



Office for
**Budget
Responsibility**

Long-term dimension to fiscal uncertainty

Jim Ebdon
Team Leader, Fiscal risks and sustainability
James.ebdon@obr.uk

ECFIN workshop, January 2019

Contents

- The UK approach to fiscal risks
- Available tools / approaches
- Risks from health spending

Fiscal Risk Reports

- Weak risk reporting a failing against IMF Fiscal Transparency Code
- In 2015 the OBR legislated to publish a risks report every two years, including a commitment for the Government to respond within a year
- Scoping report in 2016: IMF guidelines and international experience.
- First FRR published and laid in parliament in July 2017
- First Government response *Managing Fiscal Risks* in July 2018
- FRR II due in 2019

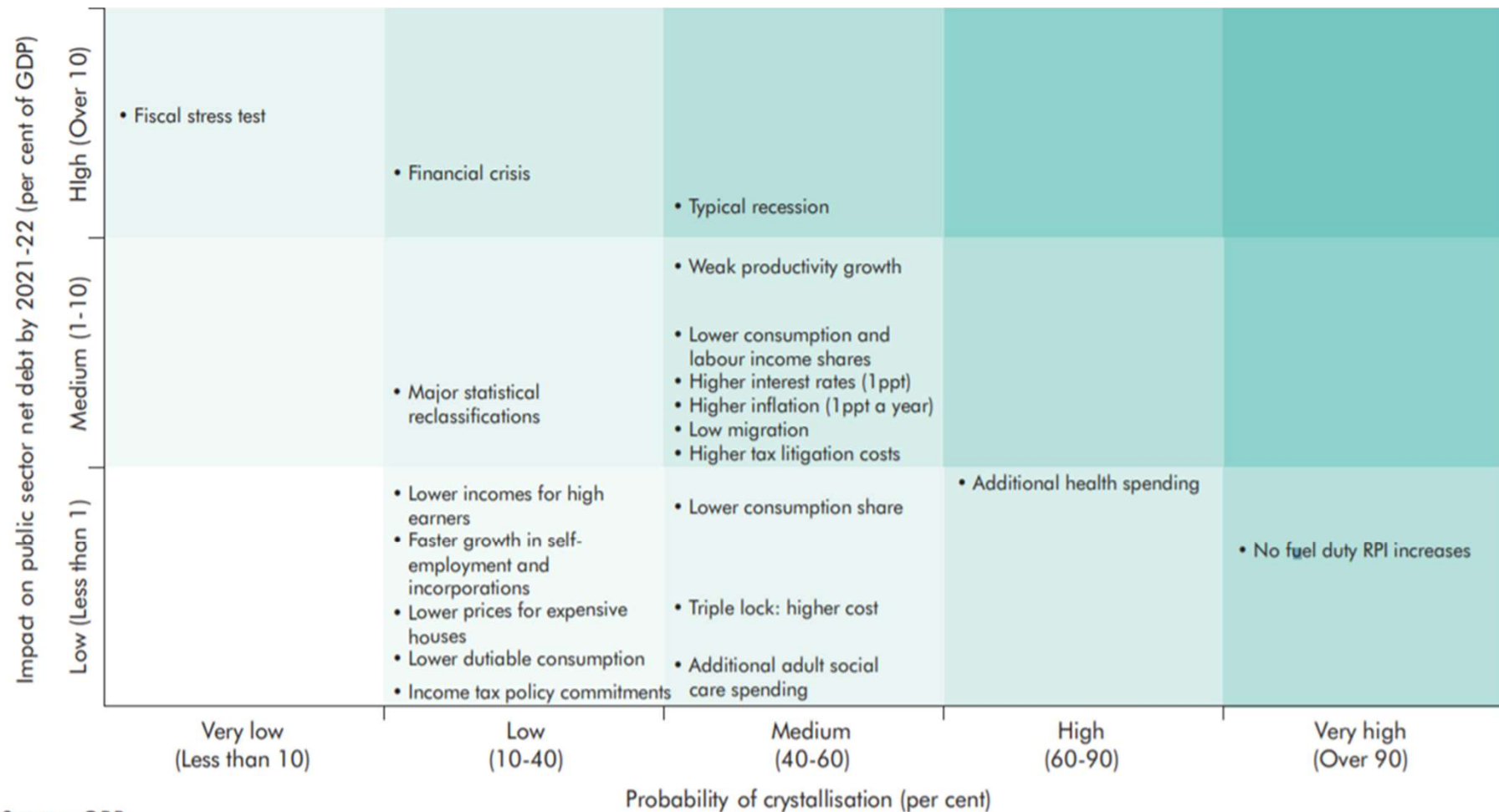
Our approach

- The IMF defines fiscal risks as
 - “the possibility of deviations of fiscal outcomes from what was expected at the time of the Budget or other forecast”
- We adapted this to focus on risks
 - To our most recent forecast over the medium term
 - To fiscal sustainability over the longer term
 - With greater attention to downside risks in both cases
- We were particularly interested in
 - The probability of particular risks and their potential impact
 - Whether they were correlated with other risks
 - What the government was doing about them

Measurement principles

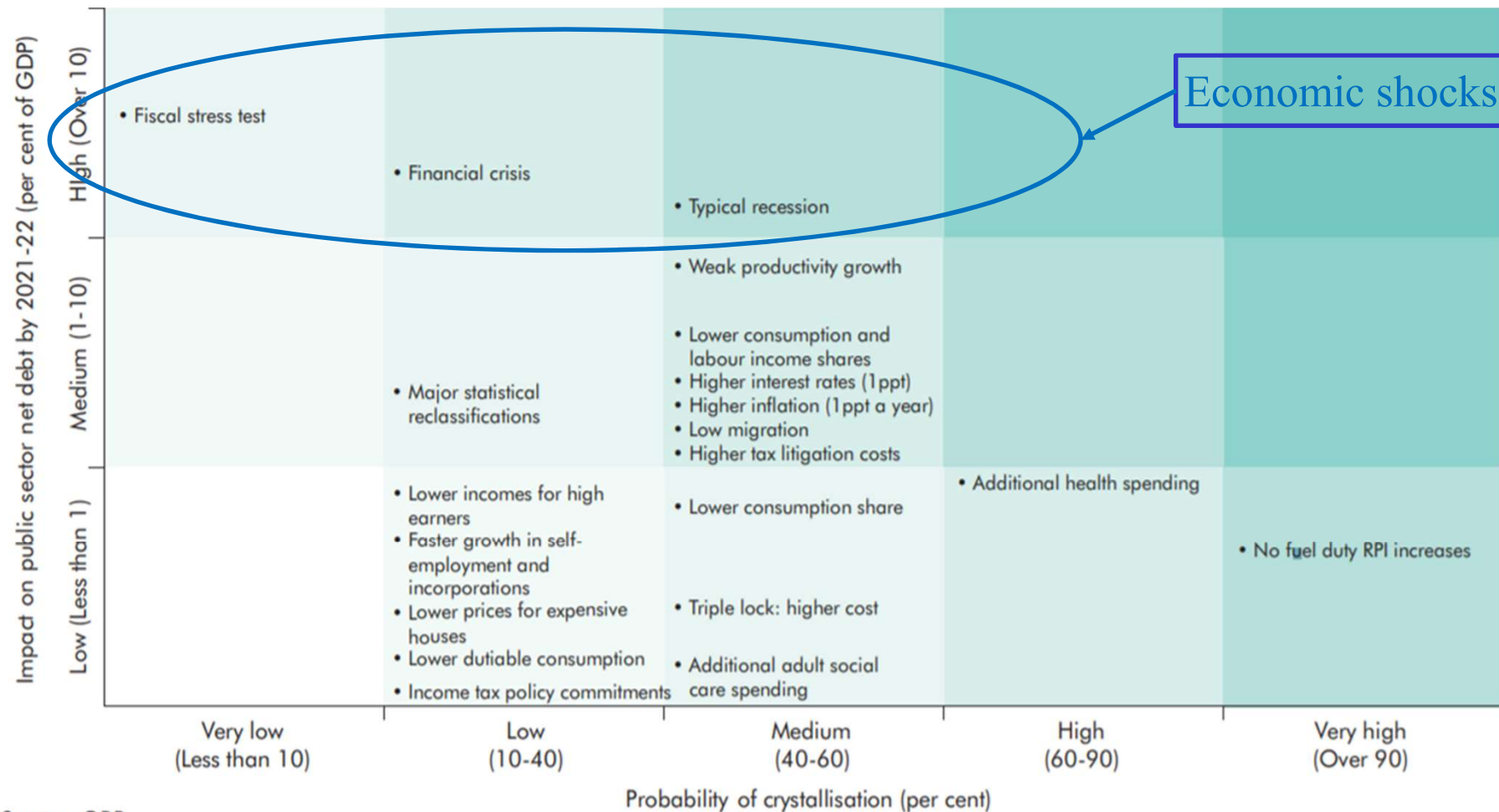
- Considering risk core to our medium/long-term forecasting so we largely used existing knowledge and models
- International comparisons IMF / OECD etc
- Decided against spurious analytical precision:
 - Right order of magnitude of probability and impact
 - Use judgement where data missing
 - Illustrative examples not whole distribution
 - Not aggregating risks

