Reserving Forum

2023

Agenda

Opening Remarks

Lloyd’s Market Reserving Exericse

D&O US Lloyd’s Deep Dive

Key Uncertainties for 2023 Year End

Inflation

Ukraine

Risks on the horizon

Closing Remarks

Questions & Answers

Opening Remarks

Rebecca Soraghan – Interim Head of Actuarial Oversight

Key headlines on reserving ahead of 2023 YE

Lloyd’s Market Reserving Exercise

Hazal Karakurt – Senior Actuary

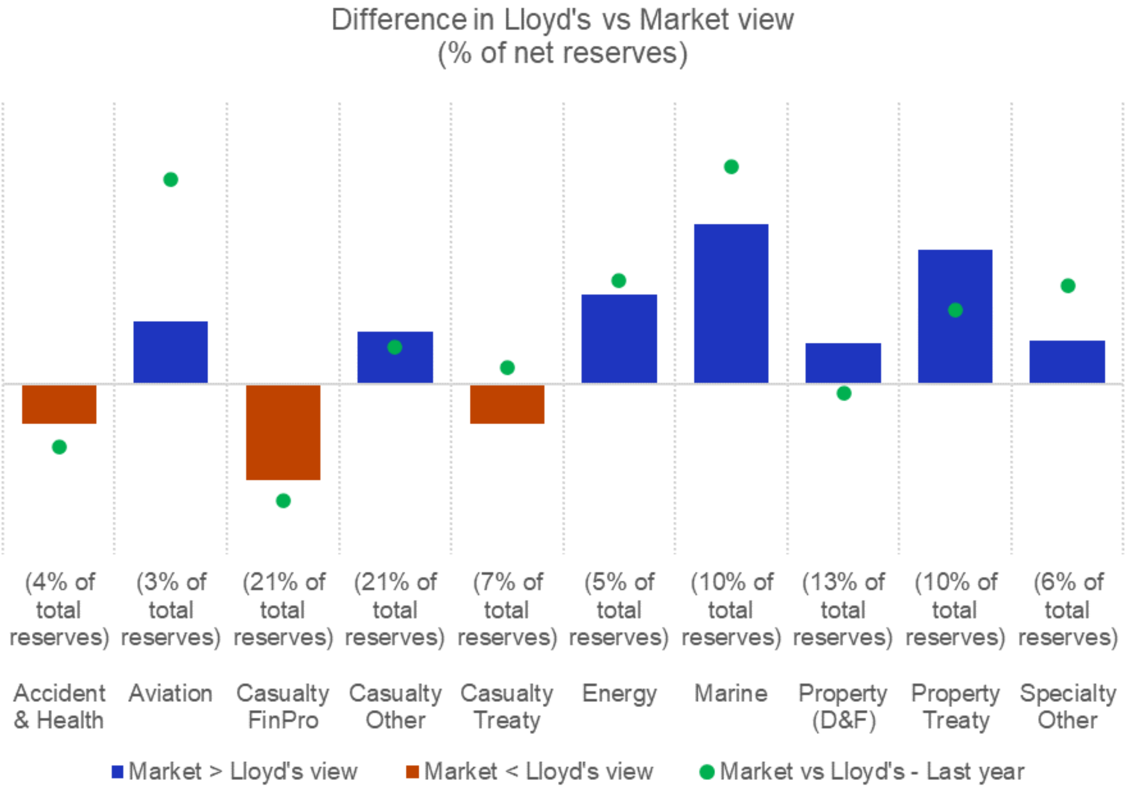
We remain confident that aggregate market reserves are appropriate

Best estimate reserves are sufficient at total level but there are some concerns at class level

The market's best estimate reserves combined continue to exceed our corresponding independent aggregate view.

Our best estimate for Casualty Treaty is now high than the market, driven by NM Casualty Treaty classes.

Our best estimate for both Accident & Health and Casualty FinPro continue to be higher than the market although the two views are closer than last year.



Instability in the global economic, political and social environment continues to prevail. This increases the uncertainty associated with estimating future claims experience and means that trends and assumptions determined based on historical data are not applicable to the future.

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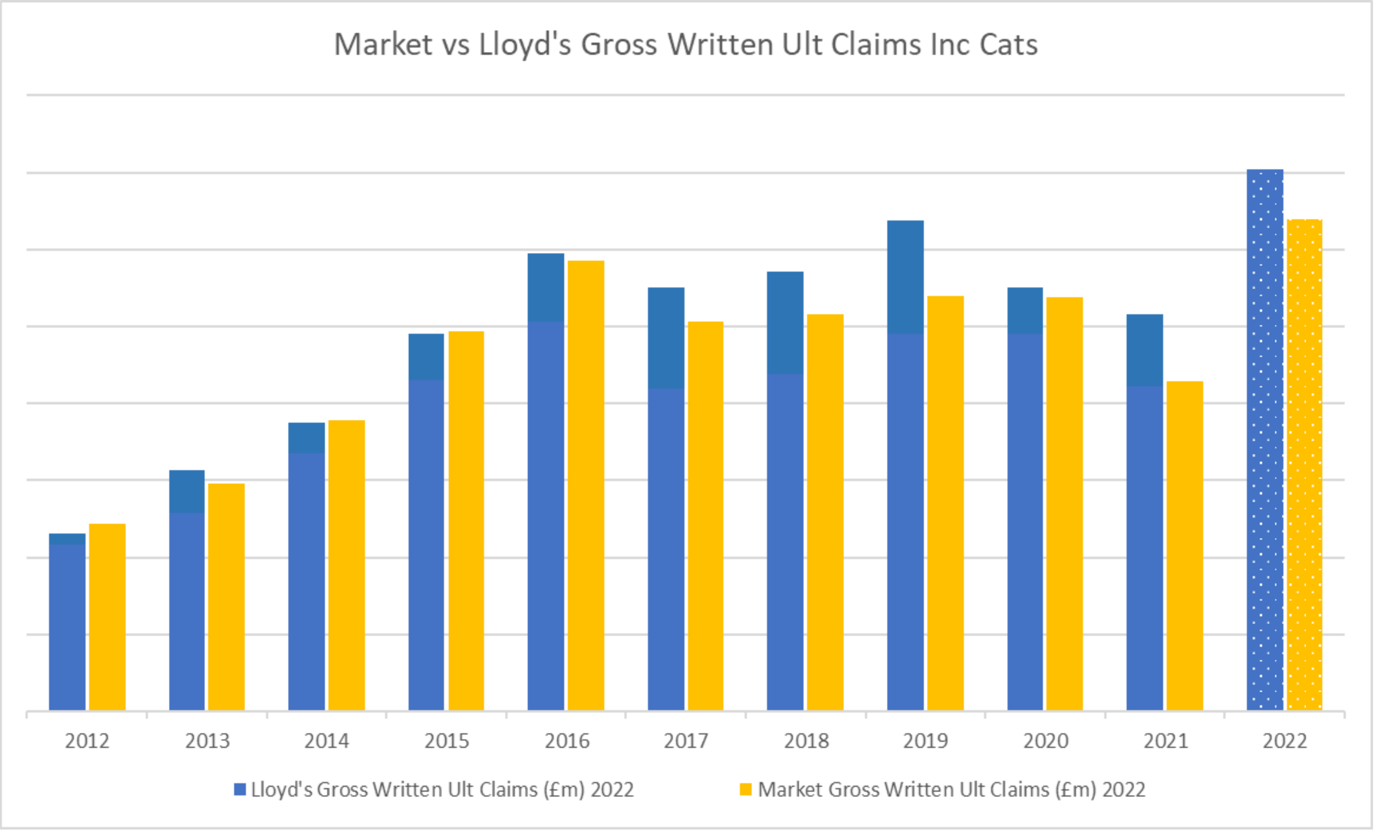
Results

Non-Marine Casualty Treaty driving difference between Lloyd's and Market views on Casualty Treaty high level class

Differing views on settlement delays and re-underwriting benefit

- This year the Lloyd's view of Casualty Treaty is higher than the market's view
- The has been driven by the NM Casualty Treaty class where the Lloyd's independent view has increased materially compared to the Market's.
- This gap has grown significantly since last year, with US business being the largest driver of that gap, on years of account 2013 onwards.
- This class is the main driver of Lloyd's view being greater than the Market's for the Casualty Treaty class overall.
- Adverse movements in older years driving up IELRs.
- Market has favourable outlook on recent years of account – how much of this favourable experience is Covid-19 court delays?
- How much credit should be given to re-underwriting?



Are reporting and settlement delays being appropriately allowed for? Are you confident your IELR selections are relevant for recent years of account? Has deterioration on older years been appropriately allowed for?

Focus Areas from 2022YE Global Central Reserving Exercise

Where should attention be focused?

