



Institute
and Faculty
of Actuaries

PPOs – What's the market doing?

Daniella Lobo – PwC

Alice Boreman – Deloitte



Note

- The views and opinions expressed in this paper are those held by the authors individually and do not represent the views and opinions of their employers or the Institute and Faculty of Actuaries.
- Although we have used our best efforts, no warranty is given about the accuracy of the information and no liability can be accepted for anybody relying on the accuracy of the information or following the recommendations in this presentation.

These slides were presented at CIGI 2016. They represent views from the perspective of insurers and reinsurers.

If you have any questions, please contact Michelle Chou at the IFoA who will be able to put you in touch with the PPO Working Party members.

2015 PPO Working Party Qualitative Survey

- Conducted telephone interviews with senior actuaries from various insurers and reinsurers regarding their exposure and approach to PPOs
 - Recent view – interview performed in winter of 2015-2016
 - 16 Insurers
 - 4 reinsurers
- Can be used for:
 - Benchmarking
 - Observing industry trends and different approaches



Agenda

- Actuarial Methodology
 - Level of concern
 - Reserving Methodology
 - Capital Modelling
 - Pricing
- Introduction of Irish PPOs
- Reinsurance and Risk Transfer
- Investment



Institute
and Faculty
of Actuaries

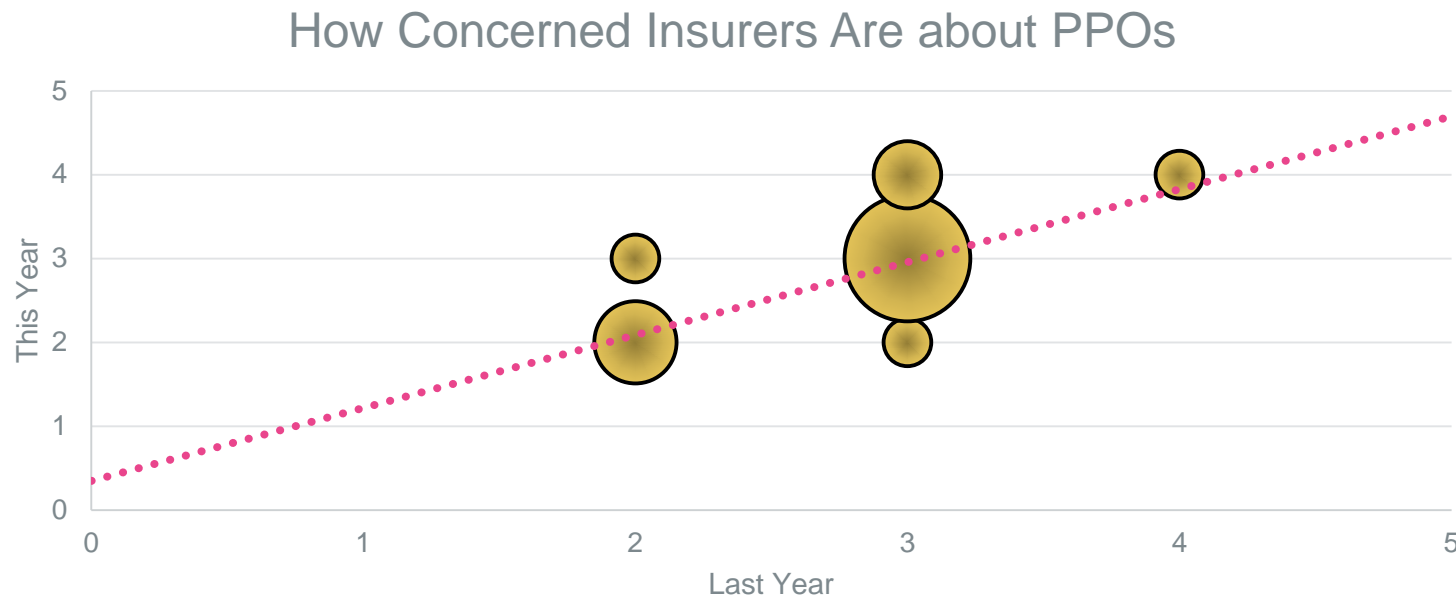
Actuarial Methodology

Level of concern

12 April 2016

How concerned are insurers about PPOs

- Chart showing concern levels between years, scale of 1 to 5, 5 most concerned



- None of the reinsurers we asked changed their view from the previous year

Reasons behind the change in concern

- Why no change (11):
 - Propensity and severity in line with expectations
 - Better reserving methodology despite more settled PPOs
- Why increase (3):
 - More potential PPOs than previously expected
 - Fall in investment returns
 - Impact of Solvency II
 - Long tailed nature
- Why decrease (2):
 - Not as many PPOs compared to predicted
 - Improved modelling

