



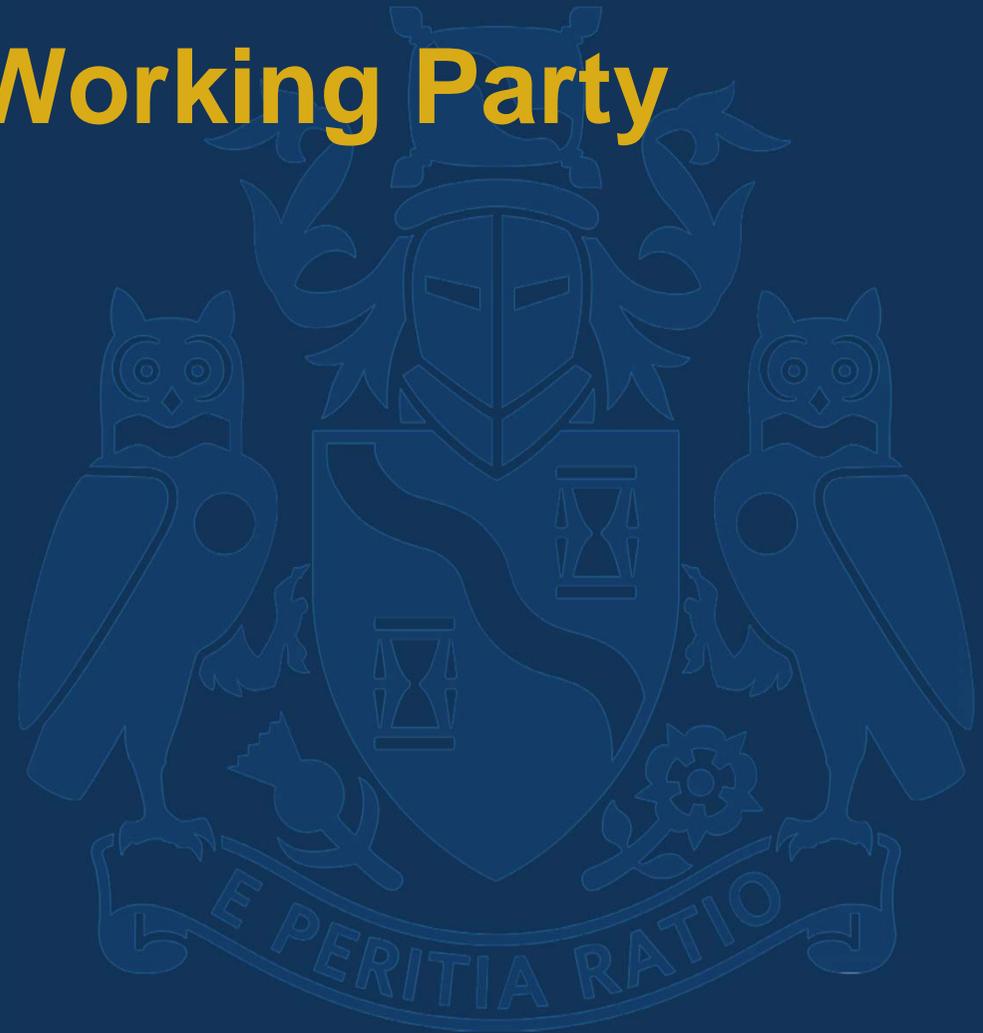
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Update from the PPO Working Party

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Deputy Chair of PPO Working Party

Presentation to General Insurance Reserving Seminar 2015
18 June 2015



Agenda

- Reserving methodology
- Propensity
- Introduction of Irish PPOs

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.

2015 Workstreams

Mortality – UK

Mortality – Australian

Reinsurance

Market Solution

Bodily injury almanac

PPO Information Paper

Industry Survey

Legal interviews

2014 Industry Survey

PPOWP
2014 Survey

- 2014 survey taken as at 31 December 2013
 - 398 Motor PPOs, 45 Liability PPOs
 - Insurers surveyed cover >90% of PRA regulated market
- Can be used for benchmarking or observing industry trends in:
 - PPO Market experience
 - PPO Methodology



Look out for full report to be published 2015

Thank you to our contributors

We are very grateful to all the contributors, including:

PPOWP
2014 Survey

- Ageas (AIL)
- AIG
- Allianz Insurance
- Aviva
- AXA
- Covea
- CFS
- Direct Line Group



- esure
- Liverpool Victoria
- NFU Mutual
- RSA
- Saga
- Tesco Underwriting
- Zurich Insurance



Please note: The above insurers agreed to be acknowledged for their participation in the survey, so this list does not include all contributors.



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PPO methodology



Actuaries Triangles



Actuaries Triangles for PPOs

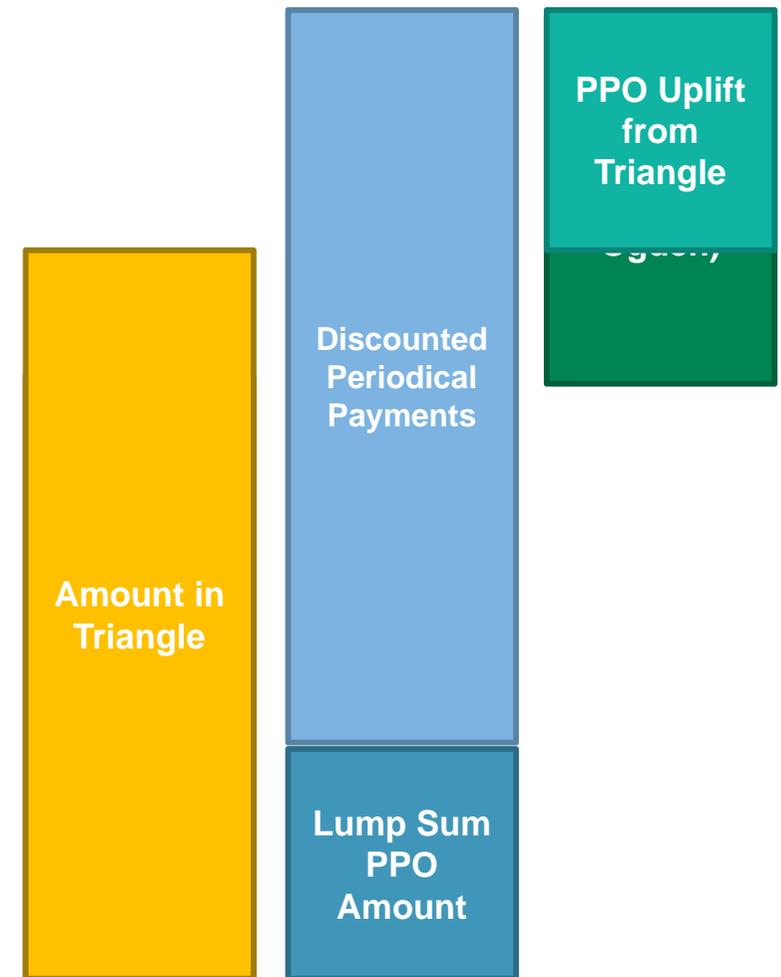
- Triangles fail us for PPOs
- Triangles only work well where the past is a good estimate to the future
 - The whole industry's claims don't have a reliable pattern for numbers
 - Then there's the question of scanty data in individual firms
- What would be projected in a triangle?
 - Inflation
 - Mortality
 - Steps in payment streams
 - Variation orders being activated

An uplifting approach

The difference between what is in your triangle and your PPO valuation.

But, how well do you know your triangles?