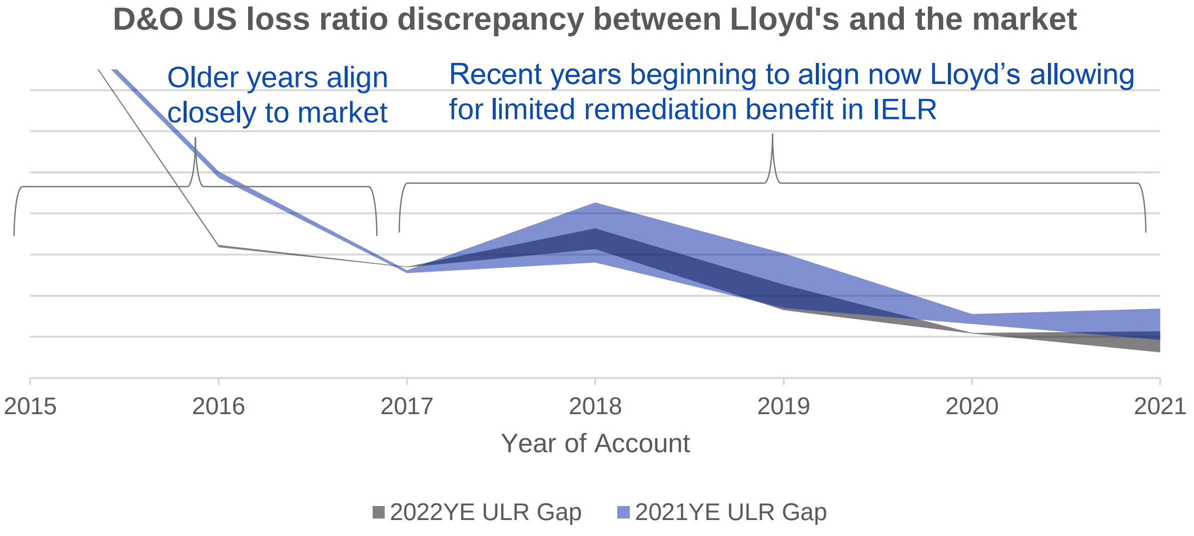
- The impact of remediation action
- Stressed inflationary environment
- Exposure to Geopolitical Risks

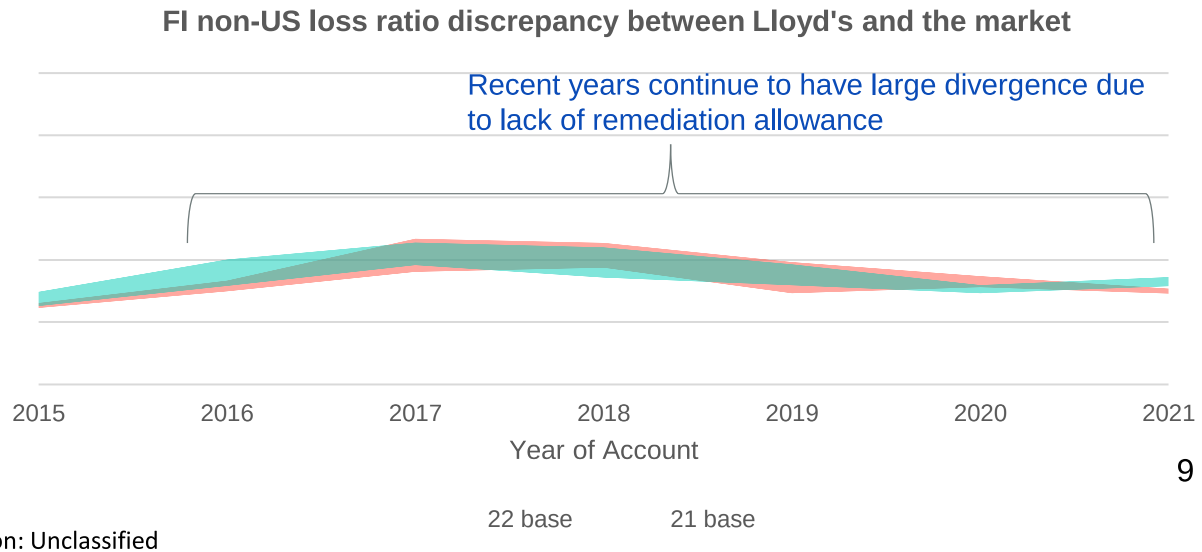
Consideration of and allowance within Reserving

Focus Areas

Allowance for remediation action within reserving

- Over past few years the market has been taking **action to address poor performance** across certain classes of business.
- It will take time for the impacts of these actions to materialise – particularly in the case of long-tailed classes.
- For impacted classes, there are currently **diverging views** between Lloyd's and the Market. We believe that this is largely due to the Lloyd's central reserving exercise giving limited allowance for remediation impacts unless evidence of this can be seen in the underlying claims data, while the Market appears to be taking credit for the expected impact of these actions. This represents a difference in reserving philosophy between Lloyds and the Market.
- This divergence most pronounced for **Casualty FinPro classes**, in particular the D&O and FI classes.
- D&O (US) has been subject to a deep dive review in this year's exercise, including consideration of this divergence.

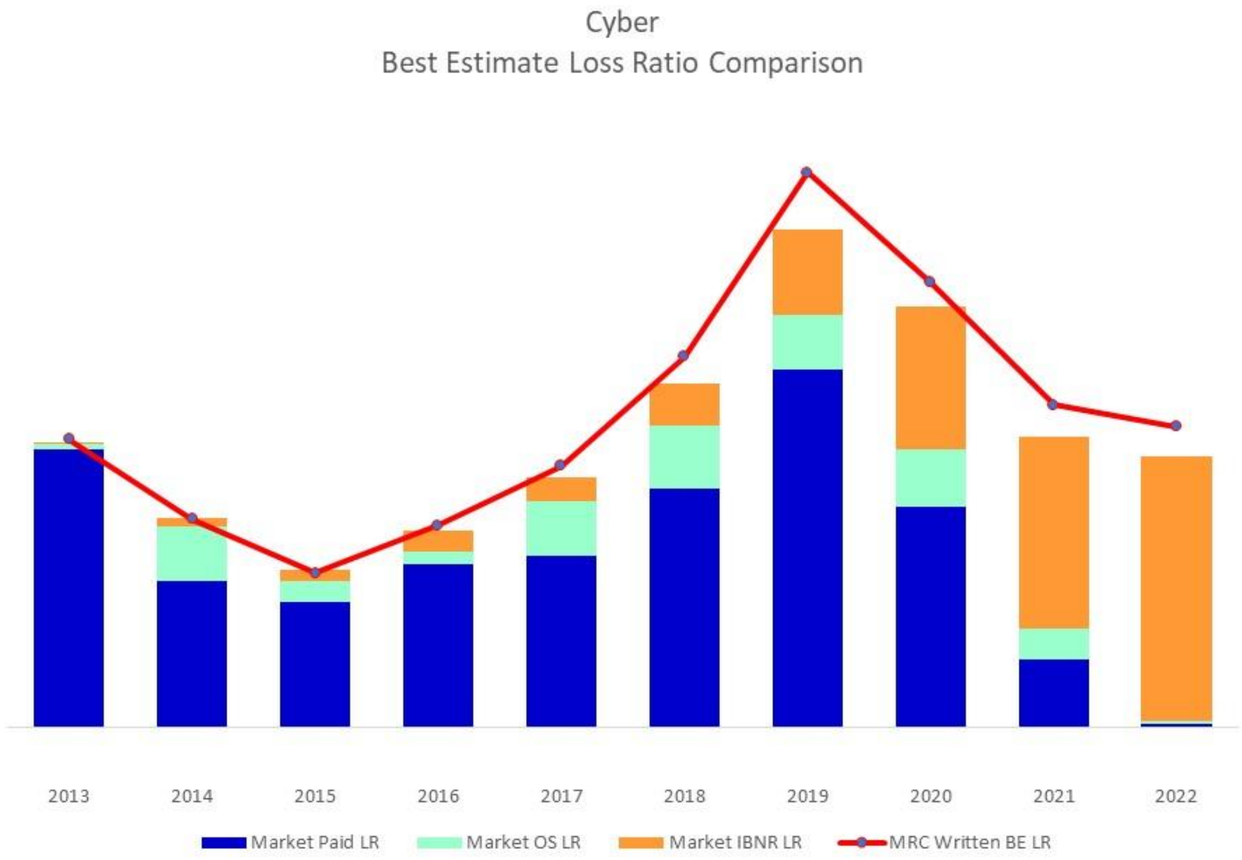




Updates from previous exercise

Cyber uncertainty continues

- This class has seen rapid growth at Lloyd's in the last 10 years and has become one of the top 5 largest classes
- It has experienced heavy losses globally, particularly since 2019
- Ransomware attacks continue to be prevalent, while liability claims have reduced somewhat, which could mean a shortening in tail length.
- However, the claims profile appears to be changing again with the emergence of new types of claims, which, alongside the immaturity of this class and coverage changes, makes it difficult to determine the tail length and to determine claims frequency for this class. This makes reserving challenging.
- Evidence of improvements in underwriting practices emerging on recent years
- How will increased general economic uncertainty and global activism impact claim frequency?



Continue to understand the drivers of growth in the account and challenge assumptions on the most recent years of account, particularly in light of uncertain economic climate.

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2021YE Updates

Updates from previous exercise

Casualty FinPro and Energy Onshore Liability

- There is a step-change in Energy Onshore Liability performance from 2020 year of account onwards.