Main Types of Medium Term Risk



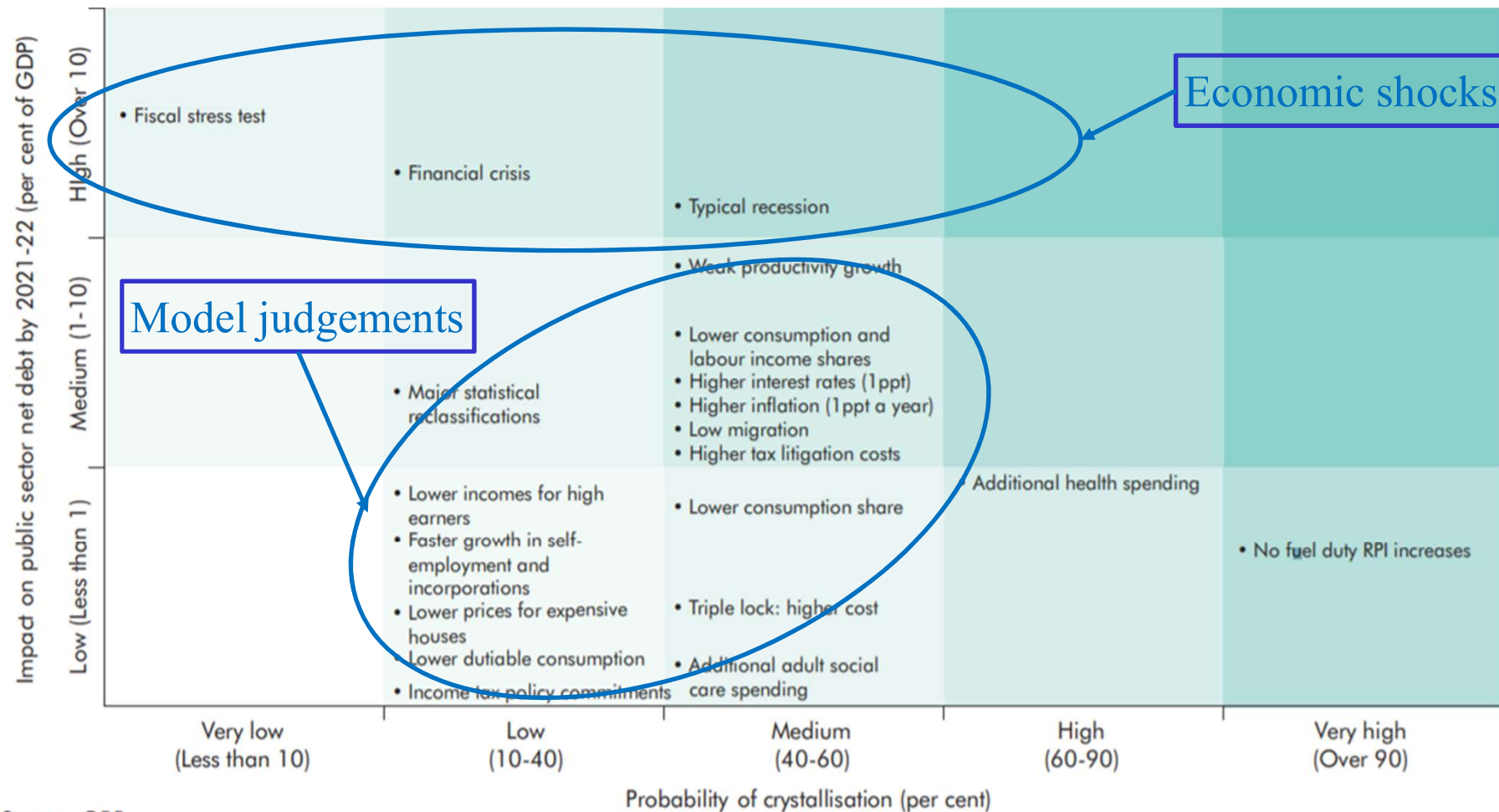
Source: OBR

Main Types of Medium Term Risk



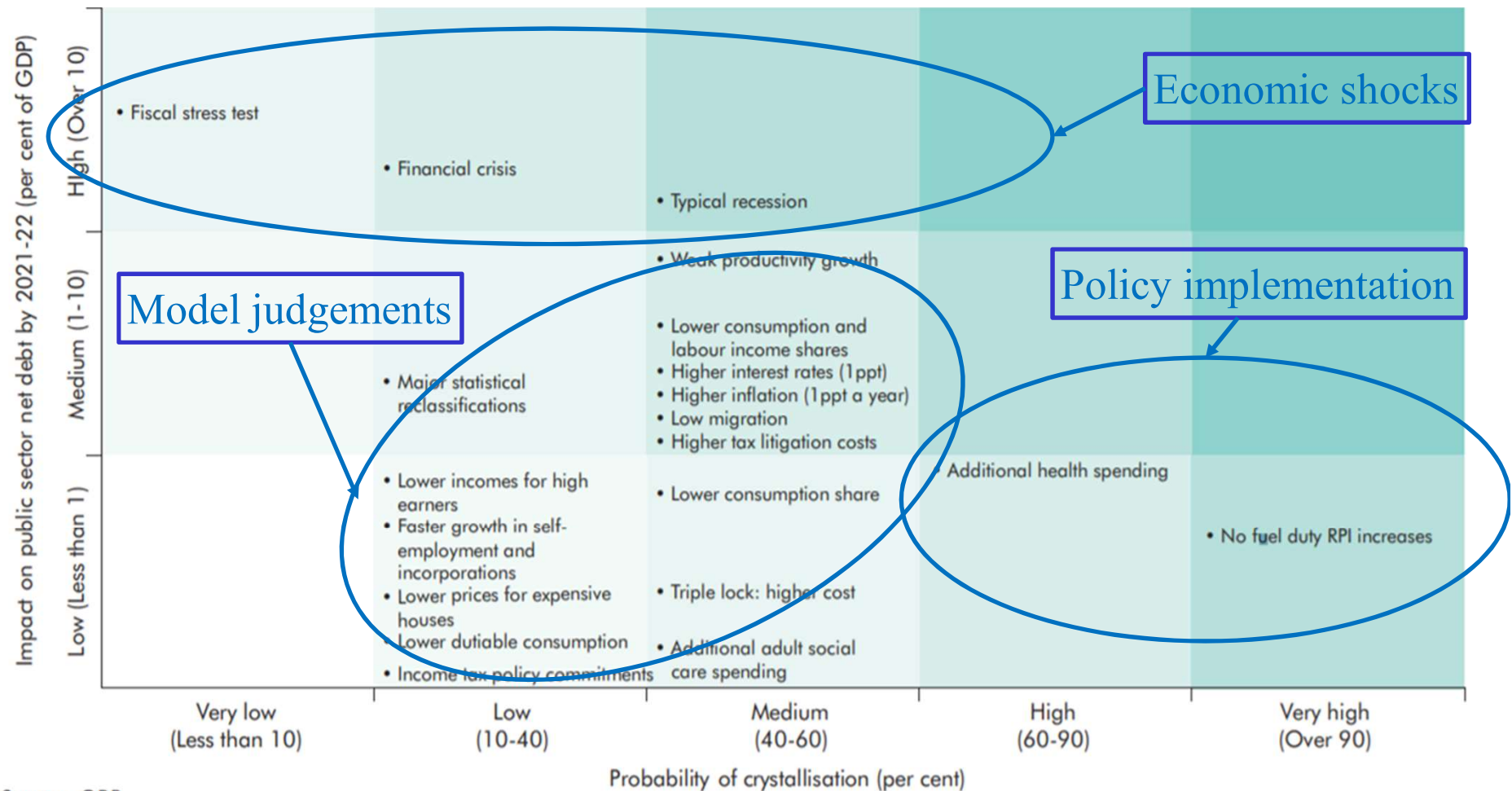
Source: OBR

Main Types of Medium Term Risk



Source: OBR

Main Types of Medium Term Risk



Source: OBR

Economic shocks

- Generally not in forecasts
- Historical/international statistics on frequency & magnitude
- Also stress tests
- But discrete idiosyncratic events
- E.g. ICB: UK crisis 4.5% in a given year

