



# Funded Reinsurance in the Post-Pandemic World

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# Funded Reinsurance in the Post-Pandemic World

Market Indicators*	Pre-Pandemic	During Pandemic	Post-Pandemic
<b>Annual Funded Vol.</b>	~ \$20B	~ \$200B	TBD
<b>Typical Deal Size</b>	< \$5B	\$1B - \$10B	\$1B - \$50B
<b>Target Blocks</b>	Annuity Tranches	Large Fixed Annuities	Complex   Flow
<b>Cedant Motivations</b>	Opportunistic	Low Interest Rates   Strategic**	Capital Optimisation
<b>Cedant Priorities</b>	Execution	Price	Counterparty Credit Risk
<b>Reinsurer Motivations</b>	Deploy Risk Capital	Asset Accumulation	Various

- Alternative risk capital entered the market to address a sharp increase in cedant desire to offload legacy blocks that consumed significant capital
- Expect the market needs and preferences to continue to evolve

\*Figures and descriptions for broad market representation purposes only. Annual funded reinsurance volumes generally excludes M&A activity

\*\*Concerns on low rates stem from decreasing average book yield and potential negative spread; RI pricing remains attractive due to large differential between statutory & economic discount rates

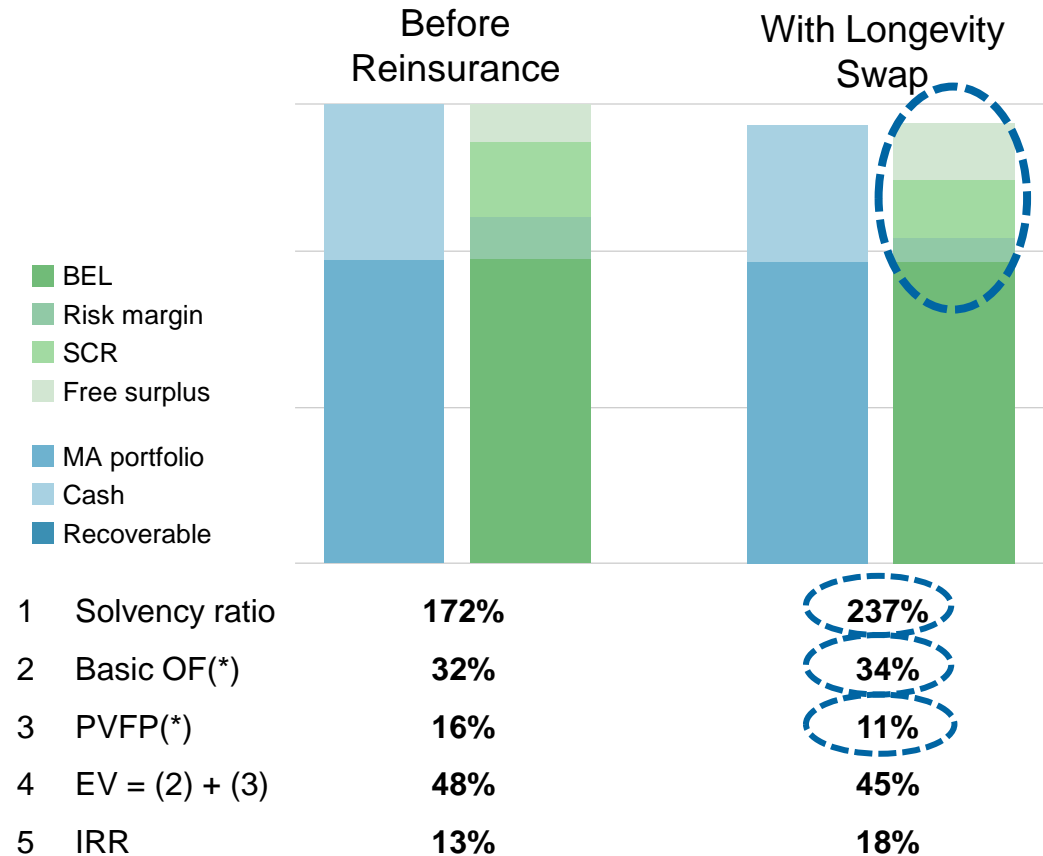
# Funded Reinsurance in the Post-Pandemic World



Funded Reinsurance is having an identity crisis

# Longevity Swap Impact

Under Solvency II, the trade-off between the embedded value sacrificed and the capital release achieved is typically viewed as favourable by most UK insurers.