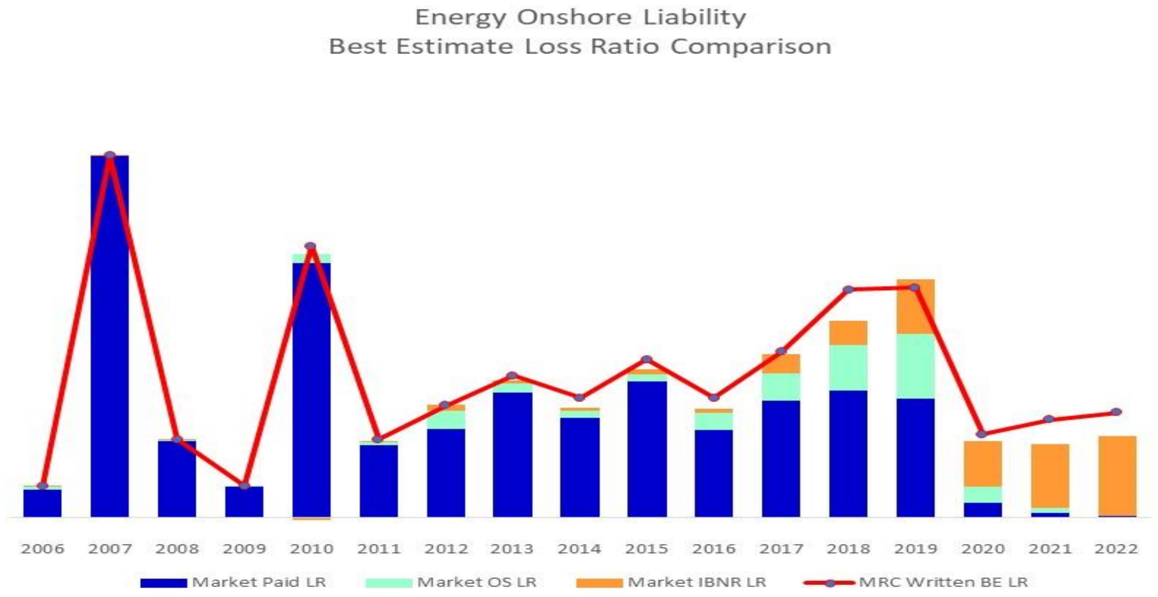
- Lloyd's has seen unfavourable development on prior years of account and has strengthened it's view of reserves on this class, but acknowledges that 2020 onwards do appear to be performing better than expected.

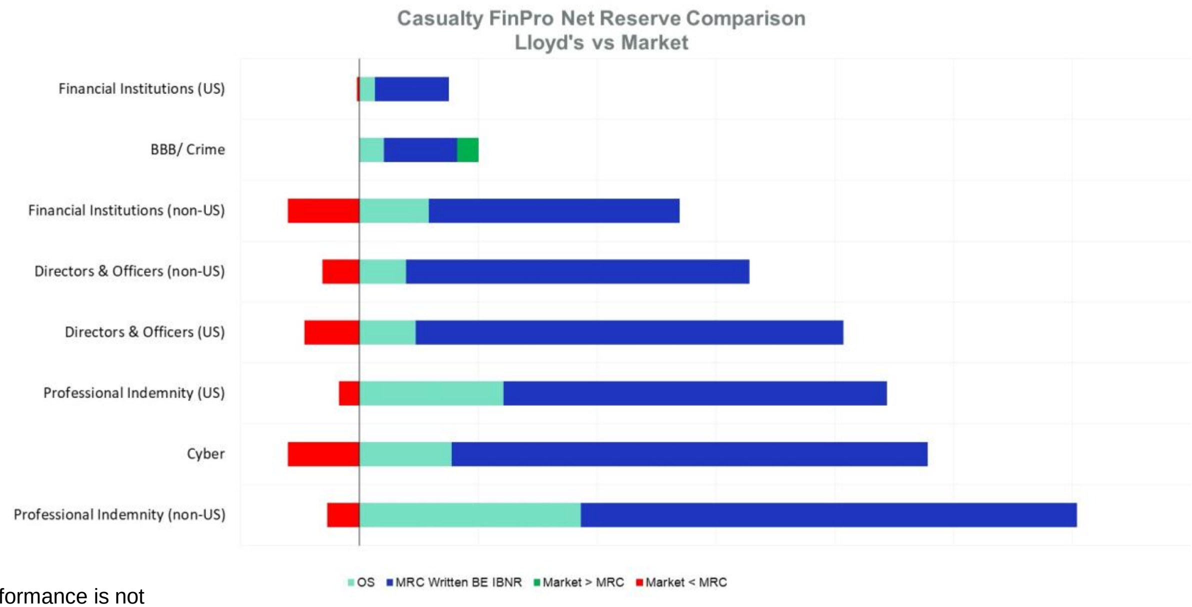
- Lloyd's independent view continues to be higher than Market's on most Casualty FinPro classes.

- However, the market and Lloyd's views are beginning to converge

- On D&O, we are beginning to see some of the benefits of remediation impacts come through the data, aligning our view closer to the market.

- These classes are especially exposed to uncertainties due to the economic environment





D&O US

Class of business review

David Bracewell – Senior Actuary

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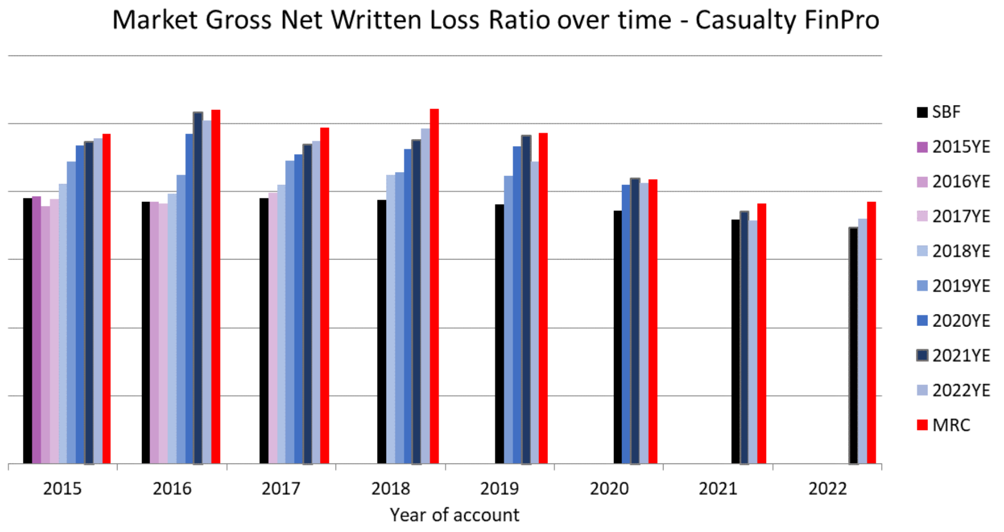
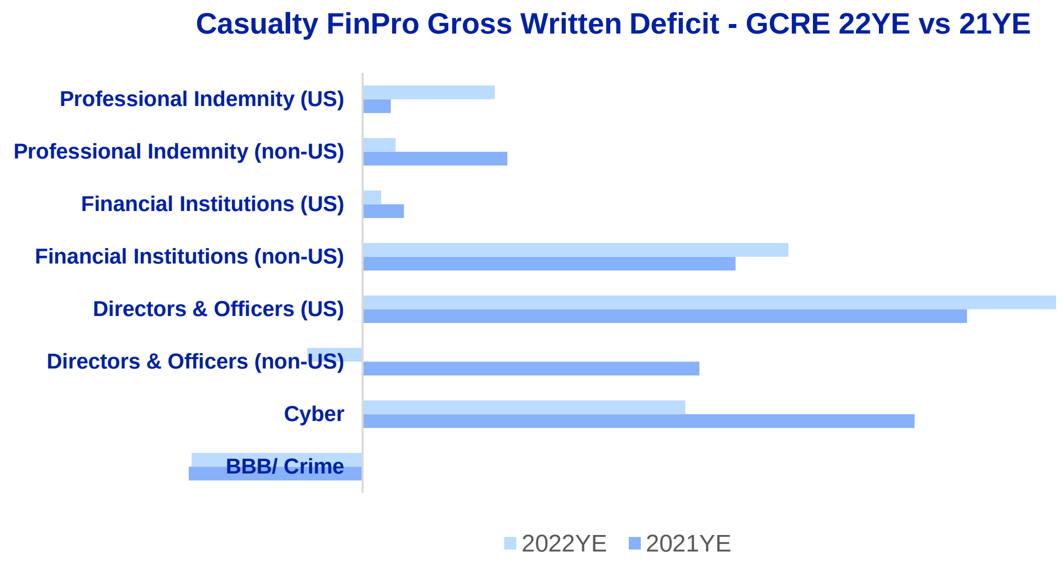
Casualty Fin Pro concerns

