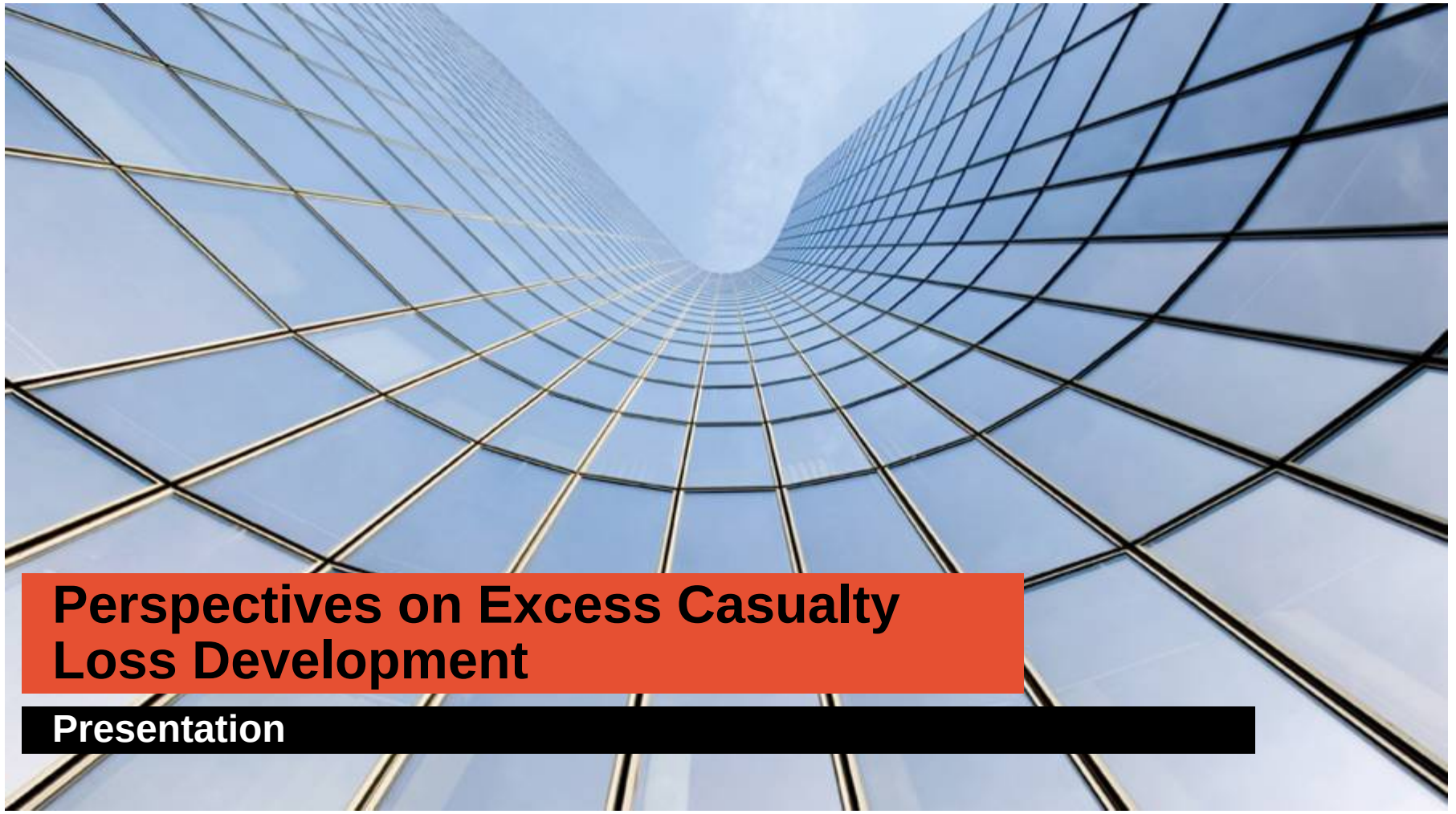


Perspectives on Excess Casualty Loss Development

Presentation

A presentation to CAMAR
by Michael Christian FCAS, MAAA

May 29, 2014

TOWERS WATSON

Summary of Contents

- RAA Historical Loss Development
  - Intent of Study
  - Towers Watson Roles
  - Data Call – 2012 Study
  - Limitations / Considerations
- RAA Studies
  - Overview of RAA Studies
  - Retrospective Look
  - Additions / Changes / Issues over the Years
  - RAA Reported % for Last 6 Studies
- Towers Watson RAA Selections
  - Process
  - TW Medium Curve Reported % for Last 4 Studies

Intent of Study

- Intent of Reinsurance Association of America (RAA) Historical Loss Development Study is to reinforce awareness of historical loss development patterns:
  - For reinsurance companies writing excess business
  - For primary companies writing high deductible, umbrella or excess insurance

Towers Watson Roles

- Drafting of data call and questionnaire
- Data accumulation – data sent directly to us and accumulated after checking for unusual data points (outliers, negative numbers, etc…)
- Mechanical calculations of graphs and charts (no development beyond last point for the total patterns)
- Write-up of findings
- Discussions with RAA sub-committee throughout the process and with the full RAA committee at the beginning and end of the process
- Any comments during this presentation, while founded in the study, are my opinions and not those of the RAA