## Balance Sheet

Implementing a longevity swap:

- Reduces the SCR (a large decrease in longevity SCR and corresponding small increase in counterparty risk SCR)
- Reduces the Risk Margin (as per changes in the SCR above)
- Reduces total assets due to reinsurance fee
- Increases free surplus

## Key financial metrics

- 1) Increase in Solvency Ratio due to higher free surplus
- 2) Increase in Basic OF due to Risk Margin release, offset to some extent by reduction of total assets driven by the reinsurance fee
- 3) Decrease in PVFP(\*\*) due to Risk Margin release

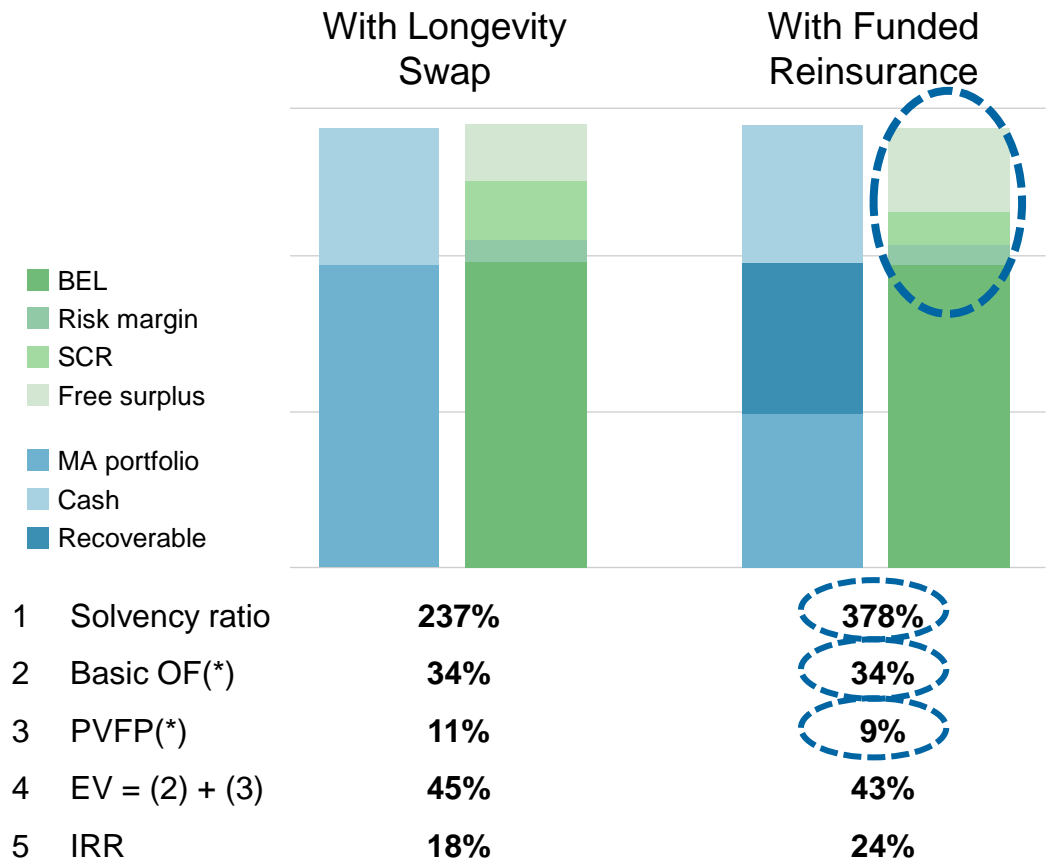
(\*\*) PVFP is defined as present value of the unwind of (i) Risk Margin and (ii) margins in the BEL (e.g. earned yield above Matching Adjustment)

**Capital efficiency improves significantly (i.e. increase in IRR) in return for a small decrease in embedded value.**

*Annuity writer on Standard Formula, taking out 50% QS longevity swap with AA rated reinsurer on new business, i.e. no Transitional Measures ; (\*) percentage of BEL*

# Funded Reinsurance Impact

If insurers consider favourable the trade-off between the drop in embedded value and the increase in IRR after implementing a longevity swap, then funded reinsurance should be viewed as even more favourable.