Lloyd's vs Market



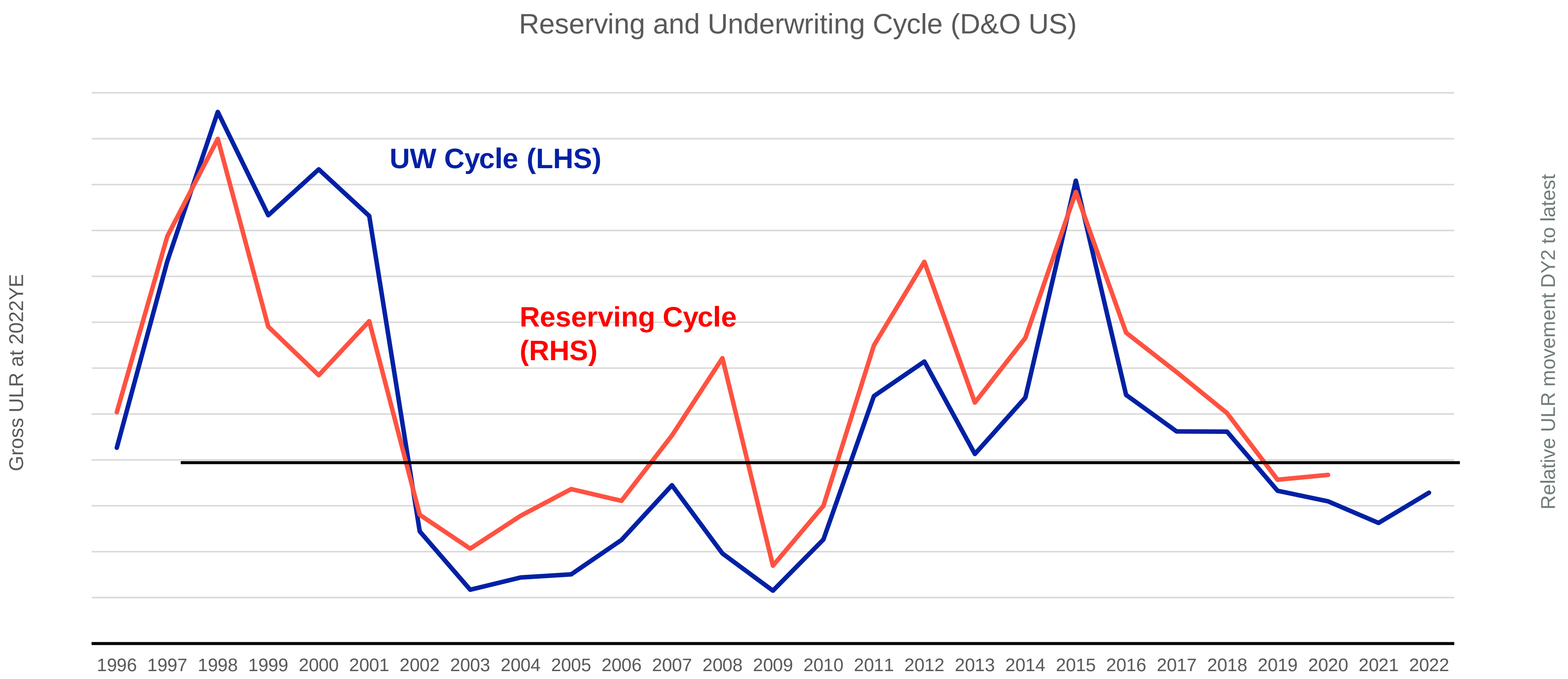


- For all historical years of account, Market's view has increased from the initial estimates and SBF, bringing it closer to the MRC view
- Lloyd's independent view continues to be higher than Market's on most Casualty FinPro classes
- Significant gap between Lloyd's and Market on more recent years as Market loss ratios in more recent years continue to be lower
- Given the historical loss ratio development seen, combined with uncertainties stemming from changing economic environment and market cycle, it is important to understand this gap and set appropriate assumptions for recent years of account.

Directors and Officers US has been selected as the primary class for review in 2023 from a pricing perspective and a reserving perspective.

Reserving vs Underwriting Cycle

Reserving cycle still exists!



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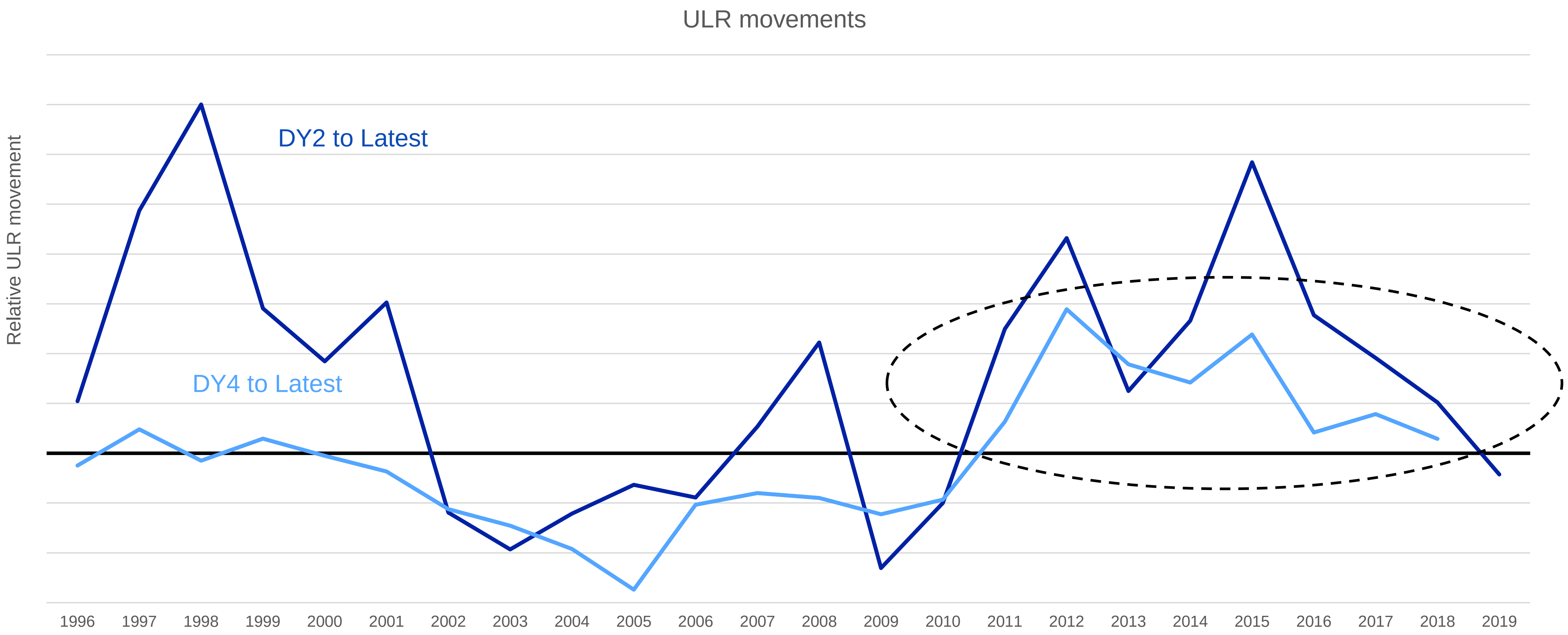
Reserving Cycle

Longer to recognise losses?



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D&O US Deep Dive

Reserving Team Review

Purpose

- Gain comfort around level of reserves in the market
- Understand the drivers of the differences between the reserves estimated by syndicates and Lloyd's

Criteria for selection

- Material writers (last 5 years)
- Material reserves (>70% coverage)

Lloyd's Oversight

- Reserving methodology
- Claims watchlist
- IELR setting process
- Early warning indicators

Reserving Methodology

Differences in approach in the Market

Segmentation	Non-Cat Split	Methodology	Validation
Segmentation of D&O US into **Transactional Liability** and **Binder/Non Binder business**	**30%** of agents reviewed claims in aggregate **70%** consider Attritional and Large claims separately	**81%** of the Syndicate reserving classes reviewed use traditional actuarial reserving techniques A minority of syndicates consider a **Frequency Severity model**	Broadly half of agents perform Freq/Sev analysis. Most consider benchmark tools and comparison with claim watchlists

Claims Watchlist

100% of sample use a watchlist

Bronze

- No structure / formal process

Silver

- Clear process concerning use of watchlist
- Output is structured, e.g. H/M/L status

