

Office for
**Budget
Responsibility**

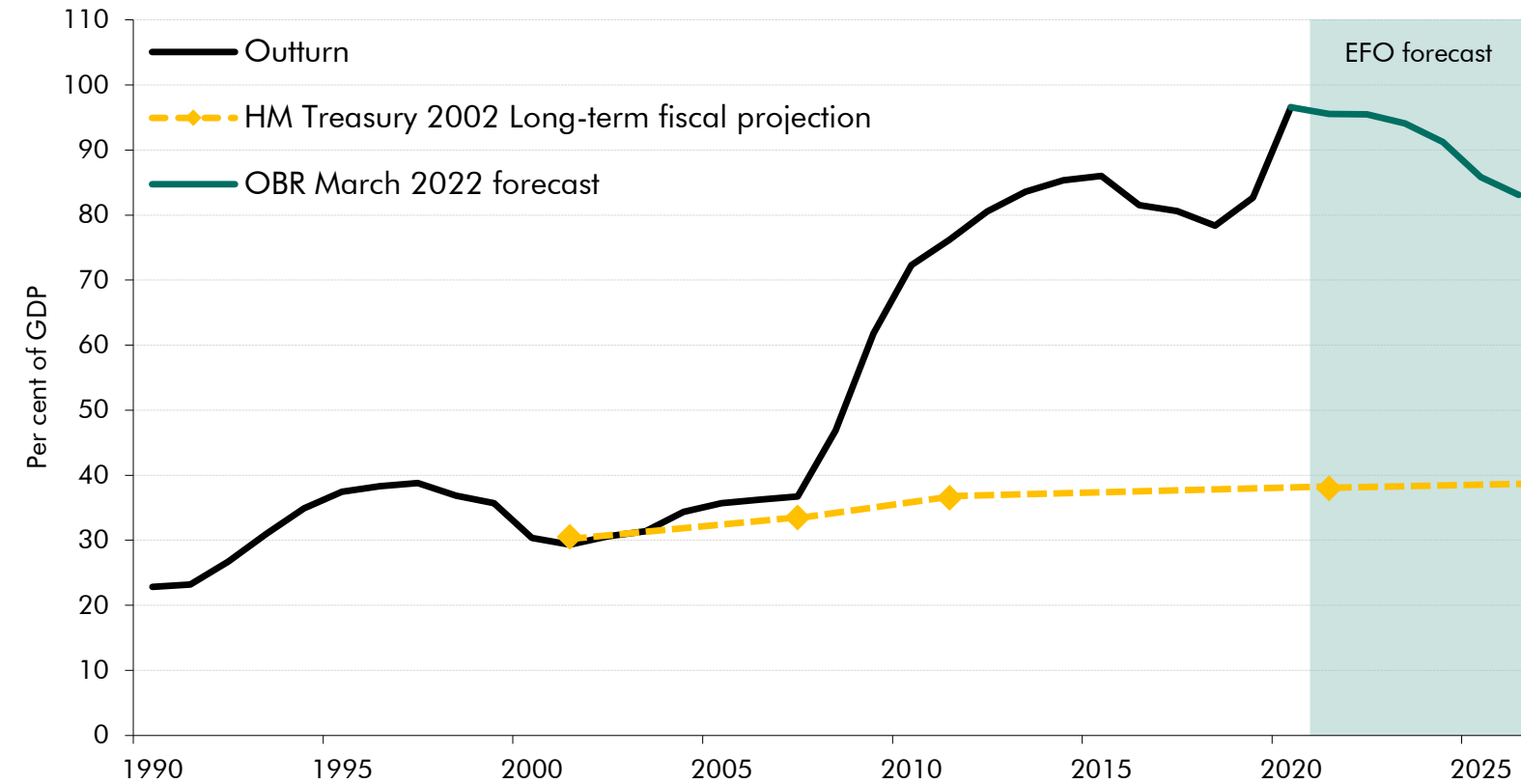
July 2022 Fiscal risks and sustainability

Richard Hughes
Chair

London
7 July 2022

Integrating risk and sustainability analysis

Public sector net debt: projections vs outturns



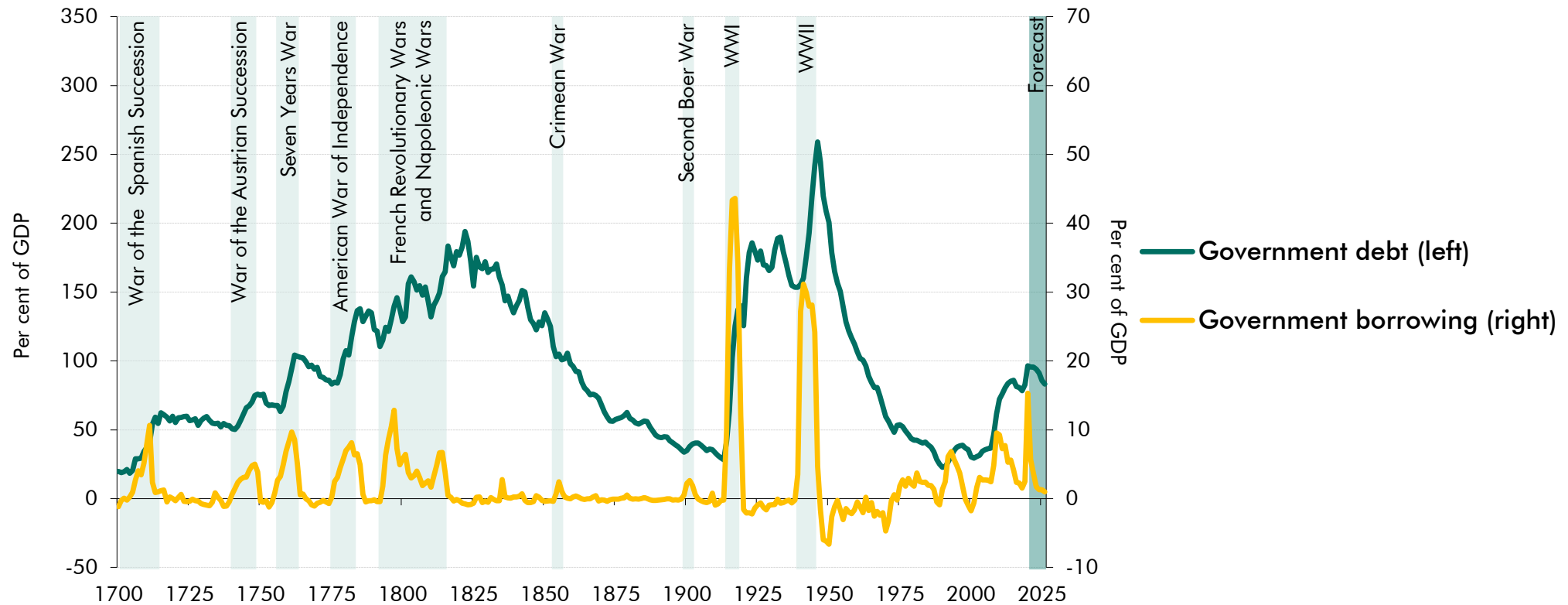
Source: HM Treasury, OBR

Fiscal Risks and Sustainability 2022

- **Rising geopolitical tensions (Chapter 2)**
 - Defence spending
 - Cyber-attacks
 - Global economic fragmentation
- **Higher energy prices (Chapter 3)**
 - Near-term fossil fuel price shocks
 - Long-term changes to the energy mix
- **Long-term fiscal pressures (Chapter 4)**
 - Updated demographic projections
 - Latest policy, economic, and environmental changes

