

Capital Briefing

20 February 2023

Agenda

| Agenda Item | | Presenter(s) |
|-------------|-----------------------------------|-------------------|
| 1. | The Actuarial Oversight Landscape | Rebecca Soraghan |
| 2. | 2023 YoA SCR Reviews | Cameron Beveridge |
| a. | Inflation | Cameron Beveridge |
| a. | Ukraine | Cameron Beveridge |
| 3. | Setting ourselves up for 2024 | Rebecca Soraghan |
| 4. | Practical Takeaways | Rebecca Soraghan |
| 5. | Wrap Up | Emma Stewart |

The Actuarial Oversight Landscape

Rebecca Soraghan

Head of Actuarial Oversight

A reminder of the 2022 priorities this time last year...

And how they changed!



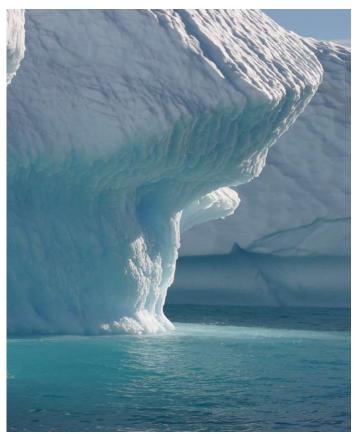
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What does 2023 look like?









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Working with the market to achieve better outcomes

We have heard your feedback and here is how we will address it

Market Concern

Actuarial Oversight Actions for 2023

Insufficient time to respond to loadings

- Increase number of syndicates on fast track via additional deep dives
- Consult with CALM for alternatives to the current loading process

Delay in sending out feedback/reviewing some elements of the submission

 Ensure that additional time for feedback write up is factored into the CPG planning process

Capital Fast Track not beneficial

- Intention is to not have thematic Focus Area reviews during CPG this year that reduce differential benefits of Fast Track.
- Reduces workload during CPG not the work required do pre-submission.

Slow communication from POCs during busy periods

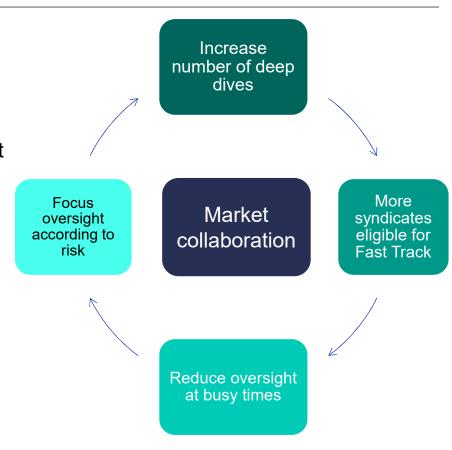
- Reminder of escalation channels
- POC best practice training sessions within MRC

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2023 – the year of focussing on the core risks

- Reduced thematic work to acknowledge that syndicates may need time to revisit BAU processes after a few years of focus on "hot topics".
- Continue to shift oversight away from the busy times, instead increasing the number of deep dives performed at quieter times of the year.
- We will continue to embed risk-based oversight using the Principles of Doing Business at Lloyd's as a framework.
- The Principles rating will be used to inform all of our oversight activities
 - Used to assess syndicates for Fast Track during CPG reviews.
 - Will become part of the process for reviewing Major Model Changes.
- We will improve the Lloyd's Standard Model, in response to market feedback and our own findings.



Risk-based Oversight



Oversight will be **focussed on syndicates that aren't meeting expectations** to ensure that any issues are resolved

Current snapshot of the market Expected Maturity and Capital Principle Ratings

| Expected Maturity | # of syndicates |
|-------------------|-----------------|
| Advanced | 19 |
| Established | 19 |
| Intermediate | 32 |
| Foundational | 25 |
| New syndicate | 18 |

| Capital Principle Rating | # of syndicates |
|-------------------------------|-----------------|
| Meeting Expectations | 73 |
| Marginally Below Expectations | 17 |
| Below Expectations | 5 |
| Well Below Expectations | 0 |
| N/A | 18 |