Gold

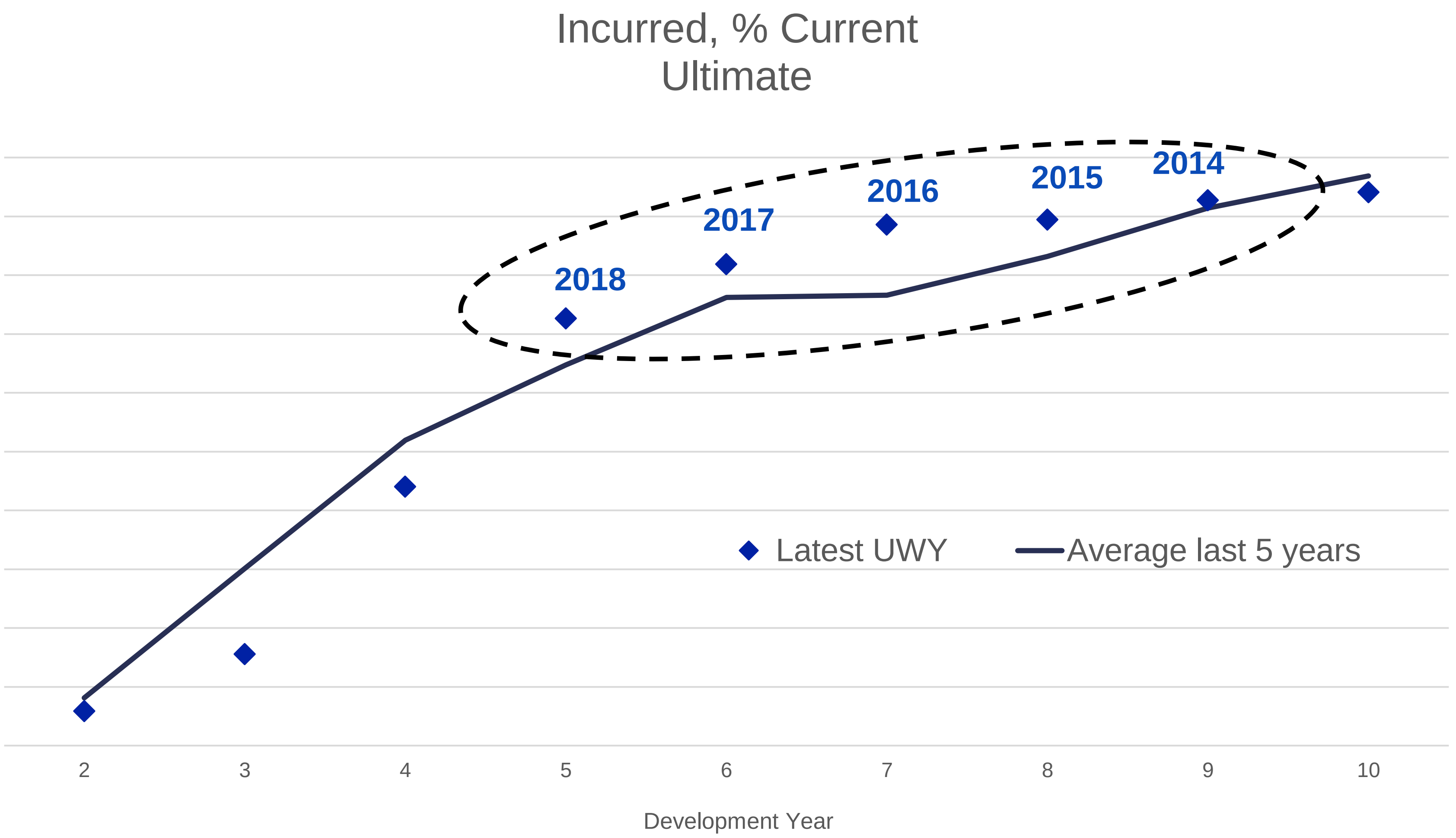
- Considered historical appropriateness and enhanced where necessary
- Stress test watchlist assumptions

Best Practice observations for claims watchlist process:

- Consider historical appropriateness; i.e. AvE.
- Feedback loop.
- Consideration of nil claims.
- Claims ranked as H/M/L risk and associated probabilities.
- Best-estimate vs Optimistic vs Pessimistic.
- Watchlist is stress tested as a validation tool.

Reserving Methodology

Upper end of historical experience



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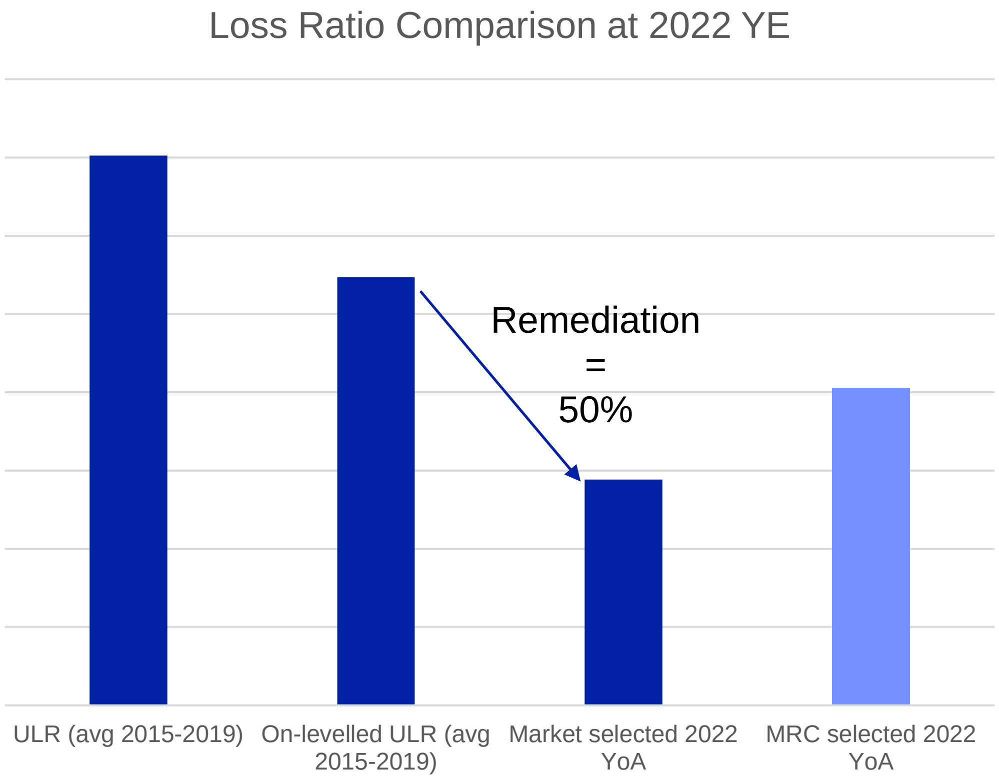
IELR Assumptions

Survivorship Bias?



Methodology	• Some use of Cape Cod. • Most move to experience-based methods between 70% and 75% development.
On-Levelling	• Only a minority validate rate change. • A narrow range of inflation assumptions
Remediation	• Half of participants give partial credit for rate change. • Limited evidence that survivorship bias is considered.
Benchmarking	• SAO benchmarks requested. • Comparison vs IELR's in other Group entities. • Compare vs pricing loss ratios.

Judgements should be Transparent & Communicated

Early warning indicators

Is it too easy to disregard?

- **AvE is used consistently across managing agents and widely shared with management.**
- **Limited evidence that longer term trends, cross-cycle, are being considered sufficiently.**
- **No clear use of high-level early warning indicators other than AvE.**

	Year of Account	Avg IBNR burn during Yr 3	Avg Reserve burn during Yr 3
"BAD"	1997-2001	95%	18%
"GOOD"	2002-2006	30%	8%
"GOOD"	2009-2010	16%	7%
"BAD"	2011-2018	47%	15%
	2019-????	14%	7%

Overall Summary of Findings

Key considerations

- The Reserving Cycle still exists
- Continue developing claims watchlist & feedback loops
- Judgements should be Transparent & Communicated
- Simple reserving metrics are insightful

Key Reserving Uncertainties - Inflation

Alex George – Senior Actuarial Analyst

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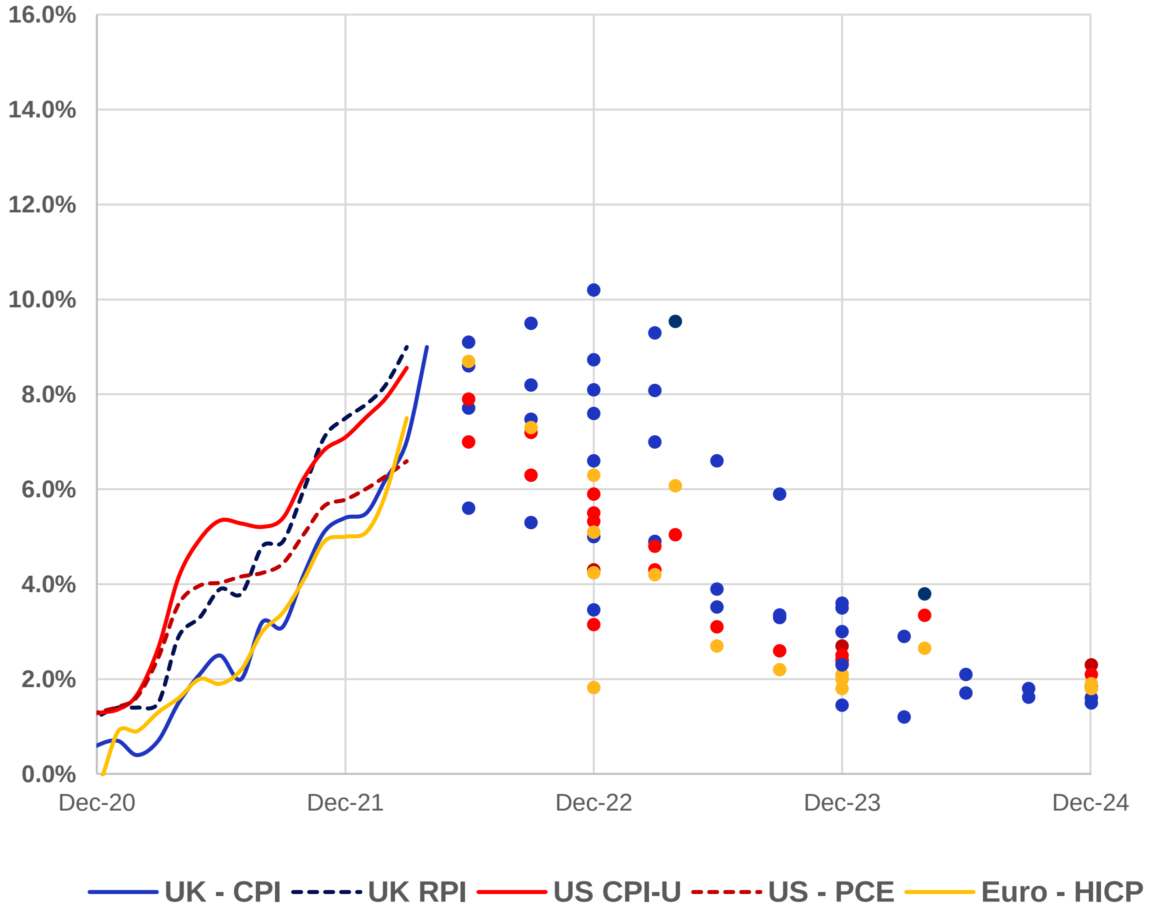
Inflation: The latest view