- What is included in your incurred triangles?
 - Discount rate assumptions
- Impact on your large claims projections?
- Treatment of PPOs in your paid triangles?



Think outside the triangle



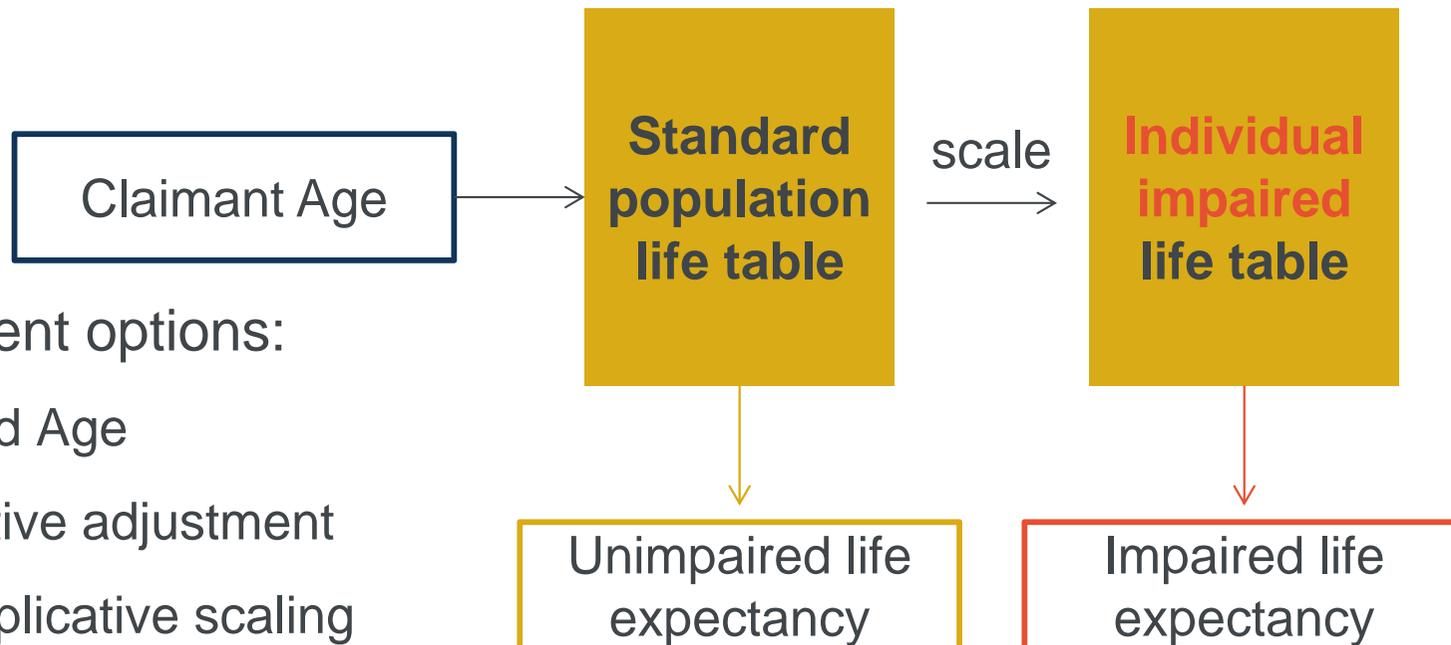
- Cash flow approach for PPOs
 - Insurers tend to use cashflow approach for settled PPO valuations
- Stochastic models can capture the impact and correlations of economic variables and stochastic mortality.

PPOWP
2014
Survey

- 8 Probabilistic
- 5 Annuity-certain
- Even more important for reinsurance considerations (and pricing)
 - Indexation clause
 - Different cedants
 - Different treaties by year

Adjusting for impairments

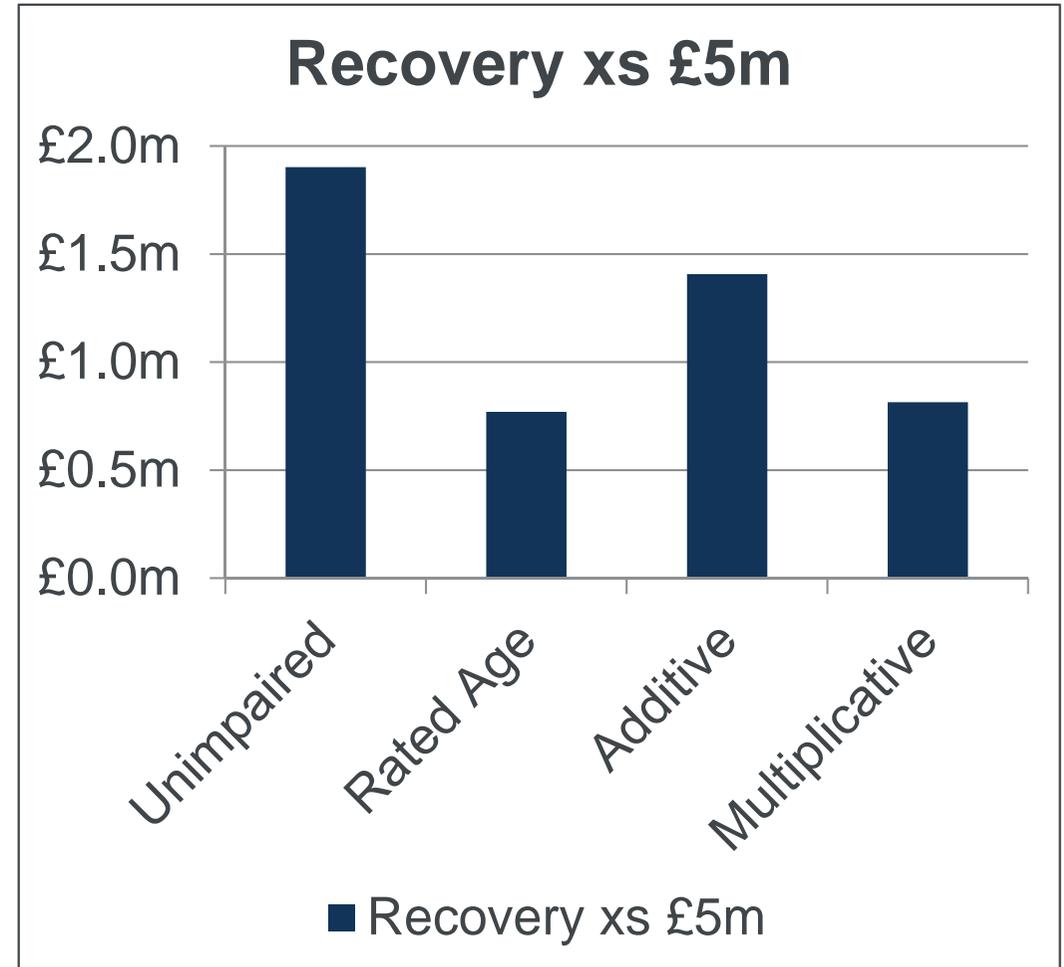
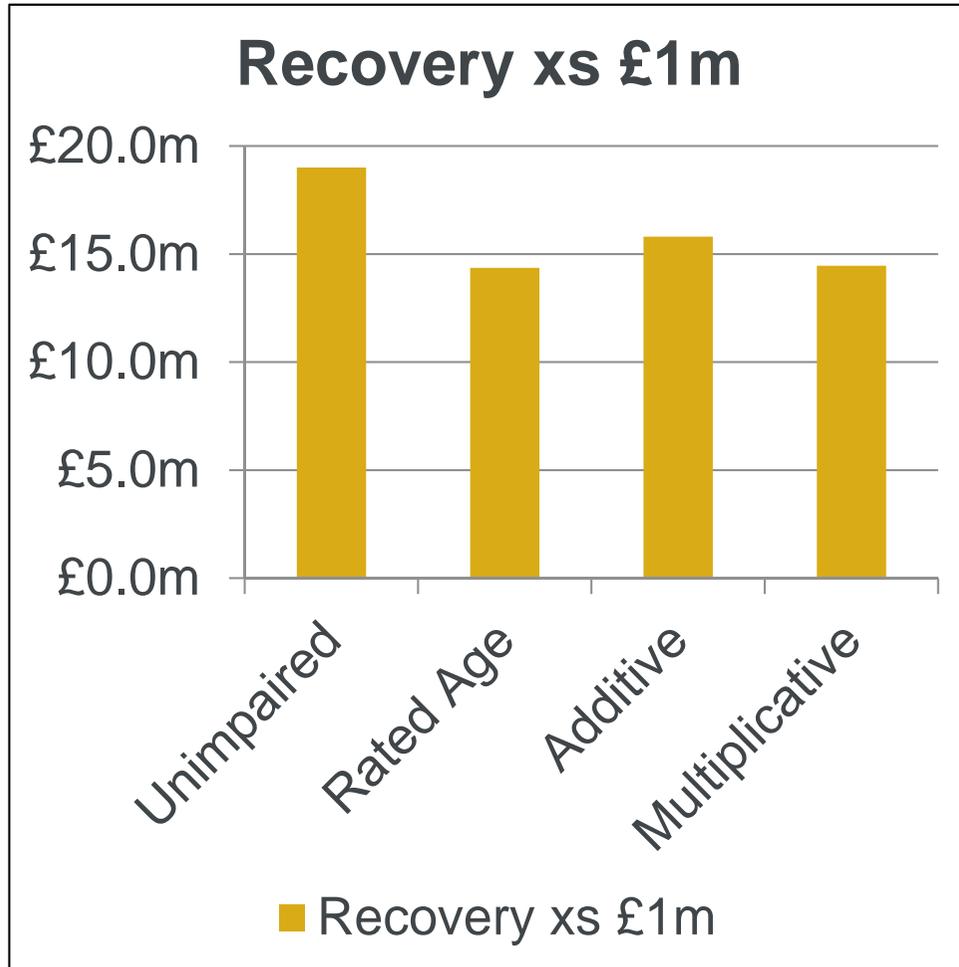
- For whole-of-life cash flow approaches survival probabilities are required
 - Should consider impact of claimant's impairment on future life expectancy



