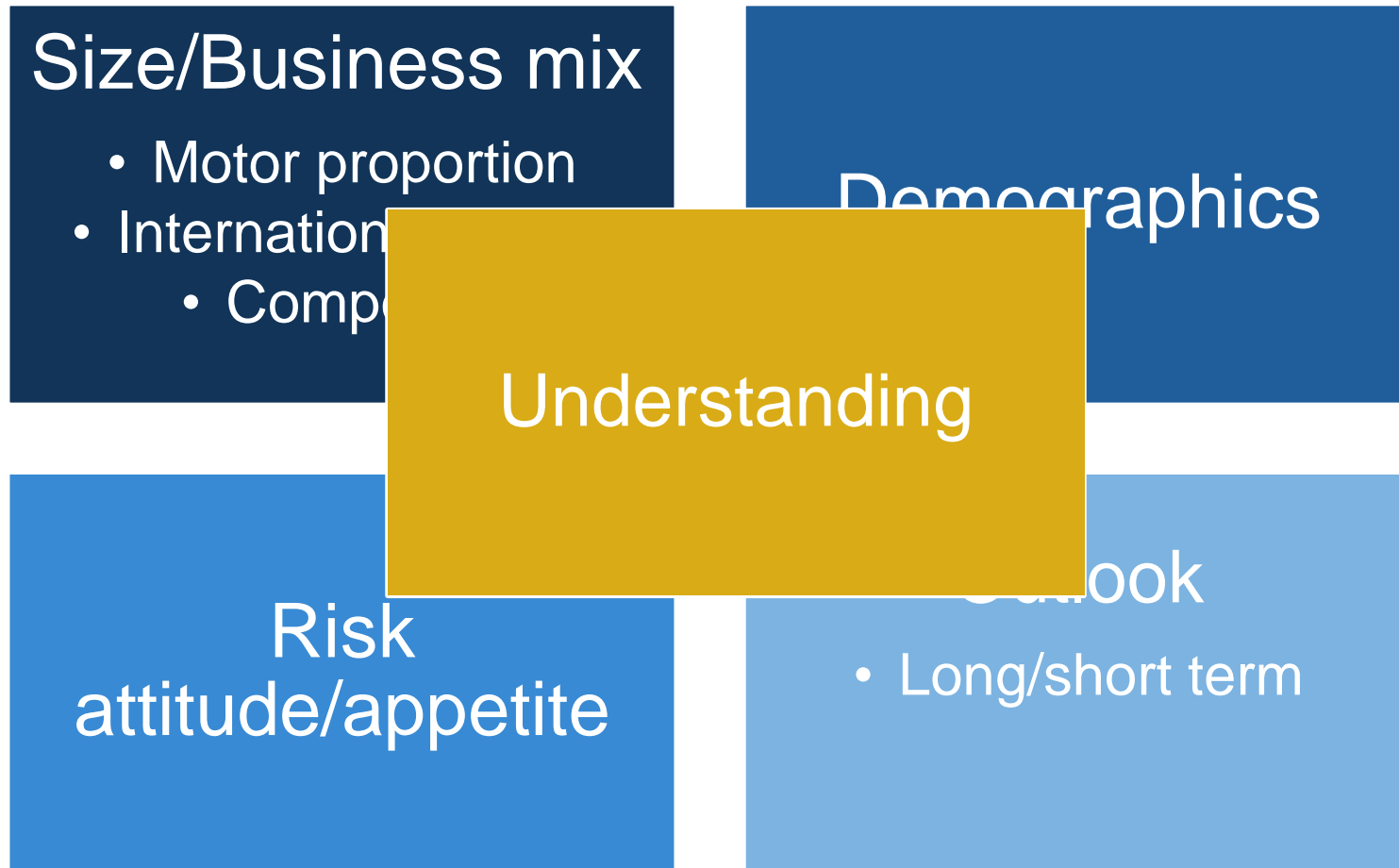
- Long/short term

How concerned are you about PPOs? Insurers



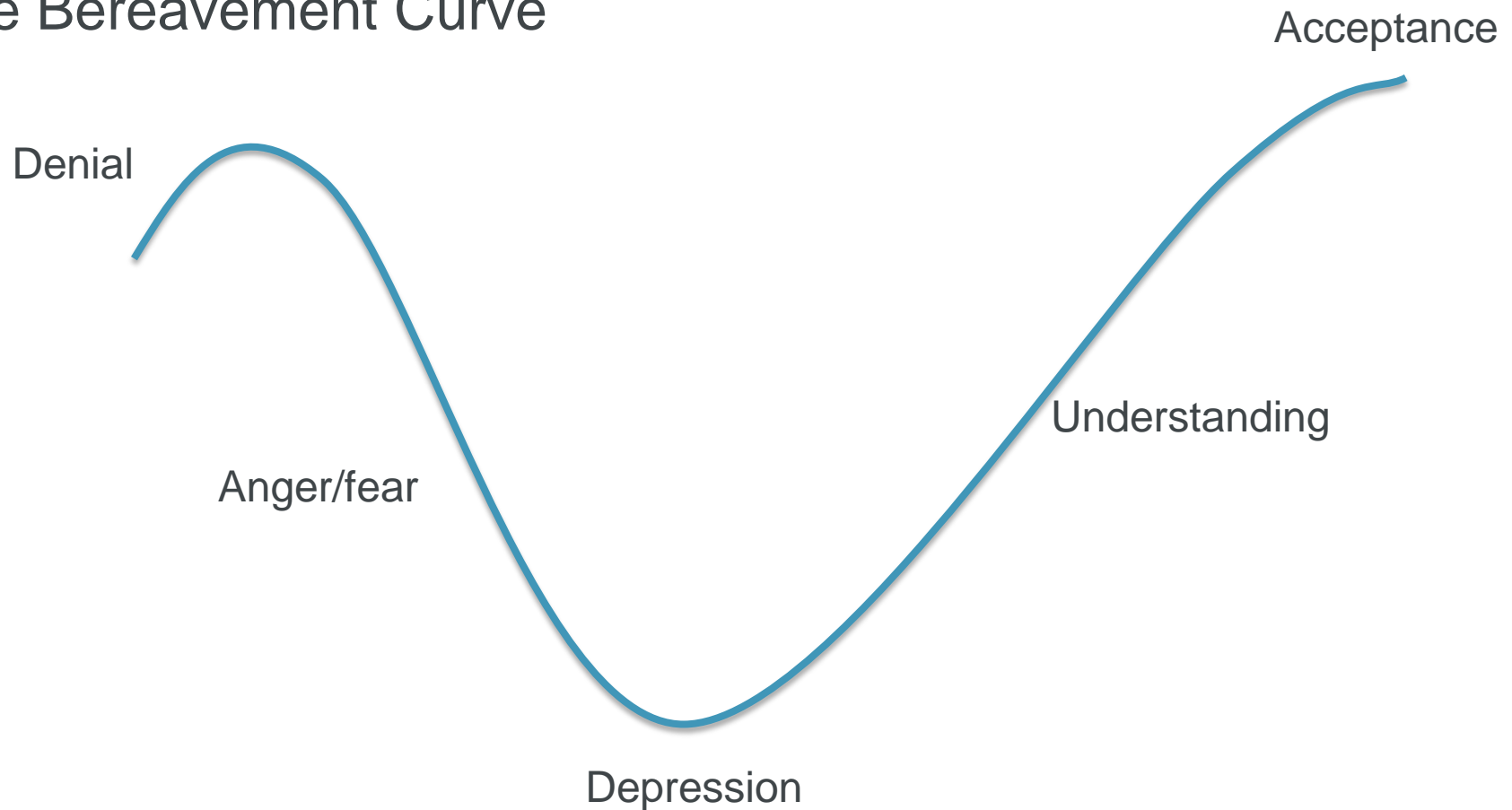
1 least concerned, 5 most concerned

Diversity



Understanding

The Bereavement Curve