Realised inflation has been higher and more persistent than expected last year for UK and Europe

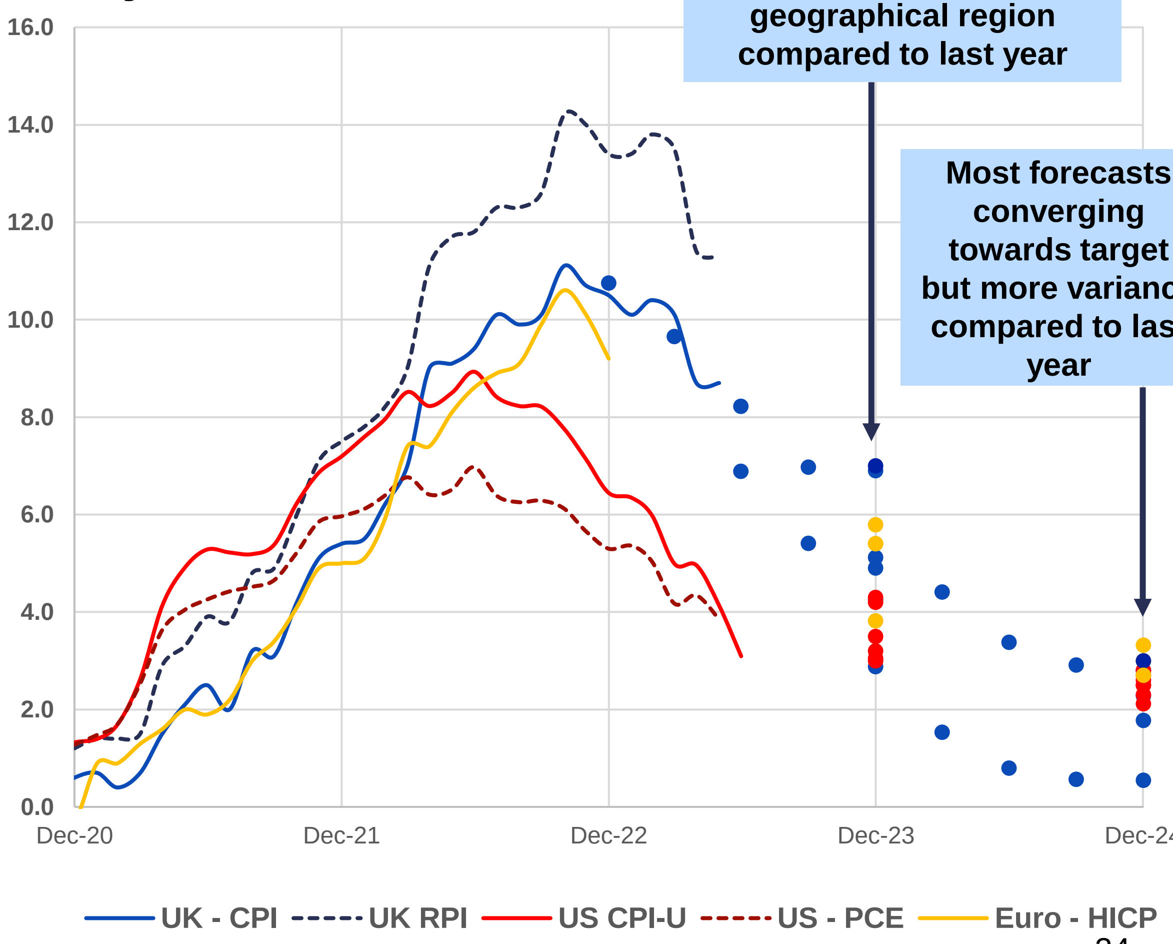
May 2022



July 2023

More divergence between the inflation paths by geographical region compared to last year

Most forecasts converging towards target but more variance compared to last year



The foregoing should not be relied upon as a promise or representation as to past or future performance. Furthermore, past performance is not necessarily indicative of future performance.

Inflation: Entering a new phase

The evolving nature of claims inflation create a complex problem

Phase 1 "New"

- Inflation emerges as a step change in comparison to previous expectations
- Explicit adjustments needed to allow for this

Phase 2 "Transition"

- Heightened inflation starts come through in data
- Case estimates and claims triangles start to incorporate

Phase 3 "Emerged"

- New Inflation environment fully integrated into case estimates
- Inflation in data matches future expectations (temporarily!)

Phase 4 "Exit"

- Expectation of inflation to decrease compared to recent heights
- Negative explicit adjustments needed to allow for this

At a differing pace for different classes of business and geographies

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Inflation: "Phase 2"

Phase 2

- Inflation is beginning to emerge in the claims data, at differing pace by LoB and region
- Previous forecasts for inflation (upon which assumptions were set) are diverging from expectations

Work with Claims teams to determine what is and isn't in the data – how does economic inflation drive claims inflation, are there any lags?

Determine what additional allowance needs to be made for 'Incurred But Not Enough Reported' as well as pure IBNR

Benign AvE experience may be due to claims inflation not emerging in the data at the pace assumed

Consider duration and level of inflation – mean reversion?

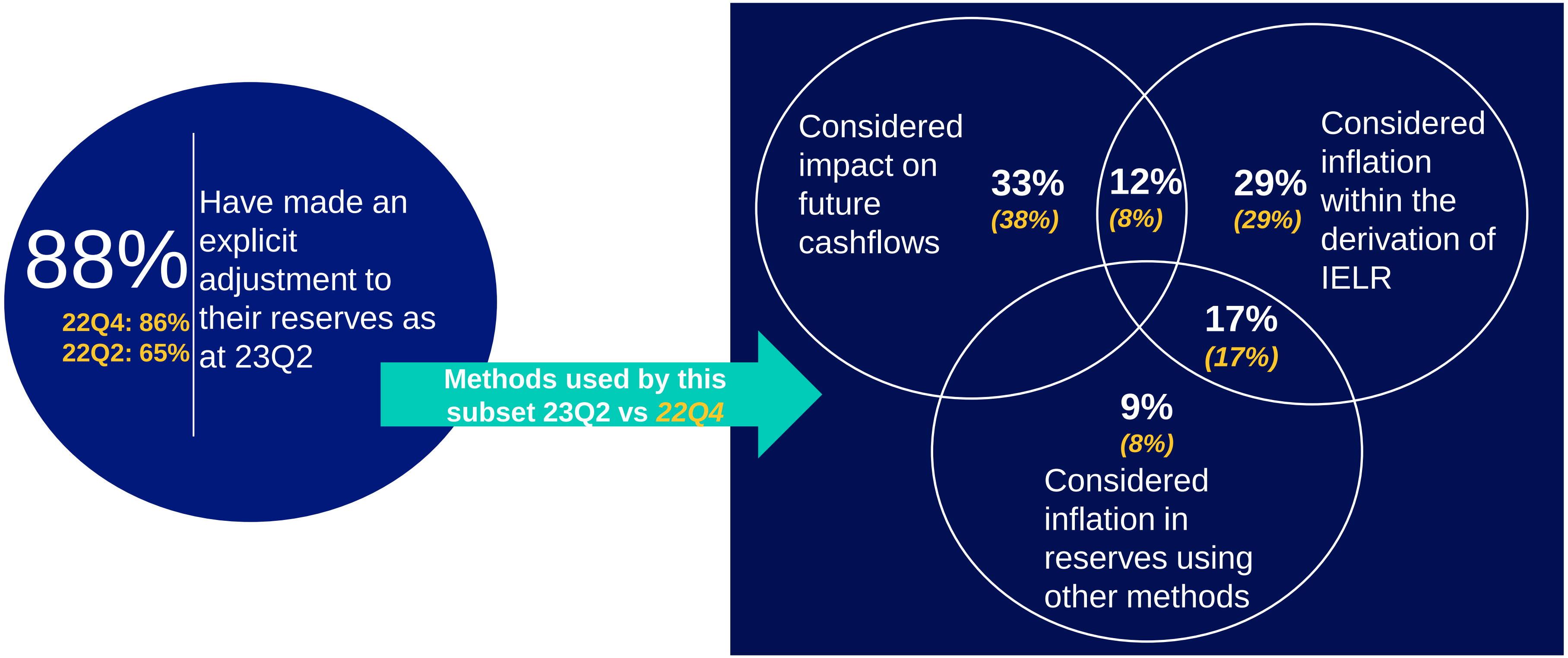
Feedback loops critical between planning and capital