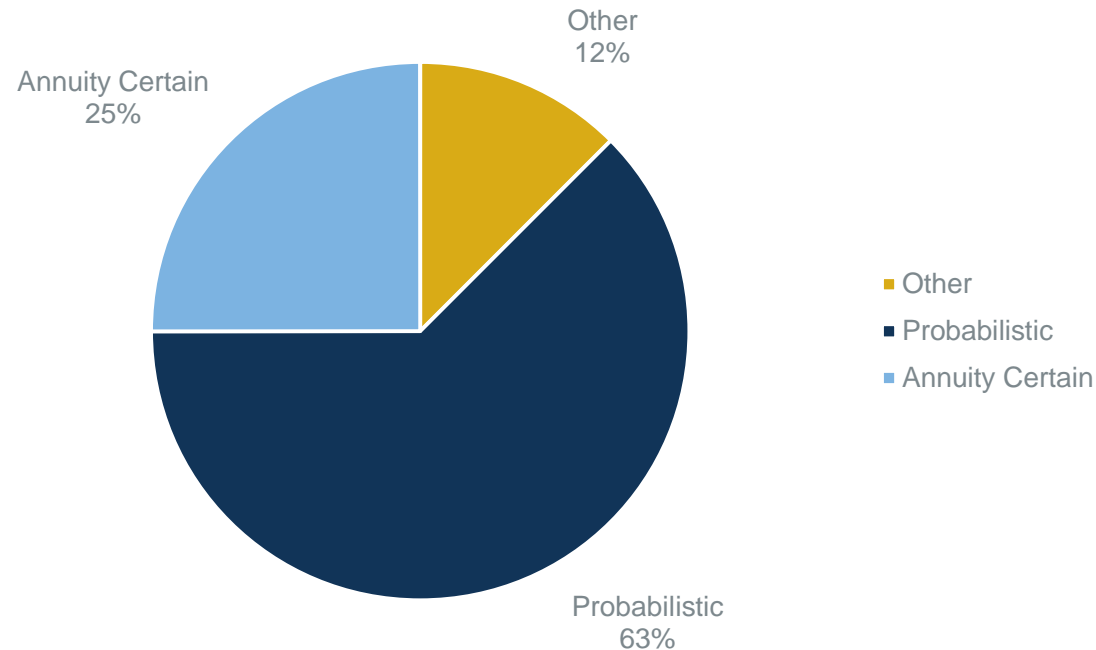


Institute
and Faculty
of Actuaries

Actuarial Methodology

Reserving methodology

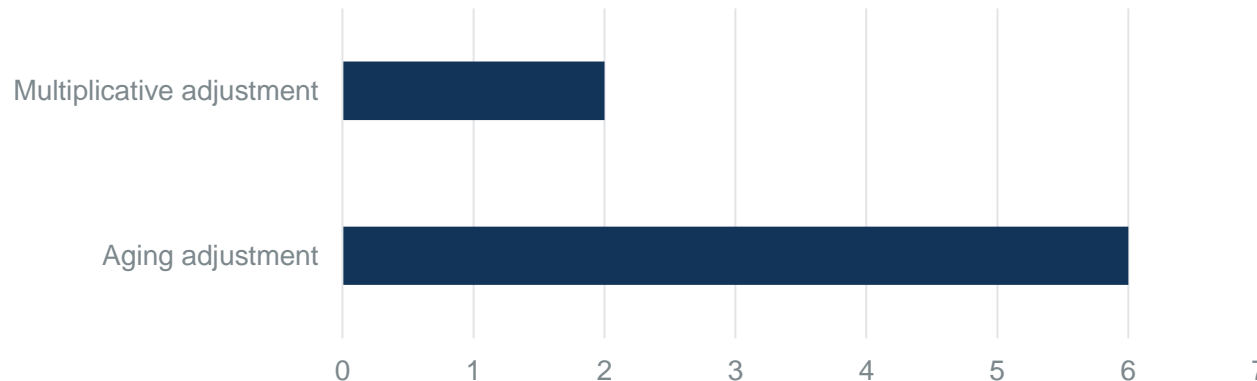
How do you reserve for settled PPOs?



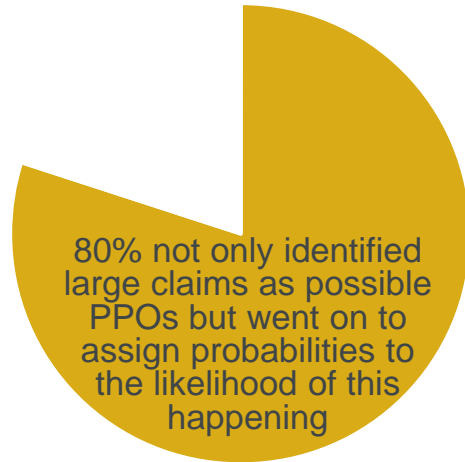
- The majority of those asked based their life expectancy on an expert medical opinion.

How do you reserve for settled PPOs?

- All those taking a probabilistic approach used the Ogden 7 tables or a more recently updated publication of the ONS table series which underlies Ogden 7.
- How do you scale your life table?
 - Multiplicative adjustment: assumed that the claimant had a mortality experience “z” times more than the life tables suggest
 - Aging adjustment: considered the claimant had the mortality experience of someone “y”-years older than them