The UK public finances in war and peace

UK government borrowing and debt

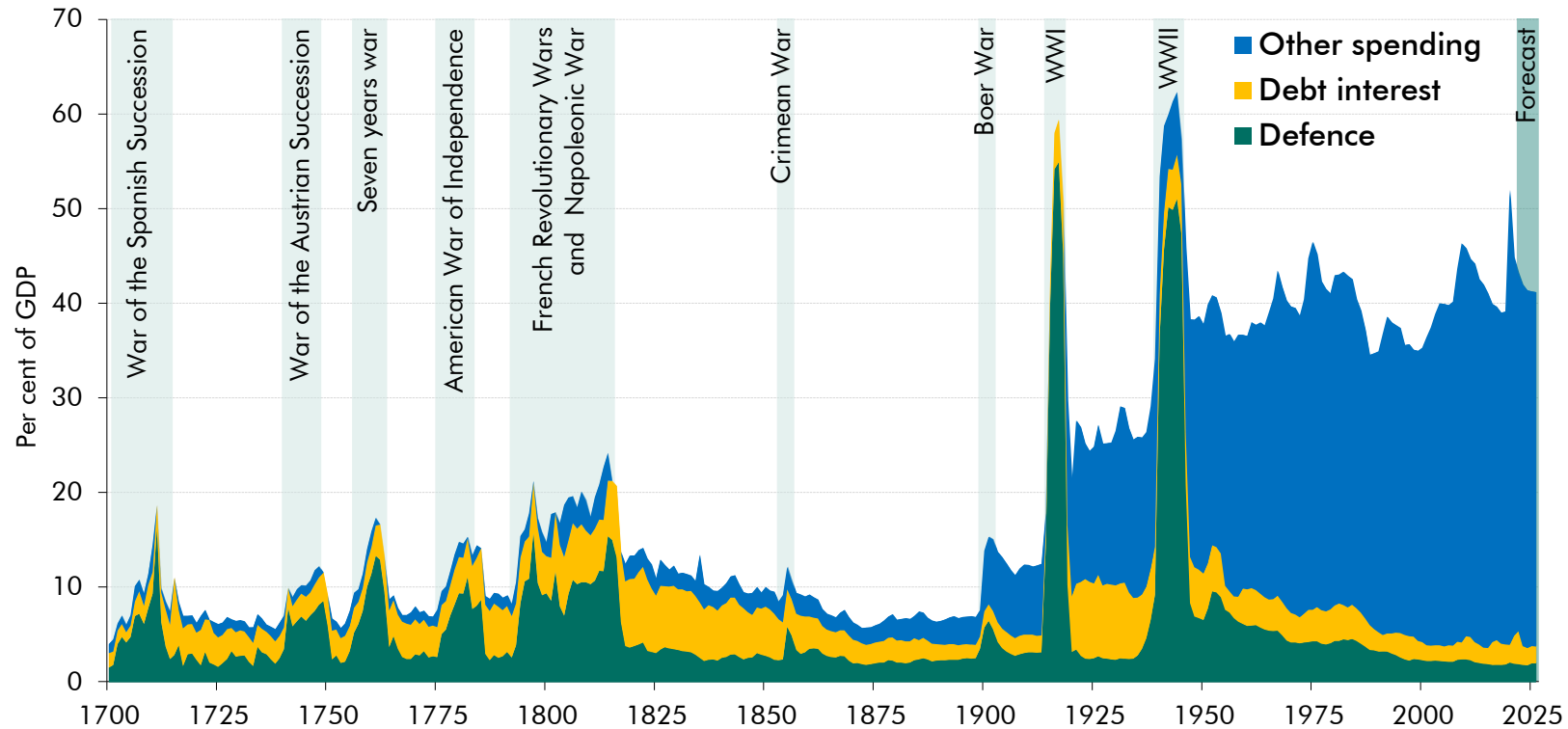


Note: Financial year data used from 2016-17.

Source: Bank of England, OBR

Defence and other spending since 1700

Composition of UK government spending

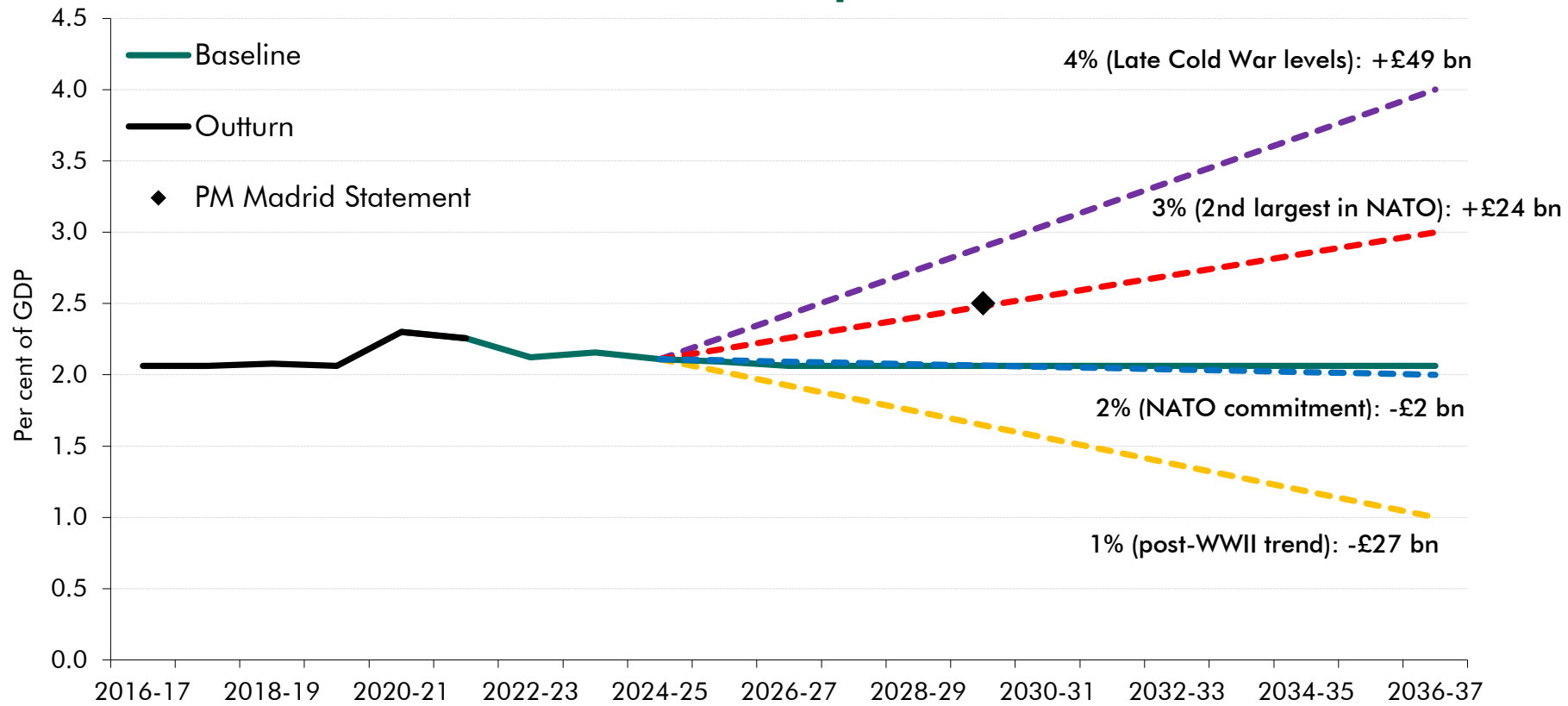


Note: Financial year data used from 1955-56. Totals are consistent with central government spending pre-1900 and total managed expenditure thereafter.

