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# Reserving for inflation

*Lloyd's Guidance – June 2022*

*NED Recording*

2022

# Agenda

- Opening Remarks
- Key Messages
- What do we mean by "Claims Inflation"?
- Quantifying the impact of claims inflation
  - Reserving Expectations
  - Suggested Considerations
  - Potential Approaches
- Summary

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# Opening Remarks

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# Inflation: Key Messages from Lloyd's

**“Inflation is the big issue of 2022 and we must manage this in an adequate way.**

**Not dealing with inflation is wrong, but so is being too prudent. We must find the right balance...**

**...and your actuaries have to make explicit and reasonable allowances.”**

Inflation is a topic that requires careful and explicit consideration in Syndicates' 2022 reserve setting, with well thought-through approaches and assumptions adopted

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# What do we mean by "Claims Inflation"?

***"The change in claims cost of a like for like policy over time."***

***'Claims cost'*** *is considered as all costs in relation to the payment and settlement of a (re)insurance claim. This includes loss adjustment expenses directly associated with the claim, such as claims handling.*

***'Like for like'*** *means having consistent policy wording, exposure and level of coverage, such that the change in claims cost is considered after normalising for changes in policy terms and other differences in the policy.*

Different breakdowns of inflation may be used by different teams, driven by the angle at which inflation is being considered:


***Please note that the diagram is just illustrative of how the two breakdowns sum up and the size of the bars are not indicative to the expected relative size of the components.***

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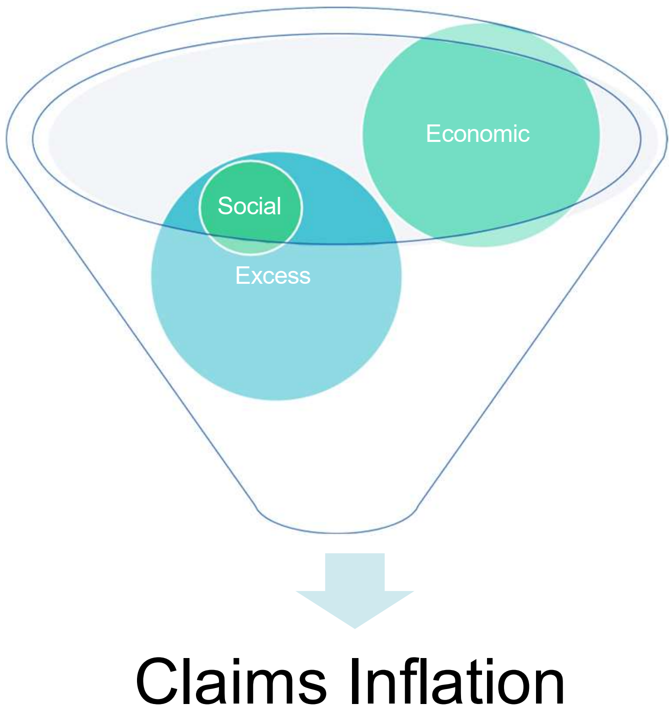
# What do we mean by "Claims Inflation"?




*“**Economic inflation"**: Changes in claims costs as captured through published economic indices relevant to a (re)insurer’s mix of business.*

*"**Excess inflation"**: Changes in claims costs beyond what is captured in economic indices, including factors which are specific to a (re)insurers’ business and including social inflation, i.e., social inflation is a subset of excess inflation.*

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# Quantifying the impact of Inflation is not straightforward


**Whilst economic indices (such as CPI) are available, these are unlikely to be completely relevant or capture all drivers of c laims cost increases.** Things to consider:

- Do your claims costs increase with CPI or are they poorly correlated? It won't be relevant for all classes or all territories
- How long do you expect inflation to stay at this level? You may expect it to return to historical levels after a certain period of time.
- Do you already have some of this (I.e. x% claims inflation) captured within your reserve estimates? Traditional actuarial methods implicitly assume and project forward the average of historic levels captured in claims data
- Is there excess inflation that needs to be considered in addition to economic inflation? This will vary by class.