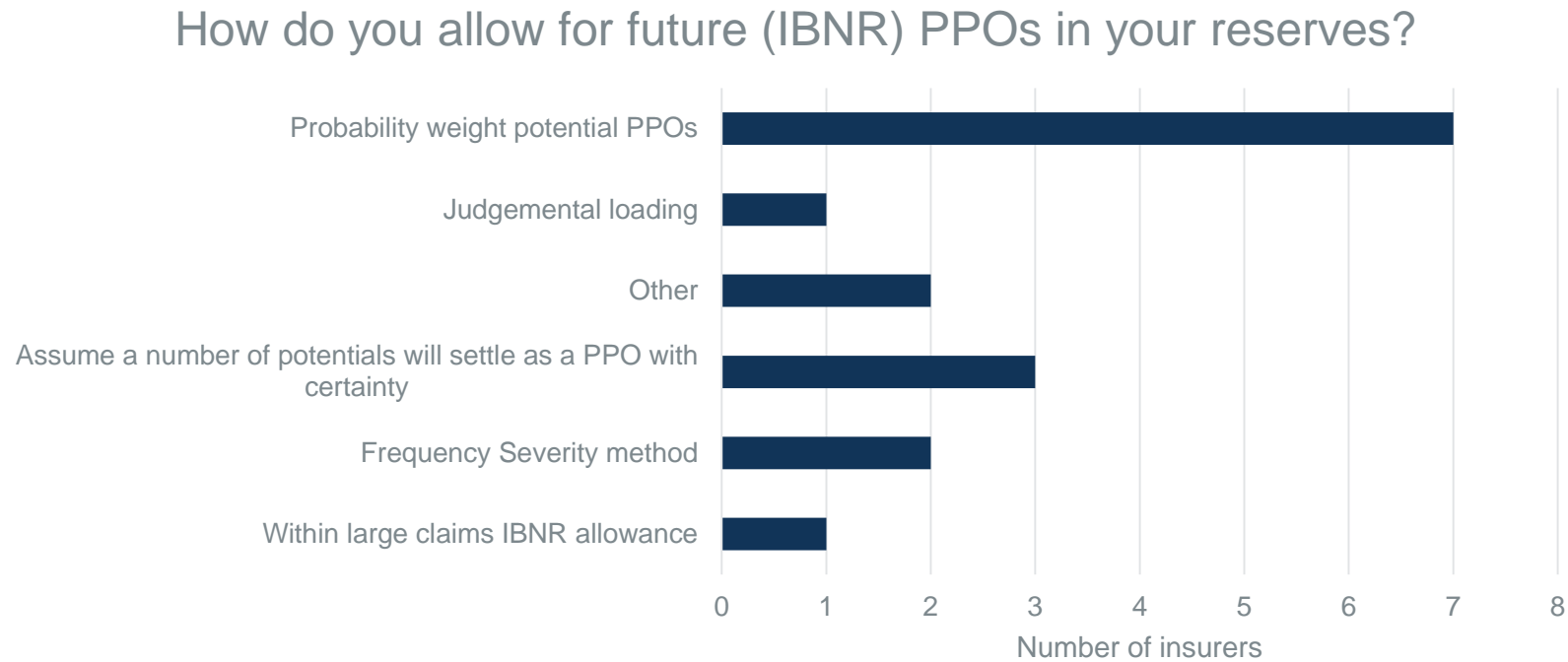
IBNR PPOs - Identification



- Some insurers used a formal scoring matrix or mechanism to determine the probability of a claim settling as a PPO.
- Indicators used included injury type (particularly mental capacity), age, annual care cost.
- Some insurers reviewed potential PPOs quarterly and some annually.
- Half of the reinsurers asked valued PPOs themselves and the others used the cedent's information.

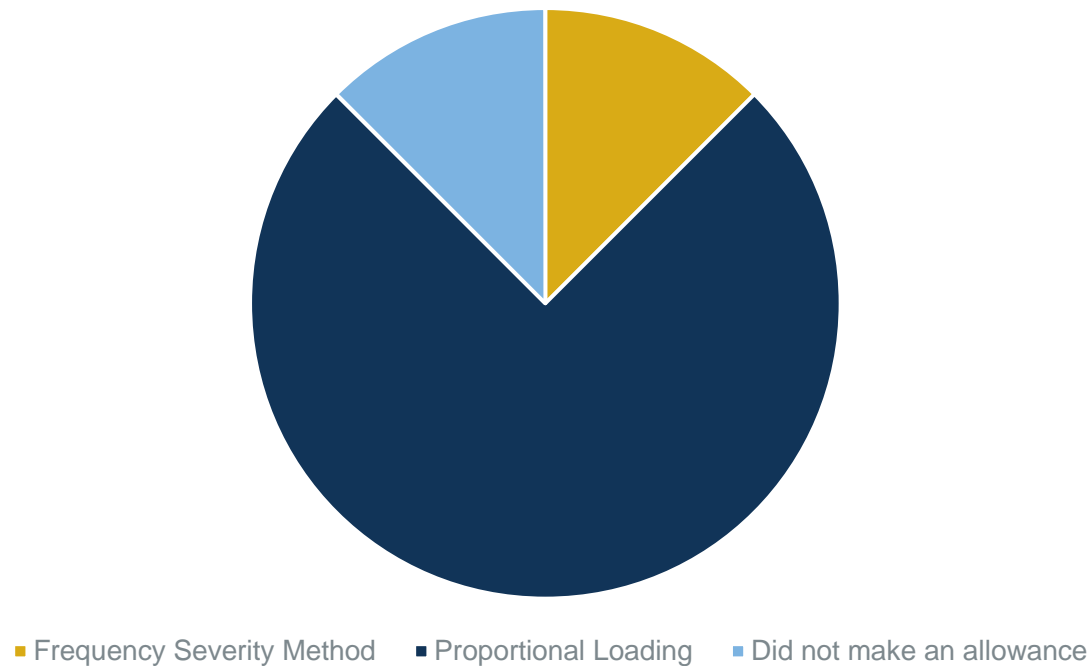
IBNR PPOs - Reserving

- The chart below shows the approaches taken in regards to claims already identified as large claims.



Pure IBNR PPOs - Reserving

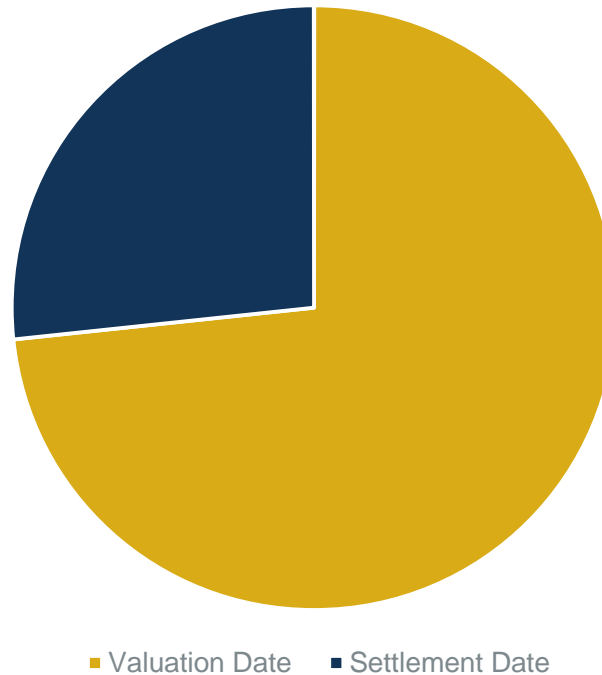
- The majority of those who considered pure IBNR PPOs added a proportional loading to the PPO reserves.