2023 YoA SCR Reviews

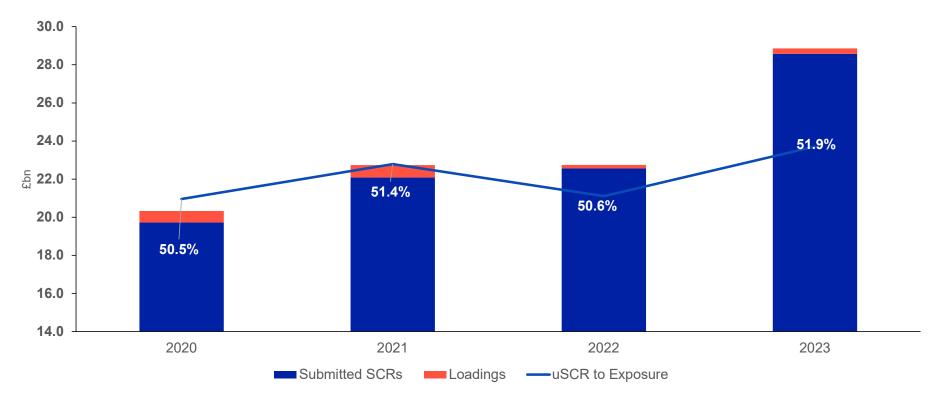
Cameron Beveridge

Senior Actuary



Required capital has increased from 2022 and prior

Market level risk versus exposure has increased, as well as total capital



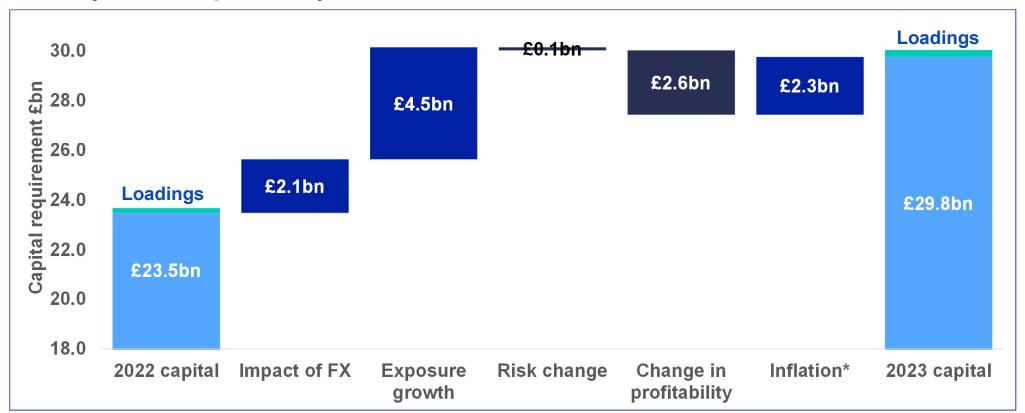
Exposure is defined as premium risk mean net claims +1/2 earned reserves (as per LCR form 600)

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Increase in capital is driven by exposure growth, FX movements and inflation volatility

Offset by increased profitability

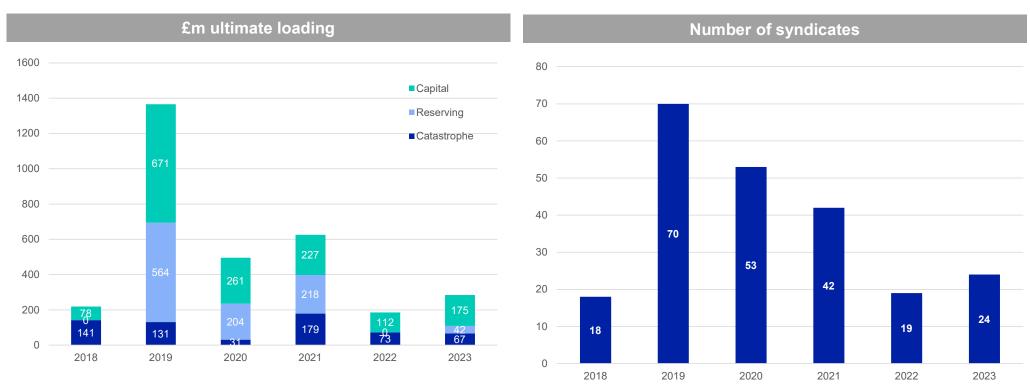


^{*} Excluding impact of inflation on exposure



The amount of loadings and number of syndicates loaded slightly increased

Primarily reflects the same approach to loadings as last year, with addition of thematic review areas on Inflation and Ukraine

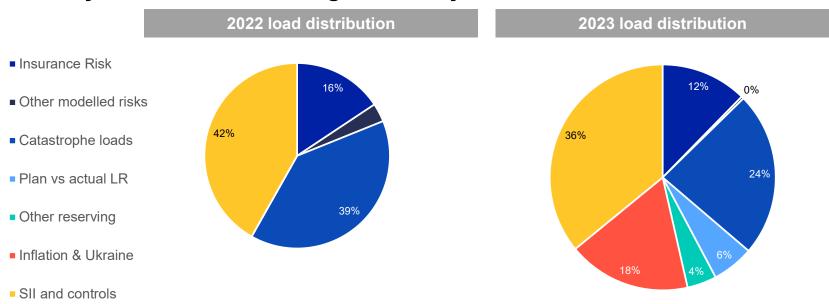


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Uptick in loadings applied, primarily inflation loadings