WARNING: Forecasts of Economic Indices are unlikely to accurately reflect the inflation you should super-impose on your future cashflows

Therefore, your approach to allowing for claims inflation should be informed by appropriate analysis of available data. So e.g. analysis of average claim costs and what has driven changes over time, and an analysis of the components of claims and what indices these should be linked to.

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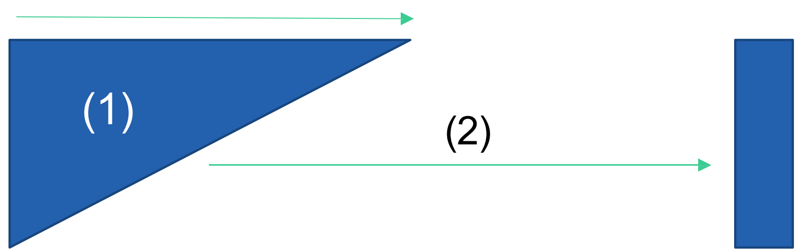
# Quantifying the impact of Claims Inflation

## Two Elements

There are two key elements of allowing for inflation in reserves;

(1) allowing for claims inflation up to now for claims that have not yet settled, and

(2) forecasting how inflation will impact claims costs between now and their settlement.




Traditional actuarial triangular reserving techniques will capture in the projected reserves implicitly the level of historical inflation observed in the data by taking a weighted average of previous periods.

The question is: **Is this allowance appropriate? Or has inflation recently changed or expected to differ in future?**

There may be some classes where it is enough because claims costs are not being impacted by recent economic inflation increases. But for others, the average cost per claim may be increasing and therefore there is not sufficient allowance for inflation incorporated in using a chain ladder method alone.

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# Reserving Expectations of Syndicates

*"We expect syndicates to **explicitly consider economic and excess inflation** (including social inflation) in their reserving process **when setting best estimate reserves.** This is particularly important when historical data is unlikely to be representative of the future and traditional reserving techniques do not address this.*

*Where syndicates are not making an explicit additional allowance in their best estimate reserves for inflation, they must be able to **explain why their approach is appropriate** and how they have gained sufficient comfort that their reserves are adequate."*

Our expectations:

### 1. Inflation to be considered explicitly as part of the best estimate reserving

- Explicit consideration by class of business and geography

This doesn't mean you should apply an additional allowance to every class of business, unless that is appropriate and not excessively prudent.

### 2. Be able to clearly explain how inflation has been allowed for

- To allow challenge by various stakeholders across the business

Allowing for inflation is not straightforward but communication needs to be clear on what the assumptions imply.

### 3. A considered approach will be taken to reserving for claims inflation

- That appropriately reflects the specificities of your claims costs

Broad-brush approaches are unlikely to be appropriate given that they are likely to under or over-estimate the impact by class.

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# What are the types of things you need to consider?

***"The key drivers of inflation for different classes and how these are expected to impact claims costs (e.g. cost of raw materials, wage indices, geographical differences)"***

- Help identify whether any indices will be a good proxy for claims inflation or not. You may need to use some expert judgement for some classes.
- Consider gearing impact on layers for reinsurance treaty business

***"The level of inflation assumed to be priced into premiums for more recent years of account"***

- Identify what level of inflation has already been allowed for in the pricing. For recent years the loss ratios should already reflect this but the allowance may not be sufficient.

***"Future inflation should be considered on a calendar year basis until all claims are run-off to understand the impact on ultimate claims estimates. This requires consideration of the expected severity and persistence of inflation shocks (i.e. when inflation is likely to revert to long-term targets)."***

- Look at forecasts (such as from the Central Bank) to extrapolate current inflation forwards and take into account claim settlement patterns.