Data Call – 2012 Study

- Incurred loss and allocated loss adjustment expense (ALAE) for all 17 of the participants; paid loss and ALAE for 16 of the 17 participants
- Segmentation – treaty, automatic facultative, individual risk facultative and indivisible (combined data that is not split)
- Data includes additional case reserves (ACRs) for 15 of the 17 participants
- Data excludes incurred but not reported (IBNR)
- Many of the participants report their losses gross of retrocessions and gross of aggregate deductibles
- Most participants are able to exclude assumed and ceded loss portfolio transfers and commutations
- Data is supplied on accident year (AY) basis

Limitations / Considerations

- Volume of data in a particular accident year can be small
- Number of participants in a particular accident year can be small
- Retentions vary considerably from cedant to cedant, and vary over time within a single cedant
- Excess loss development may not be uniform in all geographic markets (diverse population, differing legal climates, etc…)
- Underwriting rules differ amongst reporting groups
- Discounting practices differ amongst reporting groups
- Case reserving practices (including ACRs) differ amongst reporting groups

Overview of RAA Studies

- RAA Historical Loss Development Study has been published every other year from 1969 to 2009; the current study was published in 2012 (skipping 2011)
- Each study stands on it's own; it is not an update of the prior study
  - Participants come and go
  - Individual participant's data changes from one study to the next:
    - Commutations
    - Line of business (LOB) re-classification
    - Type of business (Excess, ProRata, Facultative) re-classification
- Users of the studies are encouraged to construct reporting and payment patterns based on their interpretations of the data

Retrospective Look

- For this presentation, I have looked at 10 studies: 1971, 1977, 1987, 1997, 2001, 2003, 2005, 2007, 2009 and 2012

Additions / Changes / Issues Over the Years

- 1971 study (5 pages)
  - AY 1956 through AY 1970
  - 4 companies – American Re, Employers Re, General Re and North American Re
  - Auto Liability (AL), General Liability (GL) and Workers Compensation (WC) triangles only
- 1977 study
  - AY 1956 through AY 1976
  - Same 4 companies and 3 LOBs
  - Graph is added
- 1987 study
  - 29 participants
  - Medical Malpractice (MM) added

Additions / Changes / Issues Over the Years (continued)

- 1993 Study
  - Ranges added
- 2001 study
  - 27 participants
  - 2 sets of GL triangles shown. 4 companies out of 11 that contributed data beyond the 25 year evaluation were excluded from one set of triangles because their data contained significantly larger development beyond 25 years than the data submitted by the other 7 such companies. The 4 companies indicated that a significant but unidentifiable portion of the larger development is due to mass tort claims.
- 2005 study
  - 21 participants
  - Paid losses now shown
  - Personal Injury Protection (PIP) effect shown – limited and unlimited
  - General Liability Occurrence and Claims Made report to report factors are shown

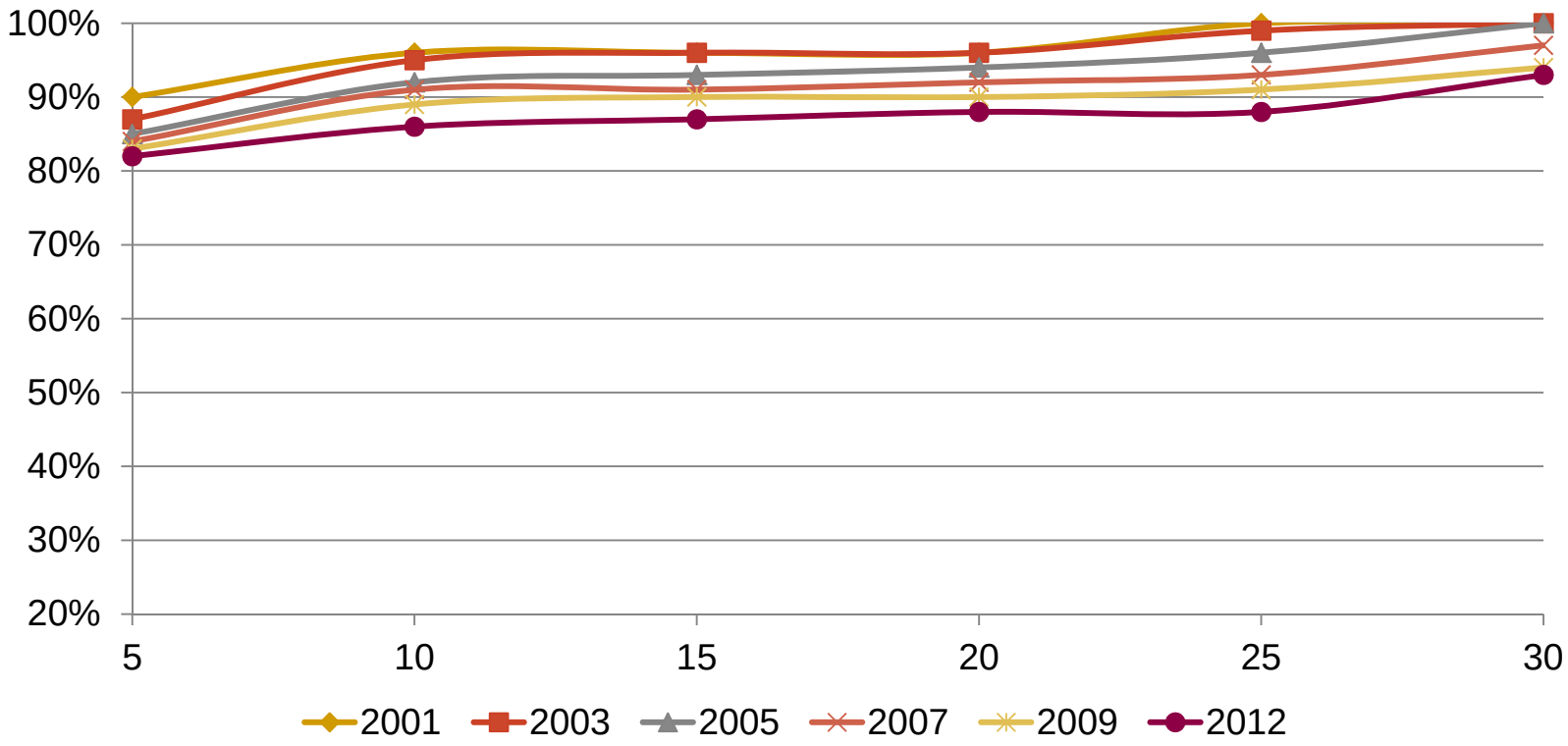
Additions / Changes / Issues Over the Years (continued)