Source: Bank of England, HM Treasury, IFS, Mitchell, OBR

Defence spending scenarios

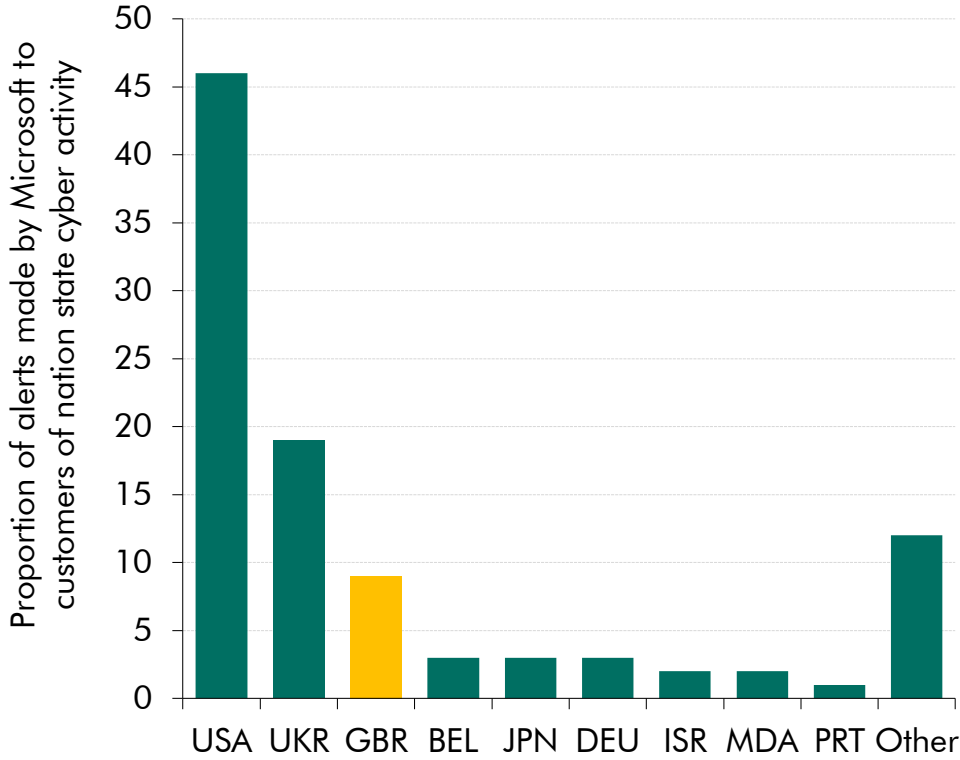
UK defence expenditure



Source: HM Treasury, Ministry of Defence, OBR

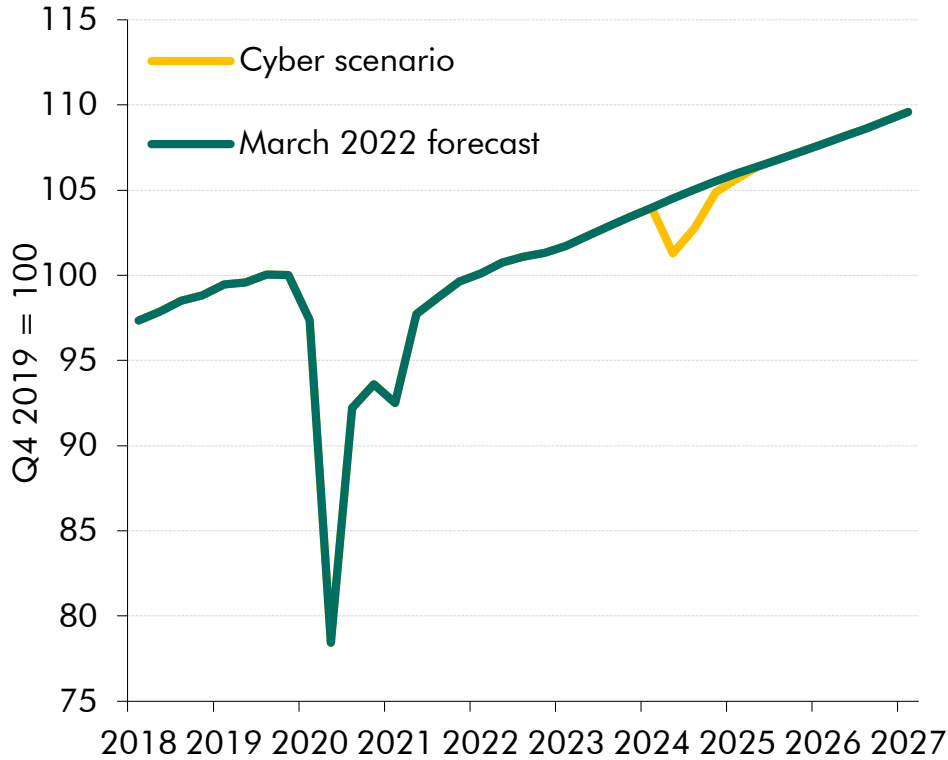
Cyberattack scenario

Cyber attacks by country



Source: Microsoft

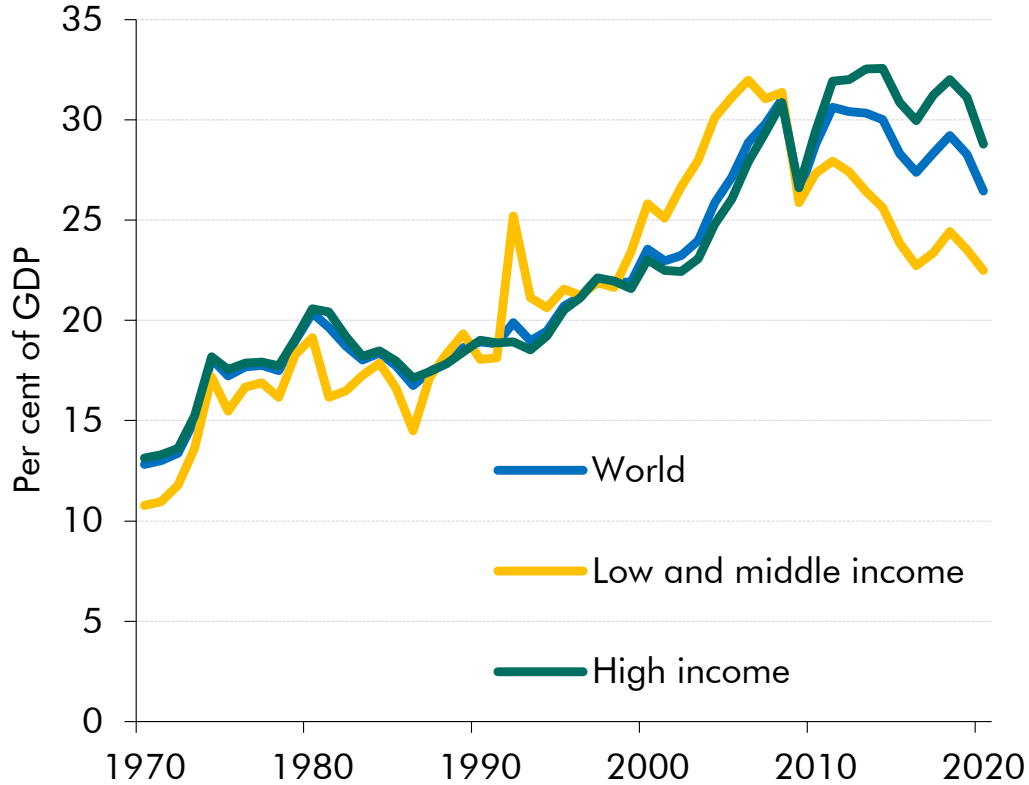
Real GDP level



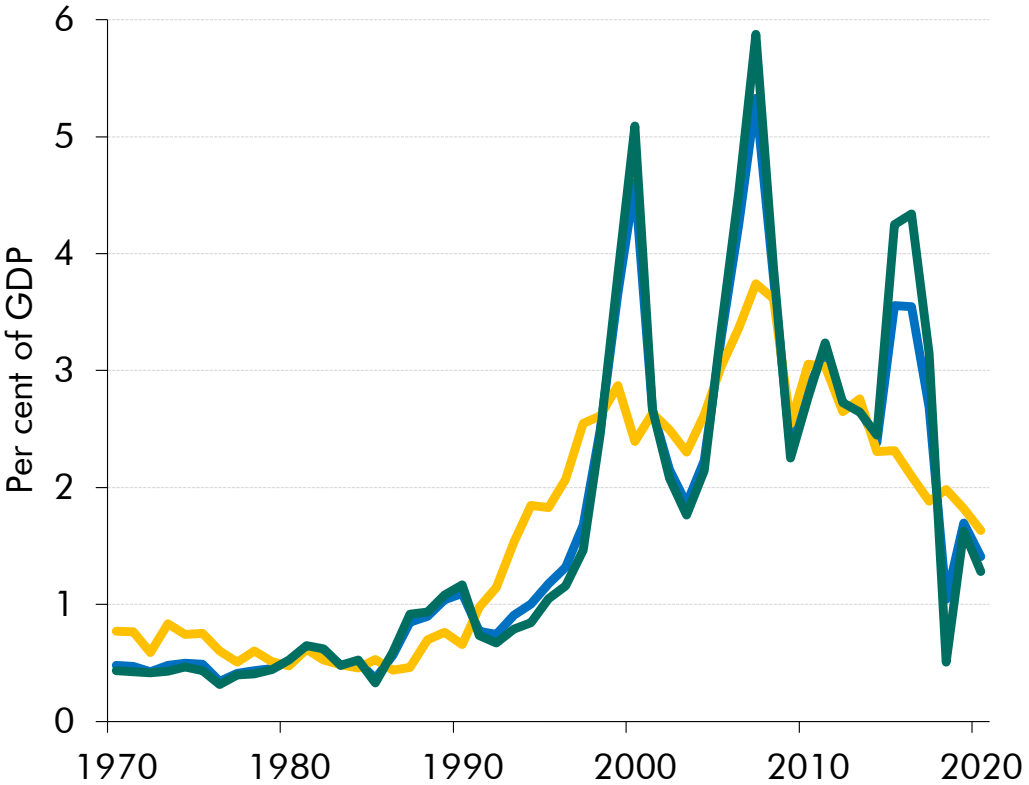
Source: Cambridge Centre for Risk Studies, ONS, OBR

Reversal of globalisation?