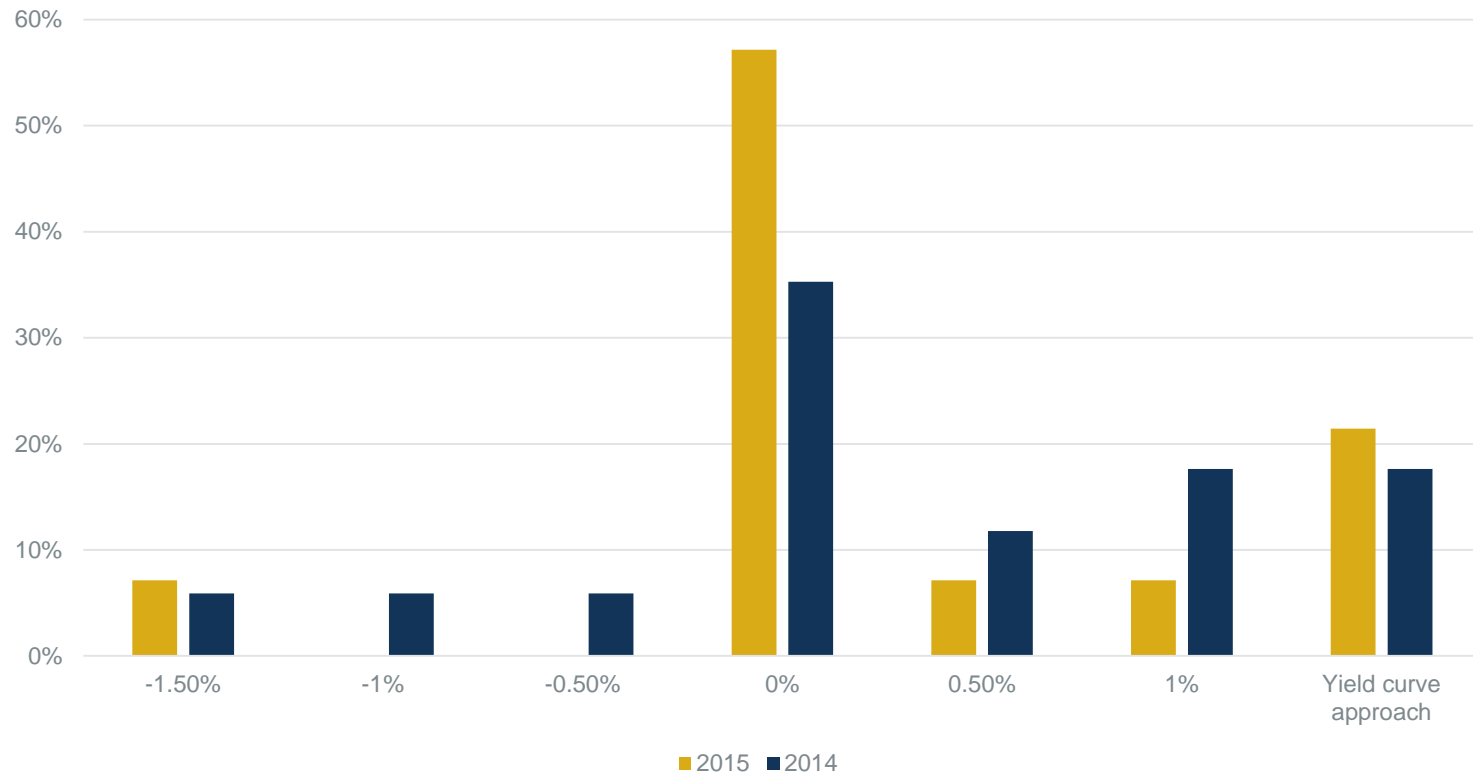
IBNR PPOs – Discount to what date?

- 11 Insurers discounted to valuation, four to settlement

To what date do you discount your future PPO reserves?

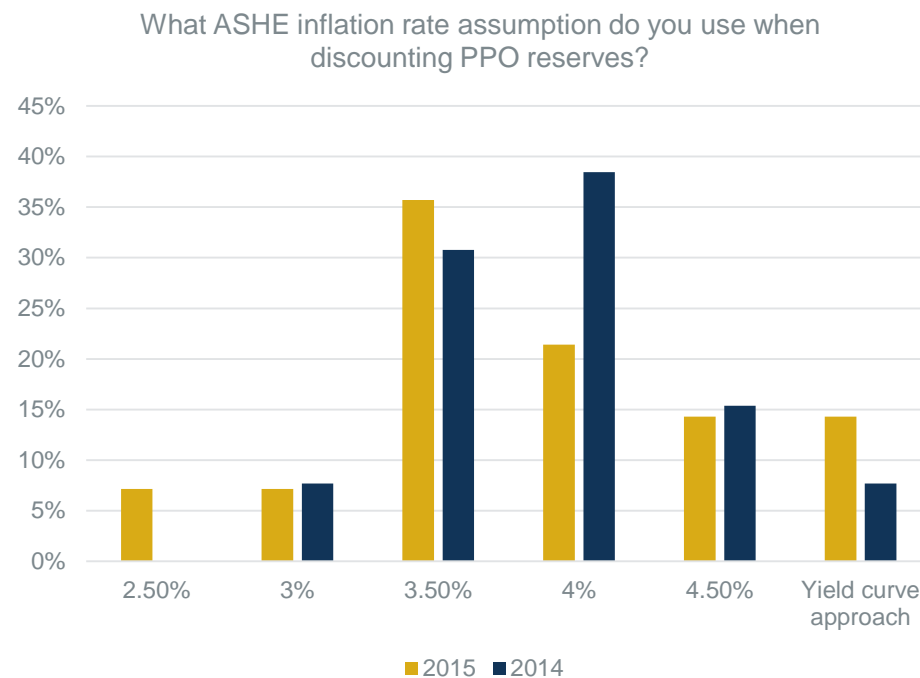
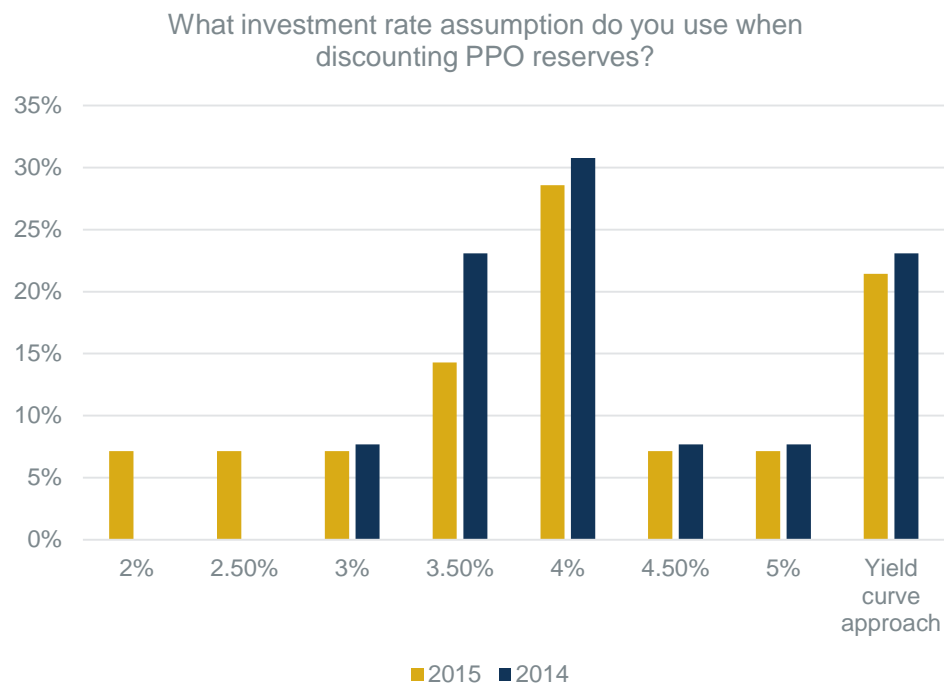