IMF: Median impact of crisis 21% GDP on debt for advanced economies

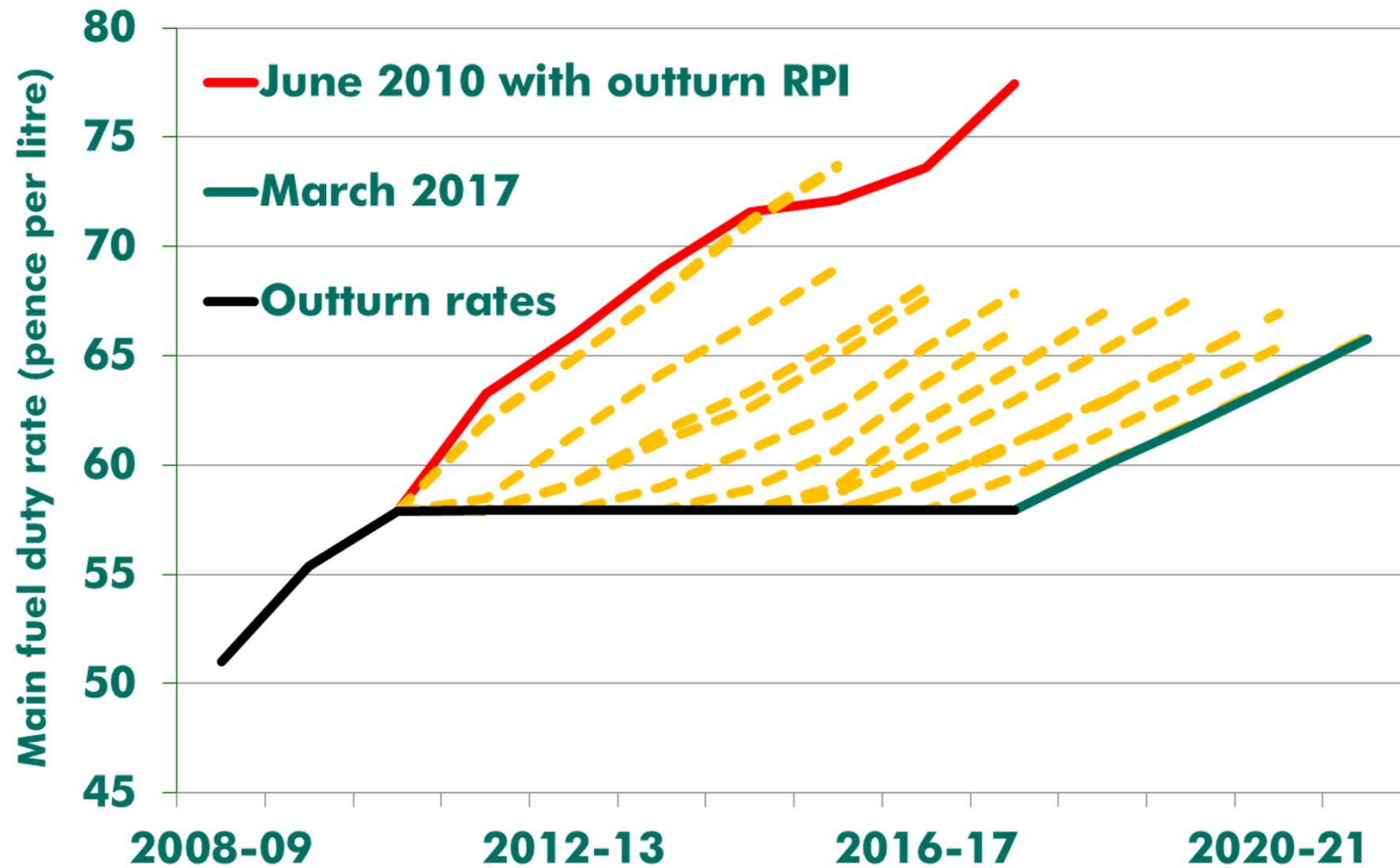
Model judgements

- Core part of forecast process
- Continuous probability/impact distribution
- Choose an illustrative change and use ready reckoners
- Probability based on judgement/experience
- E.g. 1 ppt rise in government bond rates adds £11bn to debt over five years. Judged as a medium probability on historic data and judgement