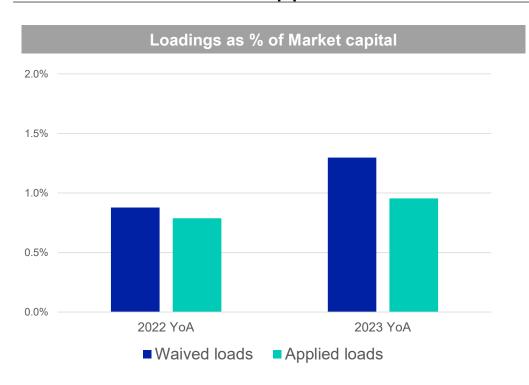
Wider variety of sources of loading than last year



- New Thematic loads (Inflation and Ukraine) made up nearly 20% of loadings applied this year
- Amount of SII and controls loading has increased in terms of size, but a slightly smaller share of overall total.
- Reintroduction of some reserve loads being applied demonstrating we still apply oversight and will load if there are issues!
- Waived loadings process resulted in negligible loads being applied for non-insurance risk related uncertainties
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Waived loads

Continuation of the approach used in 2022



 Loadings under 5% of uSCR were waived except for thematic areas of review (cat risk appetite, model completeness, inflation, and Ukraine)

Key Benefit

 The process reduced workload for Lloyd's and the market by reducing discussion over immaterial loads.

Observations and other takeaways

- Waived loadings are spread across many risk areas.
- Waived loads must be considered in the model change triggers used for 2023 capital resubmissions.
- Waived loads can be removed by submitting a response to MRC, discuss this with PoC.
 - Should be addressed by next LCR submission

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Inflation

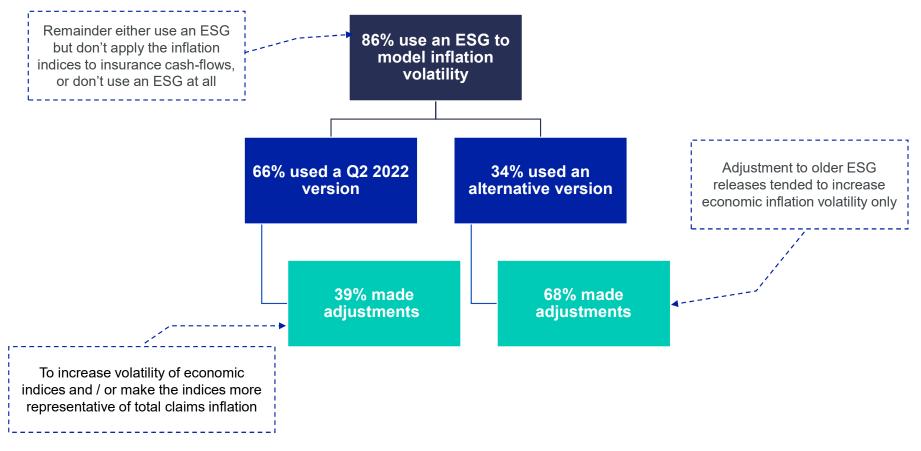
Cameron Beveridge

Senior Actuary



Economic Inflation

Key Findings - ESGs



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Inflation

Good practices observed

Economic inflation

- Separate memo or clear signposting
- Clear engagement of multiple experts within the business and a consistent approach applied
- Consideration of dependencies and secondary impacts of higher inflation environment
- Justification on ESG version and adjustments
- Appropriate suite of validation tests performed

Excess inflation

- Assessment of exposure to excess inflation
- Modelling changes, e.g.
 - Introducing new tail drivers
 - Adjusting ESG indices
 - Incorporating drivers of claims inflation into dependency and volatility parameterisation process
- Quantification and validation to support allowances modelled
- Clear documentation <u>explaining</u> and <u>justifying</u> decisions made
- Clear link between the approach taken and the syndicate's risk profile

Inflation

Common feedback points

- Often it's the 'Why' that isn't explained sufficiently.

Implicit allowances of excess inflation

- Still some poor justifications on lack of progression with quantifying excess inflation allowances
- Linking quantification back to risk profile of the syndicate

Concerns in use of ESG

- Inflation volatility lower than data from ESG providers.
- Lack of explanation behind application of inflation indices and adjustments
- No consideration of diversification credit across indices

Validation not challenging enough

- Missing validation on parameter selections
- Weak backtesting
- Insufficient inflation specific testing.
- Inconsistencies
 between validation
 tests and
 quantitative impact
 reported in Focus
 Areas return

Scenario tests needing improvement

- Stress tests
 performed rather
 than scenario tests
- Return periods not discussed.
- Scenario not 'stressful' enough
- Little or no description of impacts to other risk categories

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What does economic oversight look like in 2023?

<u>Inflation</u>

- Inflation oversight will be significantly scaled back from 2022
- Feedback and/or loadings were given to syndicates where the inflation approach was considered deficient
- Syndicates are required to respond to that in the timeframes provided
- The Focus Areas return is likely to have some element of inflation – but significantly less than last year.

