



Institute and Faculty of Actuaries

TORP – how to fit a quart into a pint pot

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Institute and Faculty of Actuaries

TORP – update from the working party

The fast close process (or: “you want what? By when??”)

Publicise
Mentorship
Thought leadership
Progress
Community
Sessional Meetings
Education
Working parties
Volunteering
Research
Shaping the future
Networking
Professional support
Enterprise and risk
Learned society
Opportunity
International profile
Journals
Support

Agenda

- Introduction
- Reporting
- Actual vs. expected
- Roll-forward
- Issues impacting the process
- Conclusions

Glossary

- IFoA – UK version of CAS.
- Solvency II – recent regulatory reporting basis for solvency purposes to be implemented throughout the EU from 1/1/16 (initially anticipated to be implemented 2012).
- Underwriting year – reserving/reporting basis that includes not only unexpired risk on written policies, but also policies still to be written for the remainder of the calendar year (plan basis).
- Fast close – high-level assessment of experience in the (short) period since a full analysis was carried out to determine the financial bookings as at a balance sheet date.
- BAU – business as usual process.

Background – UK/EU market

- Reporting requirements have been expanding steadily. Started as GAAP and Underwriting Year. Moving to including Solvency II and IFRS
- Regulatory requirements and definitions changing/evolving continuously.
- Deadlines moving forward – Solvency II reporting started at 6 months during trial period, moving to 8 weeks then to 5 weeks from balance sheet date.
- Basis of these reporting standards very, very different to each other: GAAP vs. full policy year vs. cashflow on bound contracts.
- Consistency and comparison a major and increasing issue (Solvency II = best estimate, GAAP = prudent)
- Regulatory one-upmanship/ gold plating

Background – Working party/IFoA

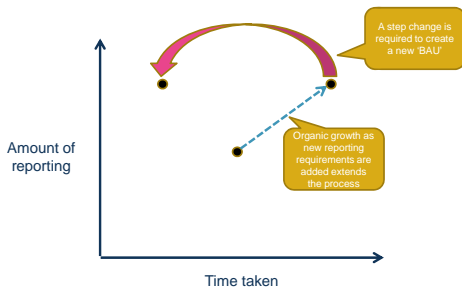
- IFoA – the actuarial association within the UK.
- Covers all areas of actuarial work (Life, Pensions, GI (P&C), investment etc.).
- GI is relatively new, and started its own research organisation (GIRO) in 1980's. Initially a series of independently organised groups of actuaries tackling current and mutually interesting areas. Now not very different, although IFoA taking more ownership of output.
- Our working party is part of the IFoA stable, under the Reserving Oversight Committee aimed at generating a base level of knowledge for reserving activities within the profession.
- We have produced a paper on AvE techniques previous to the current work.

The problem:

- **Limited time** between receipt of as at data and reporting deadline.
- **Increasing reporting** requirements are reducing the time available to study the data.
- **Less time for analysis** means less accuracy/ increased potential for inconsistency/ increased operational risk.
- Topical or recent events may get **disproportionate** management attention.
- **Unexpected issues** can derail the process.
- Management focus can be **misaligned** with actuarial processes.

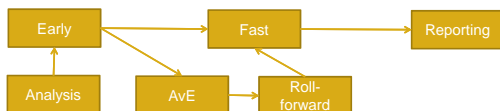
7

The problem (pictorially):



8

Early/fast close



- **Early:** previous full analysis that sets expectations for future experience. Can be a month, quarter or longer (up to a year?) before reporting as at date. Will usually take 4-8 weeks.
- **Fast:** key point is that there isn't time to complete a full analysis at the as at date in the time available (typically a week to report final reserves etc.).
- May use AvE or other techniques to provide diagnostics from which to make reserving decisions.
- Roll-forward represents the confirmation or adjustment of ultimates for reporting based on the AvE stage.
- **Reporting:** production of data and reports for management/finance etc.