- Adjustment options:
 - Rated Age
 - Additive adjustment
 - Multiplicative scaling

Impact of changing mortality assumptions

(all impairments imply same life expectancy)



Single typical PPO – 4% wage inflation assumption - undiscounted



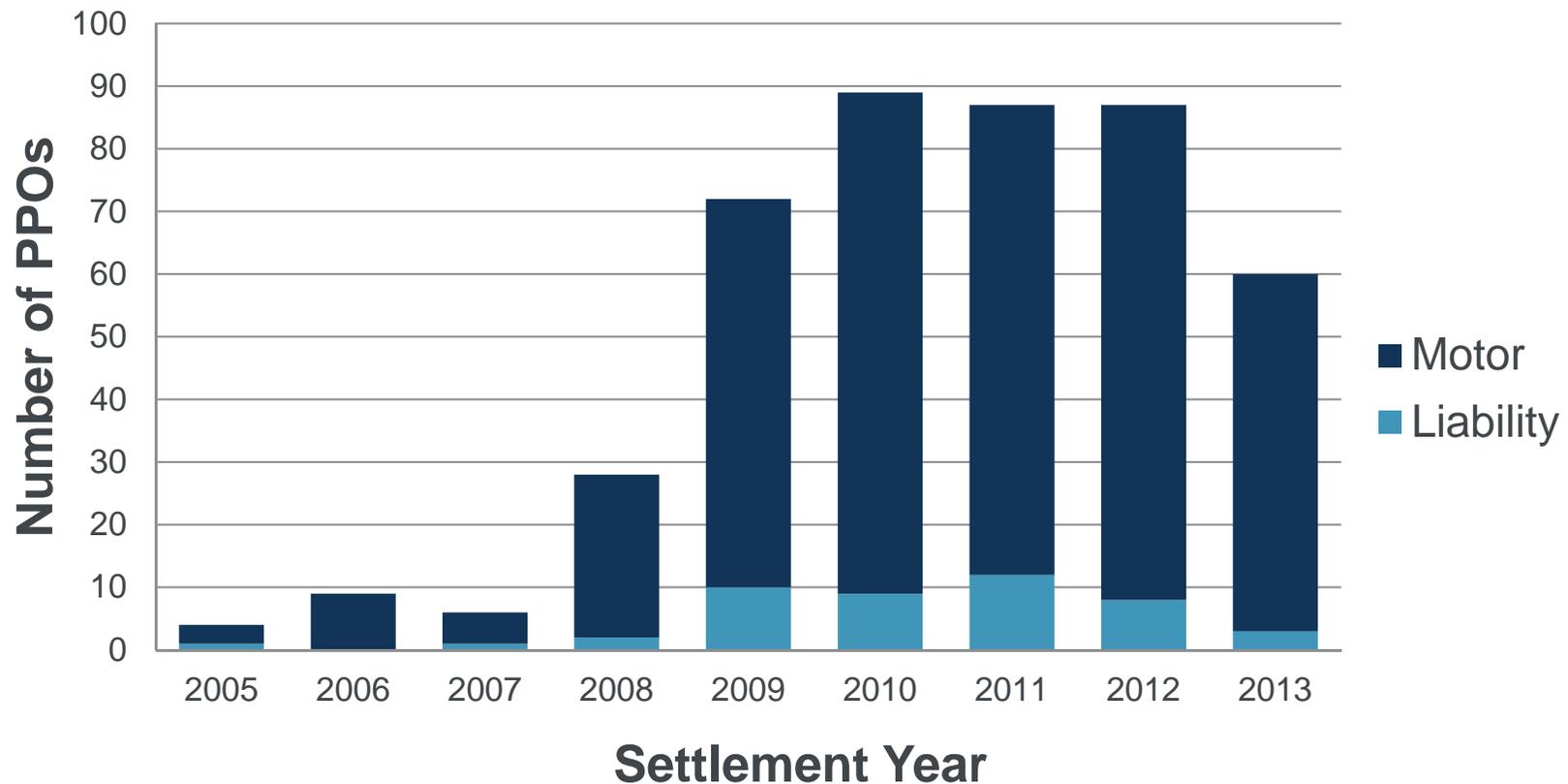
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PPO propensity outlook