- 2007 Study
  - Number of reporting groups submitting data for a particular LOB and AY are shown
  - Calendar year 1996 diagonal not shown for WC
  - Paid to incurred ratios included for AL, GL and WC
  - 21 participants
  - Charts added
- 2009 Study
  - For AL, MM and WC a number of accident years were excluded
  - MM reporting pattern significantly faster so RAA included 2007 factors also

Additions / Changes / Issues Over the Years (continued)

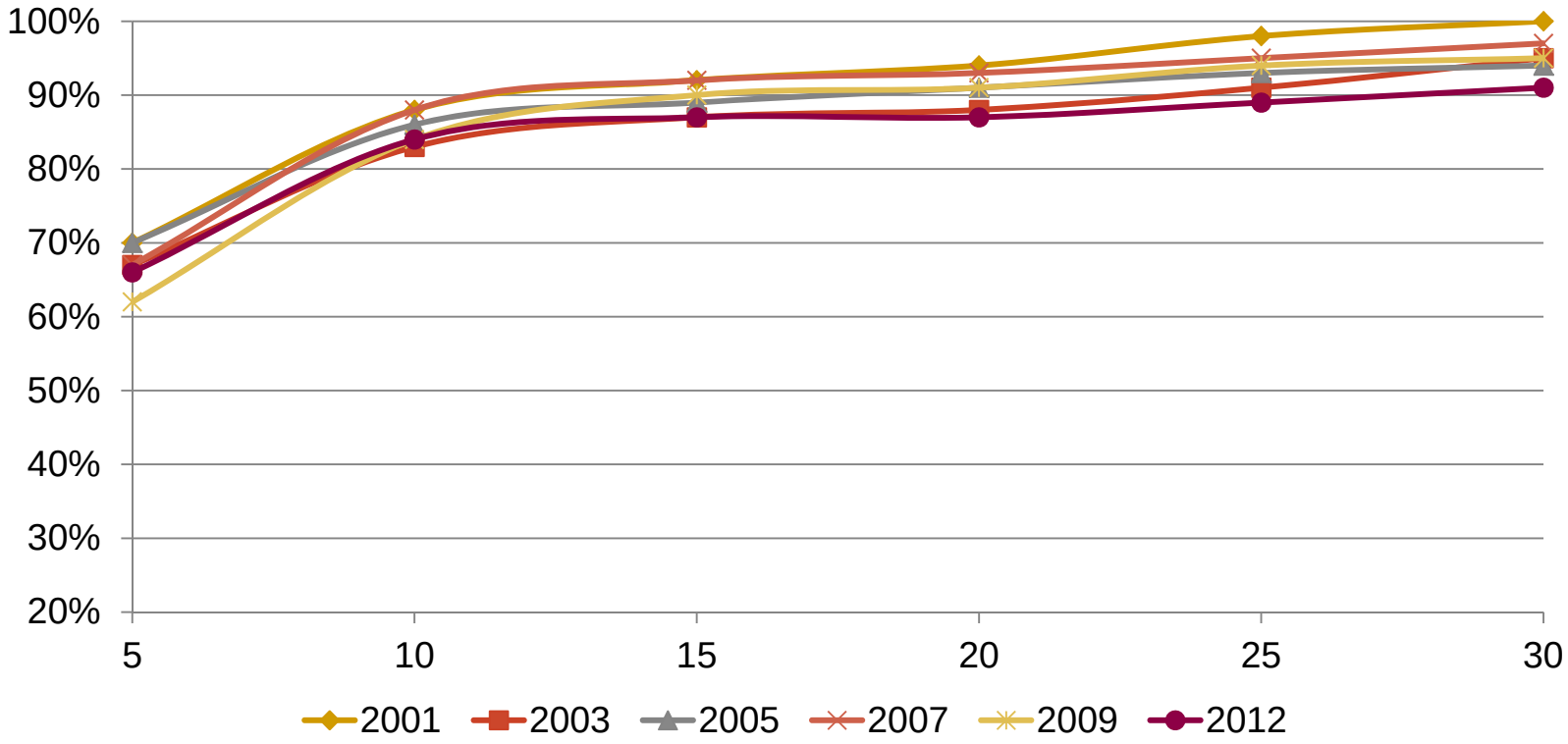
- 2012 Study
  - Study delay
  - Pro-ration of data
    - No one contributor can dominate the data in any one cell. Originally, because of this criterion, most of the attachment point ranges were not to be shown. In order to show more attachment point ranges it was decided that the data for the dominating company for any one range would be reduced to a level that the attachment point data could be shown.
  - WC reporting patterns significantly faster
  - MM reporting patterns significantly slower now that number of accident years were added back in