Further focus

- SII
- Stochastic models
- Investment
- Mortality

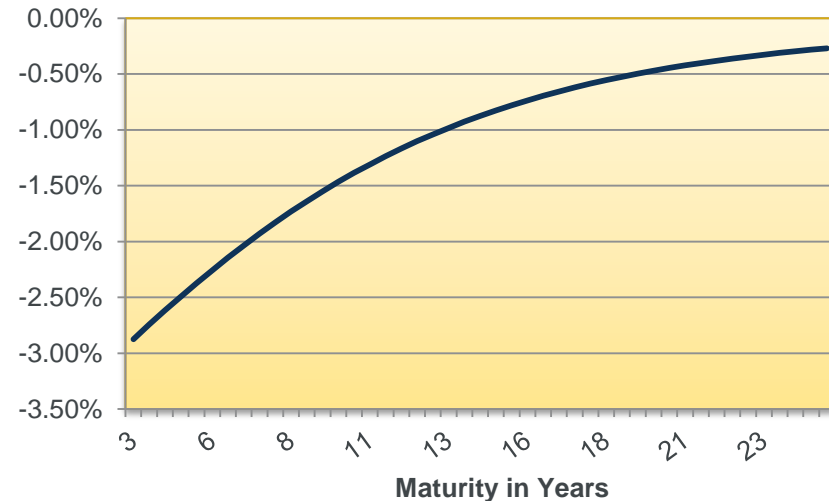
Solvency II

Matching Adjustment

- Debate raging in the life industry for some time
- One of the principal reasons behind SII delays