## Balance Sheet

- Full risk reinsurance, compared to a longevity swap:
- Reduces the SCR (large decrease in asset SCR and small increase in counterparty risk SCR)
  - Slightly increases the Risk Margin (due to small increase in counterparty risk SCR)
  - Increases free surplus

## Key financial metrics

- 1) Further increase in Solvency Ratio due to higher free surplus
- 2) No change in Basic OF
- 3) Further decrease in PVFP due to foregoing future unwind of margins in BEL

**A full risk reinsurance solution brings further improvements in capital efficiency compared to a longevity swap.**

(\*) percentage of BEL

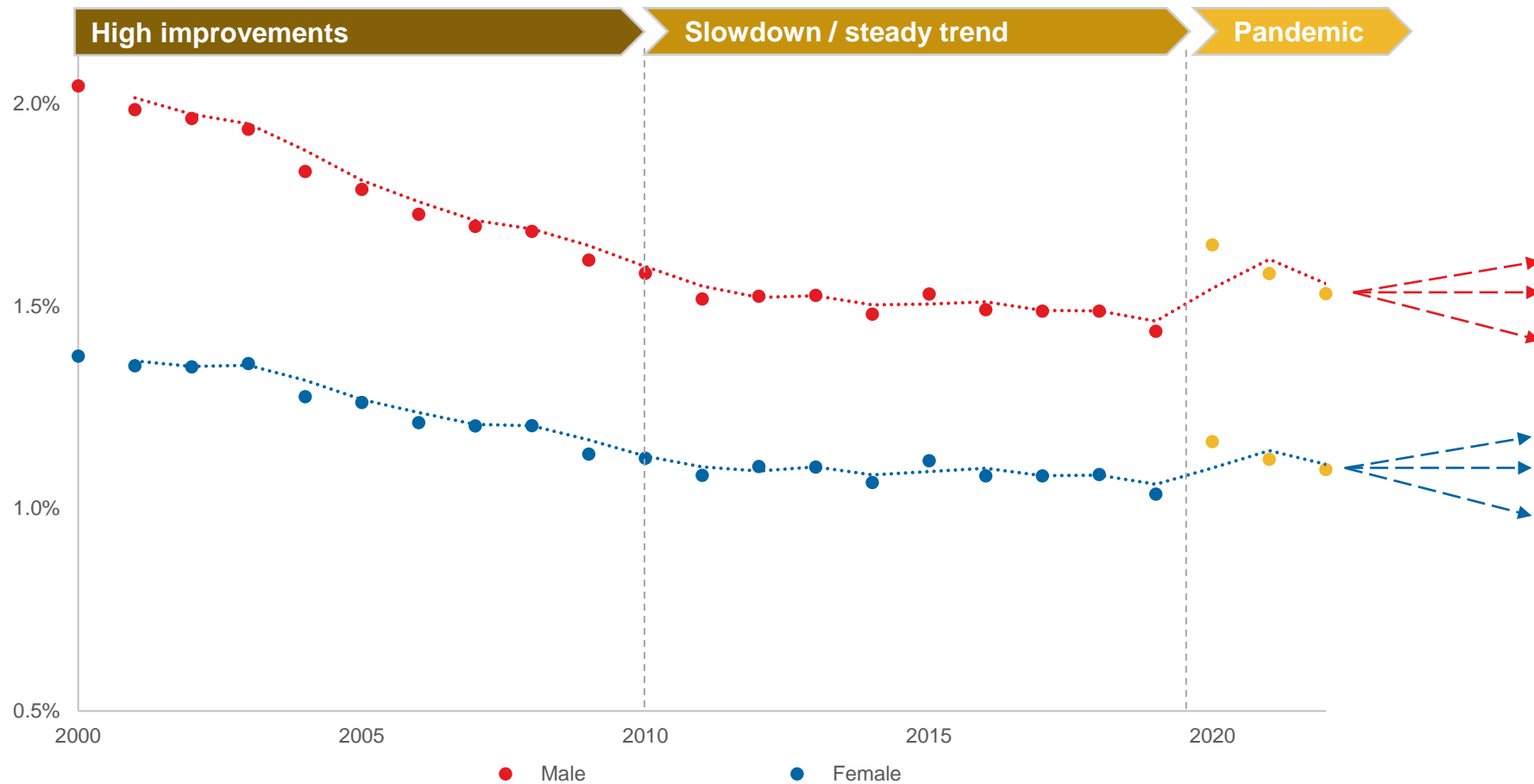
# Funded Reinsurance in the Post-Pandemic World