RAA Automobile Liability (Unlimited PIP) Reported %'s



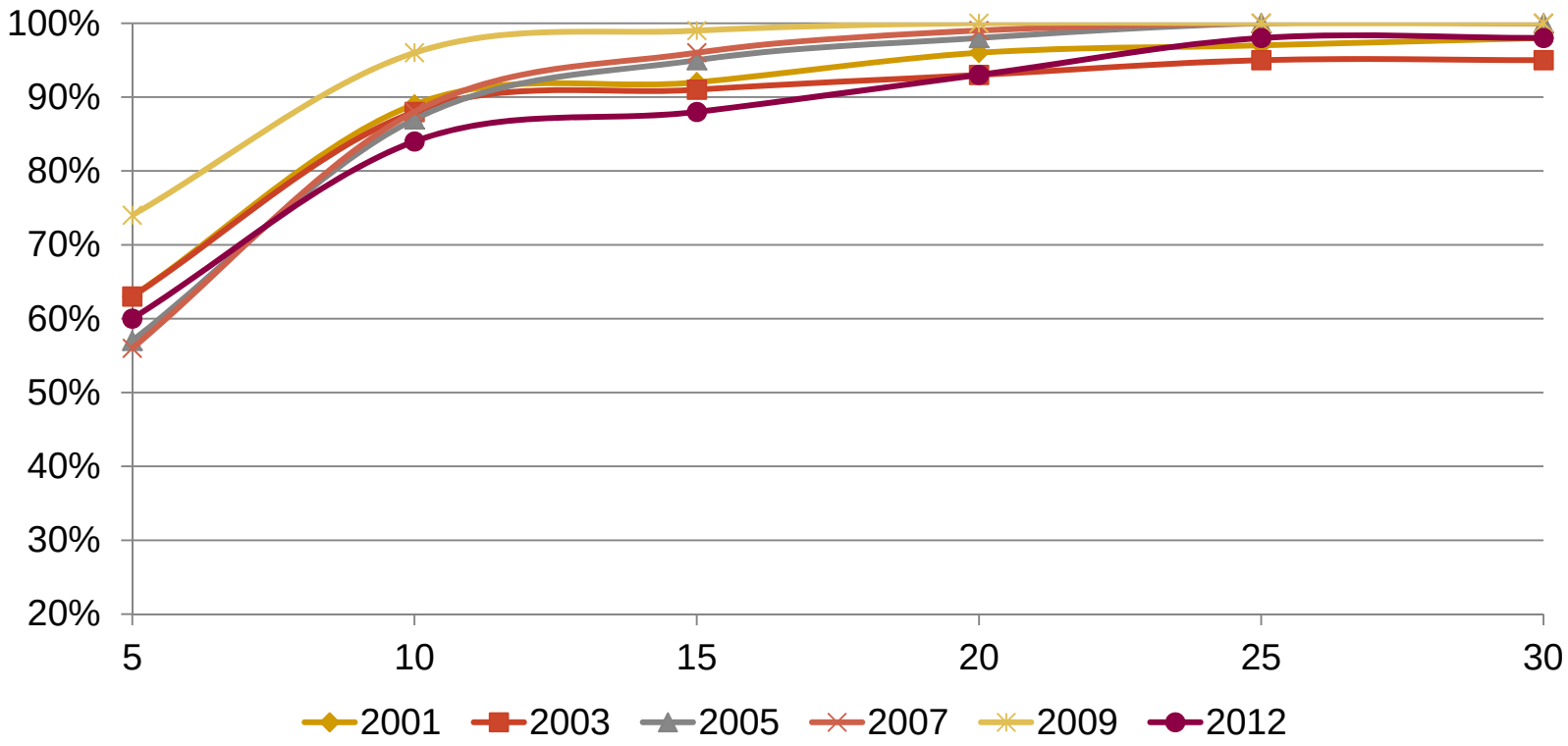
	Development Age (Years)					
Study Year	5	10	15	20	25	30
2001	90%	96%	96%	96%	100%	100%
2003	87%	95%	96%	96%	99%	100%
2005	85%	92%	93%	94%	96%	100%
2007	84%	91%	91%	92%	93%	97%
2009	83%	89%	90%	90%	91%	94%
2012	82%	86%	87%	88%	88%	93%