- Risk-free discount rate

Bank of England real yield curve as at March 2013



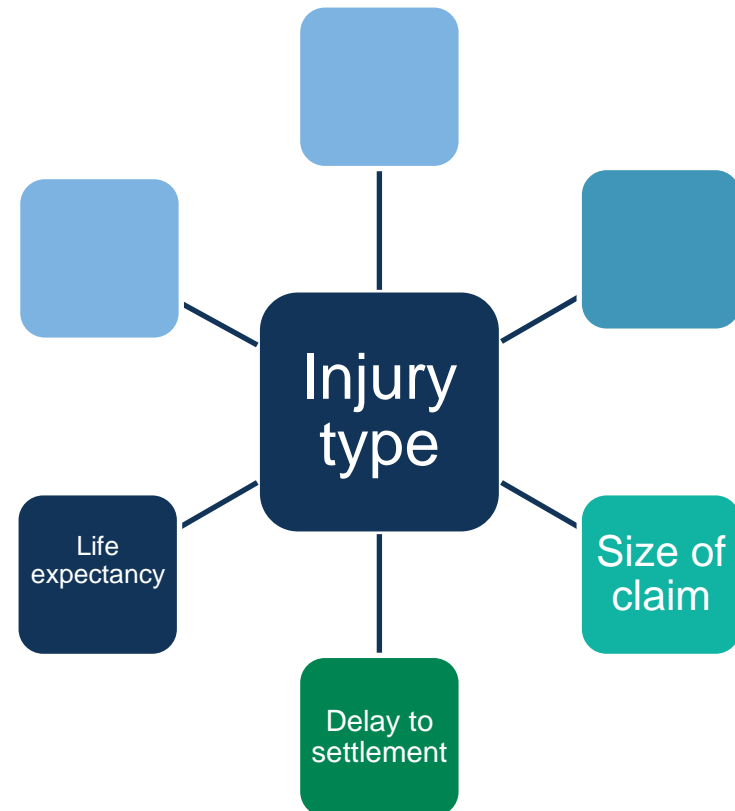
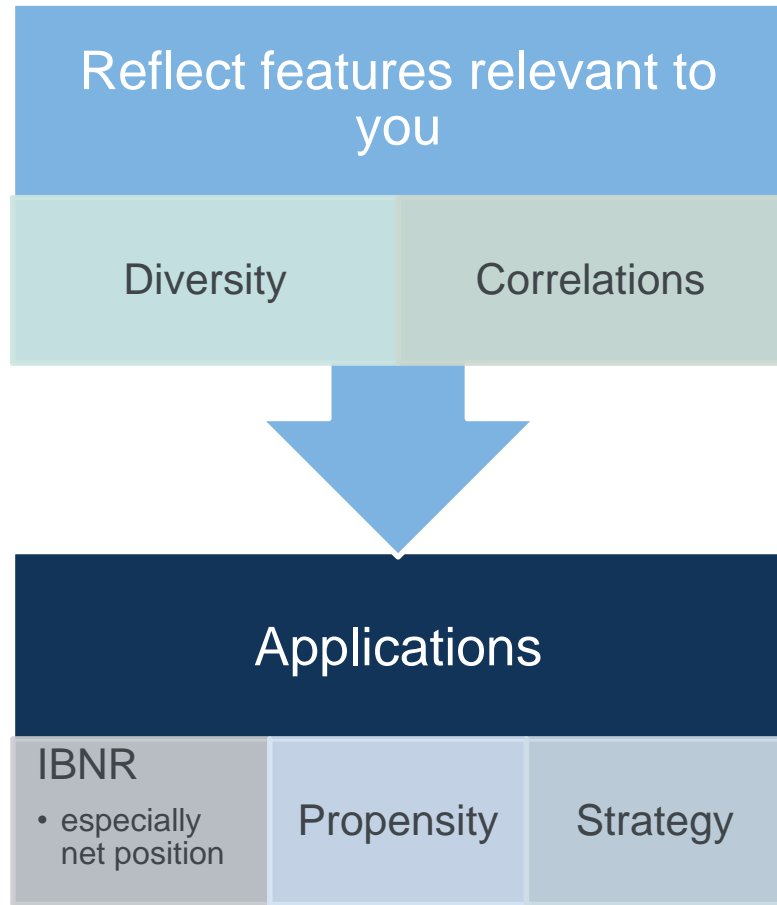
General Insurance Industry getting left behind