Inflation: The latest review

The market appropriately considered the heightened inflationary environment as at 2022YE

Oversight at 2023Q2 focused on syndicates that have made changes to their methodology, or a material change in the quantum of the explicit inflation allowances…

…methodologies adopted as at 23Q2 have broadly stayed in line with 2022YE



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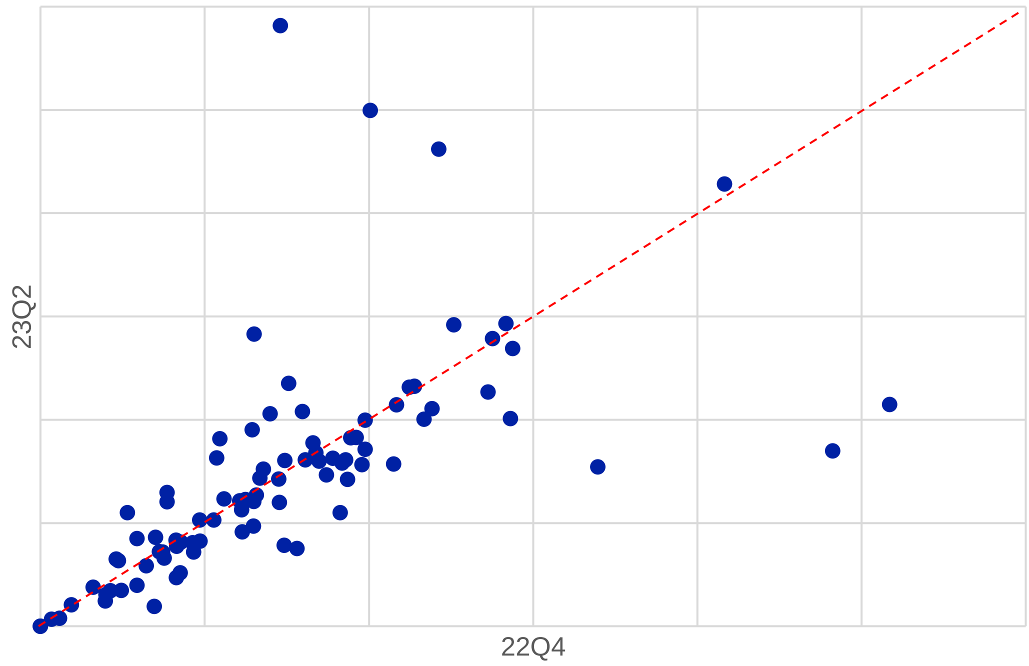
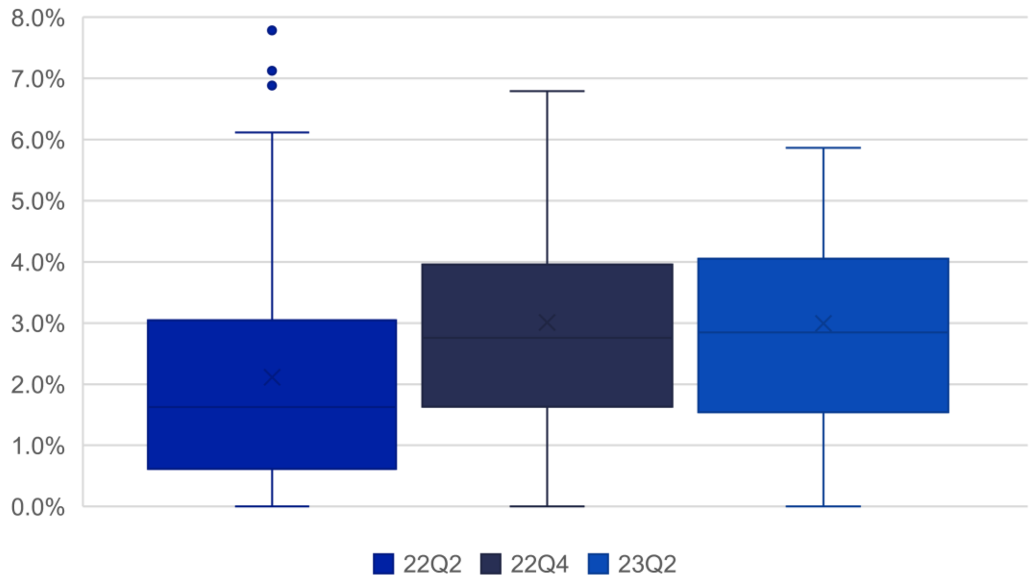
Inflation oversight: The latest review

… the explicit inflationary allowance in the market as at 23Q2 is generally similar to 22YE, the range in net uplifts is less broad.

Explicit inflationary allowance - 23Q2 vs 22Q4



Change in explicit inflationary allowance



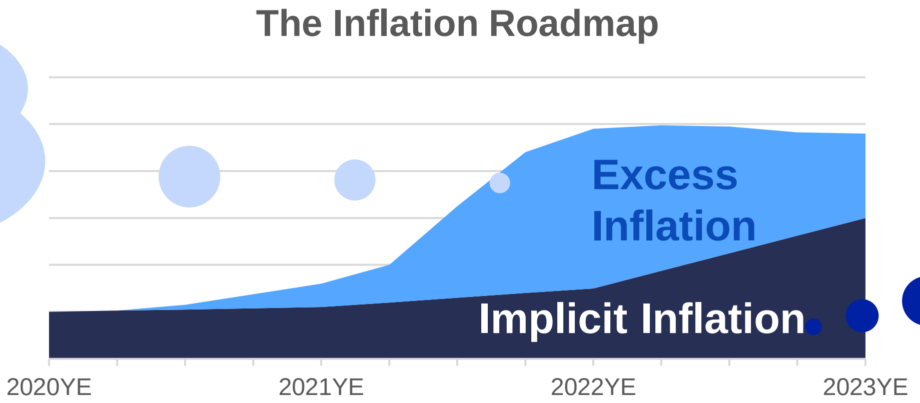
Average uplift to net reserves as at Q2 2023: 2.9%

Inflation: Oversight plans for 2023 HY2

Phase 2 Oversight

The Market will need to consider the transition from explicit inflation uplifts to the assumption that inflation impacts are implicitly included in the claims data and projected forward…

How much of the excess inflation is Social vs Economic inflation? How different will the impacts be? How long will this prevail?



How to move from an explicit excess inflation uplift to allowing for implicit inflation in our reserving triangles?

… we will conduct market oversight at 2023YE via the Q4 2023 QMA and SAO returns

Inflation: Oversight in 2023 HY2

Good practice from existing framework

Governance and challenge: Governance framework for inflation; cross-functional oversight and board challenge

Feedback Loops: Reserving team considers/validates inflation oversight by other functions.

Validation: To gain comfort in respect of inflation assumptions

Uncertainties: And how these are considered, including additional loads; a range of estimates, and selecting pessimistic views

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Inflation: Oversight in 2023 HY2

And what we would expect you to consider for Q4 2023

Monitoring data: Are syndicates monitoring data and considering the associated impact on inflationary allowances, as these trends emerge in the data?

Lag effect: For lines of business where trends are yet to emerge, have you considered whether there is an underlying lag effect in claims inflation?

Case Estimates: Have case reserves been updated to allow for claims inflation?

Benchmarks: Are the benchmarks selected appropriate given the specificities of the syndicate book?
Are syndicates appropriately monitoring the changes in economic indices and any other external benchmark information?

Drivers of inflation: For emerging trends, is the syndicate able to identify the specific drivers of claims inflation?