Setting longevity assumptions a much trickier exercise

# Progression of UK Historical Mortality Rates

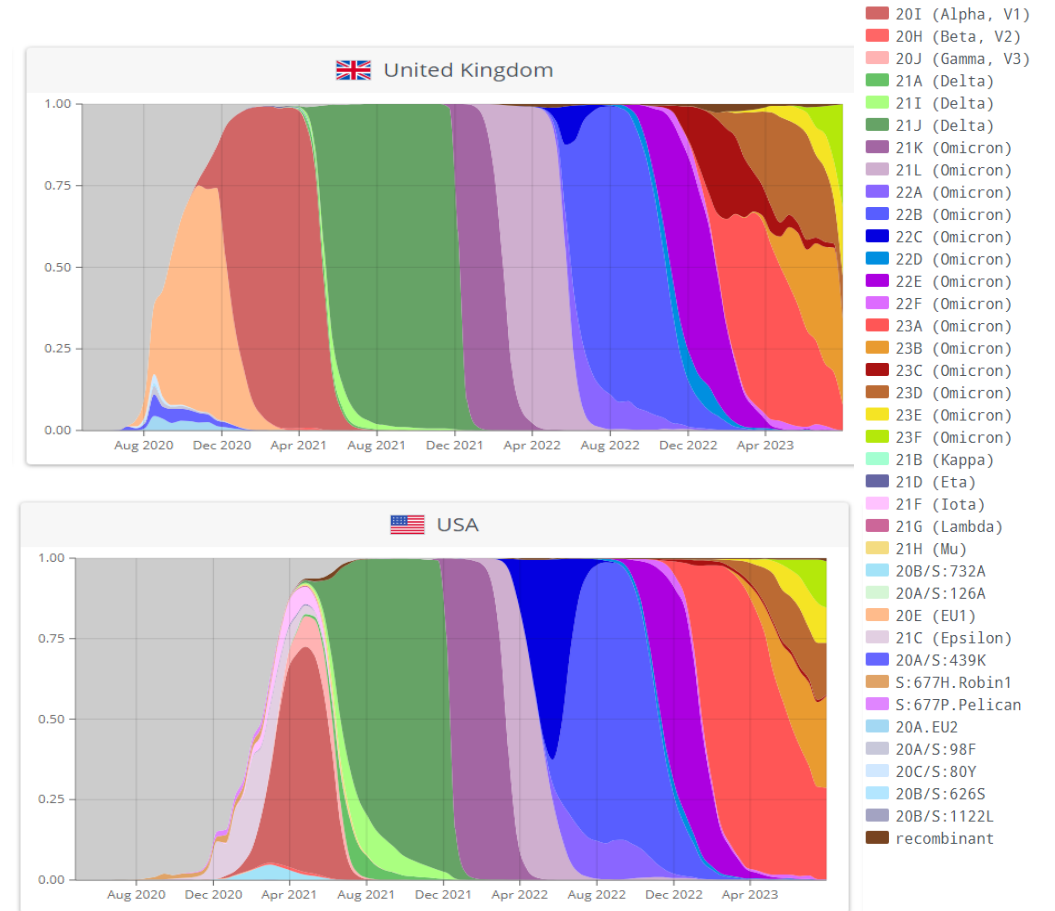
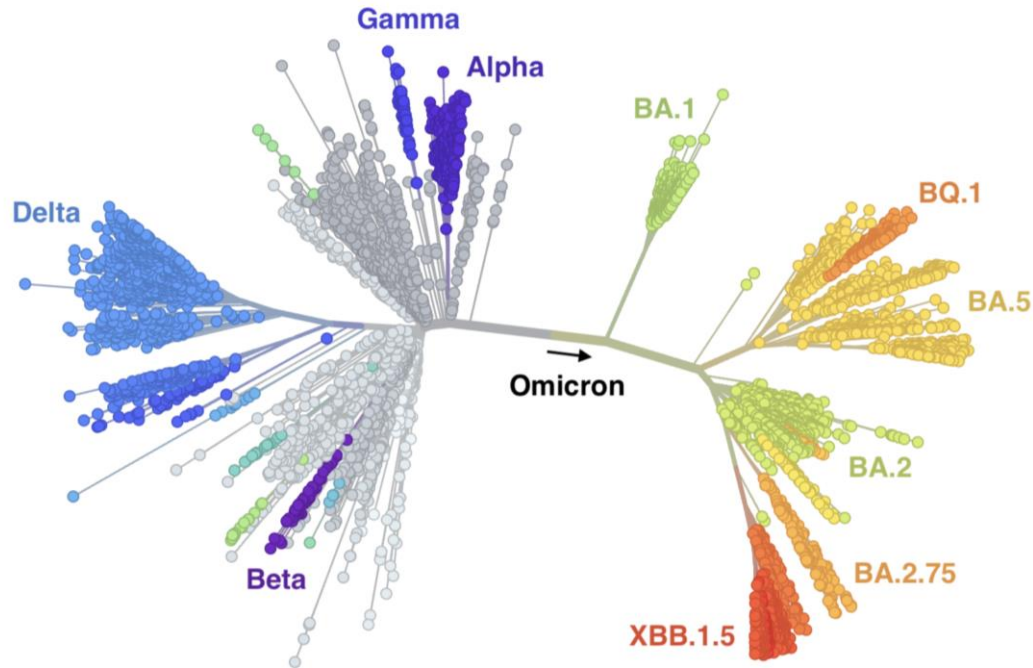
## Standardised mortality rates in the UK