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# Potential Approaches: Practical tips on how to allow for and demonstrate inflation allowance

***"Syndicates should be clear on how they are allowing for inflation within their reserves and where they expect explicit additional allowances may be required."***

"Cashflow Approach"

By Class of Business

1. Use existing reserving process to determine reserves by YoA (i.e. reserves including implicit historical inflation)
2. Determine incremental payments by future calendar year utilising payment patterns
3. Apply explicit future calendar year inflation assumptions (net of implicit allowances assumed)
   - Economic & Excess assumptions
   - Assumptions to ultimate needed
4. Determine inflation uplift relative to original reserve calculation

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# Potential Approaches: Practical tips on how to allow for and demonstrate inflation allowance (cont'd)

***"Syndicates should be clear on how they are allowing for inflation within their reserves and where they expect explicit additional allowances may be required."***

## "Building Block Approach"

**By Class of Business**

**"Recent" Years**

- Expect mainly to be reserved using IELR approach
- Uplift the inflation assumptions within the IELR
- No need to quantify implicit inflation captured in data already
- Requires mean term, payment pattern and future inflation assumptions

**"Middle" Years**

- Example where claims more than 60% developed (less unknown)
- More focus on validation of reserve setting
- Qualitative assessment with claims team for major open claims
- General IBNR projected may be sufficient

**"Back" Years**

- Few open claims
- Assume these may be captured by Specific IBNR/Case Estimates
- Make explicit allowance for inflation uplift on case by case basis by reassessment of claim estimate

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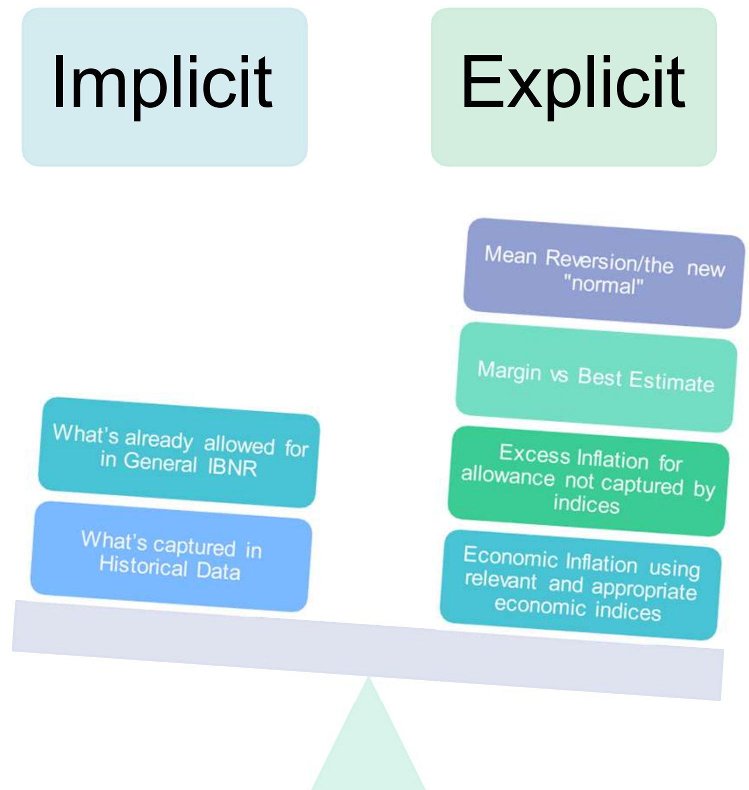
# What does “balanced approach” mean?

**It does not mean throw the kitchen sink at it**

**It does not mean do nothing**

We expect a balanced approach to be taken for the inflation allowance incorporated in the best estimate but also in the reserve margin.

Need to consider what is appropriate to hold in margin – Has uncertainty increased? Has the likelihood of adverse experience reduced?

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# Reserving for inflation final remarks


We would expect Syndicates to approach this in a **considered way.**
Inflation is just another area of additional uncertainty now compared to recent history.
It needs to be quantified and validated. This is no different to any other uncertainty.

# Summary

## Your approach to allowing for claims inflation should be...

**1. Informed by**:

- An understanding of what allowance for inflation is already captured through your existing reserving methodology.
- A detailed understanding of how inflation impacts your book
  - Informed by class-level analysis on how your average cost per claim and claim frequency have changed and what the drivers of this are.
- A clear view, consistent with the rest of the business, on how the inflationary pressures (that your book is exposed to) are expected to change over time.

**2. A balanced and well-considered approach**

- It should make sufficient allowance but <u>not contain excessive prudence</u>
- Consider what the appropriate impact on your reserve <u>margin</u> should be
- Think about how to make the approach <u>agile</u> to be able to react to future developments

**3. Communicated to your Board, including the uncertainties and ranges/scenarios**

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