RAA General Liability Reported %'s



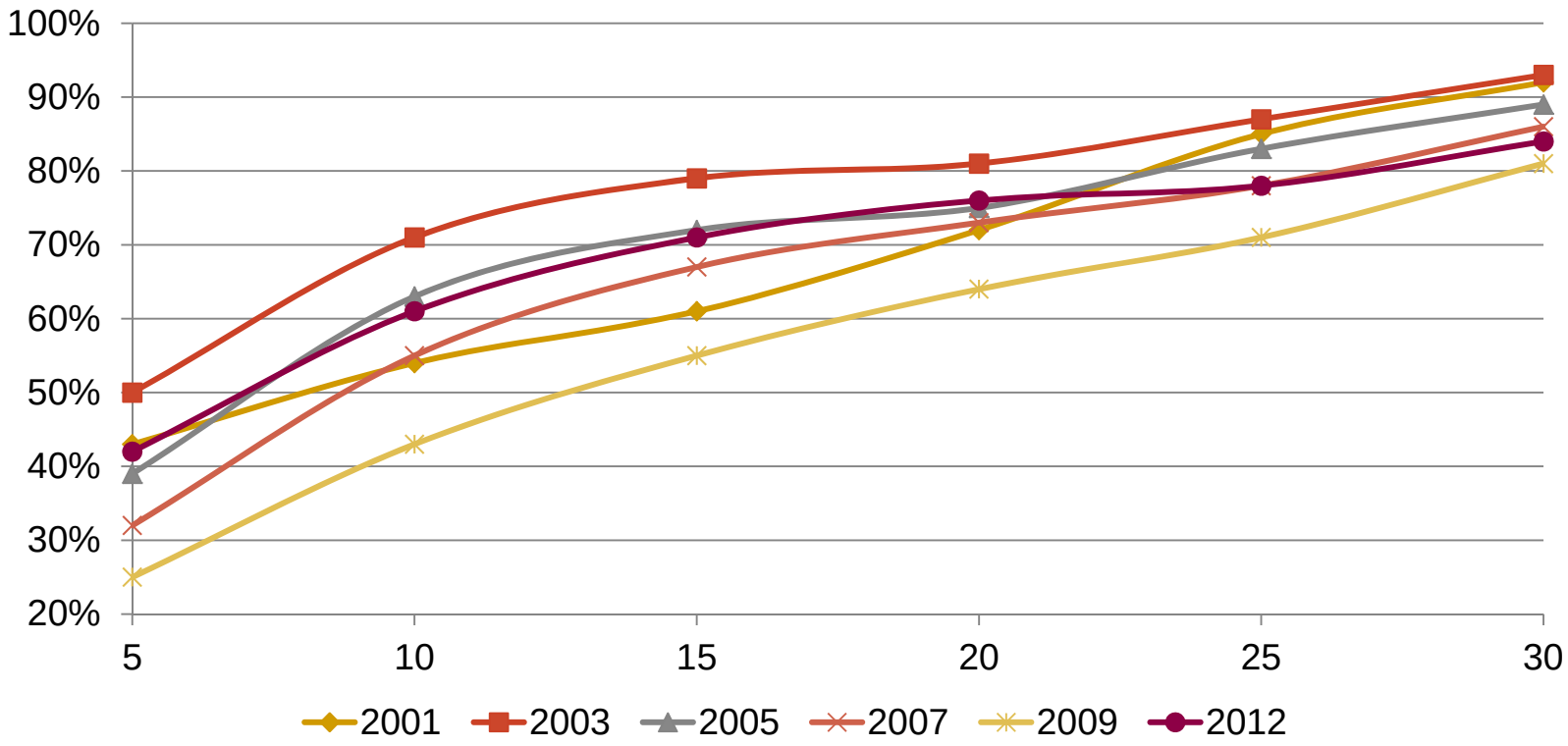
	Development Age (Years)					
Study Year	5	10	15	20	25	30
2001	70%	88%	92%	94%	98%	100%
2003	67%	83%	87%	88%	91%	95%
2005	70%	86%	89%	91%	93%	94%
2007	67%	88%	92%	93%	95%	97%
2009	62%	84%	90%	91%	94%	95%
2012	66%	84%	87%	87%	89%	91%

RAA Medical Malpractice Reported %'s



	Development Age (Years)					
Study Year	5	10	15	20	25	30
2001	63%	89%	92%	96%	97%	98%
2003	63%	88%	91%	93%	95%	95%
2005	57%	87%	95%	98%	100%	100%
2007	56%	88%	96%	99%	100%	100%
2009	74%	96%	99%	100%	100%	100%
2012	60%	84%	88%	93%	98%	98%