- High improvement rates in the 2000's, followed by a slow-down in mortality trends in the 2010's
- A discontinuity from 2020

Source: CMI calculations

# SARS-CoV-2 – Evolution



Source: [Evolutionary forecasting for SARS-CoV-2 \(bedford.io\)](https://www.bedford.io/)

Source: [CoVariants: Per Country](#)



# SARS-CoV-2 – Recent Mutation

## BA.2.86 (“Pirola”)

- Deemed a variant under monitoring by the WHO on August 17
- An unusually high number of mutations (>30 amino acid changes highly concentrated in spike protein) has several experts concerned
- Derived from BA.2 which stopped circulating ~July 2022
- The emergence of BA.2.86 highlights that the potential for a new variant of concern (VOC) remains a real possibility

- *"could be pretty important... or could be a damp squib..."*

– Dr Thomas Peacock  
(Virologist at Imperial College  
London)

- **Time will tell!**

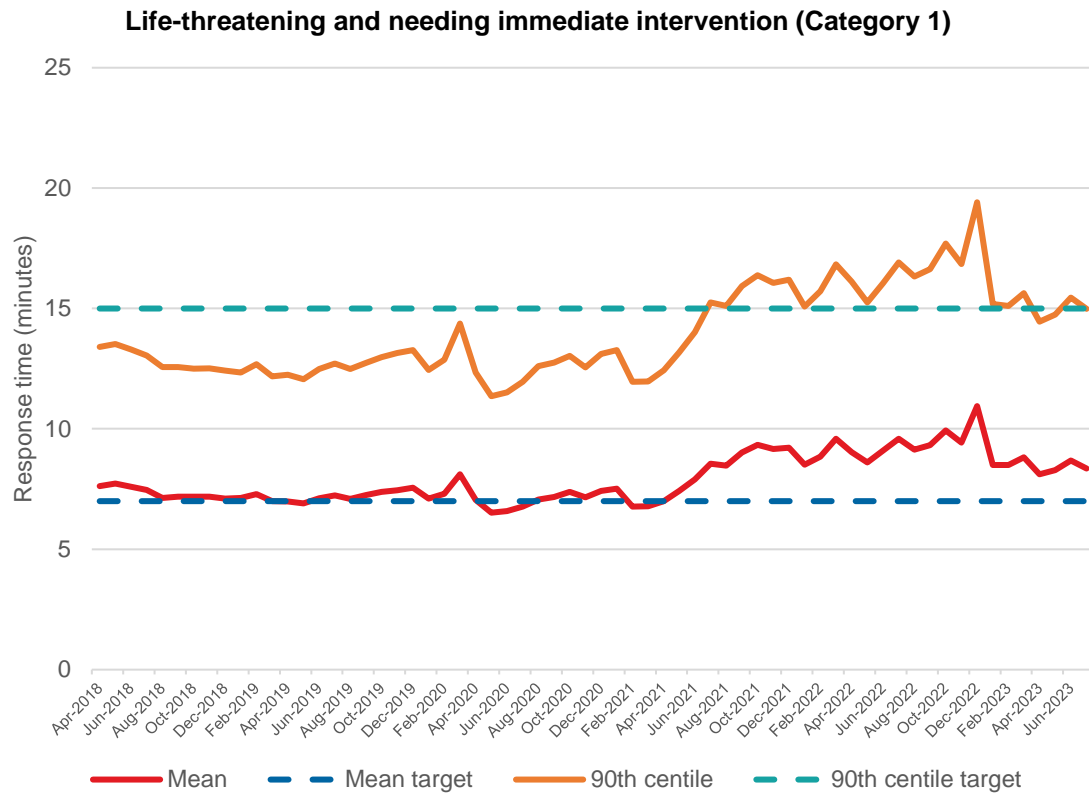
# SARS-CoV-2 – Evolution to an Endemic state