Discounting – Real discount rate



Discounting components of real discount

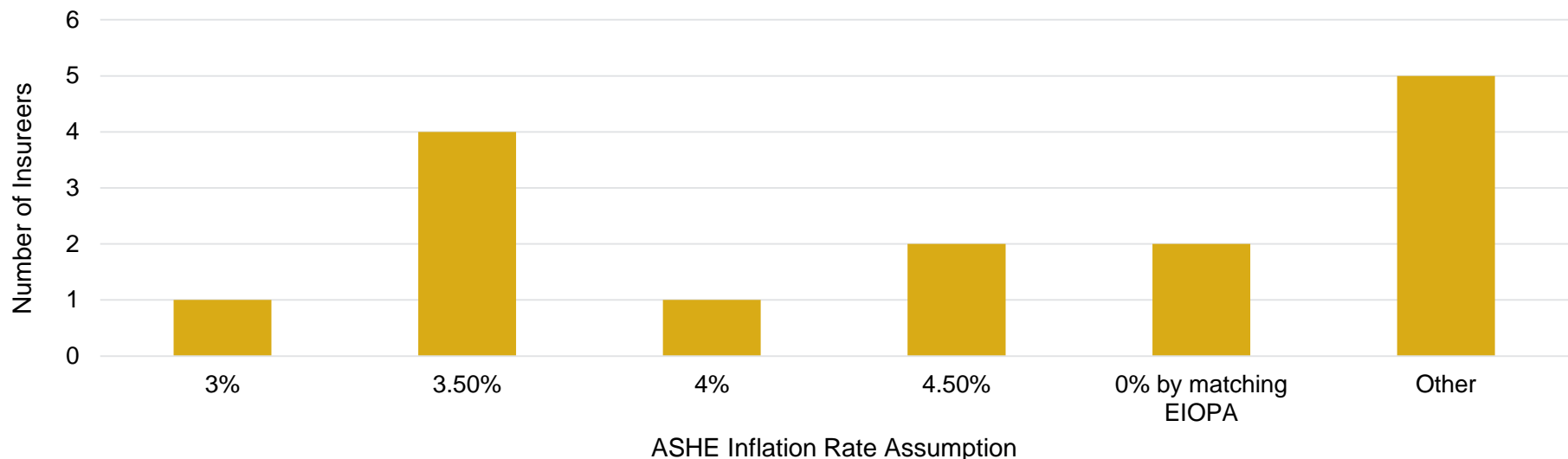
- Real discount components: Investment return and inflation



Discounting – solvency II

- As the EIOPA curve is prescribed, the main question revolves around the inflation rate used

What ASHE inflation rate assumption do you use when discounting PPO reserves under SII?



Discounting – solvency II

- None of the insurers asked had any transitional arrangements
- 50% of insurers have considered the volatility adjustor but only 2 have actually implemented it.

Variation Orders and Bad Debt

- Half of the insurers asked did not consider Variation Orders, Indemnity Guarantees and/or Reverse Indemnity Guarantees in reserving for PPO liabilities.
- Of the other half only two actually allowed for them in their reserving process after considering them.
- One reinsurer considered variation orders.
- The majority of insurers do not include a bad debt provision under IFRS but will do under Solvency II.

Variation Orders and Bad Debt

- Half of the insurers asked did not consider Variation Orders, Indemnity Guarantees and/or Reverse Indemnity Guarantees in reserving for PPO liabilities.

	Variation Orders	Bad Debt	
		Under IFRS	Under SII
Number of Insurers who allow for them in projections	2	4	11

- Of the other half only two actually allowed for them in their reserving process after considering them.
- Regarding bad debt – the majority of insurers do not include a bad debt provision under IFRS but will do under solvency II.

From 2014
survey
report

Feature	Proportion of Motor PPOs	Number of Responses
Stepped Payments	31%	395
Variation Orders	10%	389
Contributory Negligence	19%	342
Indemnity Guarantees	5%	343
Reverse Indemnity Guarantees	23%	302

Ogden real discount rate

- The majority of insurers asked said that they do hold a margin for the Ogden discount rate decreasing.
 - A number held a margin based on the rate dropping to 1.5%
- Only one did not hold reserves on the current discount rate basis
 - they held them at a rate of 1.5%
- Of the reinsurers asked, three held a margin and the other held reserves on a variety of bases, most of which are below the Ogden discount rate.