Frequency of PPO settlements

Number of PPOs by Settlement Year



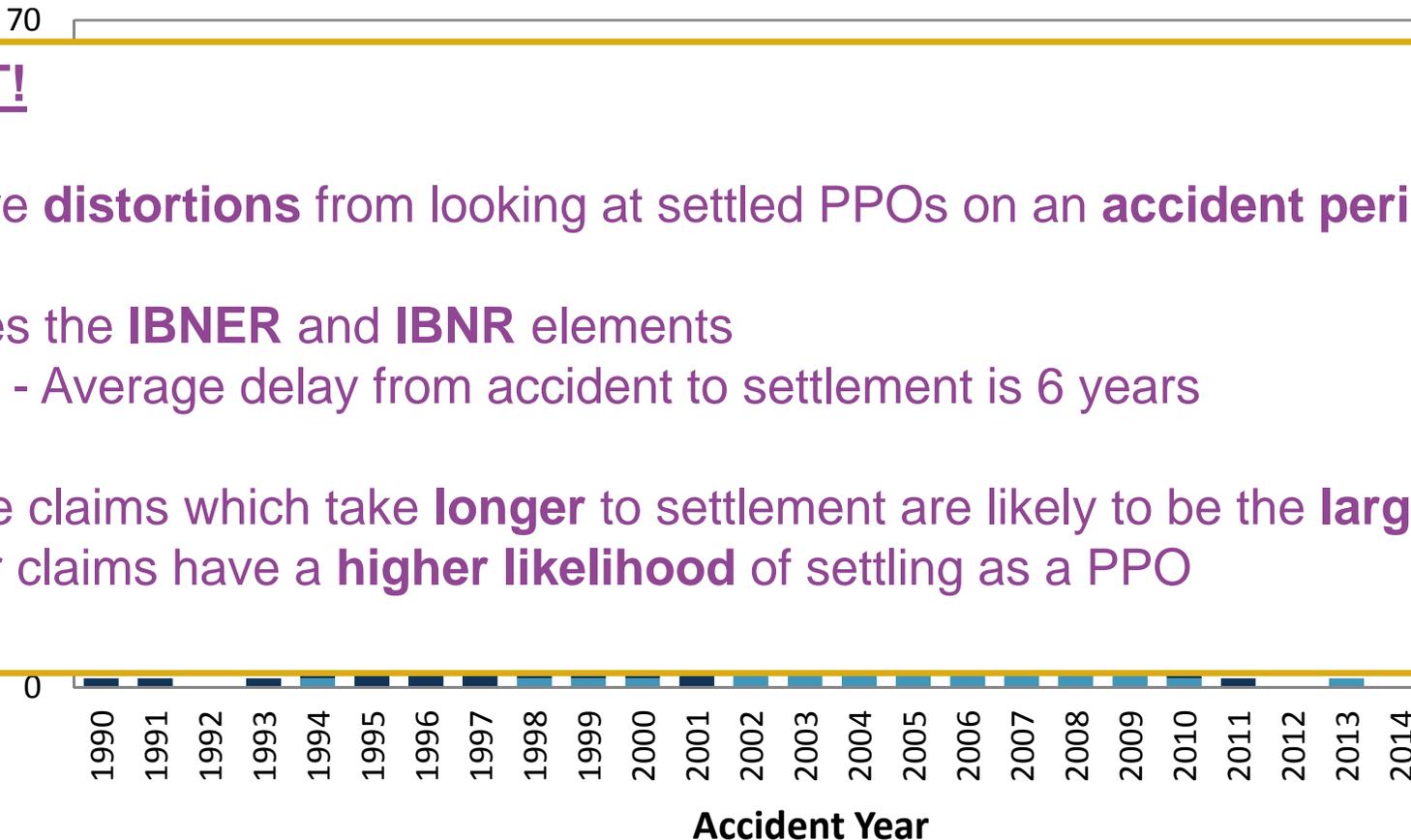
Frequency of PPOs by Accident Period

Number of PPOs by Accident Year

CAVEAT!

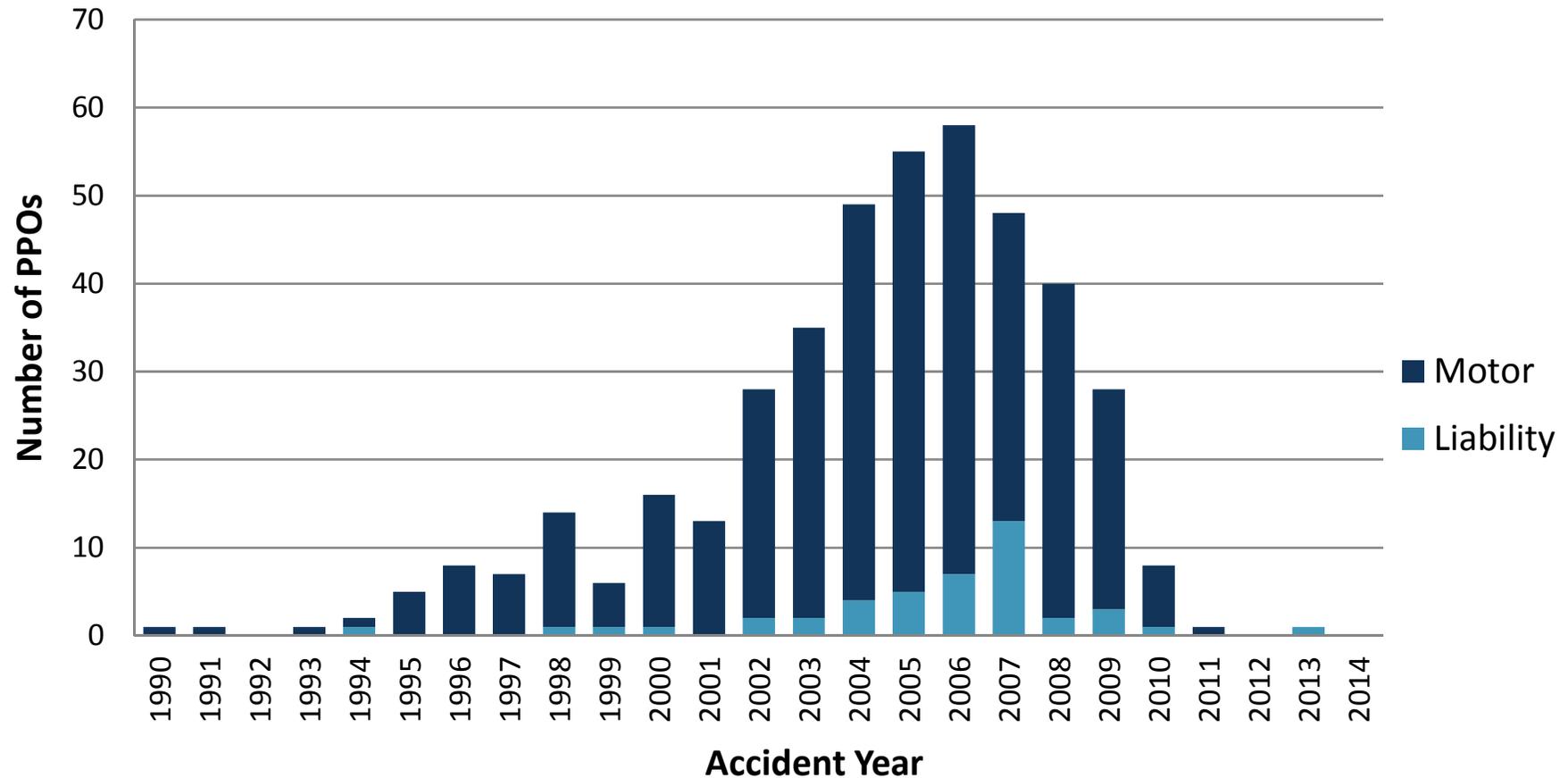
There are **distortions** from looking at settled PPOs on an **accident period** basis:

- Misses the **IBNER** and **IBNR** elements
 - Average delay from accident to settlement is 6 years
- Those claims which take **longer** to settlement are likely to be the **larger** claims, and larger claims have a **higher likelihood** of settling as a PPO