Industry practice 2012

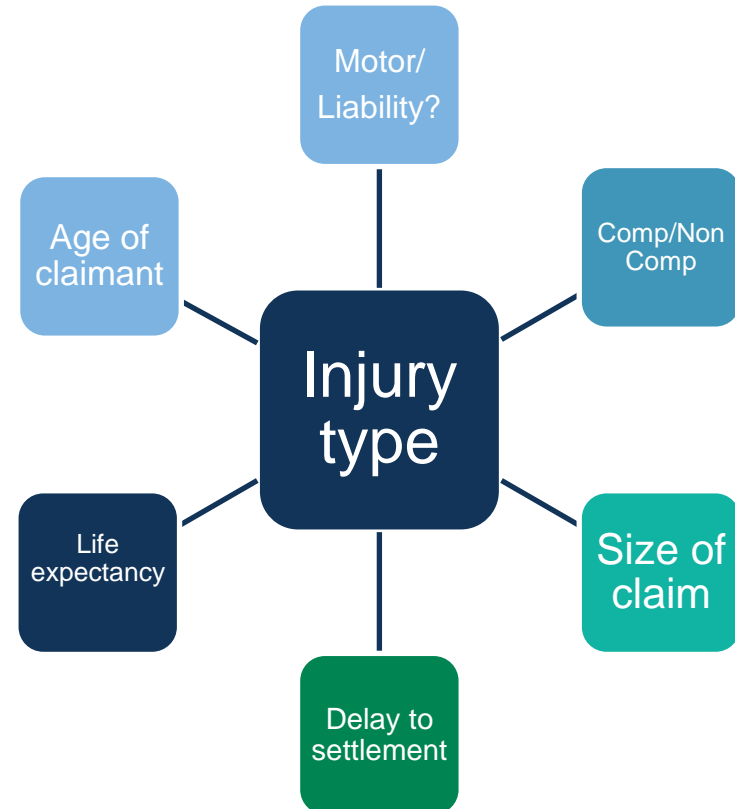
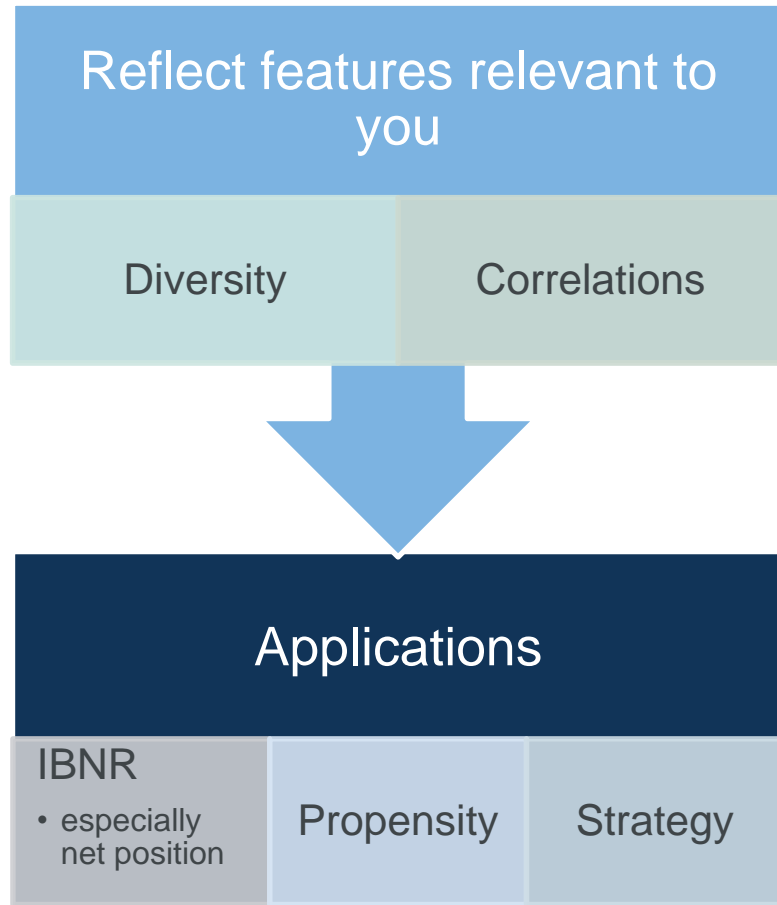
Stochastic models