9

Reporting - introduction

- **Many different types of reporting:**
 - Ultimates/reserves (MI/regulatory) – actual numbers being included in reports and financial statements
 - Reports – documents describing areas of concern/change
 - Historical data – development triangles
 - MI reports/ standardised exhibits
- **Timelines** for reporting these various elements are not always consistent.
- Underlying **importance** of each can also vary considerably.
- Fast close exercises may be very high-level, which raises the question as to **how much effort** should be needed to update such reports
- We believe a **key differentiator** in prioritising reports is expert judgement

Reporting requirements

- Reserving report
- Board Summary
- Best estimate/margin split
- Investor briefing
- Lloyd's Trust funds
- Lloyd's QMR
- FSA returns
- Reserve ranges/ adequacy
- GAAP (if not primary basis)
- Solvency II Technical Provisions
- Cashflow projections
- Future development expectations
- Allocation/ aggregation
- Audit recs
- Tax reserves
- Management exhibit on ultimates
- Statement of Actuarial Opinion
- Bad debt
- ULAE

There are a lot of reporting requirements as part of the reserving process

It seems difficult to produce all of these in a very short timeframe as well as producing revised estimates

Reporting requirements

- Reserving report
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Use the amount of expert judgement required in each output to prioritise (and allocate time) to the update

Reporting in fast close

Updated manually	Updated mechanically	Unchanged in fast close
Reserving report	Lloyd's Trust funds	Mngmnt exhibit on ults
Board Summary	Lloyd's QMR	SAO
Best estimate/margin split	FSA returns	Bad debt
Investor briefing	Reserve ranges/ adequacy	ULAE
	GAAP (if not primary basis)	
	Solvency II TPs	
	Cashflow projections	
	Future development expectations	
	Allocation/ aggregation	
	Audit recs	No manual intervention, other than sense checks?
	Tax reserves	

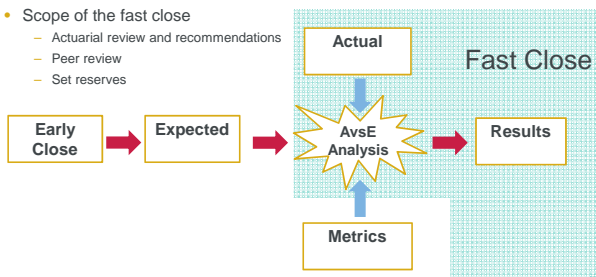
The most important outputs?

Can we leave some reports untouched?

13

A vs E in Fast-Close – Process

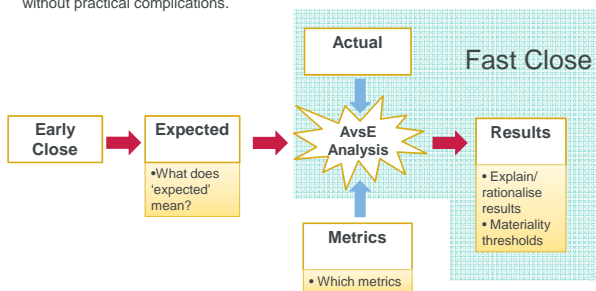
- Purpose of the fast close
- Scope of the fast close
 - Actuarial review and recommendations
 - Peer review
 - Set reserves