RAA Workers Compensation Reported %'s

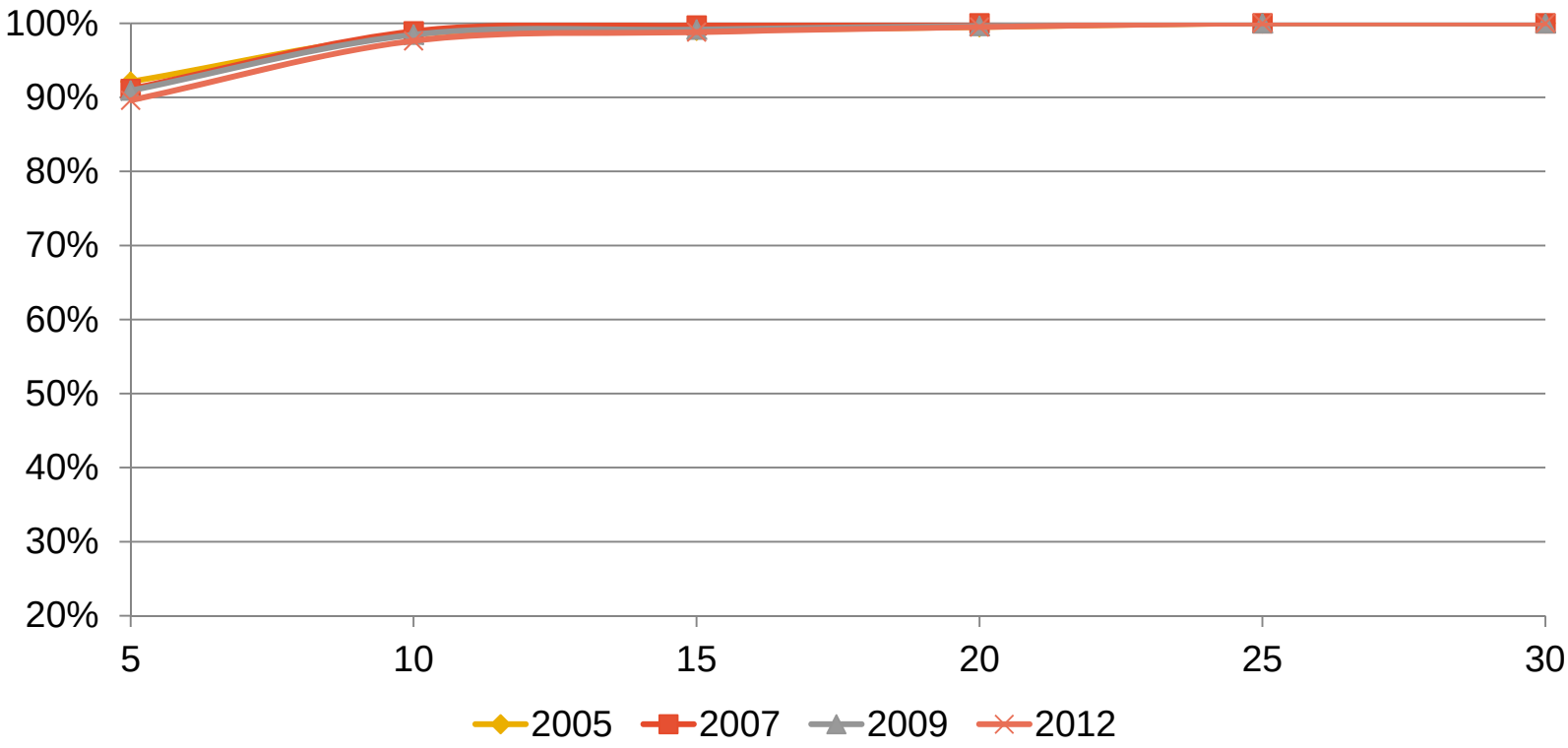


	Development Age (Years)					
Study Year	5	10	15	20	25	30
2001	43%	54%	61%	72%	85%	92%
2003	50%	71%	79%	81%	87%	93%
2005	39%	63%	72%	75%	83%	89%
2007	32%	55%	67%	73%	78%	86%
2009	25%	43%	55%	64%	71%	81%
2012	42%	61%	71%	76%	78%	84%

Process

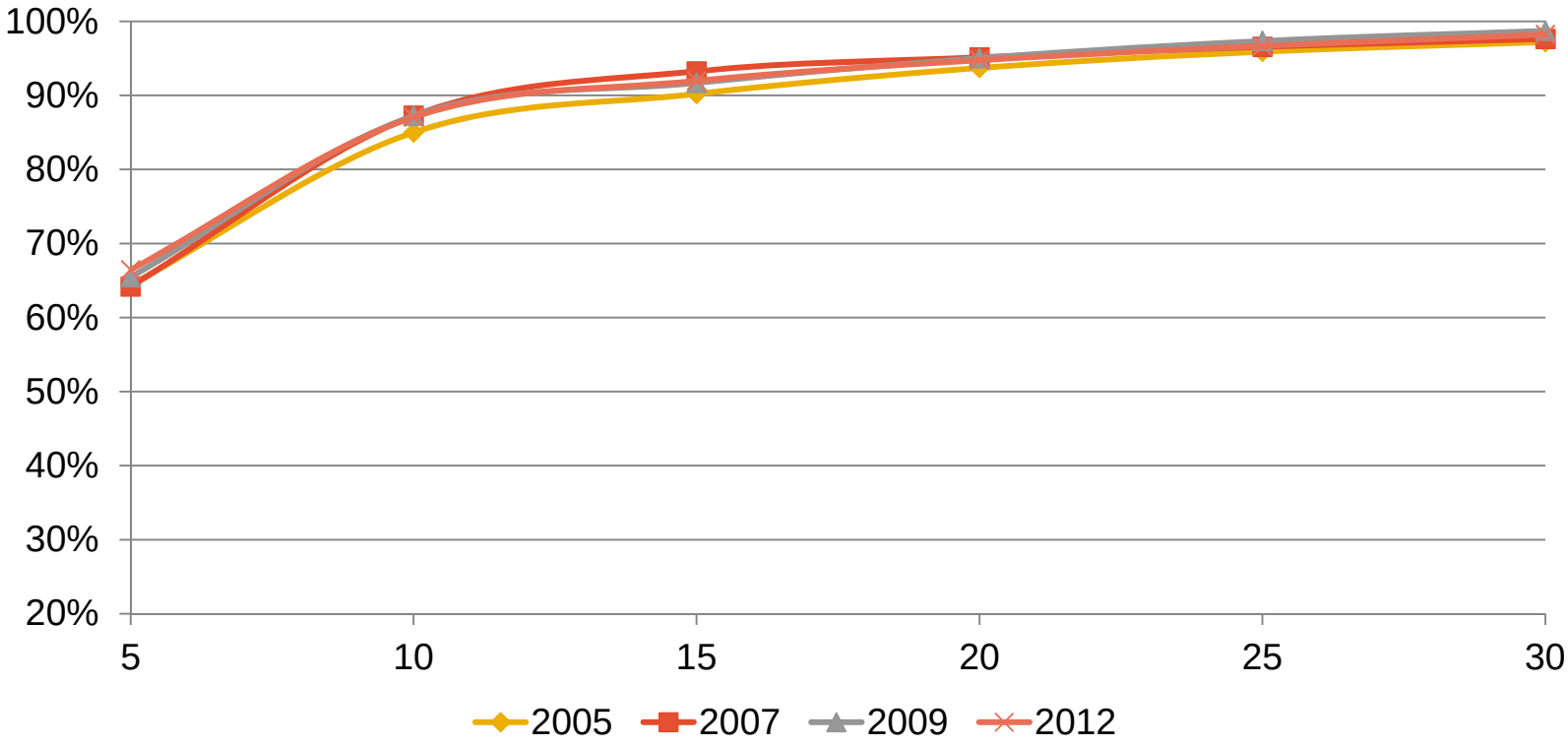
- We use the total treaty and facultative combined reported triangle as our medium reported curve due to the volume of data and number of years of experience
  - For our medium paid curve, we rely on paid to incurred ratios for tail factors
- Our fast and medium/fast curves are constructed by:
  - Using the observed development from attachment point ranges 1 and 2
  - Looking at the variation of report-to-report factors in the total treaty and facultative combined reported triangle
  - Assuming that the higher the attachment point, the slower the development
    - Clearly other factors also have an impact
- Once we have constructed the fast and medium/fast curves we can then develop the medium/slow and slow curves based on the relationship between the fast and medium/fast curves to the medium curve