Exports of goods and services



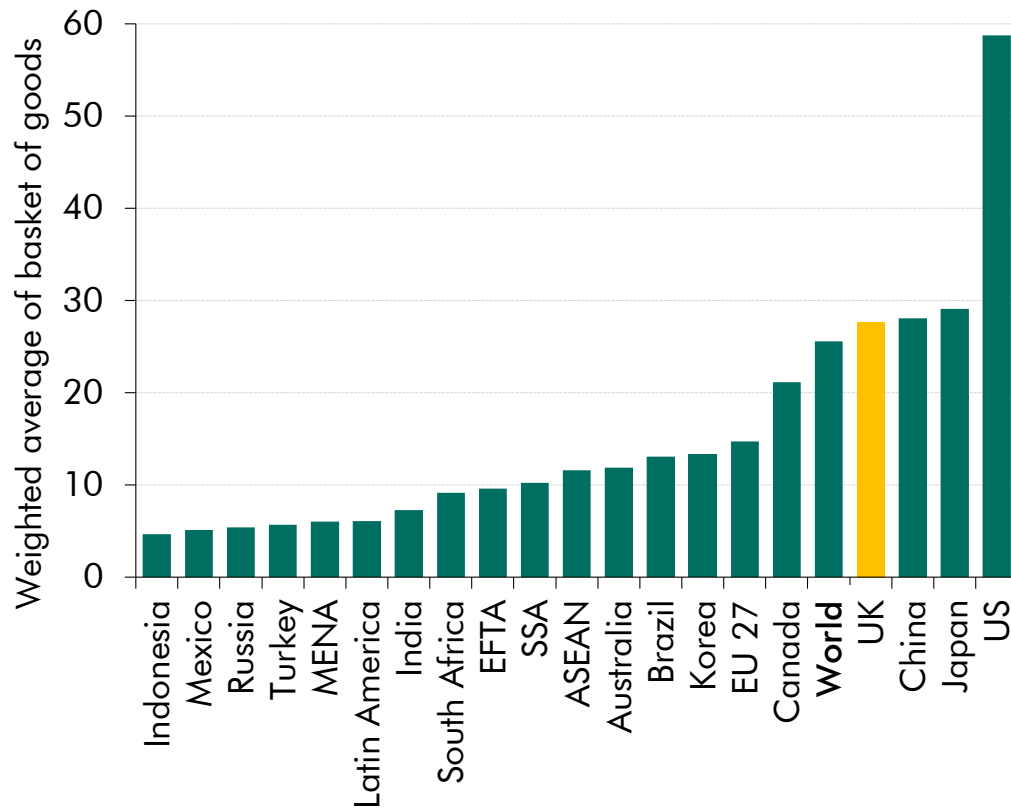
Net FDI inflows



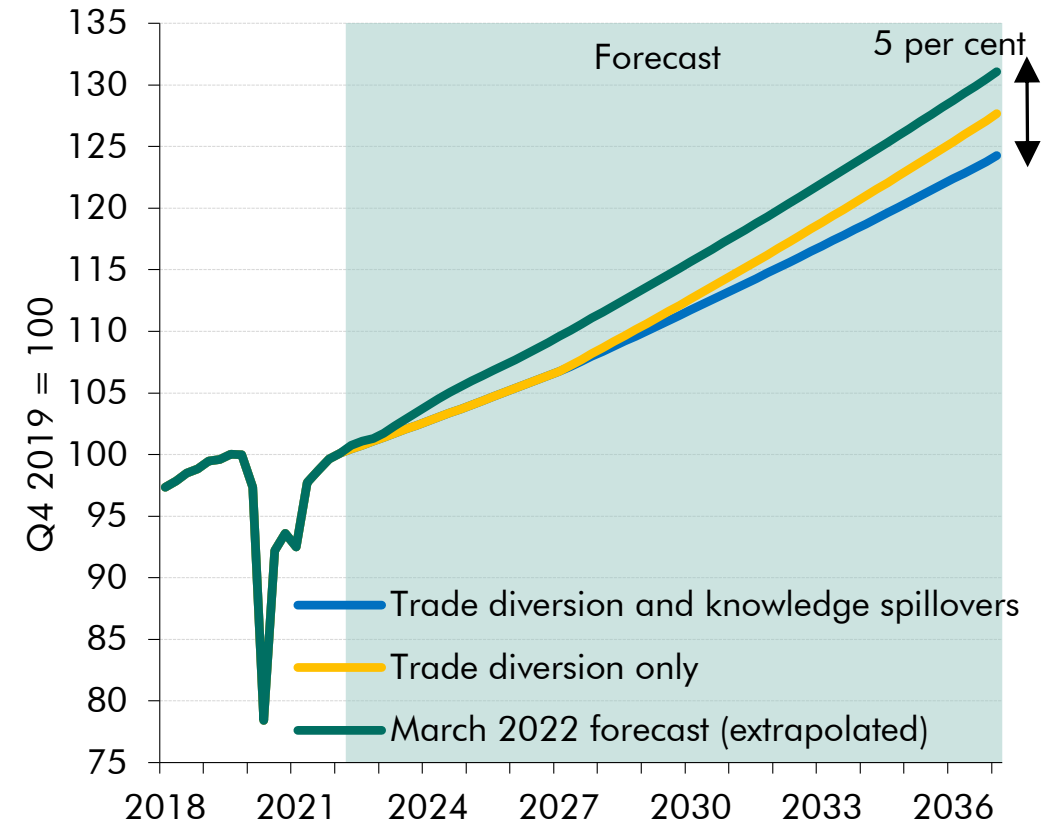
Source: World Bank

Global trade war scenario

Increase in tariff equivalent on goods



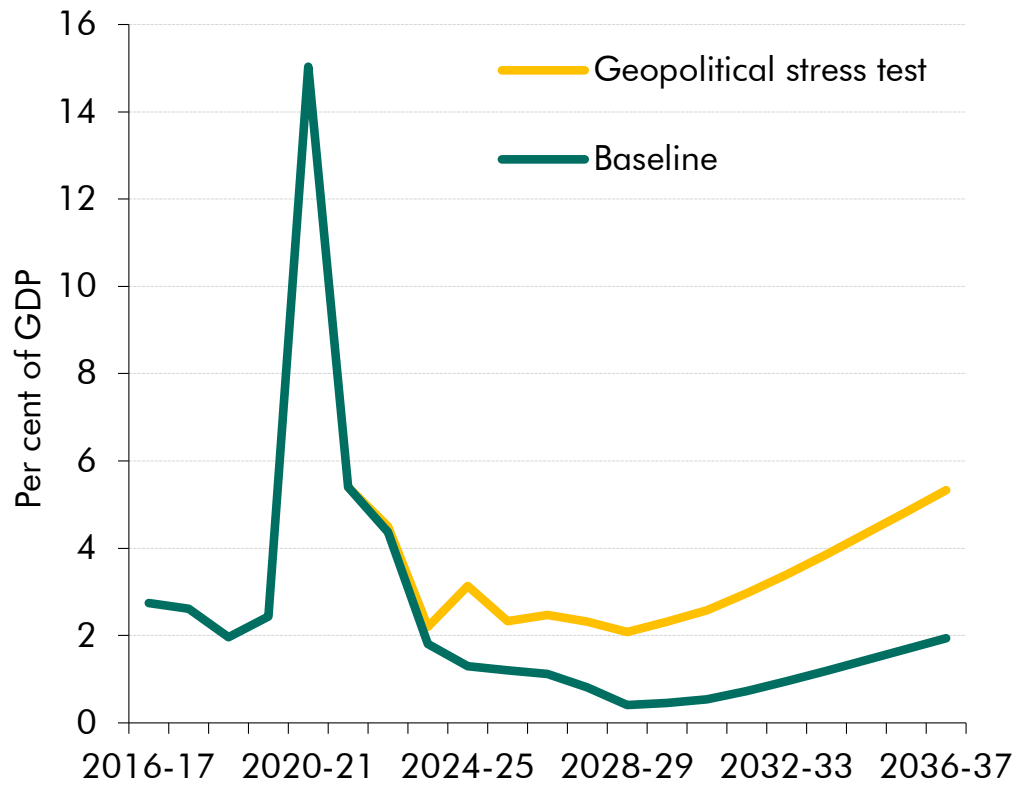
Real GDP level



Source: World Trade Organisation, ONS, OBR