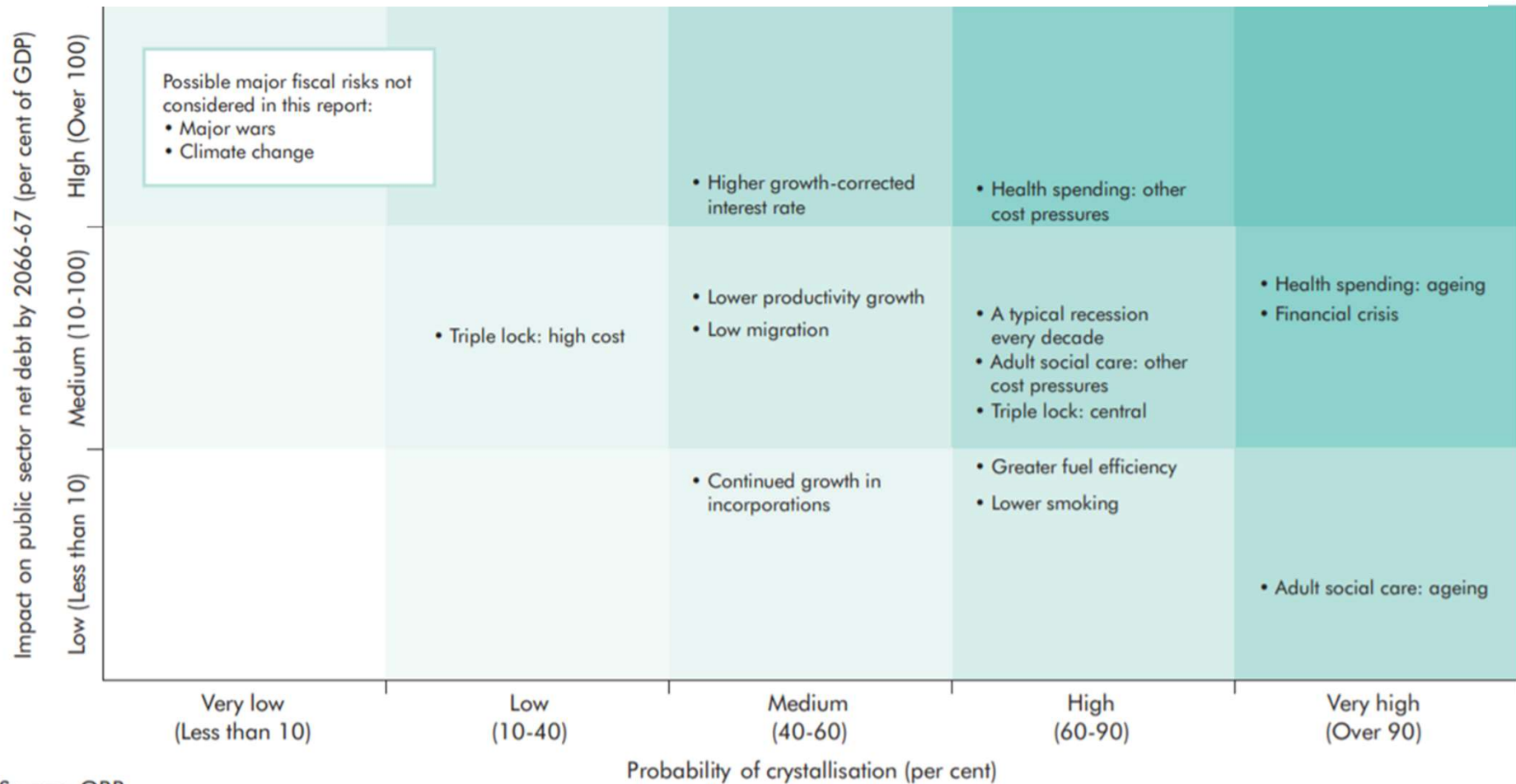
Policy implementation

- Forecasts required to adopt government stated policy
- But some policies unlikely to be implemented
- Usually a binary choice with a known impact
- Probability based on judgement (but sometimes this is easy ...)