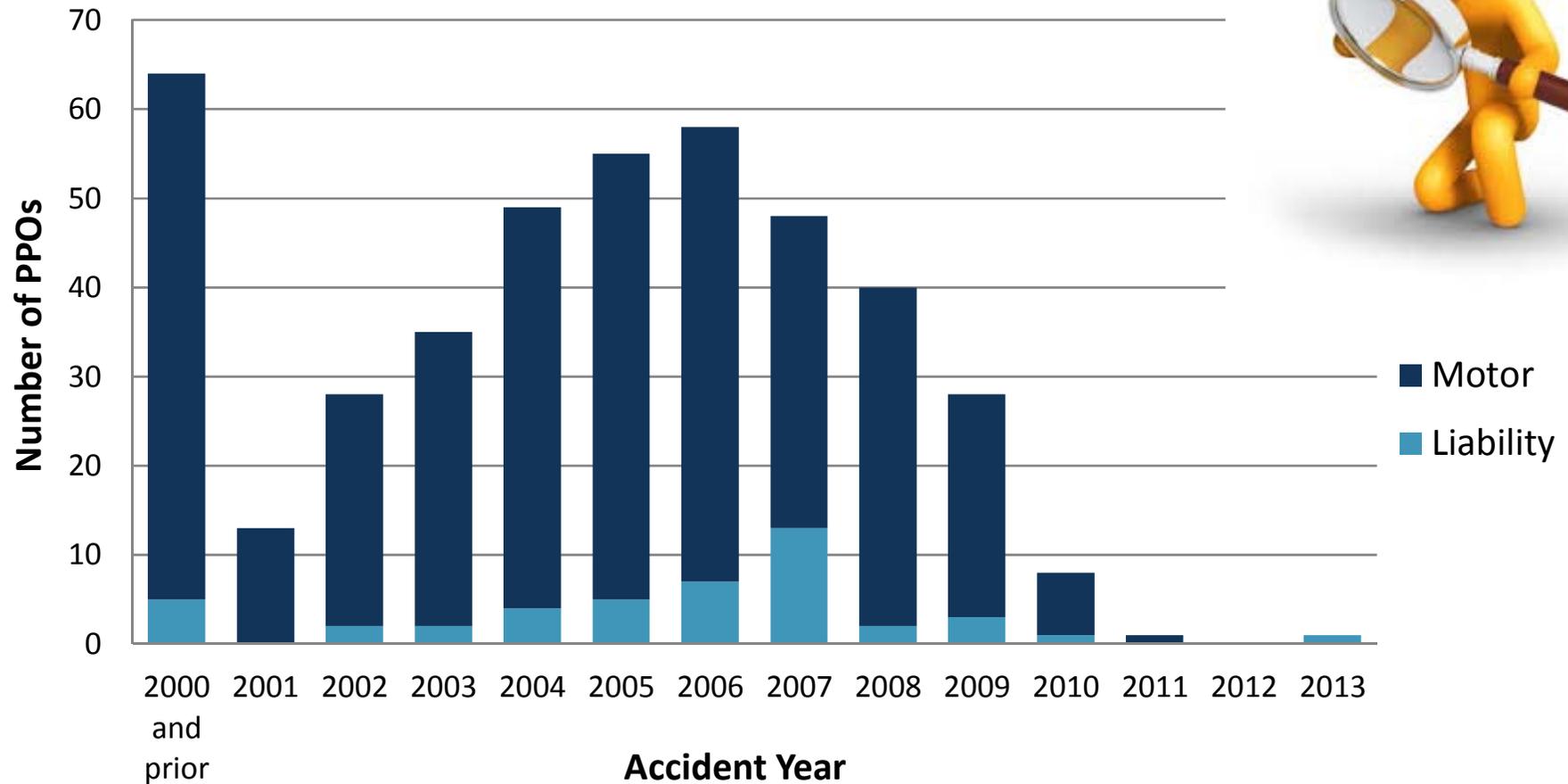
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Frequency of PPOs by Accident Period