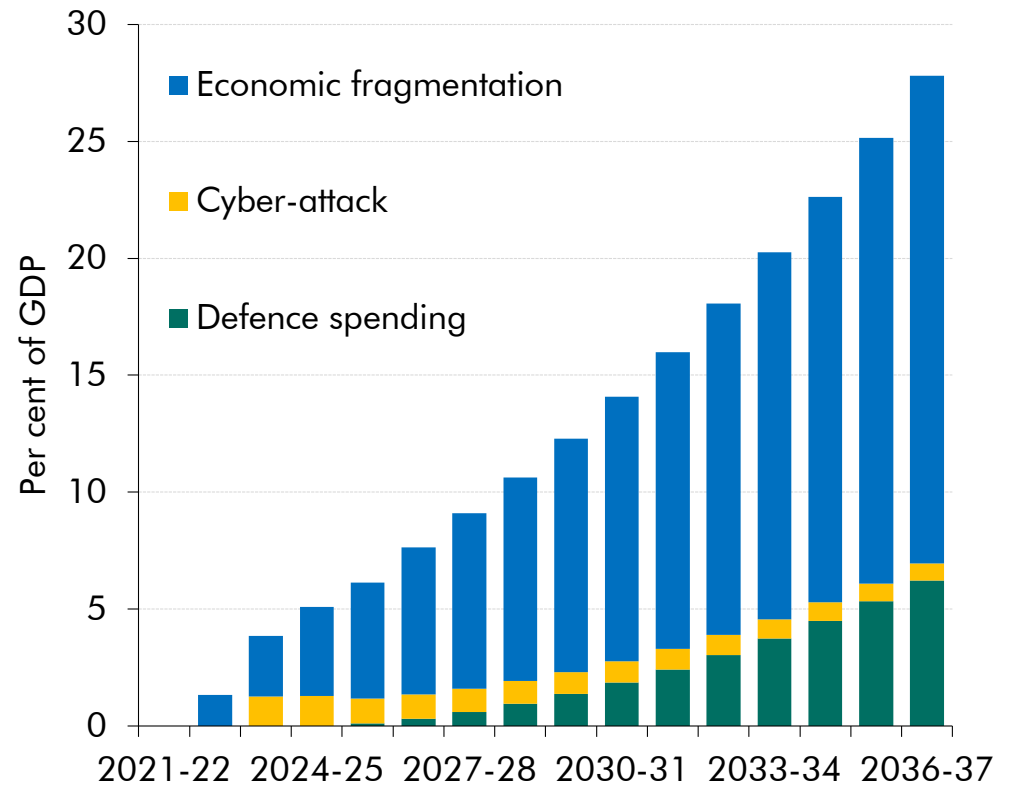
Geopolitical stress test

Annual impact on borrowing

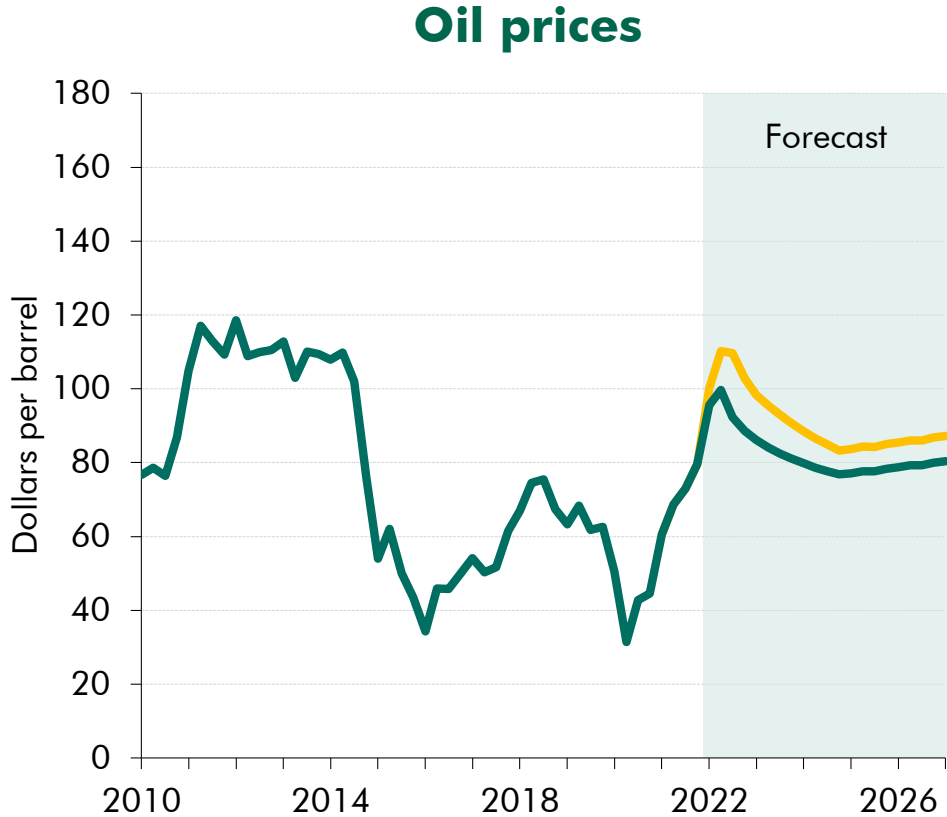
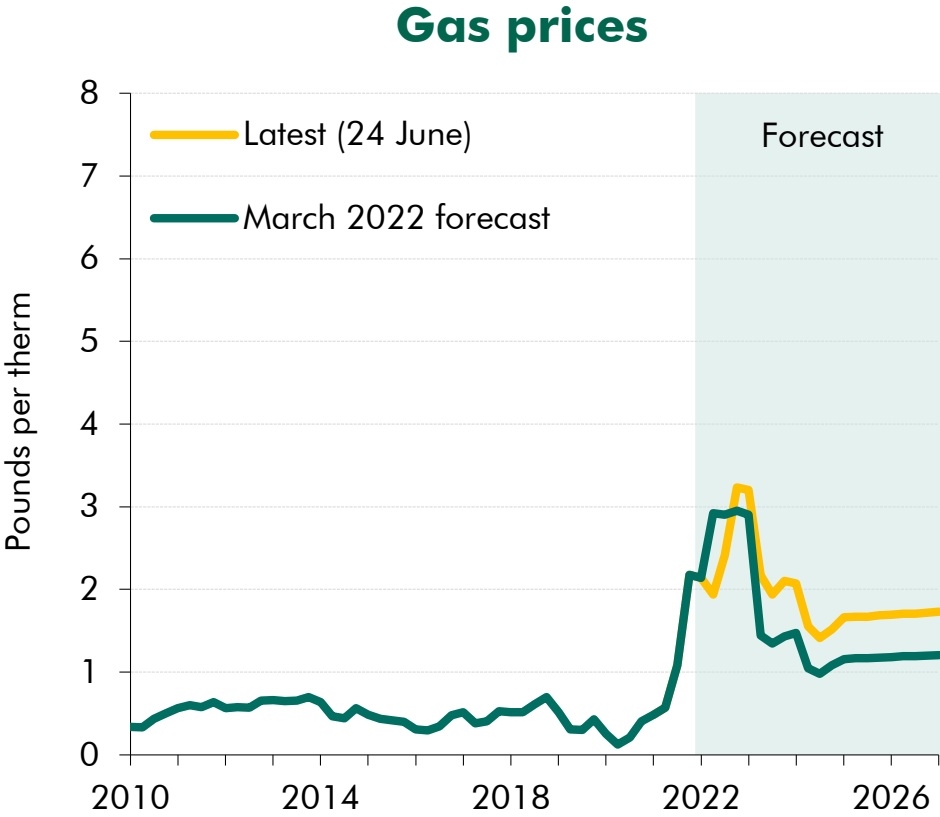


Source: ONS, OBR

Cumulative impact on debt



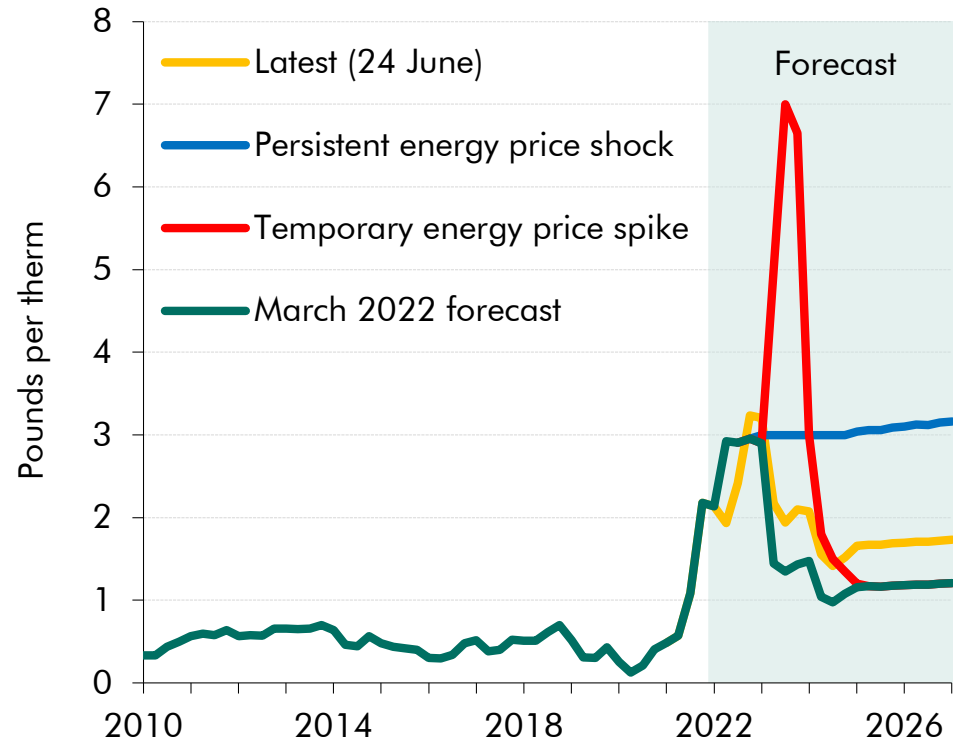
Gas and oil prices: March 2022 EFO and latest