Other economic areas

- As the likelihood of a recession increases, syndicates are expected to consider this in their capital modelling
 - Some of the recession return periods reported in the Focus Area return last year imply this area should be re-visited
- There was an increase in syndicates with negative contribution from market risk in the 2023 YoA submissions.
 - We expect to update our approach to that this year - more detail to be provided in Q2
 - Syndicates shouldn't expect significant negative contributions from market risk to be acceptable

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Ukraine

Cameron Beveridge

Senior Actuary

Ukraine

An event with significant uncertainty

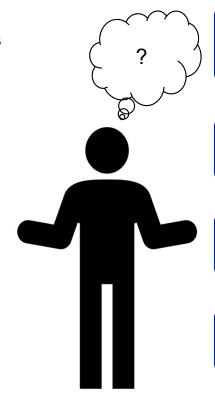
Around 40% of the market completed the Focus Areas return for Ukraine losses.

For these syndicates, all responses were reviewed, with the overarching question:

"Did the capital model adequately capture the potential for Ukraine losses?"

This included, for example:

- Backtesting at class and combined level
- Model updates to premium, reserve risk, dependencies, other risk categories
- Scenario tests including if extreme outcomes were captured and in line with expected return periods



Ongoing nature of event- unknown duration, severity, geographical scope

Lack of data to establish reserves

Potential for coverage dispute

Potential for new direct losses

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Ukraine

Observations from reviews

What was done well

Suitably detailed, clear signposting

Clear description of expert judgements e.g.

Clear thought between premium / reserve risk Whether model updates were required, and what was done

Probability tree of possible outcomes

What could be improved

Signposting not always clear

Extreme / scenario losses not sufficiently explained.

Justifications behind decisions not provided...

Communication of ground up losses and how RI could respond

Combined backtesting not completed or not explained

Including
whether
changes
required on all
'minor' risk
categories

What does Ukraine oversight look like in 2023?



Ukraine

 Oversight in 2023 will continue to focus on syndicates that have material exposure to the Ukraine conflict





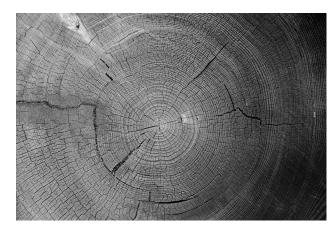
Wider Geopolitical landscape

- New data collection of scenarios
- Models should continually be reviewed:
 - Expert judgements monitor falsifiability criteria
 - In particular, dependencies
 - Reflect current external environment



Setting ourselves up for 2024

Climate Change











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Practical Considerations



Practical Takeaways

- Major Model Change Pre-Applications
 - Should be submitted now, to cover <u>all</u> of 2023 possible MMCs
- March resubmissions
 - March template submitted in all cases for syndicates with an internal model
 - Model Tests tab only Q9 & 10 to be completed if no LCR, otherwise all questions
 - LSM resubmission for all LSM syndicates
- All Capital Guidance republished in January, including new legacy RI guidance
- Requirement to continually monitoring uSCR throughout the year with resubmission if >10% movement from previous approved LCR (up to first week July)



What does 2023 look like

(Leading into LCR submissions)

- Publication of all Capital Guidance including Legacy Reinsurance Guidance
- Partial IMAP reviews
- Deep Dives commenced
- Capital briefing (20 February)
- Retrospective loadings assessment (Lloyd's to inform syndicates which will be loaded by 2 March)
- March reassessment templates, LSM, and where necessary, MY CIL LCR resubmissions (2 March)
- IMO returns (6 March)
- Principles Attestation to Lloyd's (31 March)
- Data request due for thematic review on non-natural Catastrophes (early April)
- IMAP reviews
- Deep dives reviews
- Capital and Validation briefing (June)
- Capital Market messages (TBC)
- Exposure Management reviews of Non-Nat Cat maturity published
- LCR instructions and Focus Areas return published
- Updates on Reserving Test on Uncertainty
- Syndicate Categorisation confirmed ahead of CPG (June)
- BAU: Major Model Change reviews
- NED Forum (TBC)
- Exposure management model completeness return (reduced scope)
- LCR submissions

Wrap-up



Wrap-up

We have the best intentions for smooth sailing in 2023, but can't relax...

- Current landscape is complex and fast-moving
 - There is a need to continuously ensure the model is appropriate and that will be harder as a result
 - We all need to think beyond inflation, e.g. impacts of a recession and rising interest rates
- Some "standard" areas of models show improvements but still more work to do across the market
 - Such as the appropriateness of modelled loss ratios compared to experience
 - Counterintuitive or unexplained movements at class level or in respect of contributions to capital
- Hard work undertaken by the market to appropriately consider inflation and Ukraine valuable
 - As a result we should be able to scale down review in these areas
- We learnt a lot from CPG feedback
 - Have taken a number of actions to return to a position where process is smoother and benefits felt
 - And welcome feedback year-round on how we can work better together

Questions?