Actual and default fuel duty rates

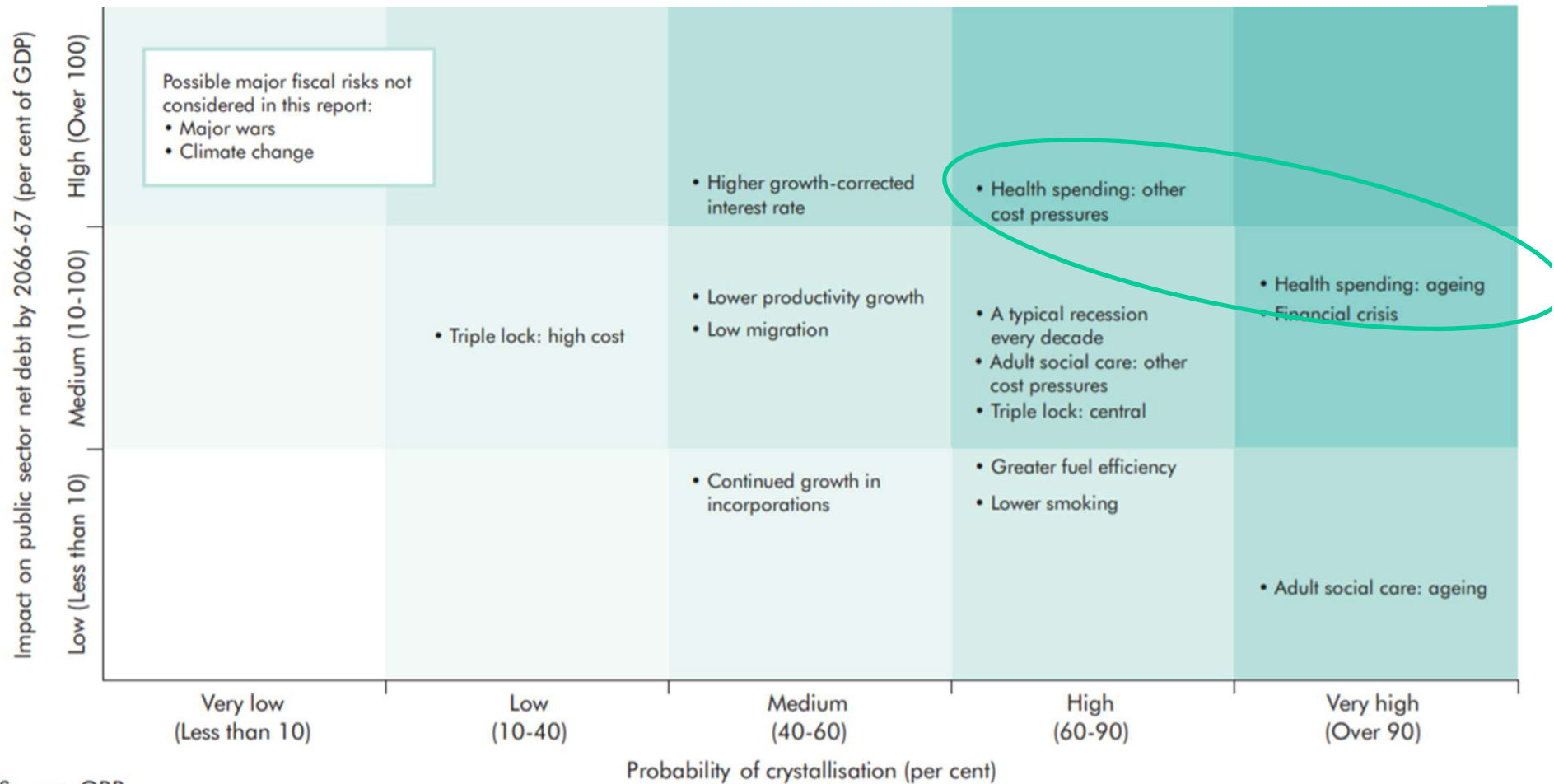


Risks to sustainability



Source: OBR

Risks to sustainability



Source: OBR

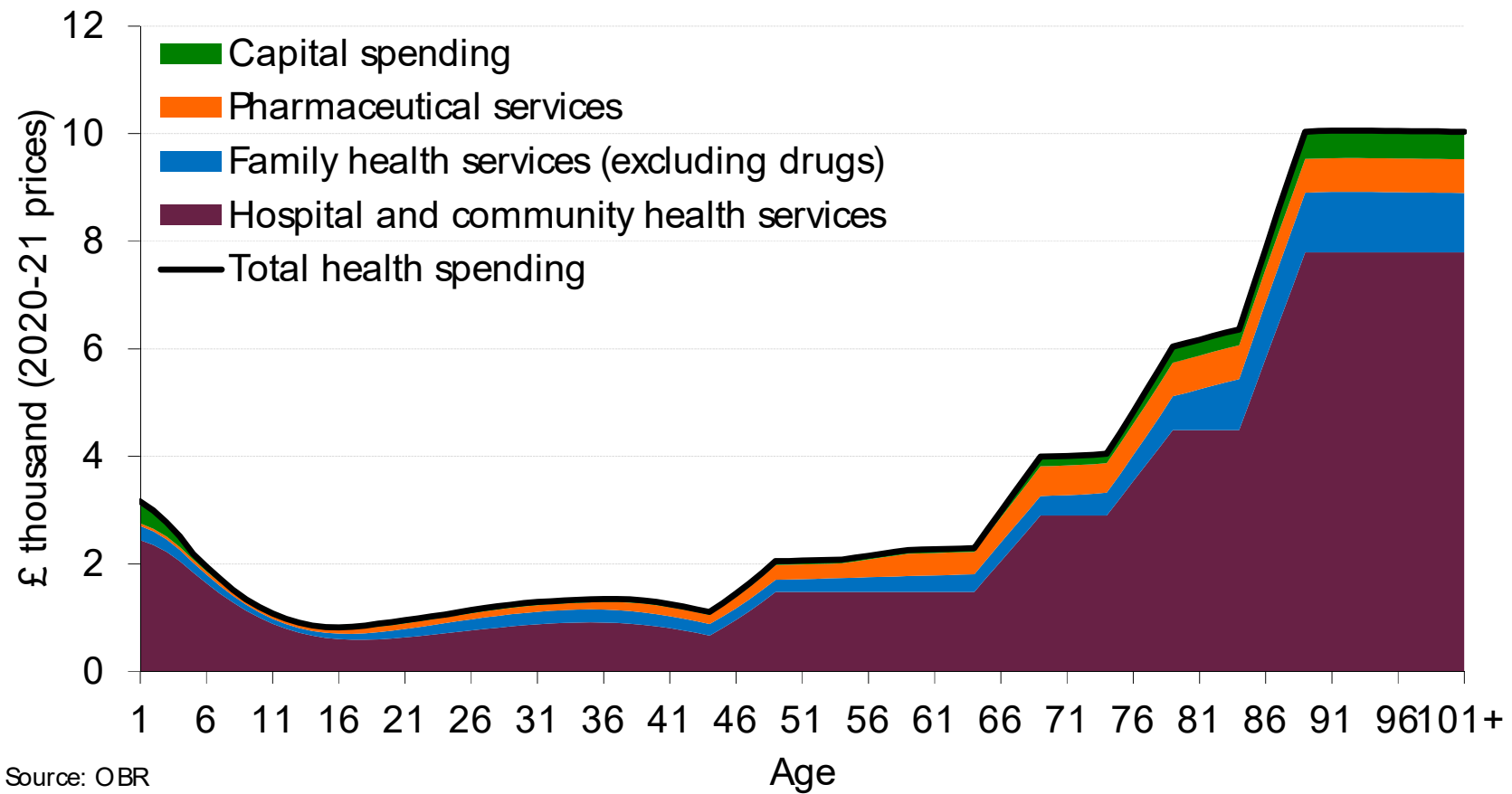
Sustainability in the long-term

- The UK's fiscal position is not sustainable on unchanged policy settings
- Unchanged policy hard to define but sensible assumptions possible e.g.
 - tax thresholds / benefits rise in line with earnings
 - age related spending changes with demographic pressures
 - other spending in line with nominal GDP
- Analysis useful for investigating the effects of demography
- Uncertainties great – important to investigate sensitivities

Demography and health spending

- Much of the future population structure is known. But uncertainties around:
 - fertility
 - life expectancy
 - migration
 - Also uncertain relationship between demography and service needs, especially morbidity
- Need to know spending profile by age and
- Make assumptions how this changes over time