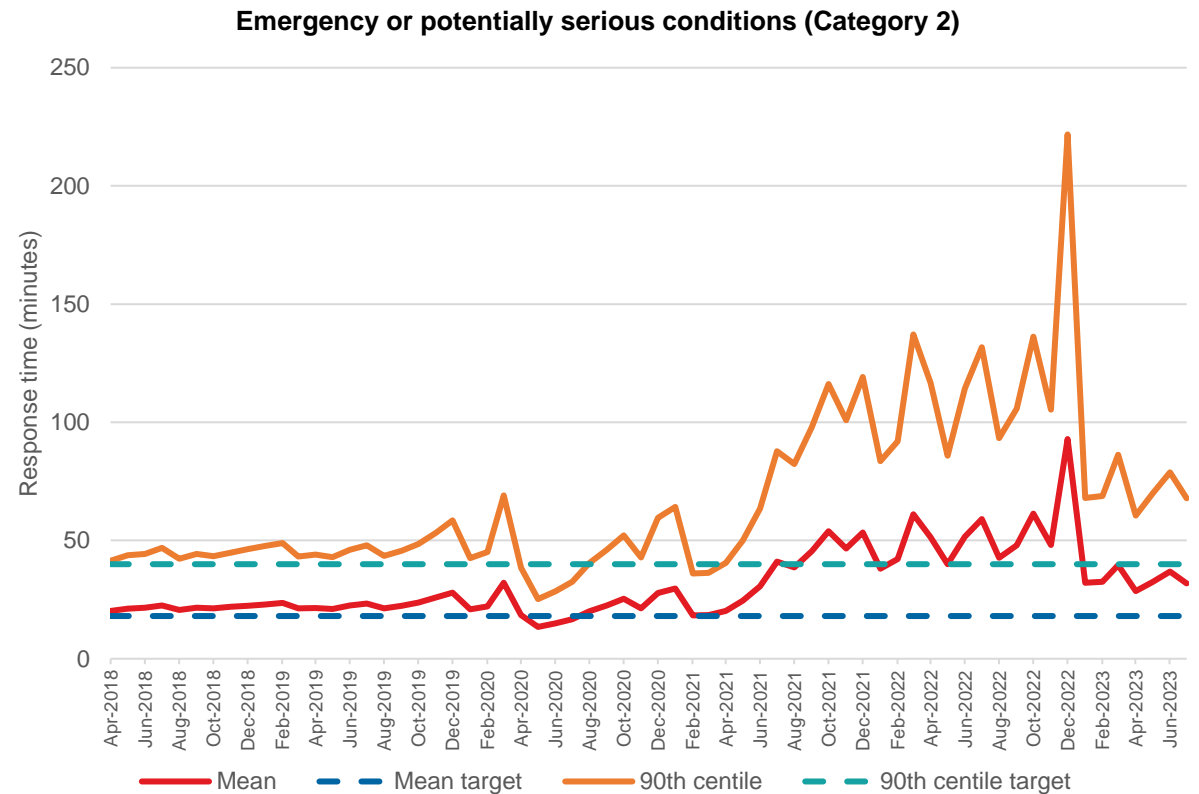
- Expecting volatility in covid deaths along the way
- Broad consensus on an endemic state
- Precise nature of the future state remains uncertain
- Range of outcomes: a common cold, a flu, a severe flu with pneumonia,