Source: Datastream, OBR

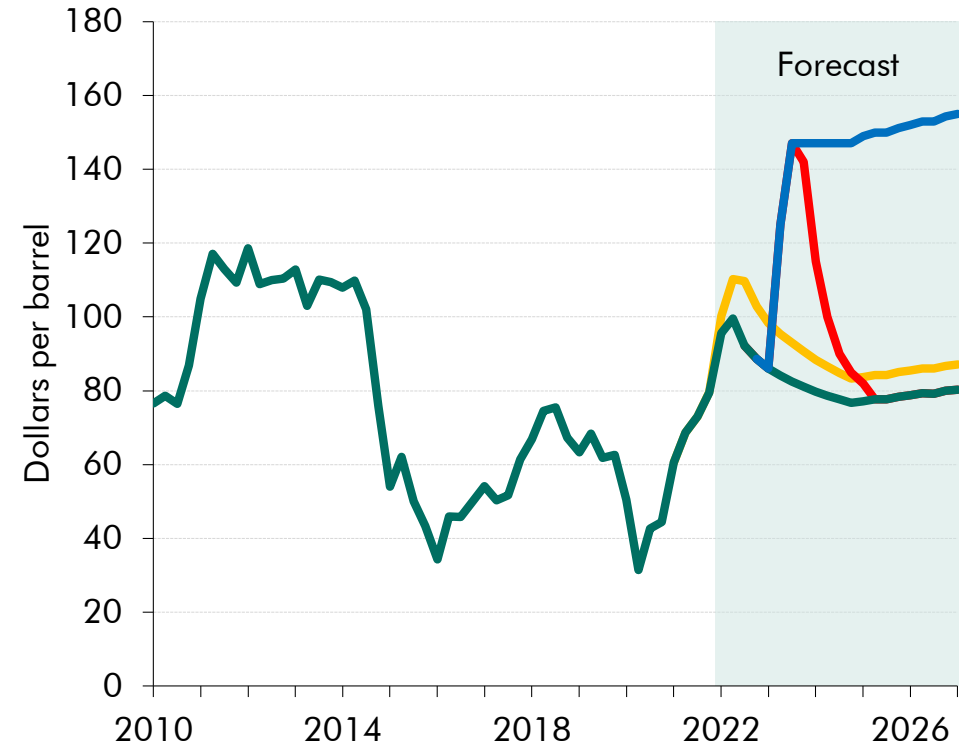
Energy price scenarios

Gas prices



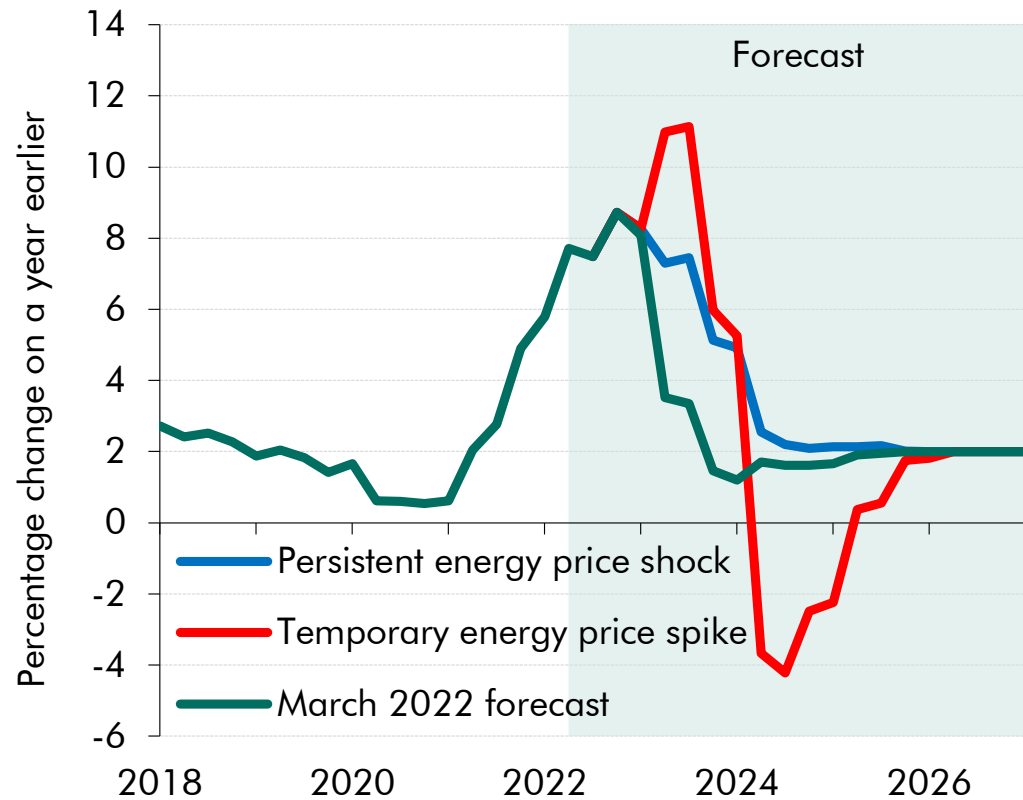
Source: Datastream, OBR

Oil prices

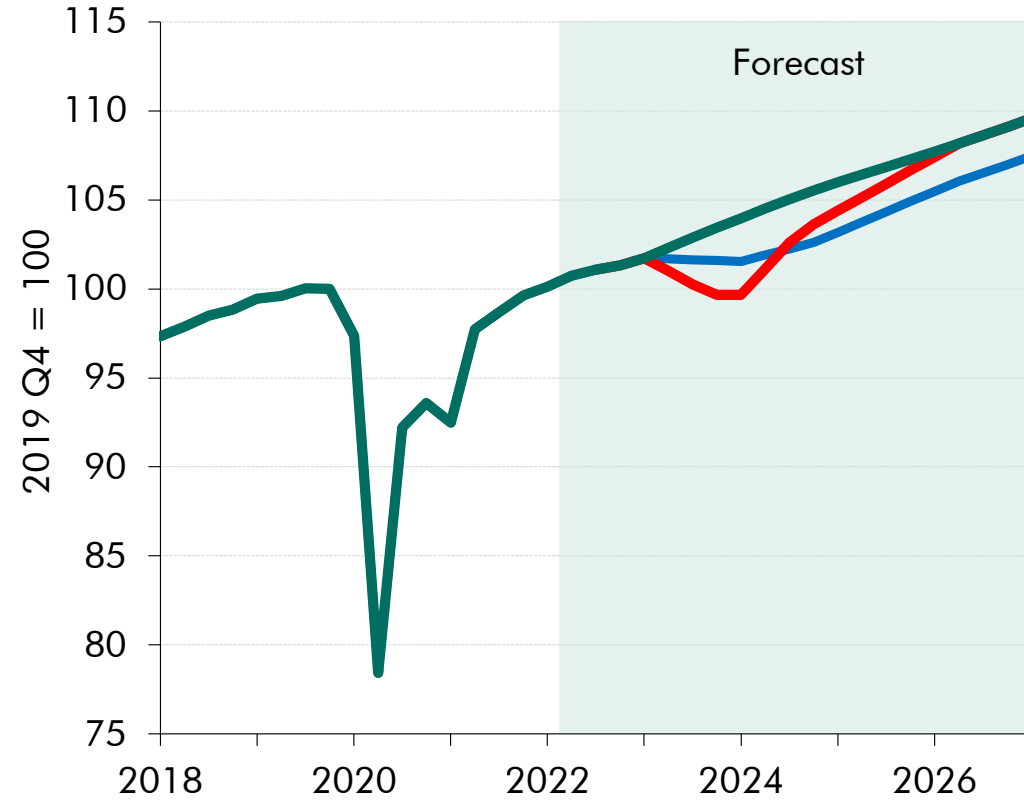


Energy price scenarios: economic impact

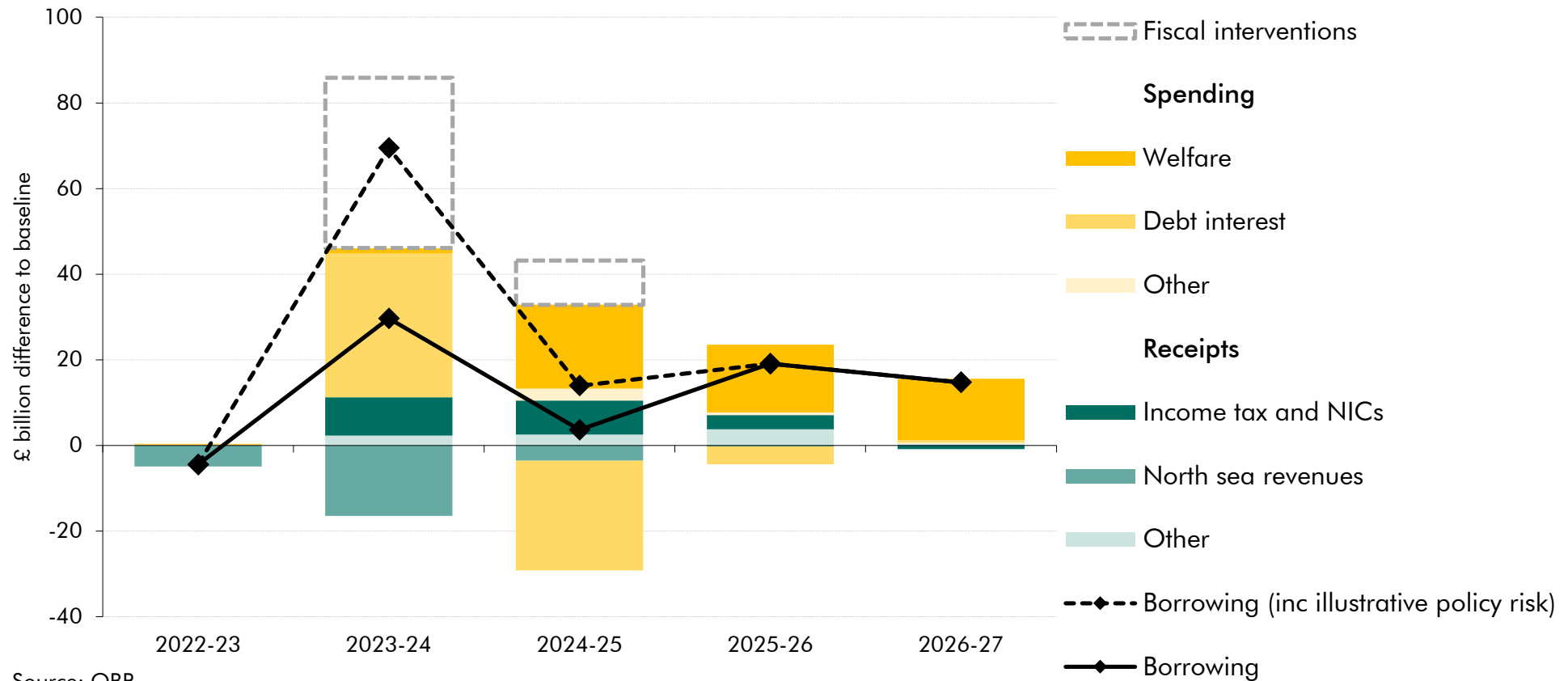
CPI inflation



Real GDP

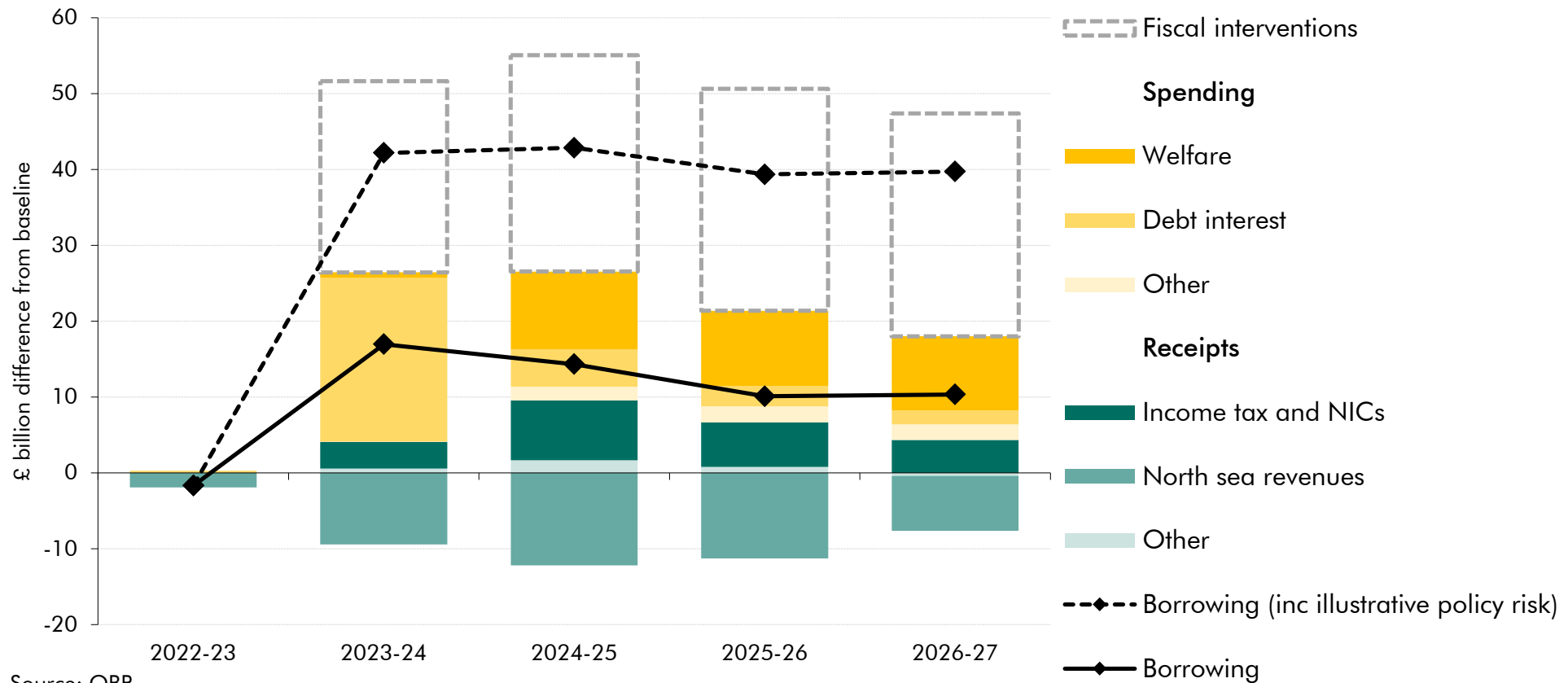


Energy price scenario (temporary): fiscal impact



Source: OBR

Energy price scenario (permanent): fiscal impact



Source: OBR

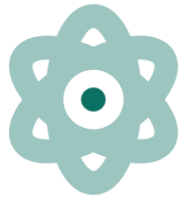
Future energy mix: a policy trilemma

- 1. Affordable:** Cost of building, operating, and decommissioning energy infrastructure
- 2. Clean:** Volume of carbon emissions generated in the process of energy production