Appendices

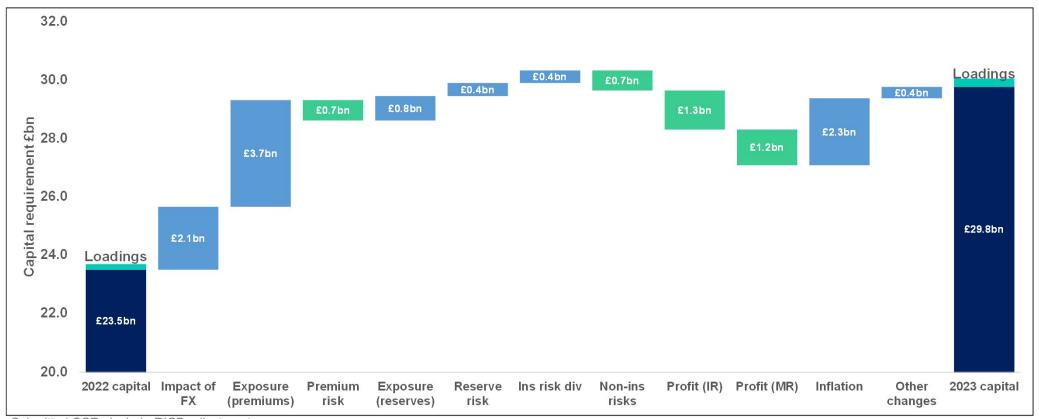
Slides additional to Capital Briefing, for further information

- Granular breakdown of waterfall chart (ref: slide 11)
- Recession/Economic slowdown slide from Lloyd's GIRO update – as referenced during Capital Briefing (ref: slide 19)
- Exposure Management areas of focus in 2023



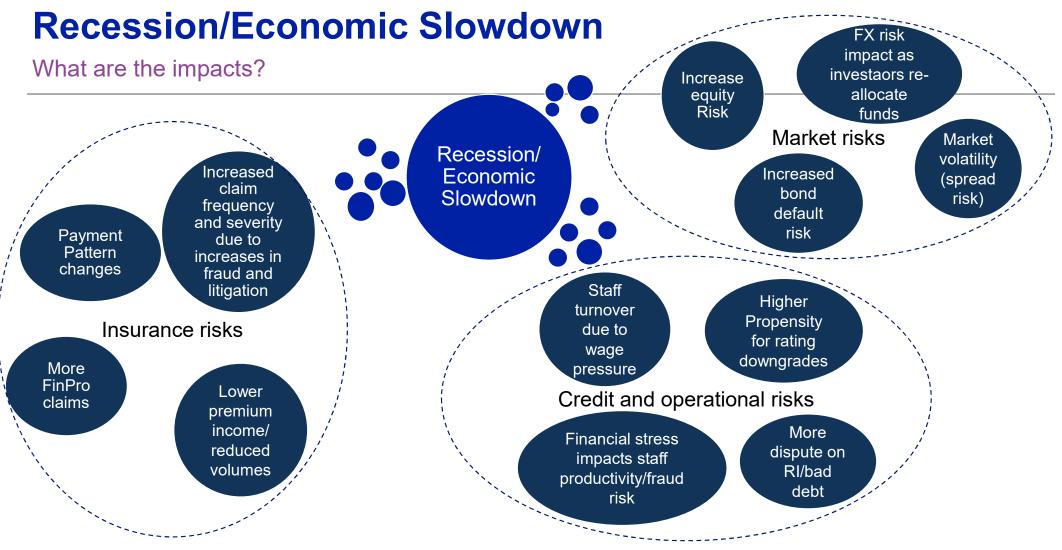
Breakdown of overall submitted SCRs – granular breakdown

Capital increases with exposure growth and increased view of risk offset by FX and higher profit



Submitted SCRs include RICB adjustment

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Exposure Management

Thematic Areas of review for 2023

Model Completeness

- In 2021 and 2022 "LCM5" and "Rest of World" perils were reviewed in-depth, to ensure completeness of the LCM
- Market-level feedback will be published in H1
- 2023 will be a reduced return, on focus areas (e.g. likely USWS Clustering) and updates to prior years' responses
- Climate change: we expect that natural catastrophe models should be validated as appropriate for current climate conditions i.e. not overly weighted to history

Non-Natural Catastrophe (NNC)

- Market-level feedback from syndicates' NNC RIO Maturity reviews will be published in H1
- The number of syndicates below or marginally below expectations is significant; we expect all syndicates to continue improving in this area
- We expect agents to incorporate the work of their exposure management teams effectively into the capital modelling process, including the use of RDS and other scenarios to inform parameterisation