# Ability to control non-Covid Excess Deaths? NHS challenges

## Ambulance Response times



**Targets persistently missed since 2021**

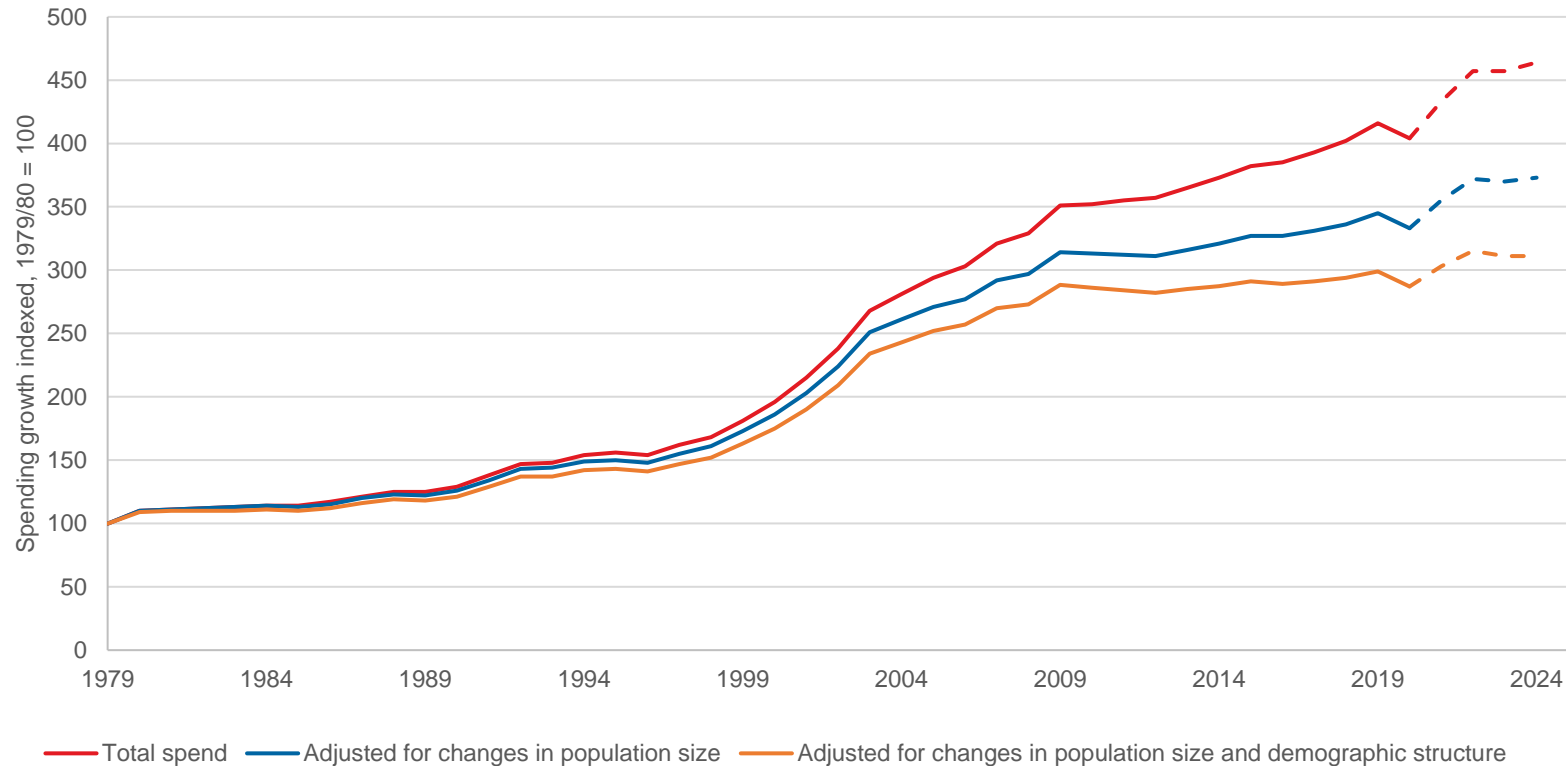


**Targets persistently missed even before 2021**

Source: NHS England. Ambulance Quality Indicators

# NHS Funding

## Growth in healthcare spending

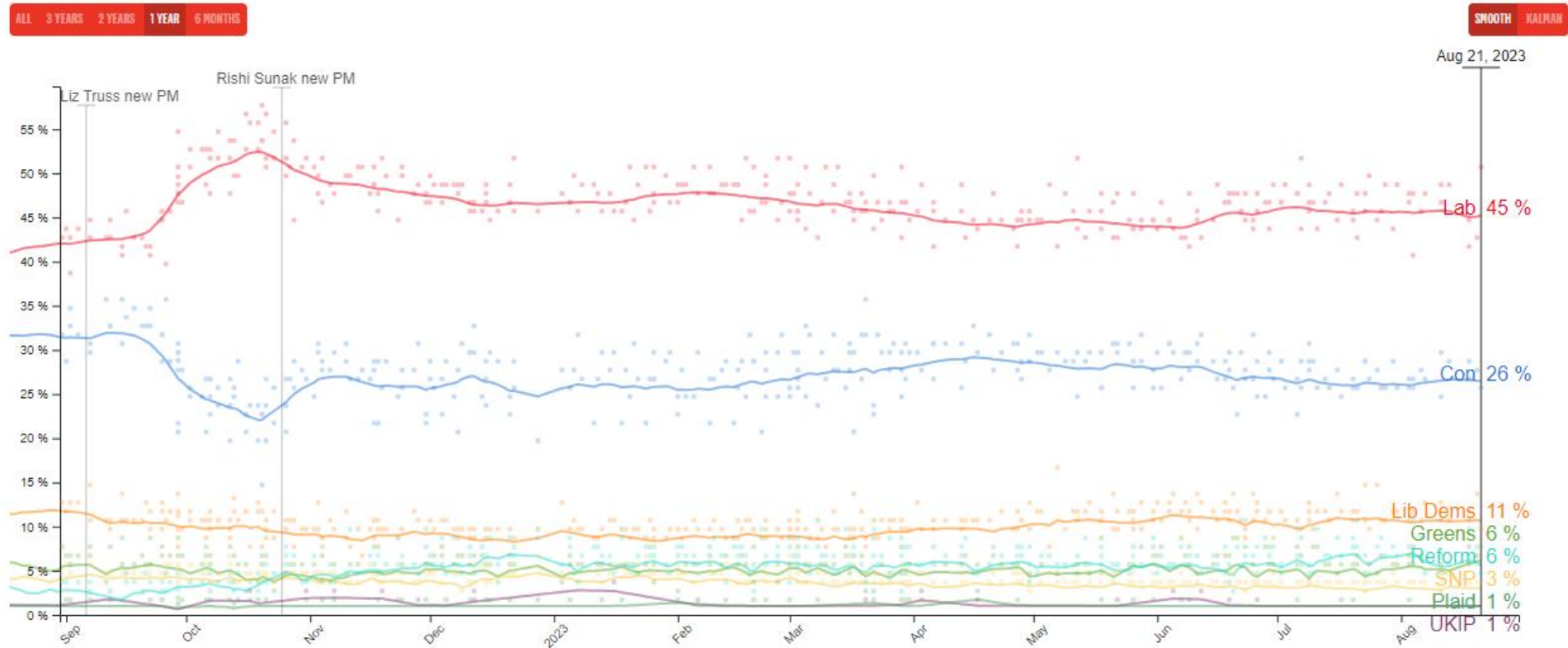


- Growth in health spending stagnates when adjusted for changes in population
- Planned spending to increase to 2024/25, but not sufficiently to make up for lost ground since 2009
- Unclear how future increases will be funded – economy still recovering from pandemic, high inflation, tax increases reversed (National Insurance)

Source: Nuffield Trust analysis of GOV.UK and House of Commons Library data

# Government Policy on health-care

## National parliament voting intention



Source: Politico.eu poll

# Government Policy on health-care – Future Policy?



Wednesday 28 September 2022 / 10:00 AM NHS / Wes Streeting

## Labour to deliver 10-year plan for change and modernisation of the NHS

### Key highlights:

- A 10-year plan
- Expansion of the workforce
  - Doubling number of medical school places to 15k a year
  - Doubling district nurses qualifying each year
  - Training 5000 new health visitors
- Re-focus the role of hospital
- Shifting resources to social care, GP, care at home, and mental services

[Source: Labour press office](#)

# Setting Longevity Assumptions



- **Setting longevity assumptions a much trickier exercise**
- **Significant degree of actuarial judgment and expertise in a wide range of areas**
- **Including epidemiological, political, economic factors etc**

# Is All Funded Reinsurance Equal?



...systematic use of Funded Re... would come at a cost of creating a systemic vulnerability in the form of a concentrated exposure to correlated, credit-focussed reinsurers...



- Charlotte Gherkin



## Regulatory Focus

<b>Risk Profile</b>	Well diversified reinsurer	Asset manager
<b>Track Record</b>	Execution Certainty w/ Strong Counterparty	TBD
<b>Client Service Model</b>	Long-Term Collaborative Relationship	Transactional
<b>Collateral package</b>	100%	<100%
<b>Financial Strength Rating</b>	AA- (S&P)	"None" to A
<b>Domicile</b>	"Onshore"	"Offshore"





Funded Reinsurance is one of the key tools in supporting the overall **strength** and **security** of our market.

The focus needs to be on continuing to **collaborate** to develop robust and bespoke solutions for the Pension Risk Transfer market.



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