Inflation: Oversight in 2023 HY2

Additional information return

Similar to 2022YE, there will be an additional information return for 2023YE in respect of inflation.*

Familiar from 2022YE	New for 2023YE
• The explicit adjustments made to capture inflation in the reserves as at 2023 Q4 • A comparison of inflation allowances versus the syndicate • How the comfort is gained in respect of reserve adequacy • Description of approach and how there is comfort that the approach captures the impact on all years of account and specificities of all classes.	• Signing actuaries to complete the template at class of business level • How the impact of inflation is monitored in the data. • Class specific considerations, including how the lag effect has been considered, in particular for long-tailed lines of business

**Inflation return available (Jan 2024): Lloyd's Reserving Guidance and Support Materials - Lloyd's (lloyds.com)*

Key Reserving Uncertainties - Ukraine

Hazal Karakurt – Senior Actuary

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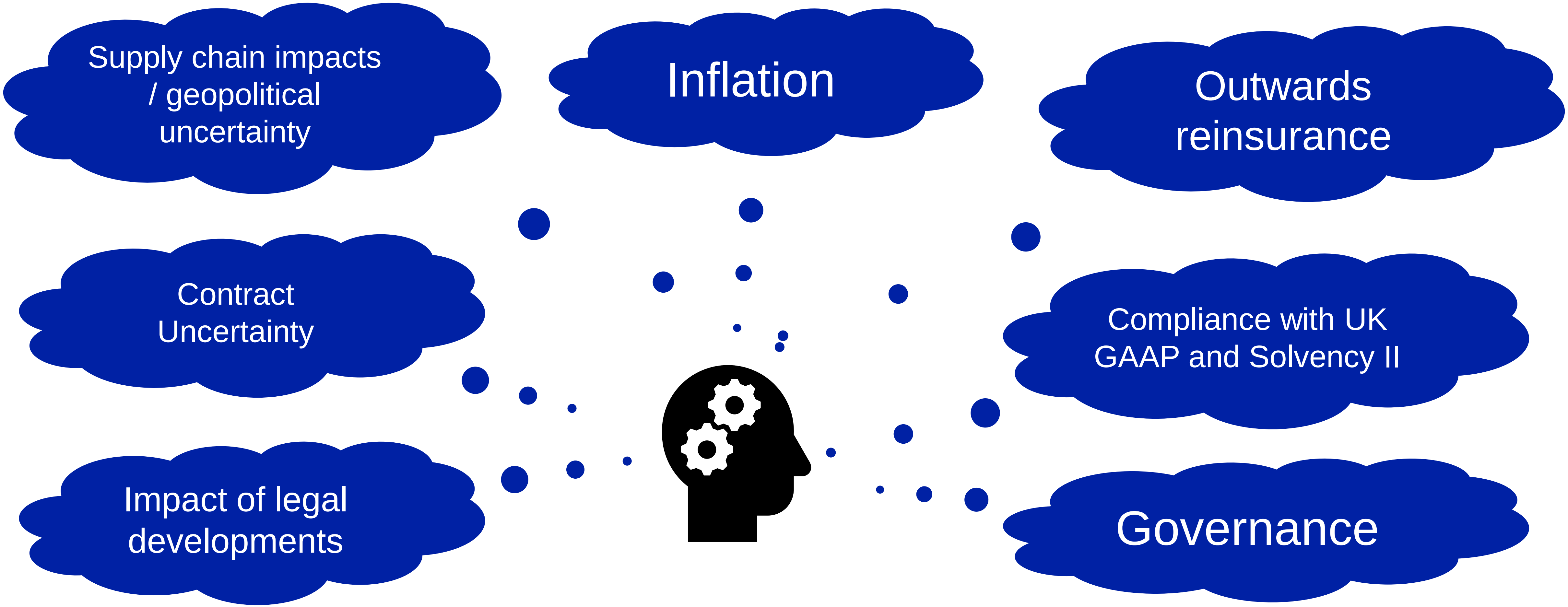
Ukraine Crisis: Considerations for Reserving

We have set out some key areas we think should be considered for Ukraine reserving



Risks on the horizon

Hazal Karakurt – Senior Actuary

Sources of potential uncertainty on the horizon

Pandemics

Geopolitical tensions

Cyber

Forever Chemicals

Banking sector crisis

Recession

Climate change

Geopolitical Risks

Allowance for the unstable global economic, political and social environment impacts within reserving

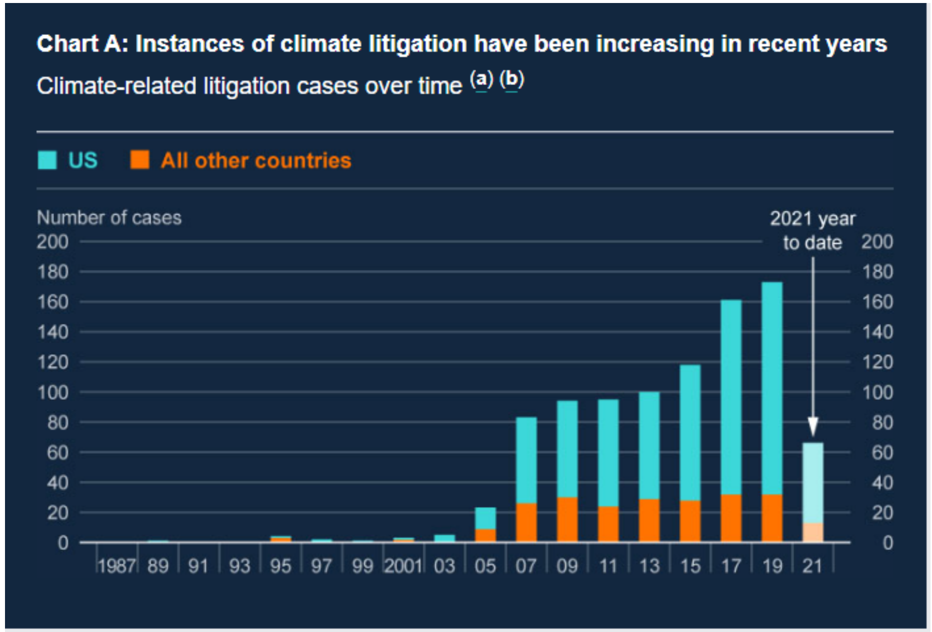
- The current economic, political and social environment, as well as behaviour trends driven by climate change, increases the volatility and uncertainty associated with future claims.
- It means that future claims costs are likely to be higher than those indicated by historical data given both increased claims frequency and claims severity, as well as the emergence of new types of claims, the combined impact of which is heightened aggregate claims costs.
- In particular, **social and civil unrest** is likely to result in **strikes, protests and lobbying action**, and the stressed economic environment is likely to give rise to increased levels of fraud, as well as increased propensity to claim. Combined, these may result in **aggregation risks** with higher volumes of lower value claims, changing the risk profile for some classes including **Terrorism and Political Risks** and **Credit and Financial Guarantee.**
- Non-Marine General Liability and Non-Marine Casualty Treaty are also exposed to the potential for heighted claims costs arising from this stressed environment.
- The changes in the world within which we are operating should be considered in reserve setting.

Economic Environment	Political and Social environment
Increased Fraud	**Claims events arising from social and civil unrest**
Increased Propensity to claim	**Impact of government and regulatory decisions**
Increased claims costs driven by inflationary environment	**Emergence of new claims types and movements**

Climate Change - Litigation Risk

Many different types of climate litigation, e.g.

- Responsibility for financial loss from climate change against "Carbon Majors"
- Challenge of high-carbon-emitting activities at different points of the lifecycle (from financing to project approval)
- Cases by shareholders/investors due to misinformation/failure to disclose climate risks
- "Strategic cases" aimed at influencing the broader debate, e.g. against government frameworks
- "Climate-washing" cases – climate misinformation and misleading green claims by corporations



Source: Global trends in climate litigation: 2021 snapshot, J. Setzer and C. Higham.

➡ Could result in significant historic liabilities

LMAG talk in February highlighted which classes might be impacted/what reserving actuaries might want to think about

Feedback from PRA on CBES – (re)insurers struggled to understand their exposures – that's where we need to start

➡ Plan to conduct a thematic review in 2024 to understand this further

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Large Loss Wordings

Existing Large Loss Wordings

Wording	Wording Description
Wording 1	I am satisfied that the company/syndicate has no material exposure to the Large Loss.
Wording 2	The company/syndicate has material exposure to the Large Loss. However, this exposure does not lead to a material increase in the uncertainty of the company/syndicate's total reserves [in an adverse direction].
Wording 3	The company/syndicate has material exposure to the Large Loss. This increases the uncertainty of the company/syndicate's total reserves, but does not increase that uncertainty [in an adverse direction] significantly beyond the normal range of uncertainty for insurance liabilities at this stage of development.
Wording 4	The company/syndicate has material exposure to the Large Loss. The ultimate amounts of these claims are subject to a great deal of uncertainty which, combined with their total size, increases the level of uncertainty for the total reserves of the company/syndicate significantly beyond the normal range of uncertainty for insurance liabilities at this stage of development.

- Lloyd’s is aware that the Climate Change Reserving Working Party is reviewing potential areas of limitations of the existing large loss wordings
- **2023 Year End SAOs reporting to Lloyd’s is expected to be on the existing Large Loss Wordings Framework (as shown above)**
- Lloyd’s will start consultations with market participants including Signing Actuaries during 2024 for any potential changes to the Large Loss Wordings

Closing Remarks

Rebecca Soraghan – Interim Head of Actuarial Oversight

Summary

There is a lot going on and it doesn't seem to get easier!

Several areas to consider for 2023 year end reserving: our expectation is that each area of uncertainty is explicitly allowed for such that there is a good understanding of what allowances are contained within the best estimate reserves to enable effective monitoring over time. This should be coupled with clear communication to your Boards of best estimate allowances and the ranges/scenarios around these to demonstrate the uncertainty.

Key take-aways for 2023 year end reserving:

1. Casualty Reserving continues to be a focus area for Lloyd's and we will continue to do oversight on these classes particular on the FinPro lines of business
2. These are classes that generally require supplementary reserving analysis over and above the traditional actuarial reserving techniques
3. Inflation is in the secondary phase and you will need to consider the transition from explicit inflation uplifts to the assumption that inflation impacts are implicitly included in the claims data and projected forward.

Finally, we highlight that the risks on the horizon may be different to what we have experienced in the past and we need to be prepared for more systemic interlinked risks and develop appropriate frameworks to appropriately reserve for these as they manifest

Questions

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