Health spending by age

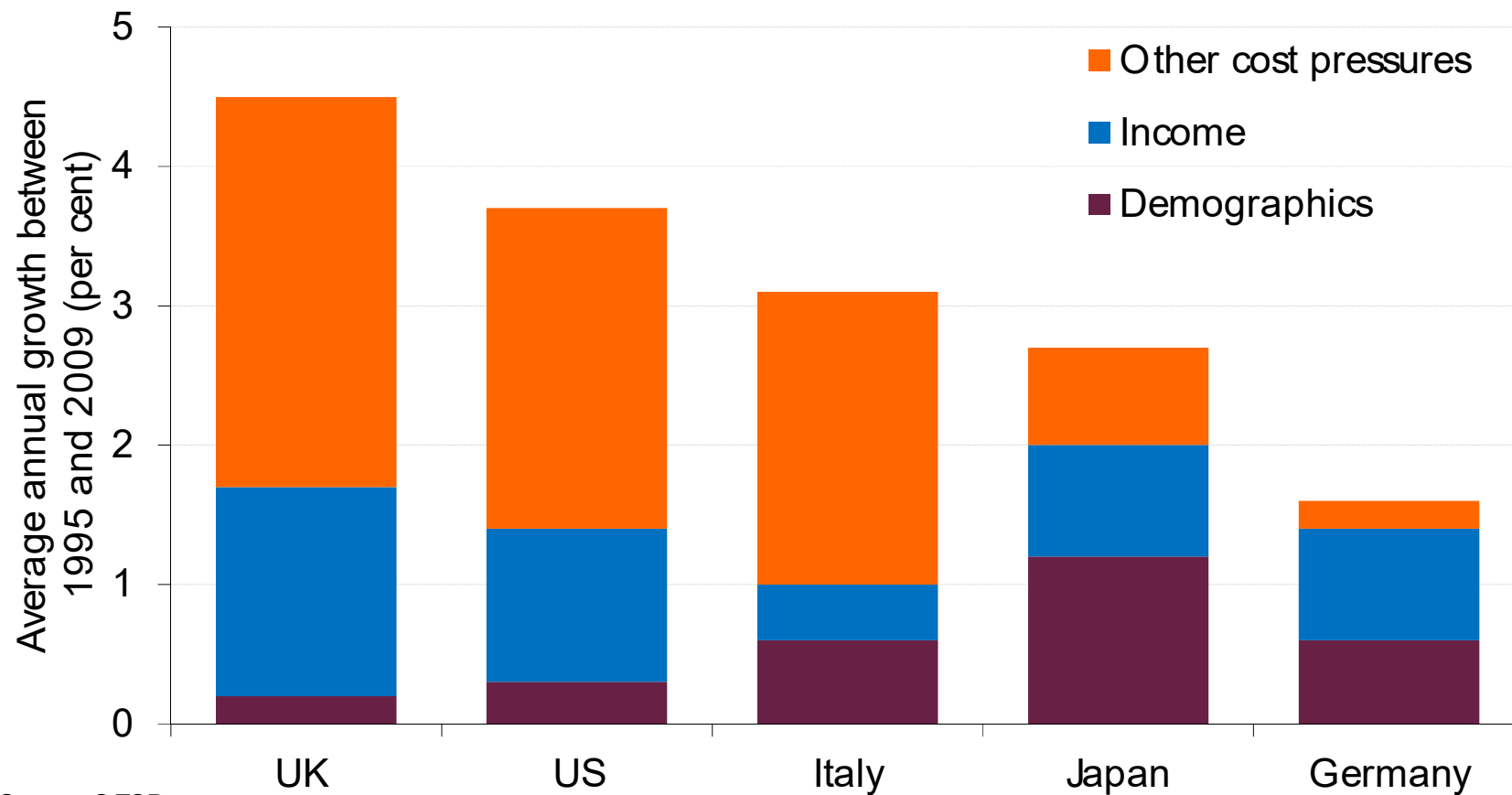


Source: OBR

Other cost pressures in health

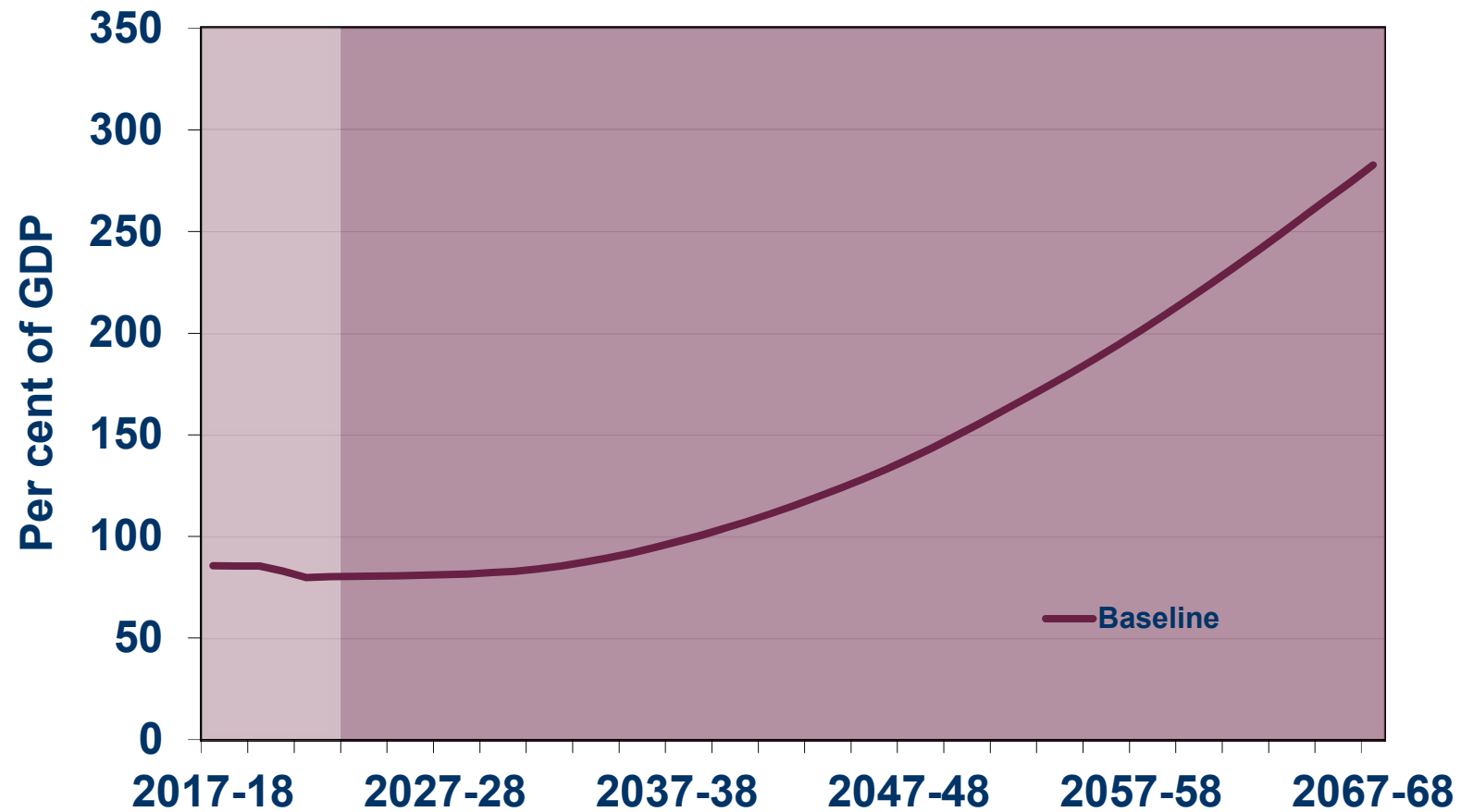
- Demographics explains only a portion of historic health spending growth across most advanced countries
- We assume this trend continues
- Many possible factors including:
 - Technological advances
 - Relatively weak productivity growth
 - Spread of chronic conditions
- Level of these pressures highly uncertain