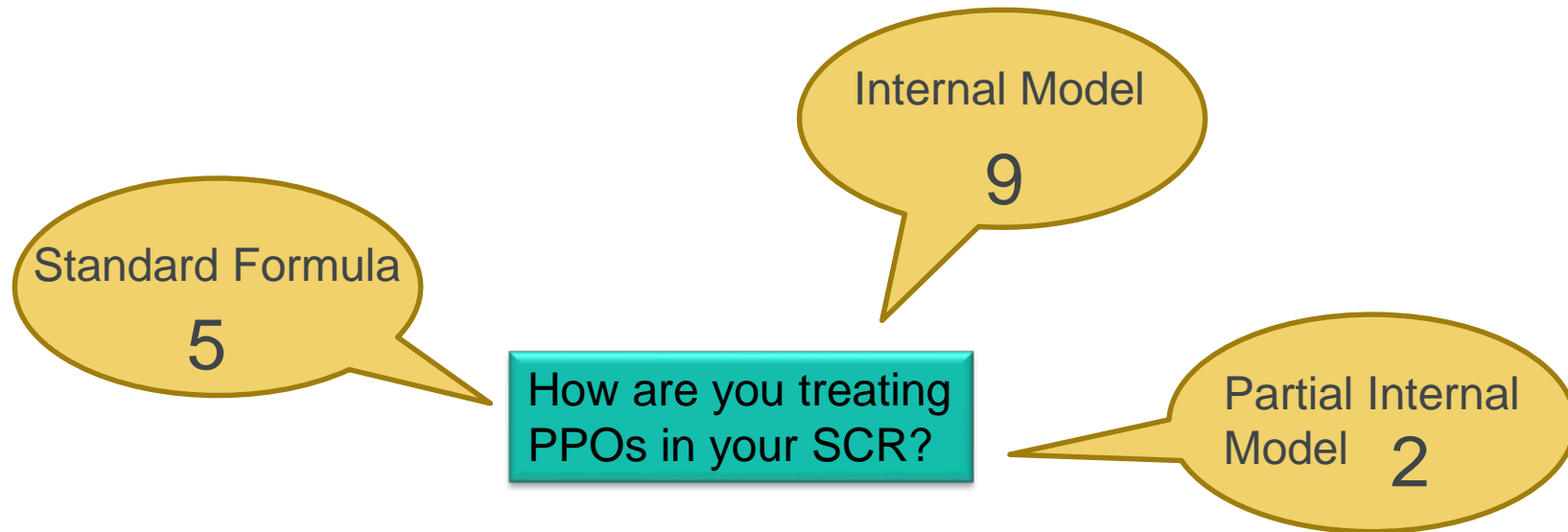
Institute
and Faculty
of Actuaries

Actuarial Methodology

Capital Modelling

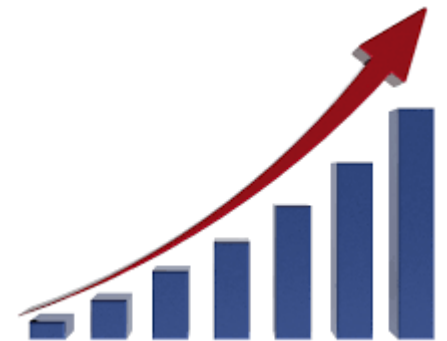
12 April 2016

PPOs in SCR



PPOs in capital models

- Most who use an internal model have a separate PPO model for capital purposes
- Others make an implicit allowance, for example within motor liability premium and reserve risks.



Differences between Pillar I and Pillar III

- Most insurers said that there was a lower capital requirement for Pillar I vs Pillar III.
- Some had not seen a change or that they were assuming that they were the same.