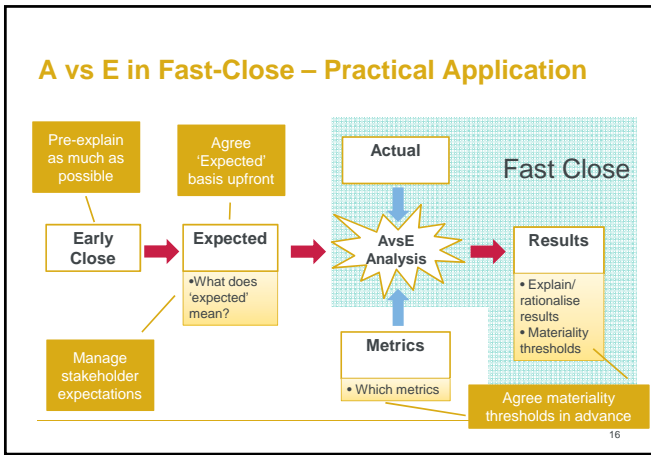
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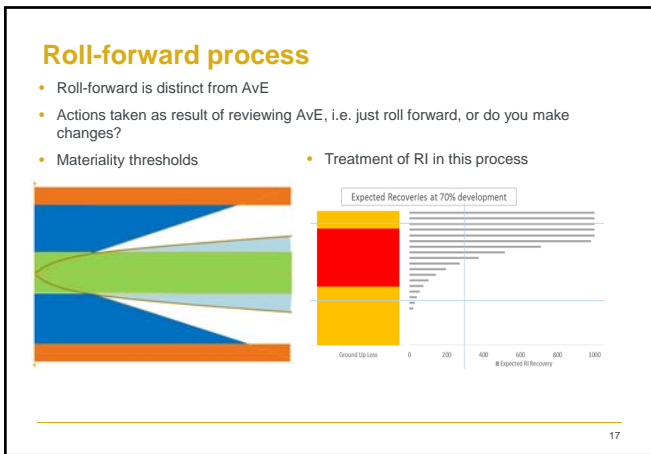
A vs E in Fast-Close – Situation

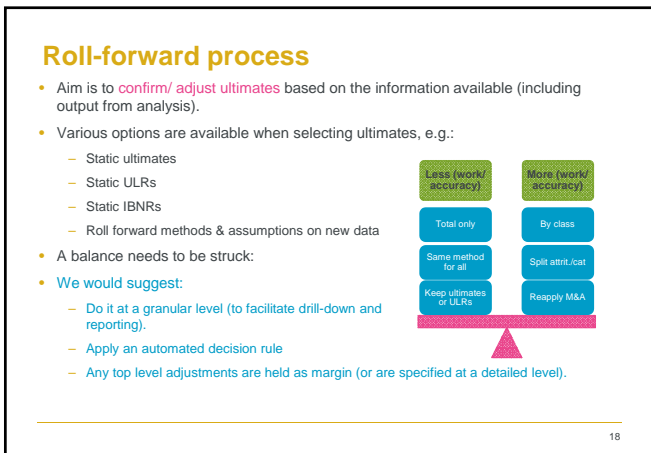
- A vs E analysis lends itself well to lean process in a fast-close situation, but it is not without practical complications.



15







Roll-forward process

Challenges:

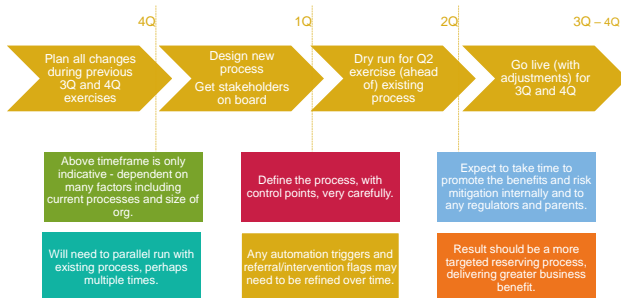
- Likely to need different approaches for different segments (Short tail vs. Long tail, lumpy vs. smooth development).
- The process of selection should be very quick, using various indicators/ defaults to ensure time is spent on the more difficult decisions (automated decision rules, RAG status flags etc.).
- Reinsurance may require a different approach entirely.
- Need to ensure sum of detailed decisions makes sense compared to total diagnostics.
- Raises some cultural questions:
 - Will Boards be happy with "no change"?
 - Will actuaries be happy with "no change"?
 - Does this achieve sufficient accuracy for tertiary uses (base for planning etc.)?
 - Can this approach be extended to replace a "full" quarterly reserving process?
- We suggest that the aim of the exercise is to ensure that movements are based on a limited number of specific known issues/effects to reduce amount of explanation and increase clarity and speed of reporting