Appendices

Box and whisker plots – submitted LCRs



Notes for following box & whisker plots

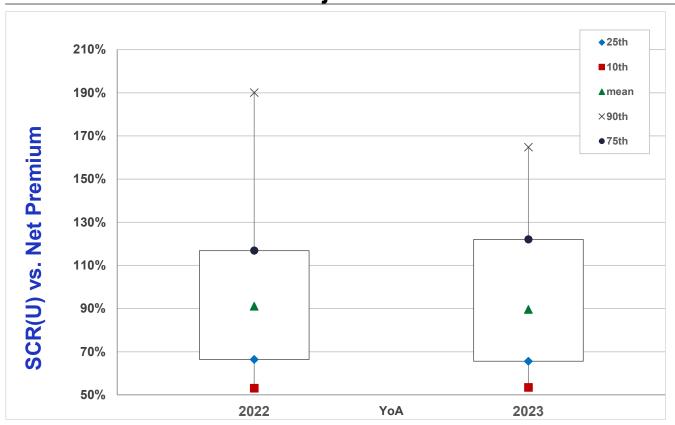
Some caution should be used by agents where using the following graphs as a benchmarking tool. These are provided for high-level information only. Limited (if any) reliance should be placed on these to support capital submissions.

- When being used, they will be a year out of date (and, market capital can move materially over time as we have seen!)
- They are 1 dimensional (i.e. do not take into account relative sizes or maturity of syndicates)
- Net ratios reflect different reinsurance structures & strategies, in addition to the underlying gross business features (e.g. line sizes, T&Cs, mix of business, primary vs excess, concentrations, geographical exposures etc.)
- Benchmarking to a certain quartile would presume knowledge of other market participant's risk profiles and risk appetite
- These only include figures reported in LCRs; risk category data will therefore exclude where management adjustments have been reported for any modelling deficiencies



Ultimate SCR vs. net premium

Excludes loads and other adjustments



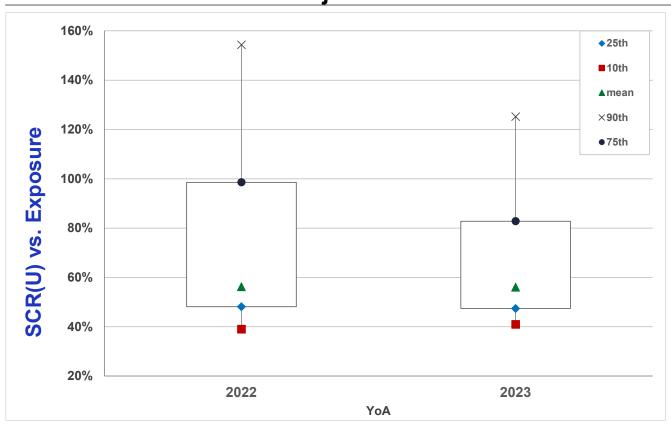
Ult SCR: F309 (submitted uSCR + management adjustments).

Net PI: F313 table 1 col D row 1



Ultimate SCR + RiM vs. Exposure

Excludes loads and other adjustments



Note: differences arise between figures on this slide vs main slides due to several differences:

- Main slide pack includes data on all syndicates; these box & whiskers only include syndicates with an internal model
- This plot includes RiM, and excludes other adjustments and loads

However, exposure measure definition is identical.

Ult SCR: F309 (submitted uSCR + management adjustments).

RIM: F312 col P total

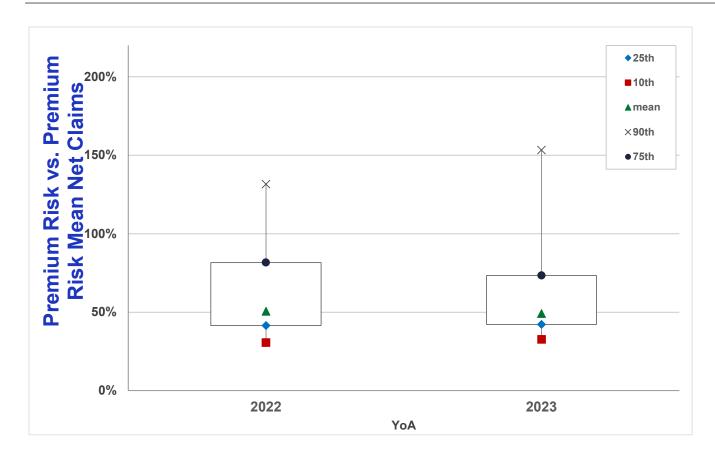
Exposure: (LCR 313.3 H1 + LCR 313.3

H4a) + (0.5 * LCR 313.3 H5)