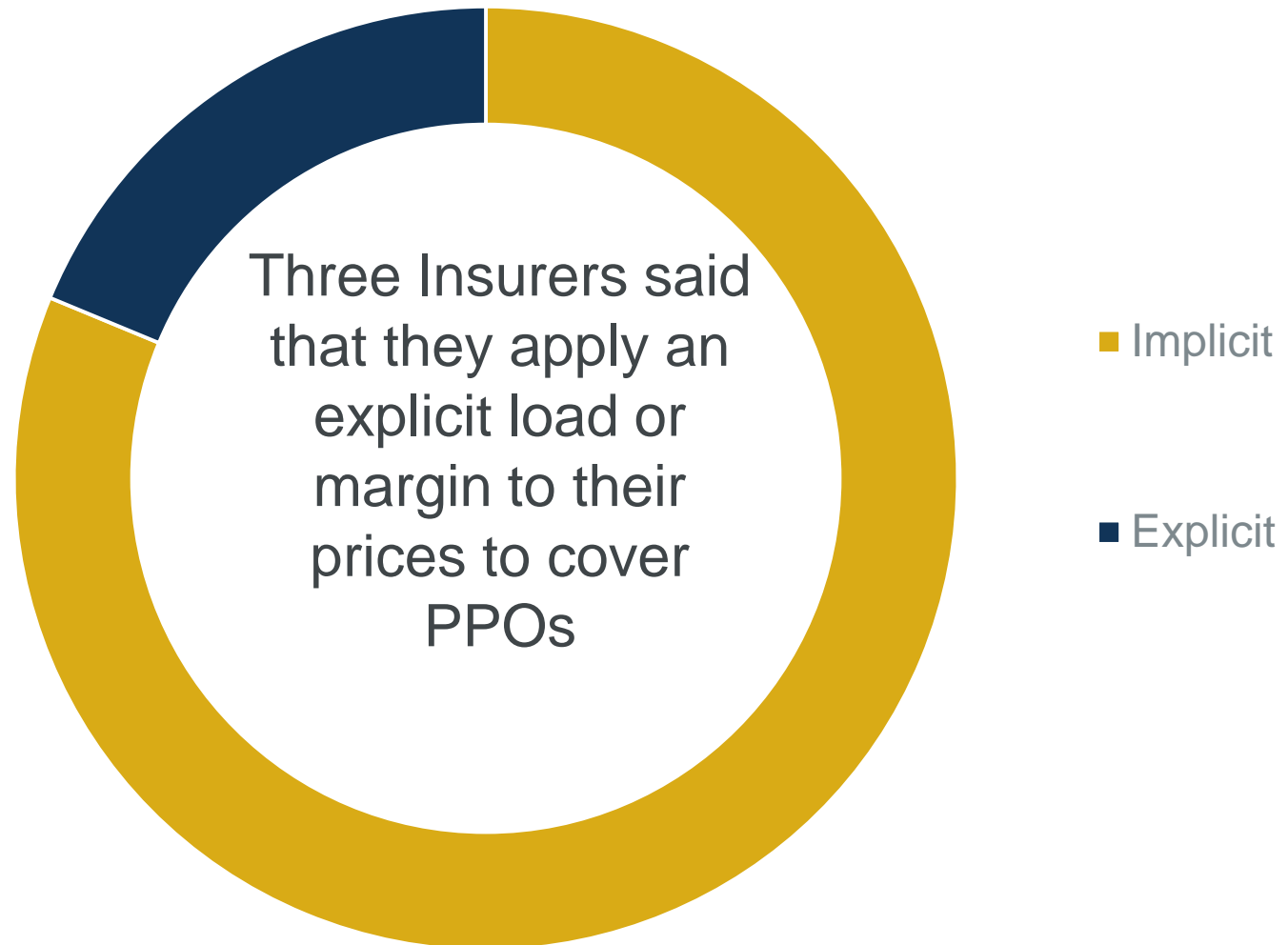


Institute
and Faculty
of Actuaries

Actuarial Methodology

Pricing

How are PPOs allowed for in Pricing?



Pricing

- Three of the insurers we asked allowed for PPOs explicitly when pricing their cover:
 - Frequency/severity method
 - Large loss stochastic model
 - Exposure pricing
- One reinsurer noted that they do not write any Motor RI business anymore due to the cost of capital.



Institute
and Faculty
of Actuaries

PPOs in Ireland

12 April 2016

Changes in Ireland

- 2 Material changes

- Discount Rate for Lump Sums

Russell v HSE set discount rate for future care at 1% (v 3 %)

Further changes expected

- PPOs

Draft Civil Liability (Amendment Bill 2015) published 27th May 2015

Seeks to establish PPOs in Ireland

PPOs in Ireland – Key features

- Key features
 - Catastrophic injuries only
 - Judges will be able to award against the wishes of claimants
 - Stepped payments allowed, variability orders not allowed
 - Inflation linked to HICP initially (UK RPI initially)
 - Inflation to be set every five years by the minister for justice (finance)
 - NTMA have proposed issuing bonds – Implications for matching adjustment.
 - Requires security of payment to be considered
 - EU/Irish insurers security confirmed by proposed extension of ICF

PPOs in Ireland - Indexation

“Such regulations shall have the aim of ensuring that the indexation used to calculate annual changes in the costs arising for plaintiffs adequately measures such changes in costs, having regard to the changes that have occurred in the index and in such costs over the previous 5 year period. “

“The aim would be to ensure that the index being applied correctly measured the change in costs for plaintiffs, “

PPOs in Ireland

- We asked whether the Insurers and Reinsurers thought that the introduction of PPOs in Ireland would affect the UK market:
 - 11 said they thought it wouldn't
 - Five said yes but weren't sure of the scale of the impact and what the impact could be
 - One said yes, if you write any business in Ireland!
- Potential to create a push to move away from ASHE?



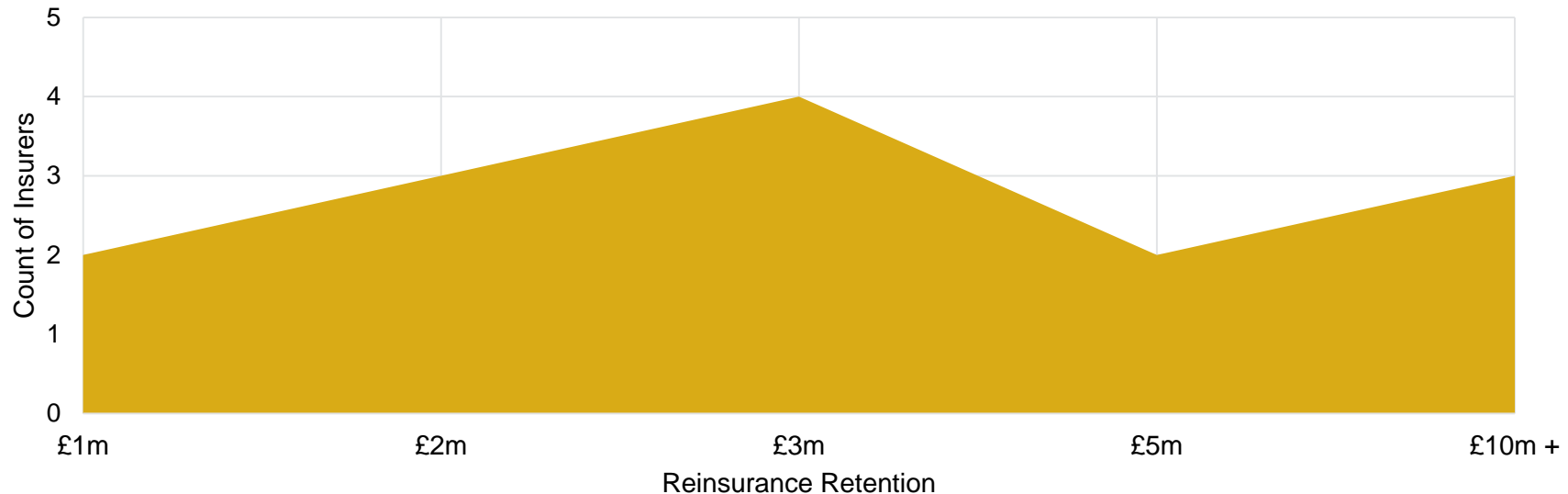
Institute
and Faculty
of Actuaries

Reinsurance and alternative risk transfer

12 April 2016

Reinsurance in the market

What is your starting retention of your reinsurance programme?