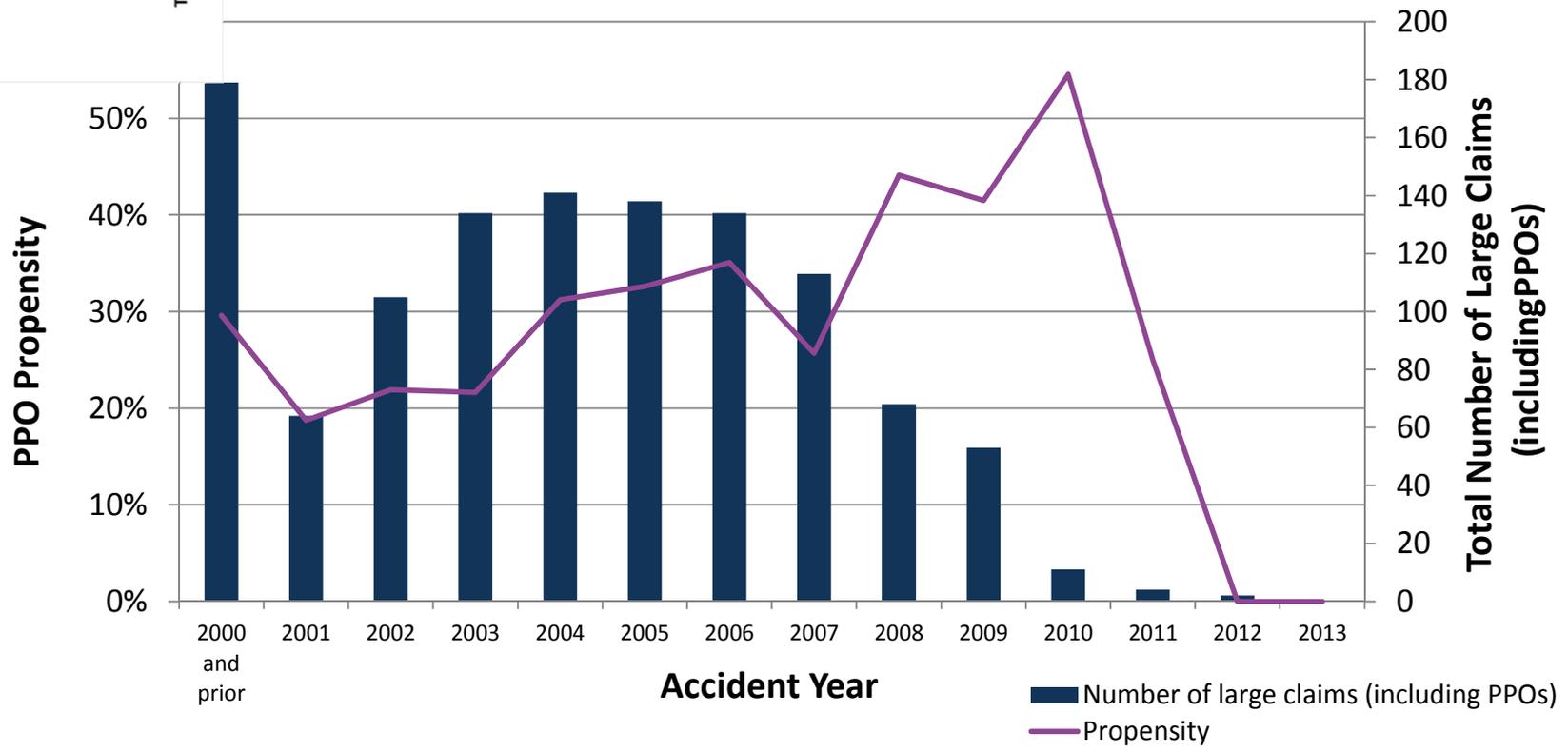
Number of PPOs by Accident Year



PPO Propensity by Accident Period

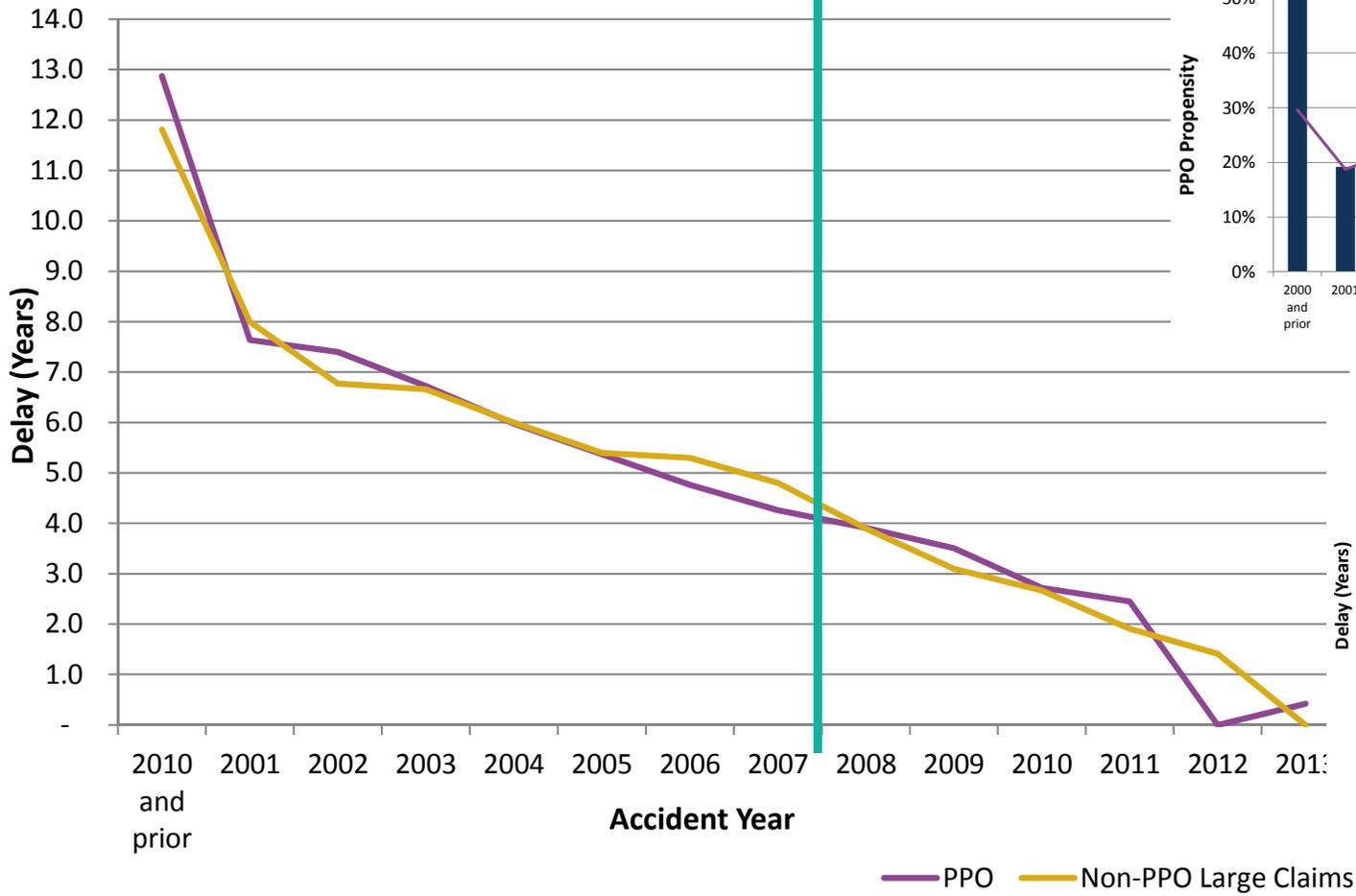


PPO Propensity of Large Claims by Accident Year - Motor

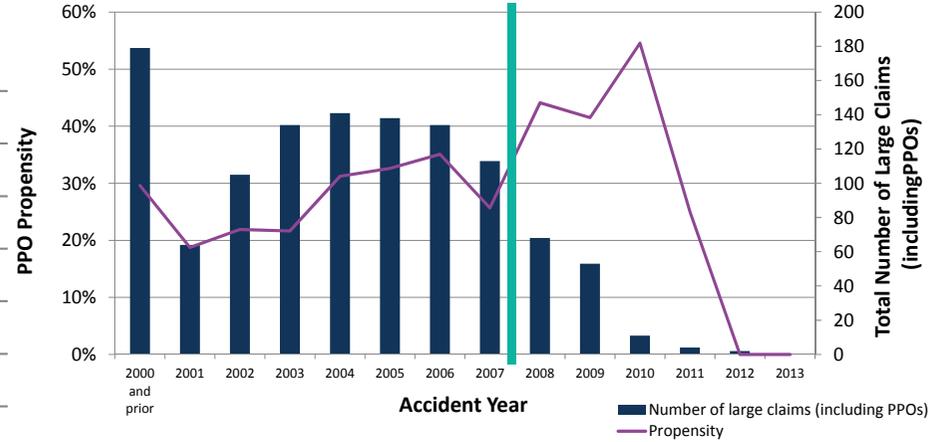


Delay to settlement

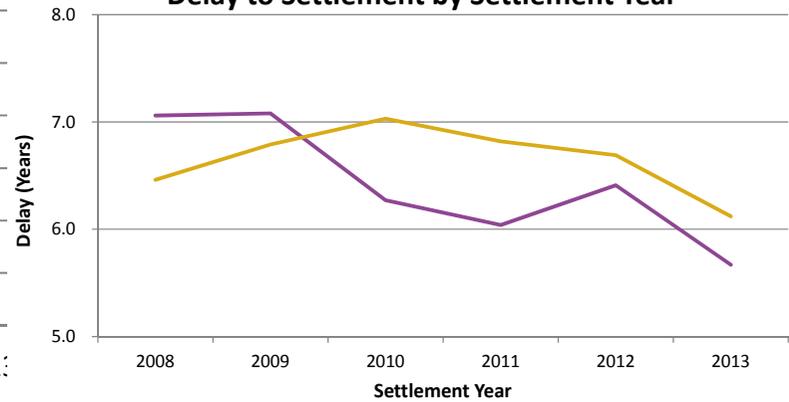
Delay to Settlement by Accident Year



PPO Propensity of Large Claims by Accident Year - Motor

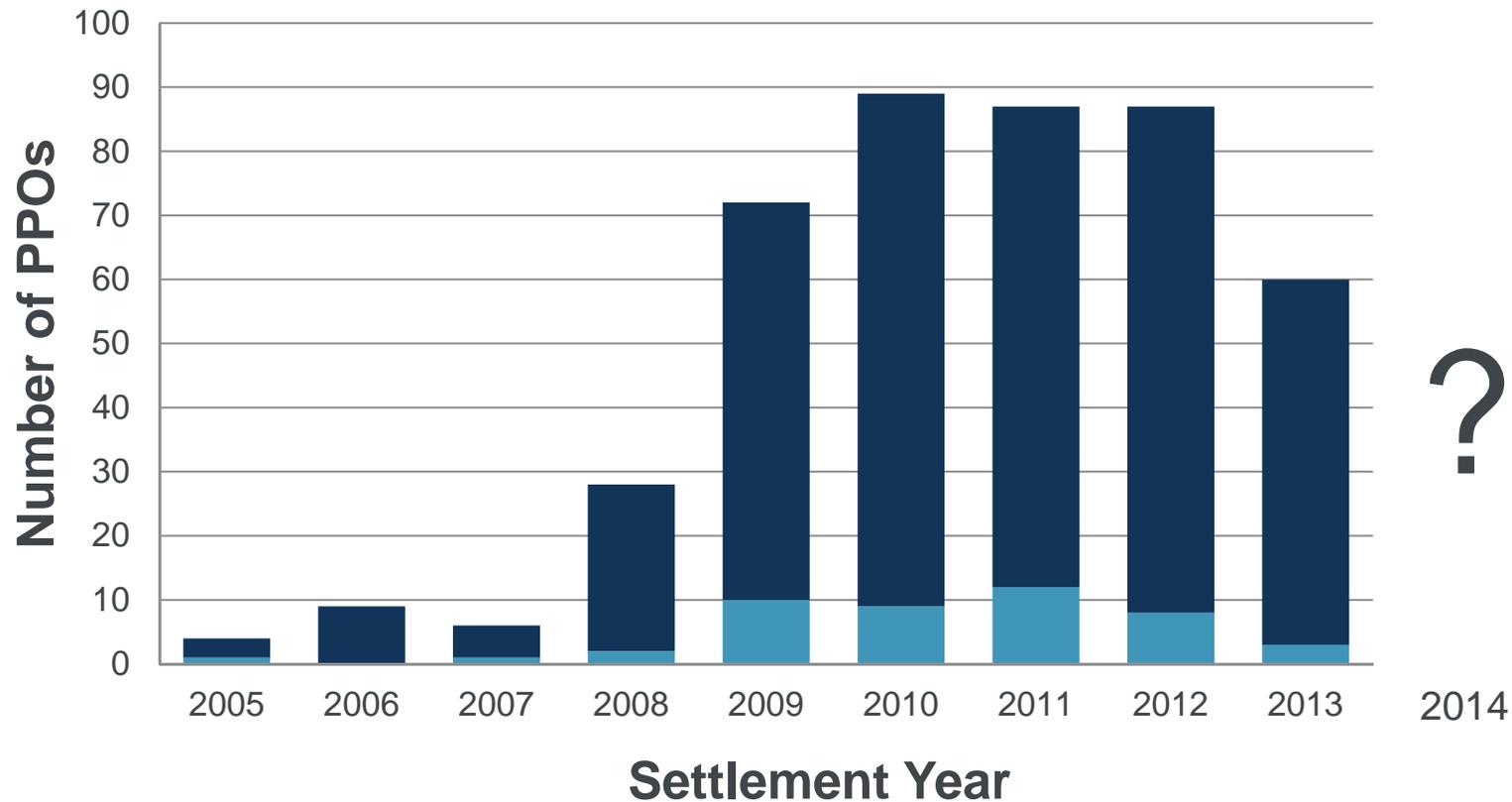