Drivers of public health spending

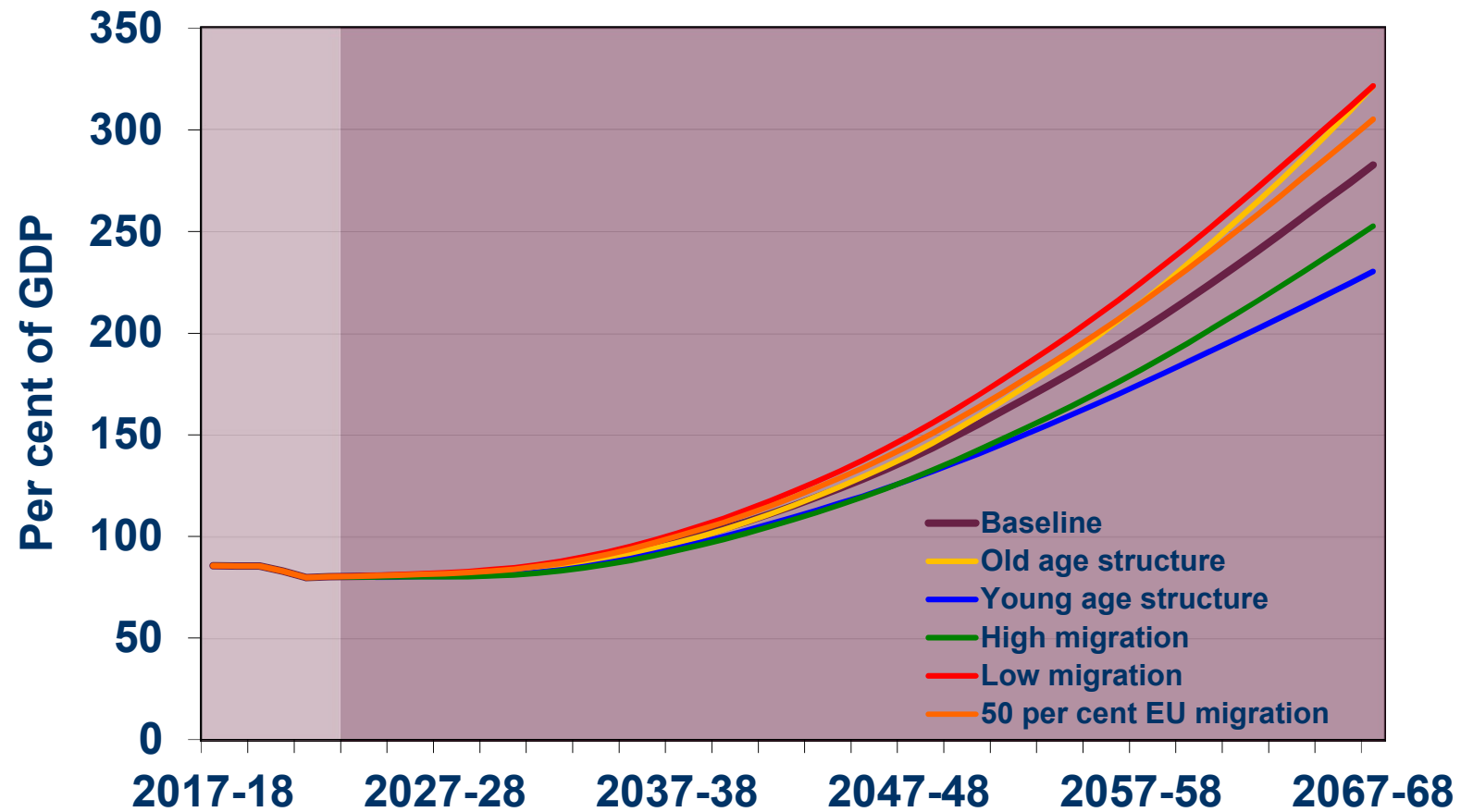


Source: OECD

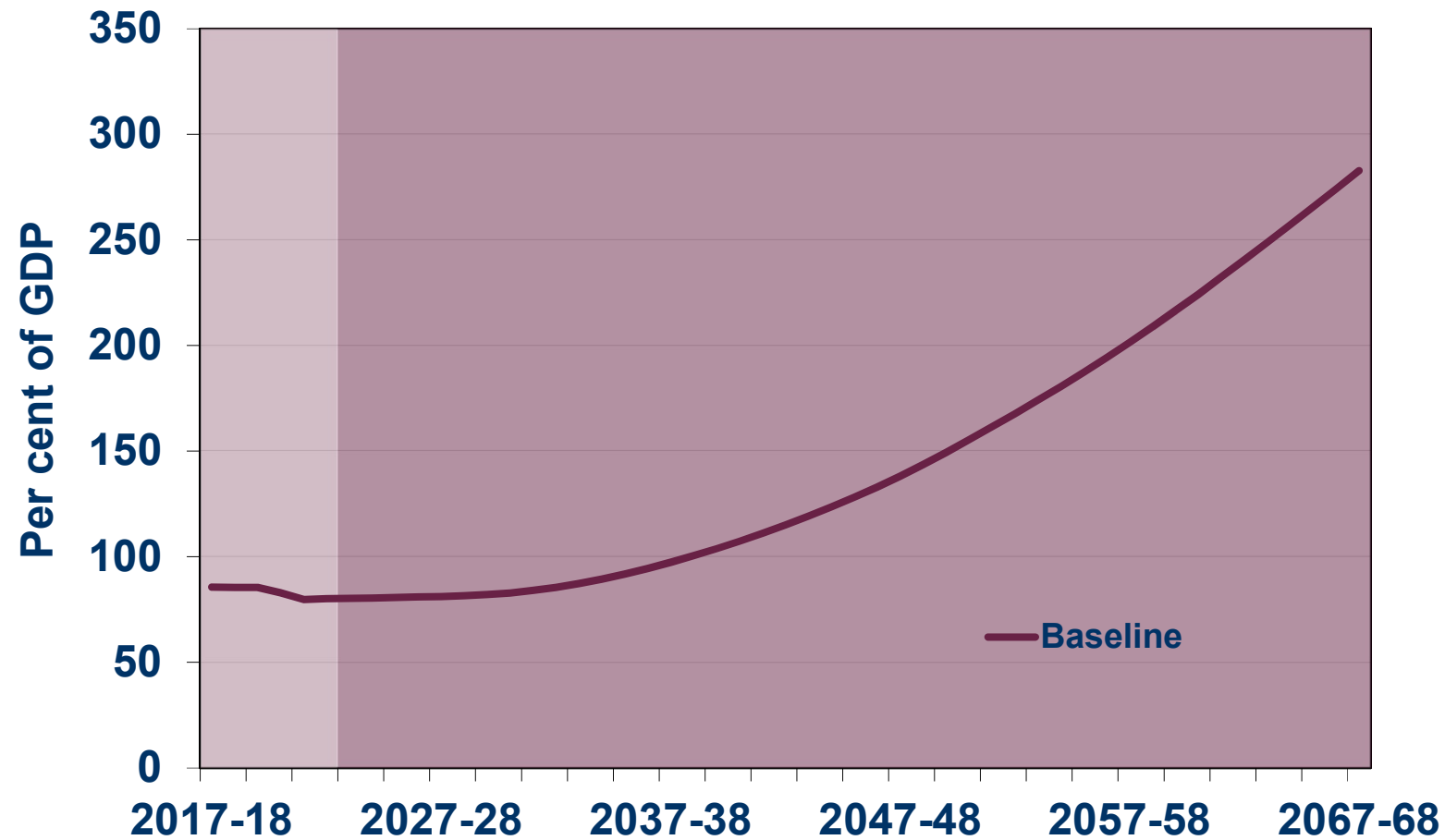
Net debt: demographic sensitivities



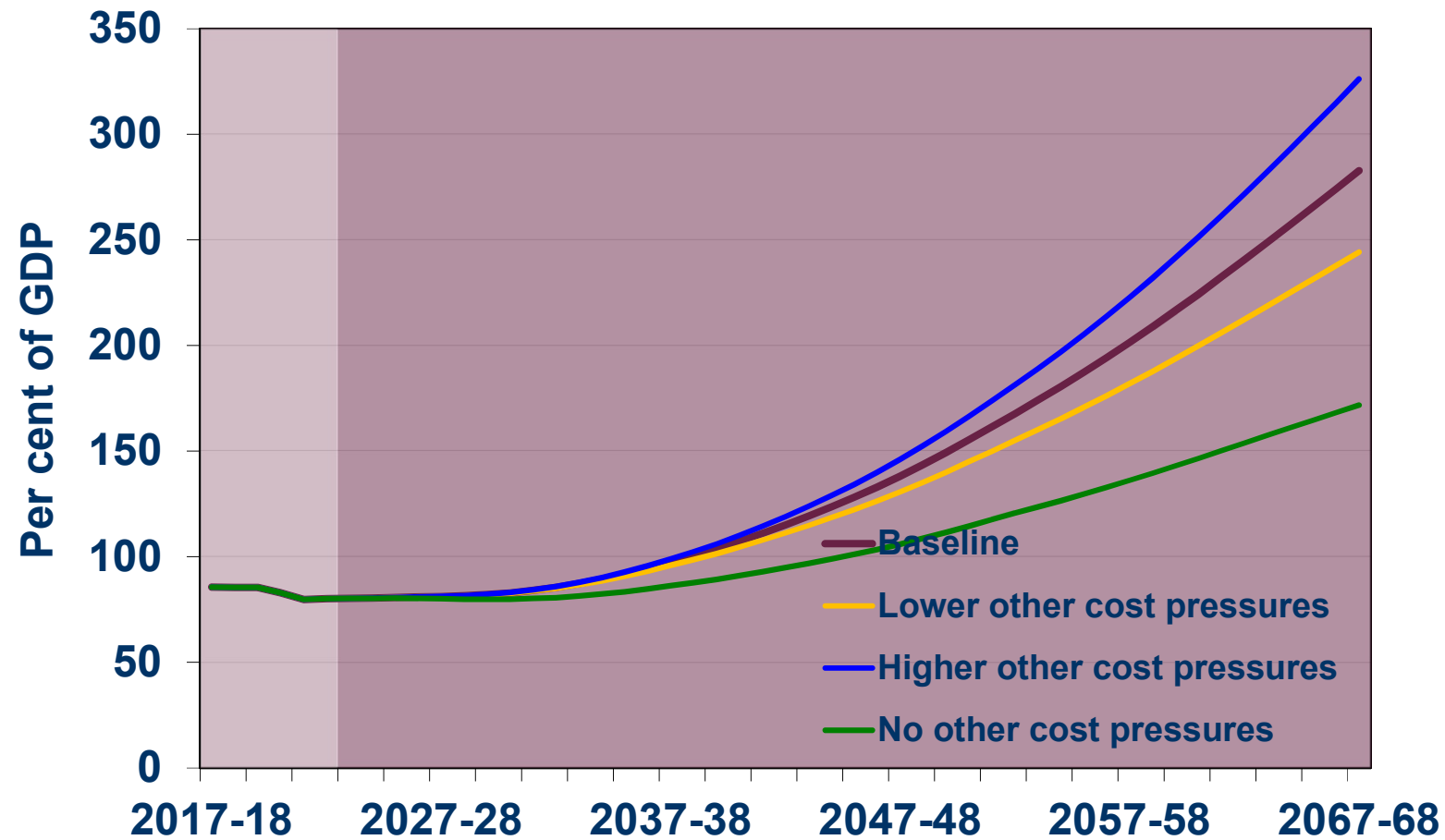
Net debt: demographic sensitivities



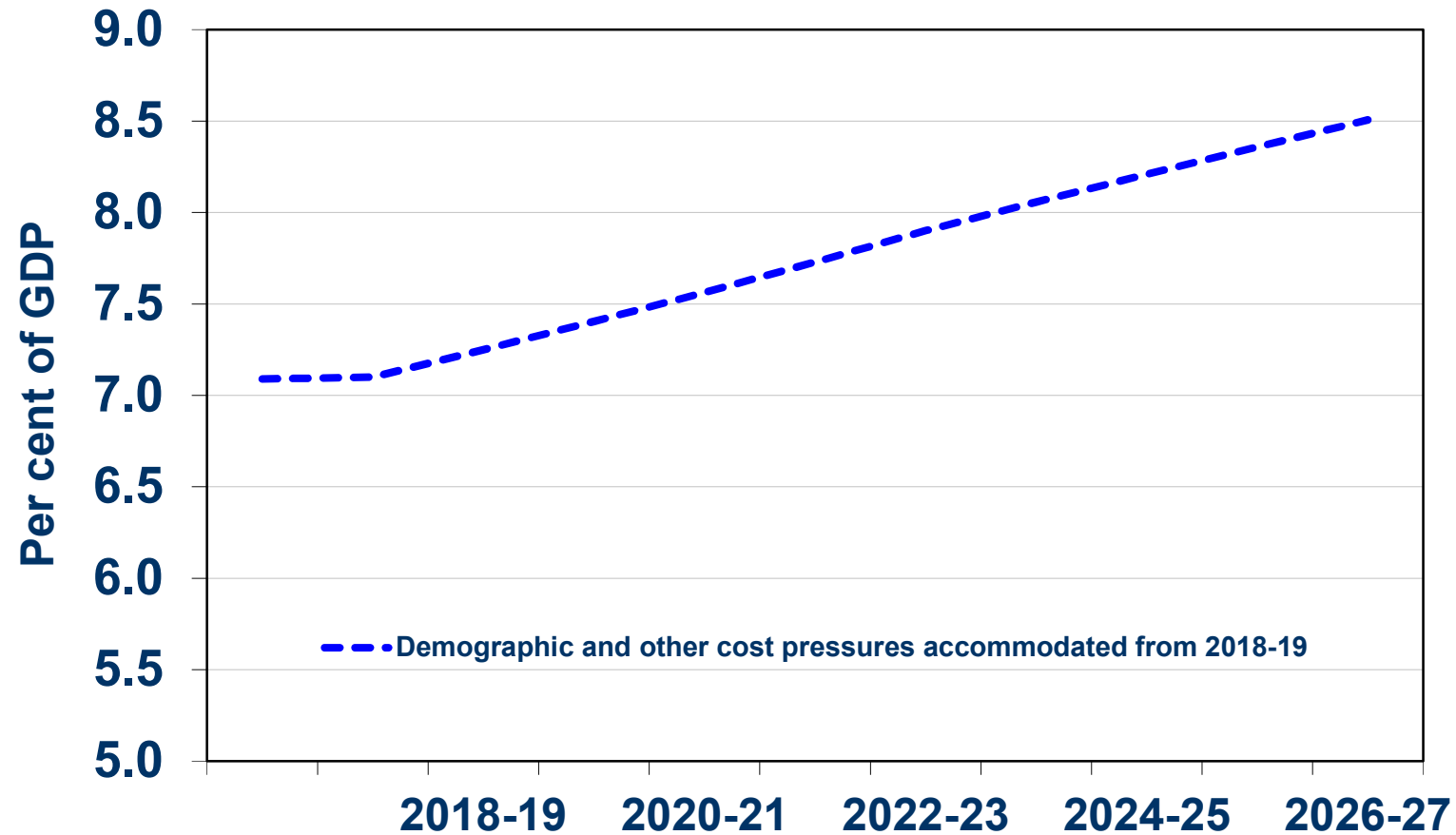
Net debt: other cost sensitivities