Major Issues & Potential Solutions

Internal	External
Data/Systems/Processes	Catastrophes/Major Events
<ul style="list-style-type: none"> • Earlier Data Extracts • Regular Catch-Ups with SMEs 	<ul style="list-style-type: none"> • Daily Analysis of Updated Data • Constant Communication with Claims • Stakeholder Management
Management Interaction	Regulators/Court Rulings/3rd Parties
<ul style="list-style-type: none"> • Early & Continuous Engagement • Range of Results/Implications • Reserving Policy/Materiality Thresholds 	<ul style="list-style-type: none"> • Regular Internal Catch-Ups • Regular External Catch-Ups/SLAs • Key Internal Contacts in Place

- Any other major issues? e.g. FX fluctuations.

Implementing fast close



Conclusions

- Set out **process** and get it agreed by all stakeholders (“rules of engagement”), including thresholds for intervention.
- Ensure **communication** lines kept open.
- **Automate** where appropriate to focus on value adding analysis.
- Identify outputs that require manual intervention and determine **critical path**.
- Use prior detailed analysis to deal with known critical issues in advance of the fast close.
- Consider **contingency processes** in case of emergency...

Not much different to a normal review...!

Our team

- Camilla Bennett
- Neil Bruce (Chair)
- Cameron Heath
- Tim Jenkins
- Katherine Laidlar
- Alastair Lauder
- Gregory Overton
- Joe Ryan
- Keith Taylor
- Chi Wong

Questions for the audience

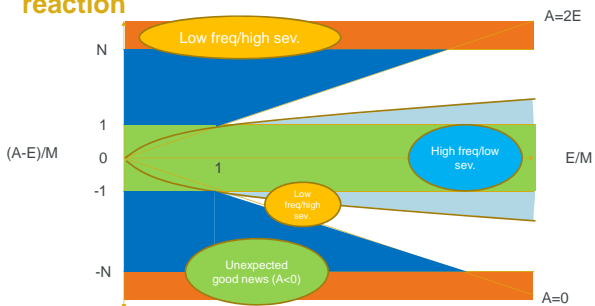
- Quantity of reporting?
- Do you have similar reporting deadlines?
- Approximate RI recoveries approaches
- Use of thresholds
- Roll-forward methods – do you use them?
- Cultural issues: reaction to not changing ultimates?

Appendix

- RI recoveries approaches
- Threshold graphs

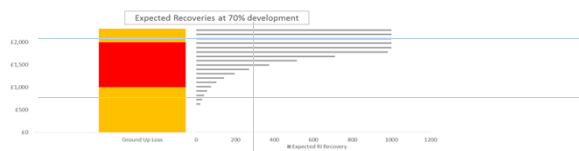
25

Schematic of AvE regions of differing reaction



Schematic of potential areas where different approaches are taken
 M = materiality threshold
 N = multiple of materiality threshold which is considered a "major" event

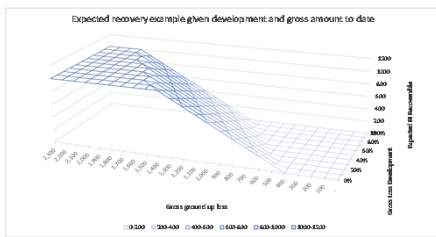
Reinsurance – predetermined recoveries on Non Proportional Reinsurance contract



Looking at an example where expected recoveries may differ at the differing levels of gross claims experience seen to date:

- Assuming:
- Risk XL in place with excess of £1,000. Limit of £1,000
 - Gross Initial expected loss of £600
 - Assumes 70% development to date on year of account
 - Considers potential recoveries at each gross loss level at date of estimate. E.g. If at point of estimate there is already £1000 gross claims seen to date, then may expect a further £180 (which would all be in reinsurance layer)
 - Potential to link to capital model for allowance for variance in gross loss experience
- Can refer to absolute development or proportionate development.

Reinsurance – predetermined recoveries on Non Proportional Reinsurance contract



- This will lead to a 3-D type graph that plots potential recoveries for differing levels of gross claims experience for differing points of development.
- Can refer to absolute amounts of recoveries or proportionate recoveries