- Invaluable process to develop understanding of risk
- Wide ranging applications
 - Reserve uncertainty
 - Cost of capital
 - RI structure and negotiation
- Helps with communicating and quantifying of risk
- Very few insurers have developed stochastic models

Stochastic models



Stochastic models

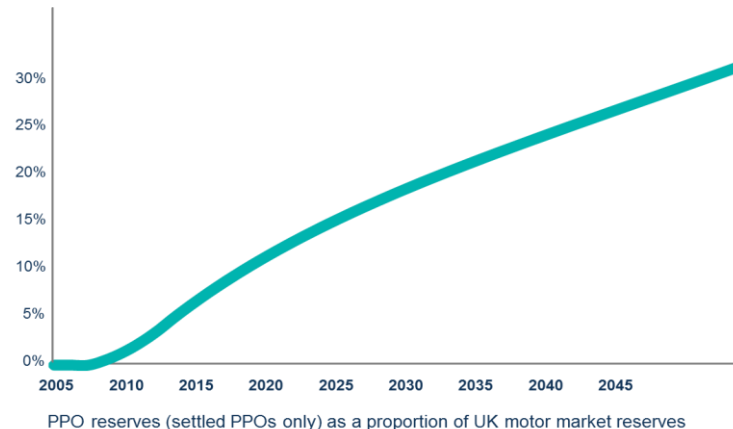


Investment

- Our survey said:
just 3 out of 14 insurers
and one reinsurer
had changed their investment strategy