- Only one of the 16 insurers said that their reinsurance program had changed as a result of PPOs.
- We also asked insurers whether they took the impact of the cost of capital into account when buying reinsurance. 11 insurers said they did, but less than half of these did so explicitly for PPOs.

Reinsurance availability

- Three out of the four reinsurers asked stated that their reinsurance offerings had changed due to PPOs:
 - One noted that they do not write any Motor RI business anymore due to the cost of capital;
 - One noted that they had dropped their XoL Motor participation significantly; and
 - Another stated that they no longer wrote uncapped UK/Ireland XoL Motor contracts.
- One reinsurer insisted on capitalisation clauses whilst two strongly preferred them.
- Two said that approximately 50% of their PPOs business was written through capitalisation clauses.
- All reinsurers insisted upon an indexation clause in their reinsurance contracts.

Capitalisation clauses

Capitalisation clause: allows (or even compels) the reinsurer to settle an individual PPO liability as a lump sum with the insurer, on a pre-agreed bases, once such an award has been made/agreed.

Three main contract types offered are:

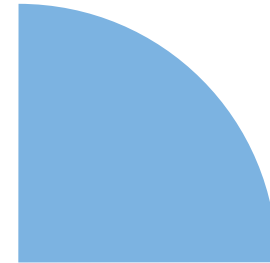
- **Uncapitalised:** Traditional "Pay as Paid" basis with inflation-linked deductible, recoveries made throughout the lifetime of the claimant.
- **IUA Capitalisation:** Lump sum capitalisation at time of settlement, allows for life impairment typically by way of medical expert opinion. Full and final settlement.
- **Delayed 20 Capitalisation:** "Follow the fortunes" for 20 years then lump sum capitalisation 20 years after expiry of reinsurance treaty. Typically assume unimpaired mortality for lump sum.

Reinsurers view on capitalisation clauses

- Reasons for offering capitalisation clauses included:
 - Having to account for PPOs on an undiscounted basis – impacting profit and loss account.
 - The effect of the uncertainty of ASHE and longevity on the profitability of the treaty, the cost of a capitalised cover is less than the cost of a traditional XoL cover.
- Only one reinsurer has experienced capitalisation clauses kick in, the others had not experienced any.

Insurers view on capitalisation clauses

- Four of the insurers surveyed said that they had a capitalisation clause on their reinsurance contract
- Of those that didn't have a capitalisation clause, the clear majority stated that they were keen to avoid them.



Risk transfer - hurdles

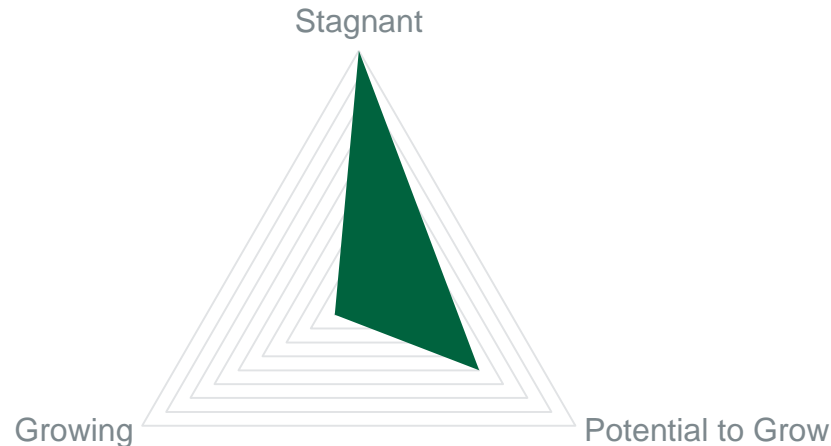
- All bar one insurer would consider transferring the risk associated with PPOs if the right option arose.
- The most significant hurdles mentioned were cost of any options and the lack of a solution that matched to ASHE inflation.



Risk transfer – growing or changing

- Some insurers claimed to have been approached by a common third party regarding a potential offering but others had not been approached at all

Do you think the risk transfer market is growing or changing?





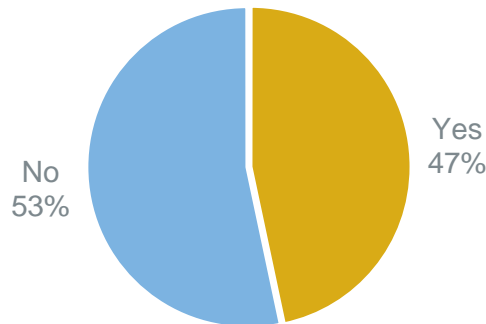
Institute
and Faculty
of Actuaries

Actuarial Methodology

Investment

Investment strategy

- Seven of the 16 insurers said that they have changed their investment strategy as a result of PPOs, however none of these came in the last year.



- A couple of the insurers review their Asset Liability matching position regularly and hence their strategy covers for PPOs, without a change in strategy as such.
- Two insurers claimed that they have ring-fenced assets specific to PPO liabilities. Although others have long duration assets to cover all longer term liabilities.

Investment issues



- The two biggest issues relating to PPOs insurers said they faced when asked were:
 - The exceedingly long duration associated with PPO liabilities
 - The inability to find assets that track a similar index to ASHE



Institute
and Faculty
of Actuaries

Conclusions



12 April 2016

Conclusions

- **In general, companies concerns regarding PPOs are not too dissimilar to last year.**
- **There has been little change in reserving approaches taken**
 - **Will this change with Solvency II now live and IFRS 4 to come?**
- **Reinsurers continue to be concerned about the number of PPOs in the market**
- **Insurers remain concerned about the ability to match their PPO liabilities**



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 presenters.



Institute
and Faculty
of Actuaries

Questions

patrick.tingay@willistowerswatson.com

aboreman@deloitte.co.uk

daniella.l.lobo@uk.pwc.com

Peter_Saunders@swissre.com