TW Automobile Liability (Limited PIP) Medium Reported %'s



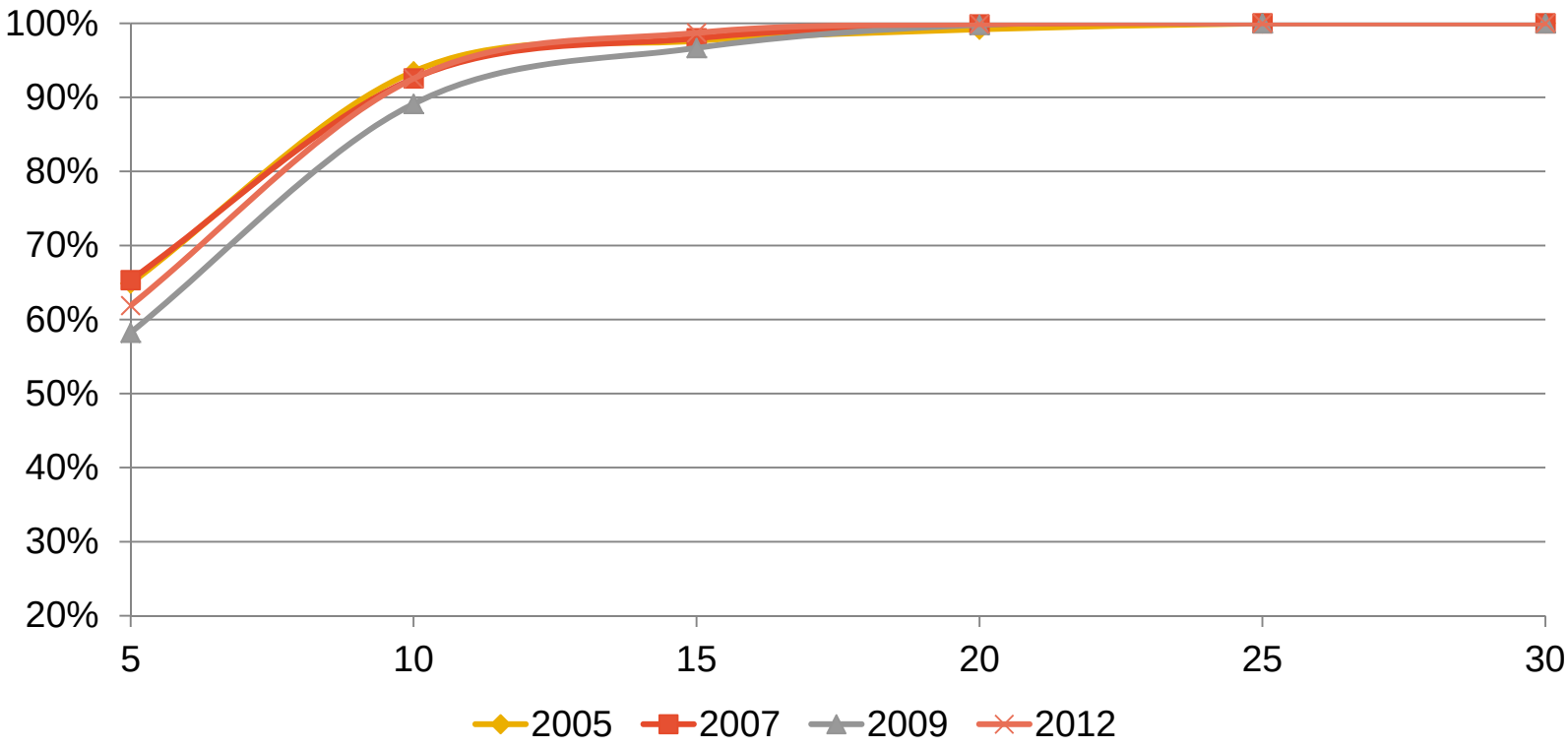
	Development Age (Years)					
Study Year	5	10	15	20	25	30
2005	92%	99%	99%	100%	100%	100%
2007	91%	99%	100%	100%	100%	100%
2009	91%	98%	99%	100%	100%	100%
2012	90%	98%	99%	100%	100%	100%