Delay to Settlement by Settlement Year



Recent trends in PPO Propensity

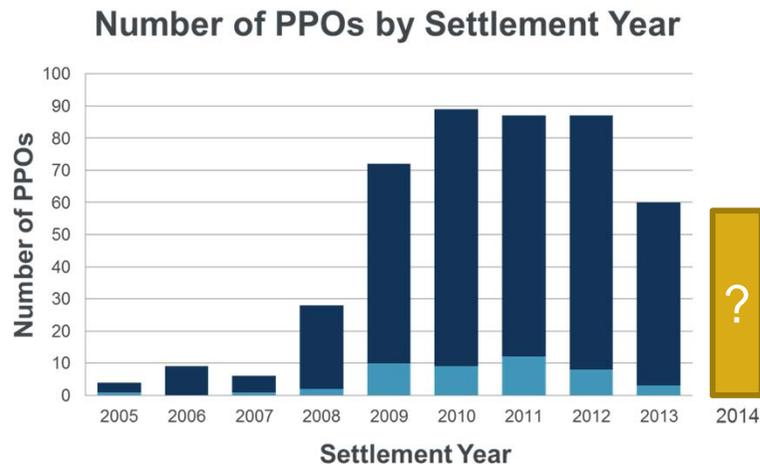
Number of PPOs by Settlement Year



- Number of PPO settlements 32% lower in 2013 compared to 2012

Current trends in PPO propensity

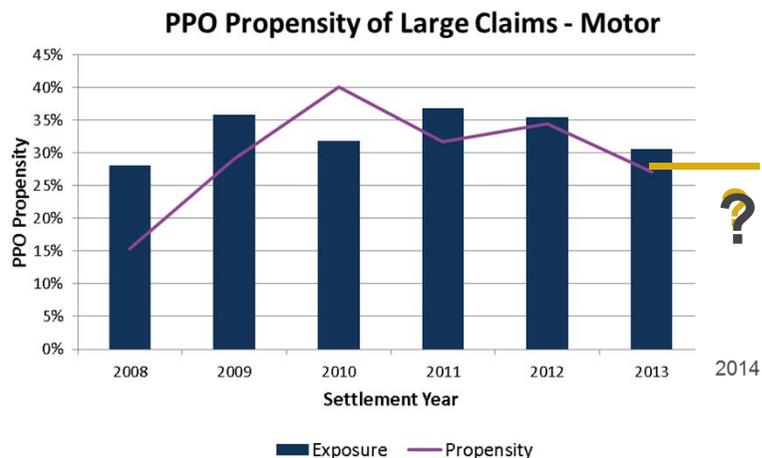
- Still collecting data, but starting to get indication of 2014 level.



Over the halfway point and it appears as if...