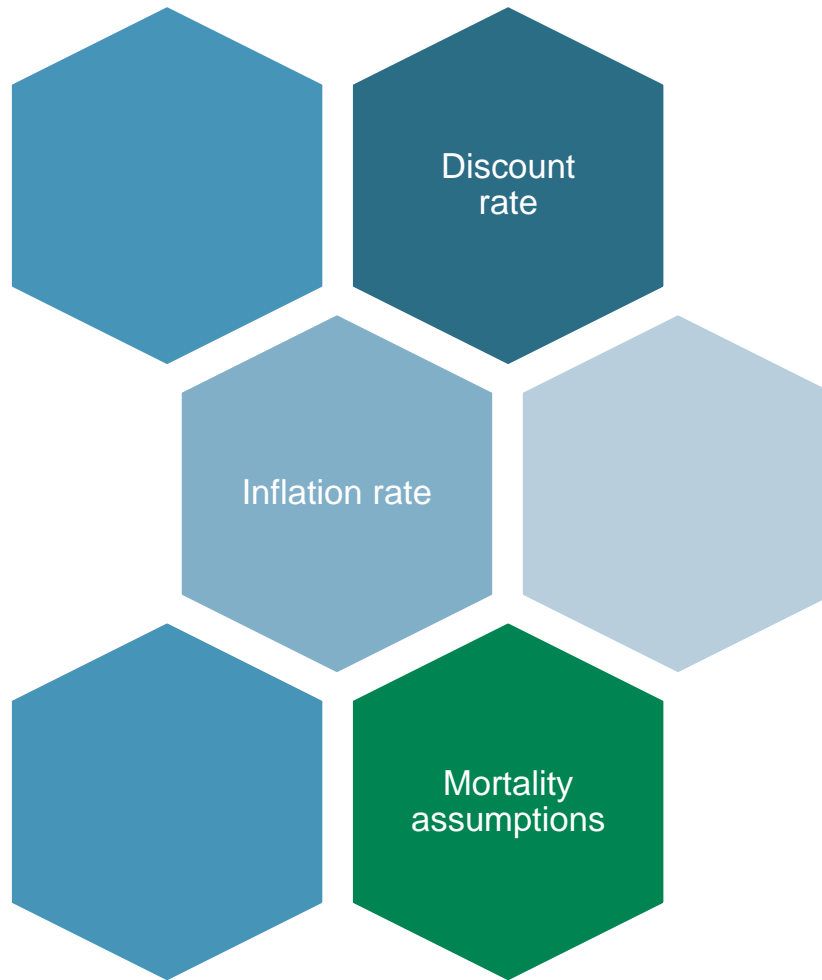
Call for Government to
issue longer term gilts

- Critical mass?



“Better to be doing *something*”

Mortality matters




Working Party Mortality Research

NZ findings

- Spinal injury has higher mortality rate than brain injury
- Severity of injury is significant
- Not enough data to comment on shape of curve
 - Age is important
 - No evidence of reduction in mortality over time
 - but not conclusive

Working Party mortality research

NZ findings

- 
- UK experience (so far) comparable to NZ
 - US spinal experience comparable to NZ
 - UK insurer recorded impaired life expectancies “not inconsistent” with mortality experience to date
 - Some evidence of variation in insurer practice

Working Party Injury Categorisation

Brain Injury

Code	Description	
B1	PVS - Permanent Vegetative State	No purposeful motor or cognitive function. Requires a feeding tube.
B2	Cannot walk - Fed by others	Does not feed self, must be fed completely (either orally or by a feeding tube)
B3	Cannot walk - Self feeds	Can feed self with fingers or utensils, with assistance and/or spillage
B4	Some walking ability	Walks with support, or unsteadily alone at least 10 feet but does not balance
B5	Walks well alone	Walks well alone for at least 20 feet, and balances well
B6	No mobility issues	

- Spinal and amputation codes (S1-S5 and A1-A4)

Working Party Injury Categorisation

Care regime

Code	Description	
C1	24/7 2 or more care ratio	24 hour care needing two or more carers for all that time
C2	24/7 1-2 care ratio	24 hour care needing one to two carers for all that time
C3	24/7 but night sleeper	24 hour care with at least one carer but carers can sleep at night
C4	9 or more hours duty care a day	Walks with support, or unsteadily alone at least 10 feet but does not balance
C5	5 to 8 hours duty care a day	Walks well alone for at least 20 feet, and balances well
C6	0 to 4 hours duty care a day	
C7	Domestic help only, no personal care	
C8	No regular care	

2014 Workstreams

Mortality – UK

- Nick Betteridge, Canopus and Tina Ruffle, Aviva

Mortality – Australian

- Sarah MacDonnell, LCP

Reinsurance

- **Peter Saunders, Swiss Re**

Market Solution

- Frank Chacko, NFU

Bodily injury almanac

- Fiona Annandale, KPMG

PPO Guidance Note

- Anthony Wright, The MDU

Industry Survey

- Emma Potter, Towers Watson



Questions



Comments

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

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