TW General Liability Medium Reported %'s



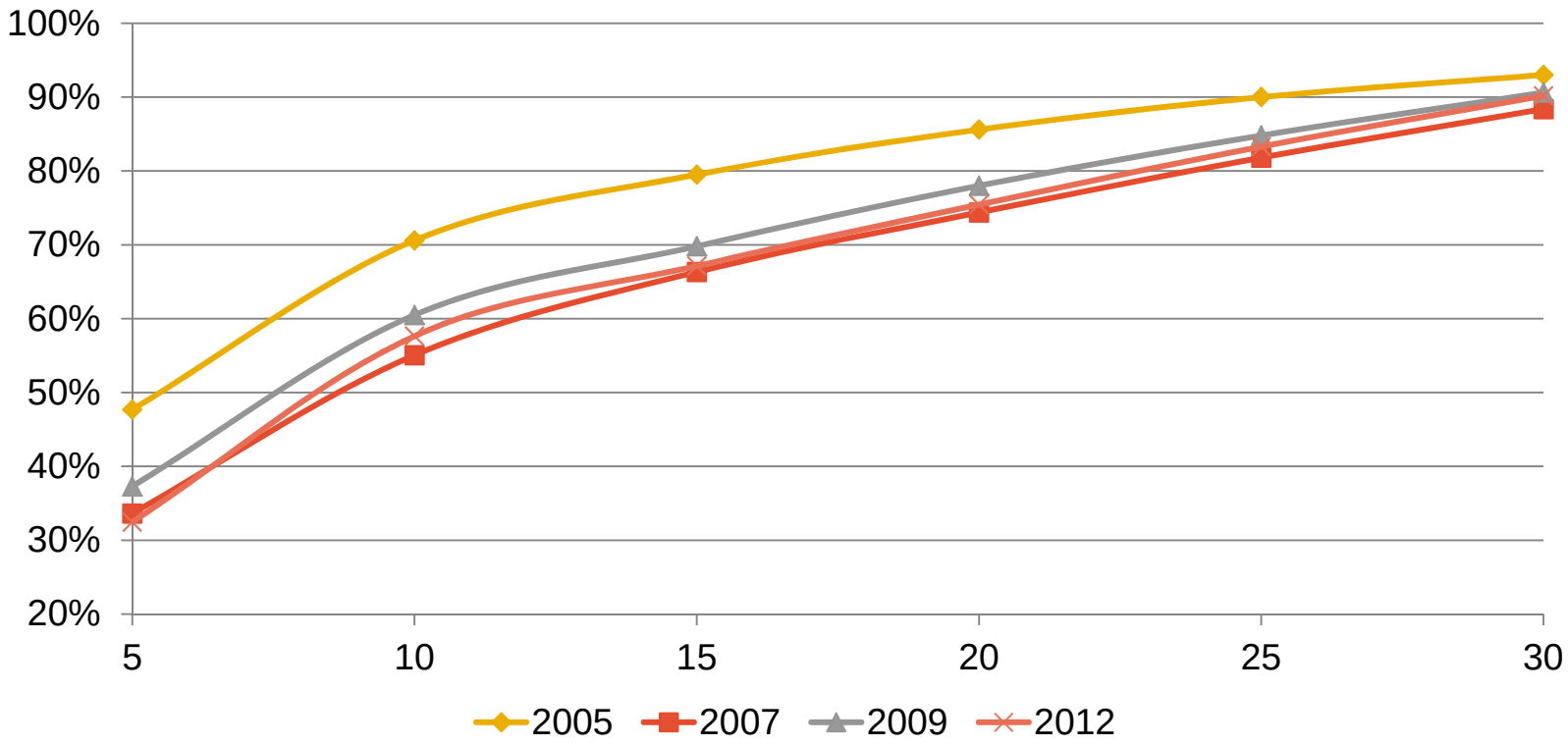
	Development Age (Years)					
Study Year	5	10	15	20	25	30
2005	64%	85%	90%	94%	96%	97%
2007	64%	87%	93%	95%	97%	98%
2009	65%	87%	92%	95%	97%	99%
2012	66%	87%	92%	95%	97%	98%

TW Medical Malpractice Medium Reported %'s



	Development Age (Years)					
Study Year	5	10	15	20	25	30
2005	65%	93%	98%	99%	100%	100%
2007	65%	93%	98%	100%	100%	100%
2009	58%	89%	97%	100%	100%	100%
2012	62%	93%	99%	100%	100%	100%

TW Workers Compensation Medium Reported %'s



	Development Age (Years)					
Study Year	5	10	15	20	25	30
2005	48%	71%	80%	86%	90%	93%
2007	34%	55%	66%	74%	82%	88%
2009	37%	61%	70%	78%	85%	91%
2012	32%	58%	67%	75%	83%	90%