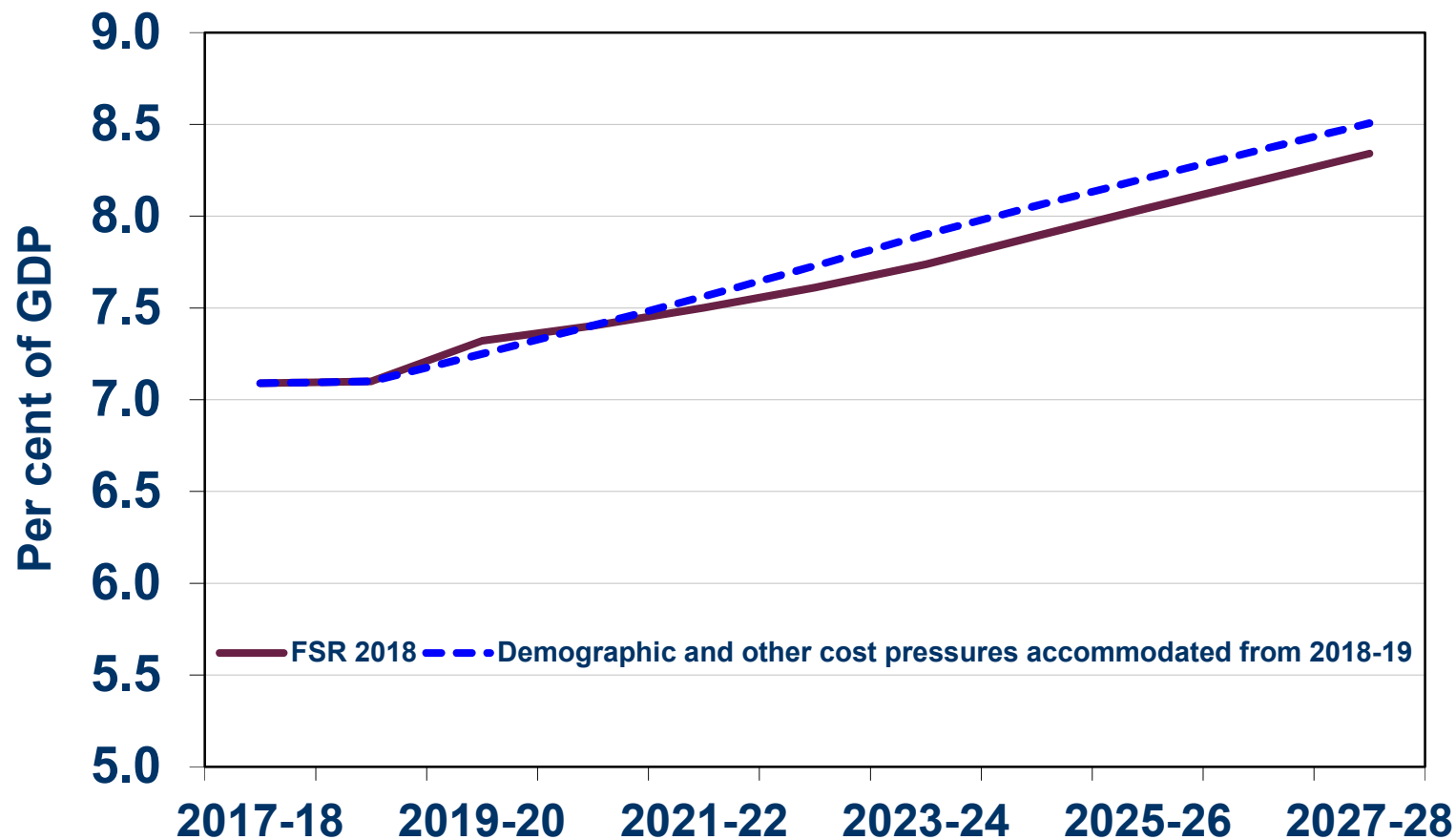
Net debt: other cost sensitivities



UK 2018 health settlement



UK 2018 health settlement



Summary

- Lots of tools / approaches available
- How precise does the modelling need to be?
- Need to trust expert judgement
- Uncertainties are great – use sensitivities