Premium Risk vs. Premium Risk Mean Claims

Excludes loads



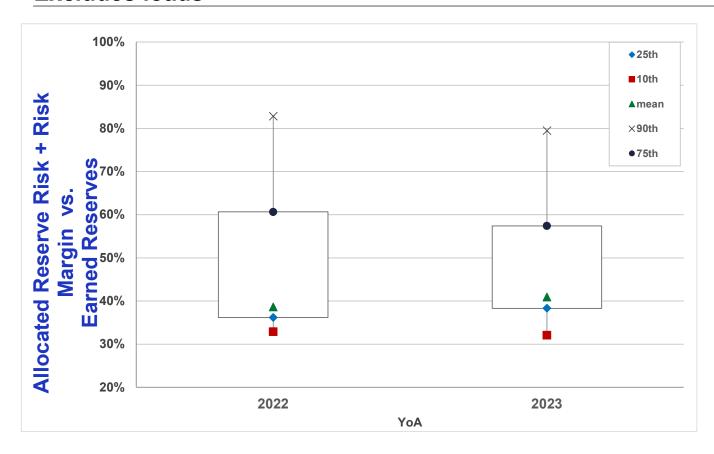
Ult premium risk (pre diversification): F309

Exposure: LCR 313.3 H1 + LCR 313.3 H4a



Reserve Risk + Allocated RiM vs. Earned Reserves

Excludes loads



Ult Reserve risk (pre diversification): F309

Risk Margin: F312 col P total

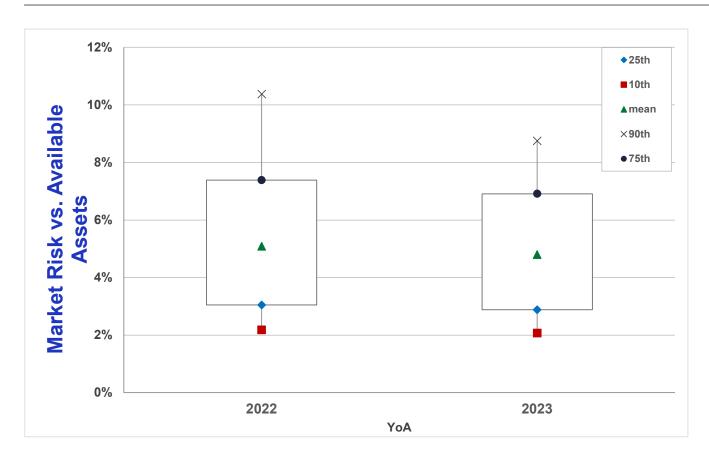
Earned Reserves: LCR 313.3 H5

Classification: Unclassified



Market Risk vs. Available Assets

Excludes loads



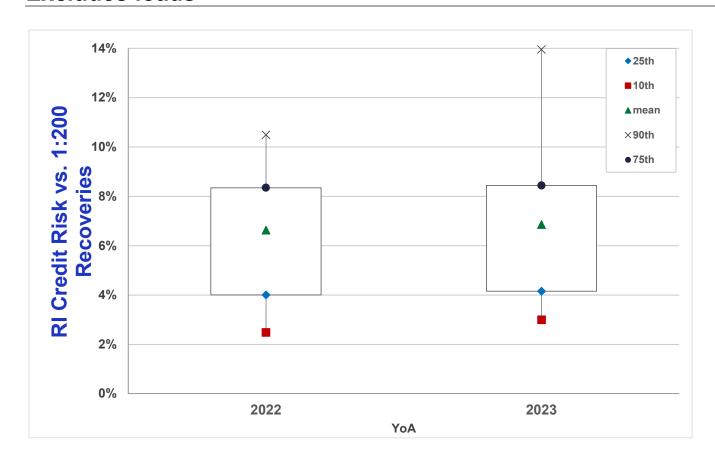
Ult Market risk (pre diversification): F309

Available Assets: F312 col Q Total less Proposed YOA + F313 table 1 col D row 1



RI Credit Risk vs. 1:200 recoveries

Excludes loads



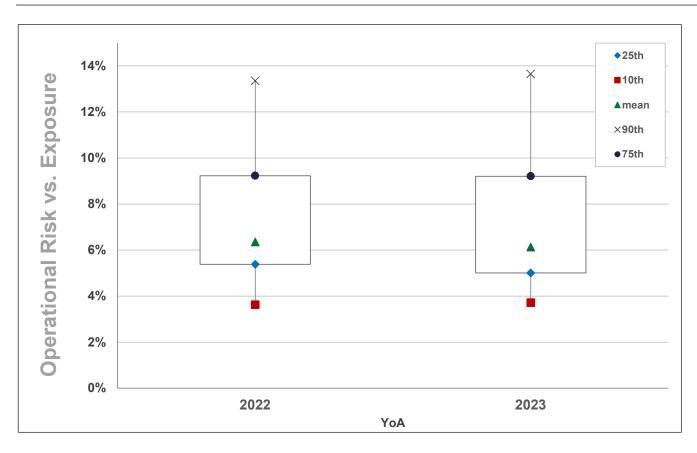
RI Credit risk (pre diversification): F309