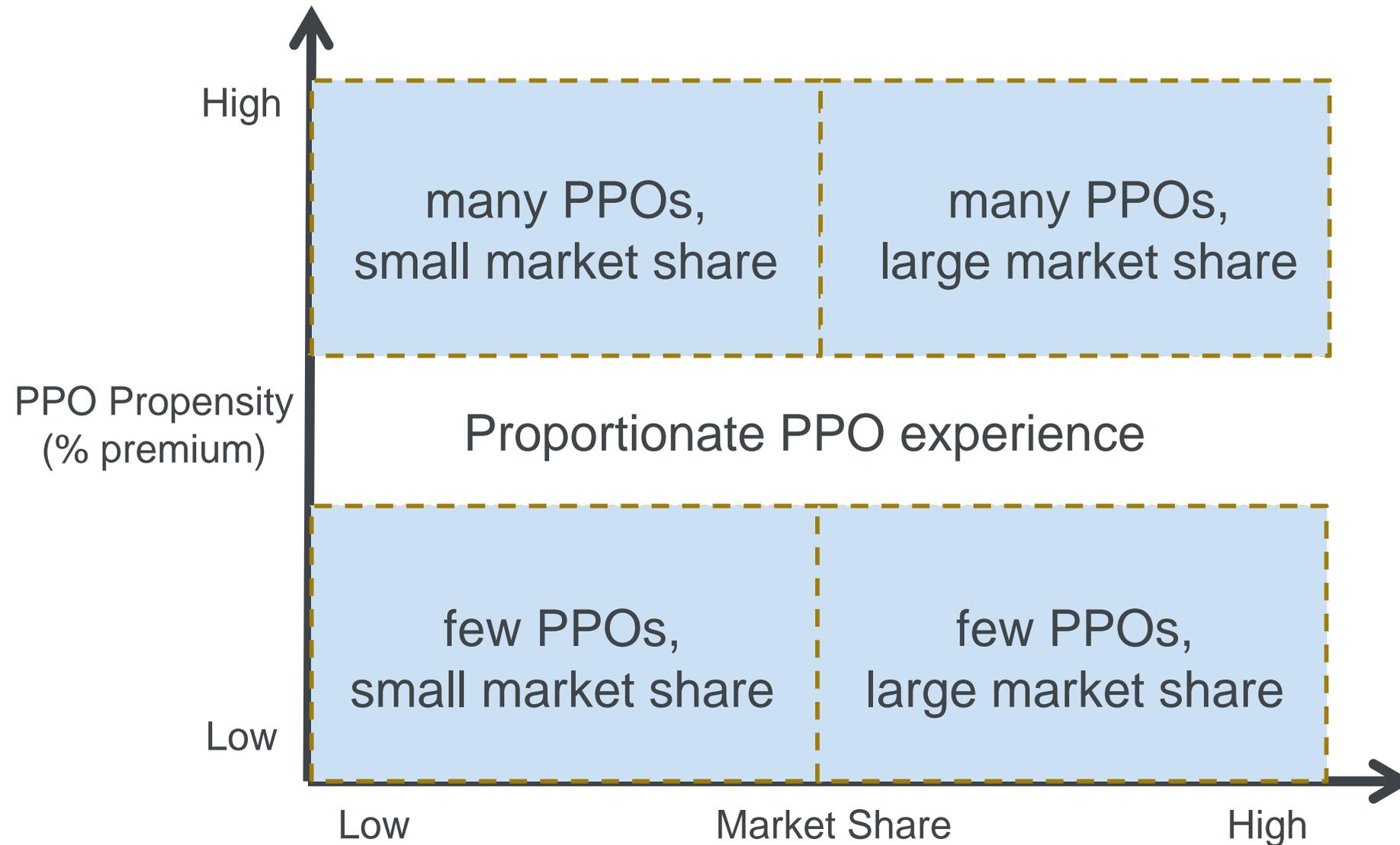
... the 2014 settlement year will...

...exhibit a **similar propensity** to 2013.



- Results will be confirmed at GIRO
- Caveat: PPO propensity may be different for remainder of contributors.

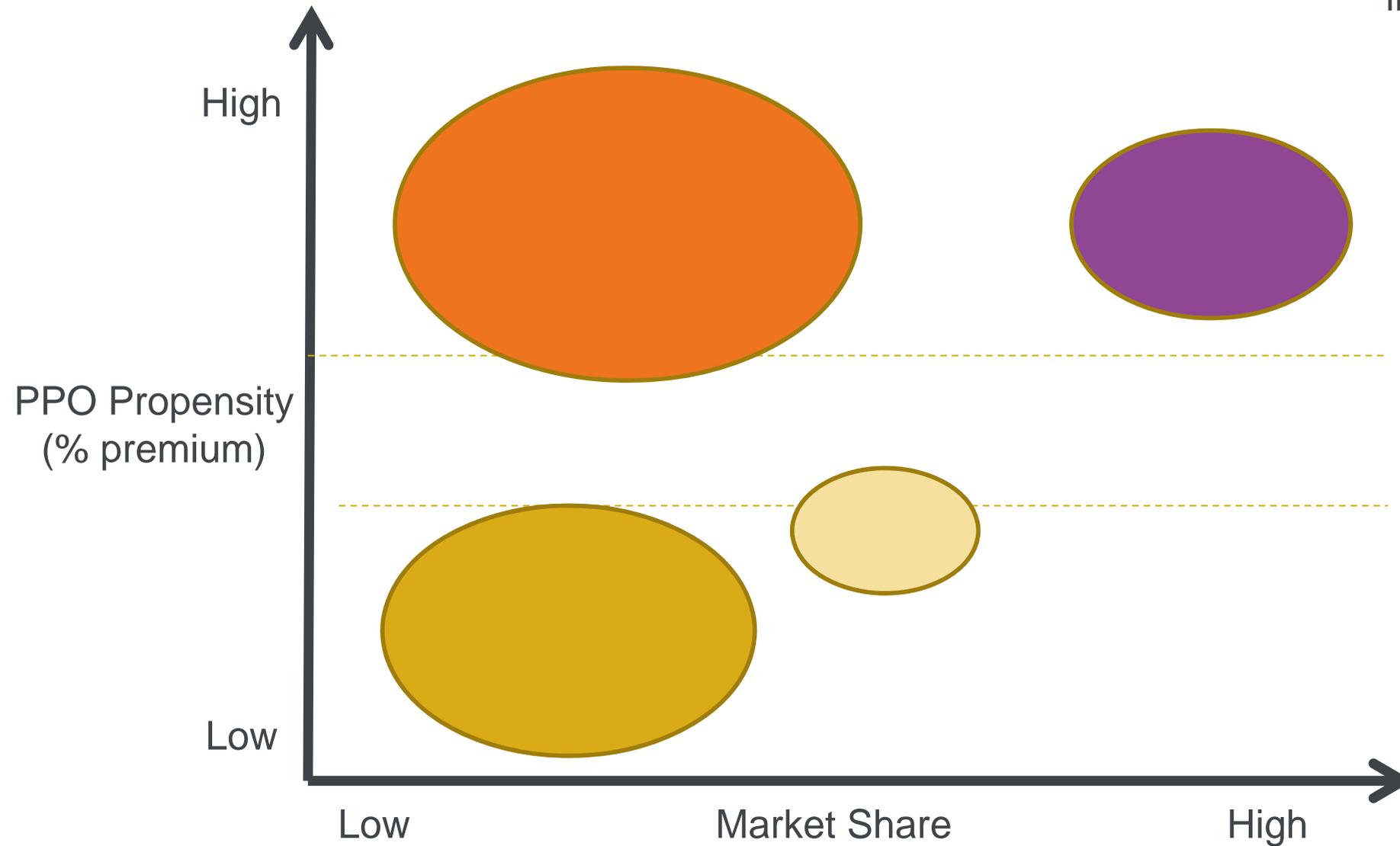
Propensity vs Market share



Propensity vs Market share

PPOWP
2014 Survey

* Indicative
diagram





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Introduction of Irish PPOs





PPOs in Ireland

- Possible will be introduced into Ireland **by the end of this year**
 - in the Civil Liability (Amendment) Act 2015
 - dependent on elections
- **Irish Harmonised Index of Consumer Prices (HCIP)**
 - published by the Central Statistics Office (CSO)
- The appropriateness of this **indexation rate will be reviewed**
 - **within the first 5 years** introduction of the Act and
 - **every subsequent 5 years**
 - Adequately measures changes in costs - additional uplift for additional wage growth required?
 - Decision will be made by the Minister and the Minister of Finance
 - **Changes to the index rate applied annually will be prospective** and made for the next 5 years
- Awarded for: Medical treatment, Future care or Assistive technology/aids
 - Loss of earnings only included following agreement of the defendant and plaintiff
- The limits of the Insurance Compensation Fund do not apply to PPOs



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Conclusions



Conclusions

- **PPO Reserving Methodology**

- It is vital to know what is in your large claims triangles in respect to PPOs
- Mortality method has significant impact on reserves

- **Propensity**

- Carefully consider results on accident period basis
- 2014 Propensity revealed at GIRO but appears to have sustained lower level

- **Irish PPOs**

- Looking to be introduced 2015Q4 or 2016Q1
- Indexation different to UK PPOs

- *Look out for the information paper, latest survey reports and get involved by helping categorise injuries in a standard way soon*



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.



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Questions

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