1:200 Recoveries (approximated): F311 table 1 col G row 4 less row 3



Operational risk vs. Exposure

Excludes loads



Operational risk (pre diversification): F309

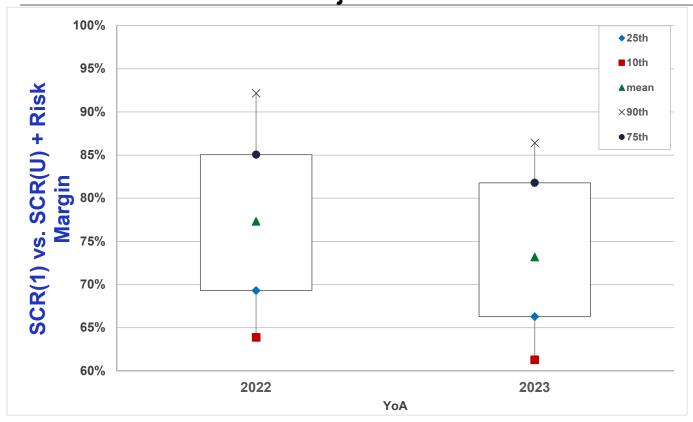
Exposure: (LCR 313.3 H1 + LCR 313.3

H4a) + (0.5 * LCR 313.3 H5)



SCR(1) vs. SCR(U) + RiM

Excludes loads and other adjustments



Ult SCR: F309 1YR SCR: F309

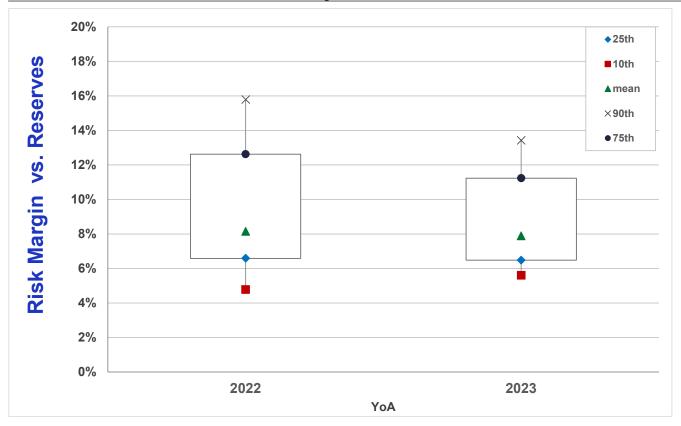
Both includes management adjustments

Risk margin: F312 col P total



Risk Margin vs. Reserves

Excludes loads and other adjustments



Risk margin: F312 col P total

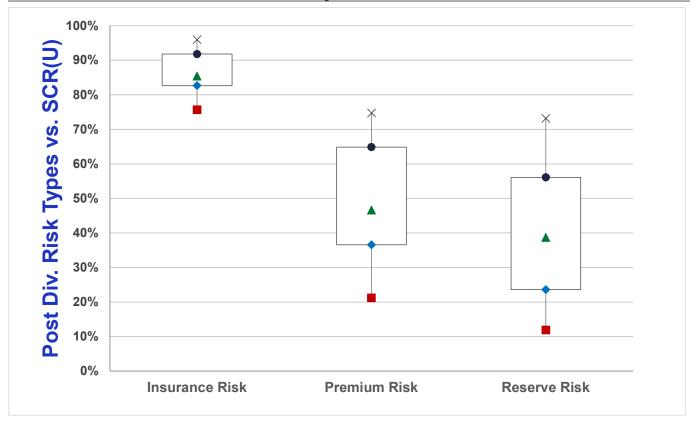
Net Reserves: F312 cols H+I+J Total less

Proposed YoA



Post Diversified Risk Types vs SCR(U) part 1

Excludes loads and other adjustments



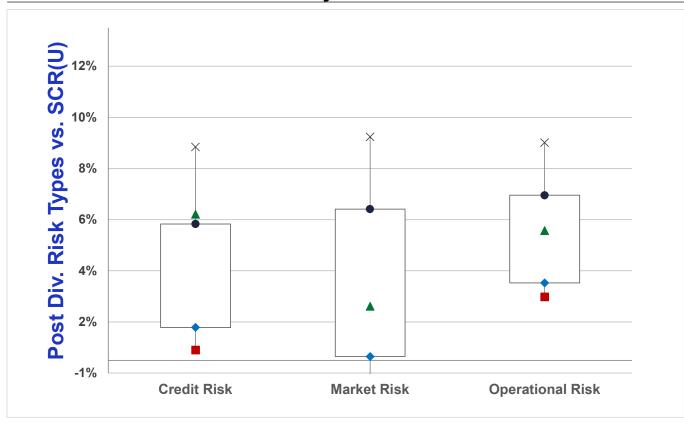
Post Div. Insurance Risk & Ult SCR: F309

Post Div. Premium & Reserve Risk: F541



Post Diversified Risk Types vs SCR(U) part 2

Excludes loads and other adjustments



Post Div. Credit, Market & Operational Risk

& Ult SCR: F309

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