- 3. Secure:** Potential for disruption of energy supply as a result of geopolitical, meteorological, or seasonal factors

Future energy mix: a fiscal trilemma



Carbon capture and storage required to make clean use of domestic **fossil fuels** doubles costs of new gas-fired plants



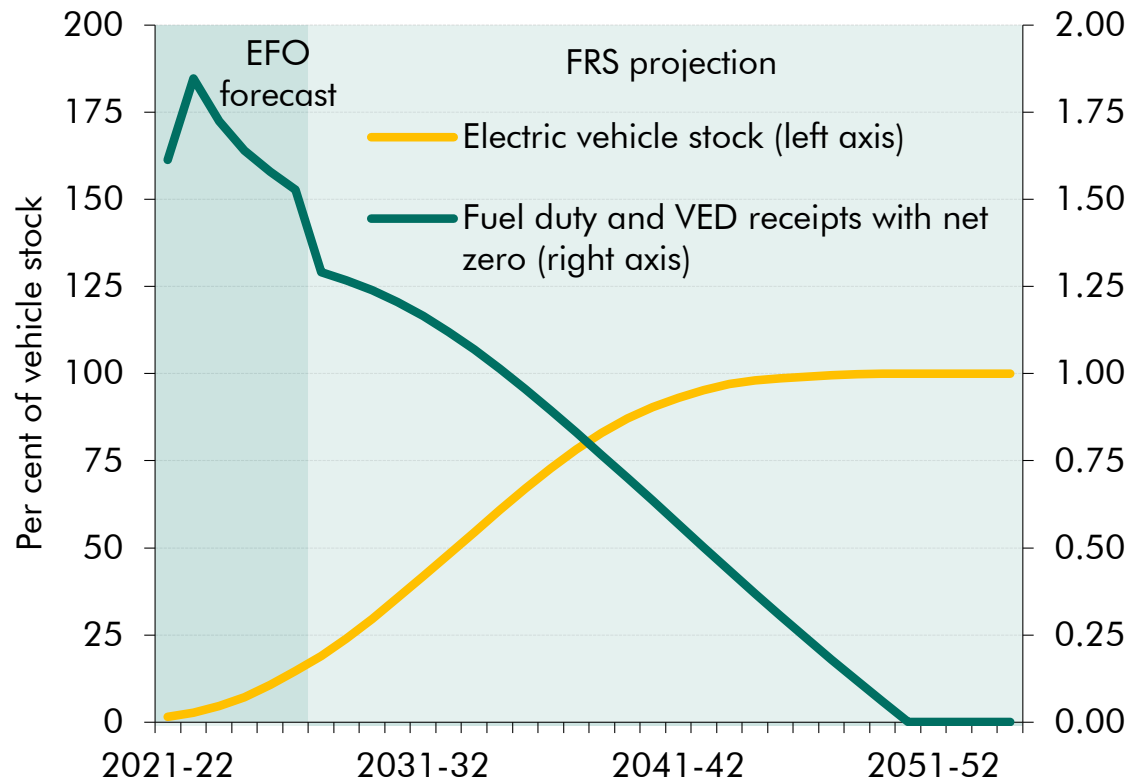
Construction costs of new **nuclear** capacity targeted in the Energy Security Strategy could total £170 billion



More economy-wide storage capacity to overcome intermittency of **renewable power** could cost tens of billions

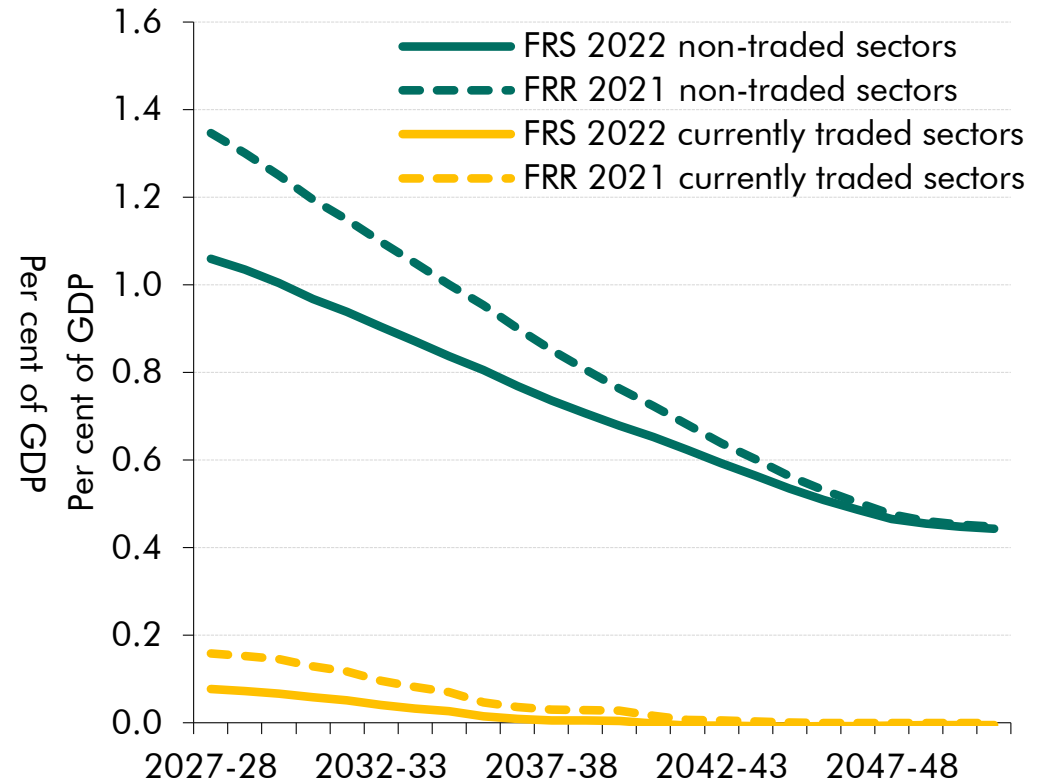
Fiscal costs of net zero: an update

Electric vehicle stock and motoring taxes



Source: OBR

Annual carbon tax revenue



Source: CCC, OBR

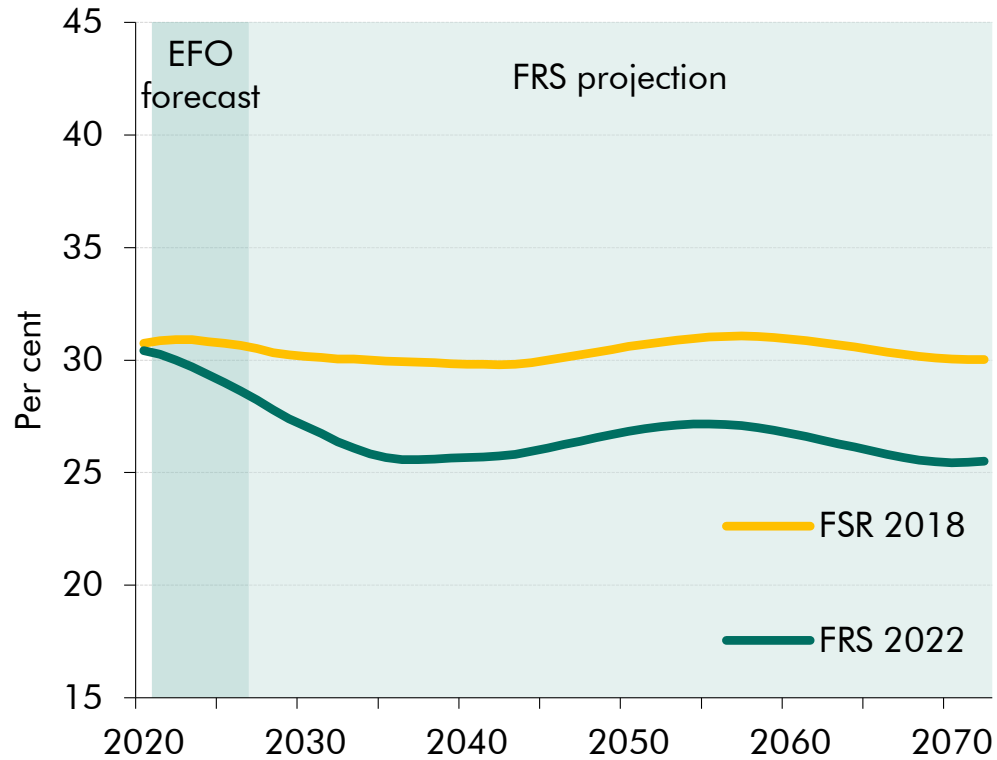
Long-term fiscal projections

Changes since our *2018 Fiscal sustainability report*:

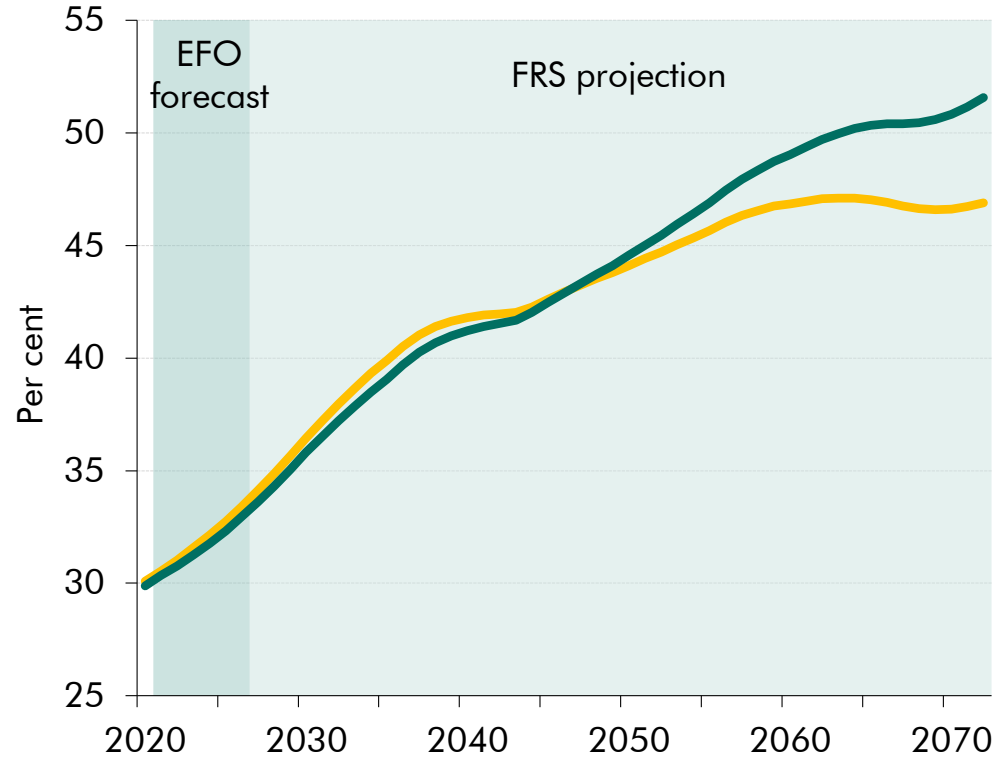
- More favourable starting primary balance (+0.7 per cent of GDP)
- Updated demographic assumptions (ONS January 2022 interim projections)
- Loss of motoring taxes (-1.5 per cent of GDP)
- Other economic impacts (higher public investment (+) & net zero cost (-))
- Other policy changes (adult social care & student loan reforms)

Latest demographic assumptions

Young-age dependency ratio

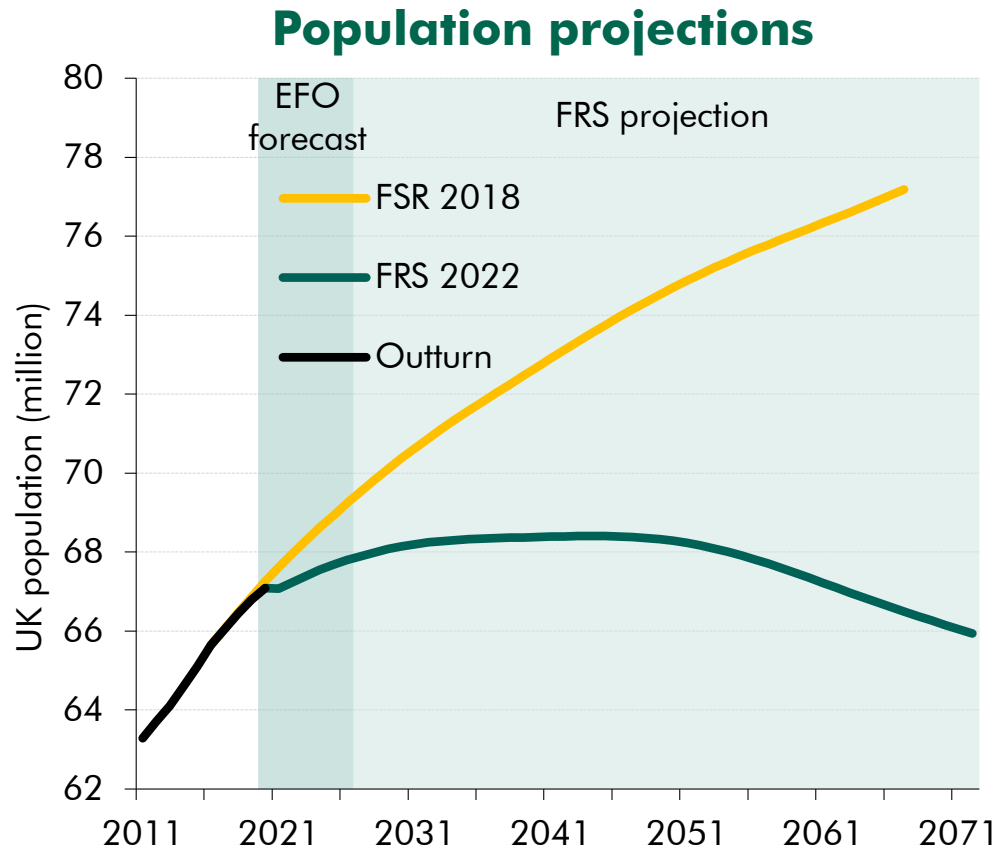


Old-age dependency ratio

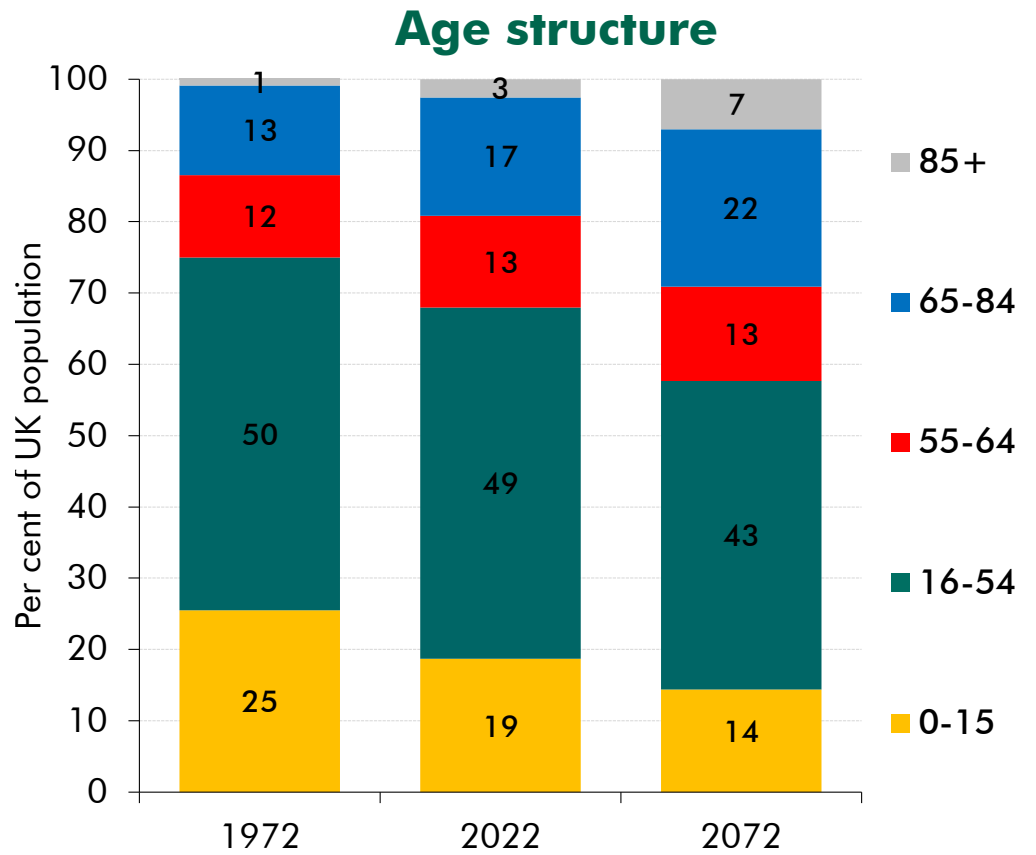


Source: OBR

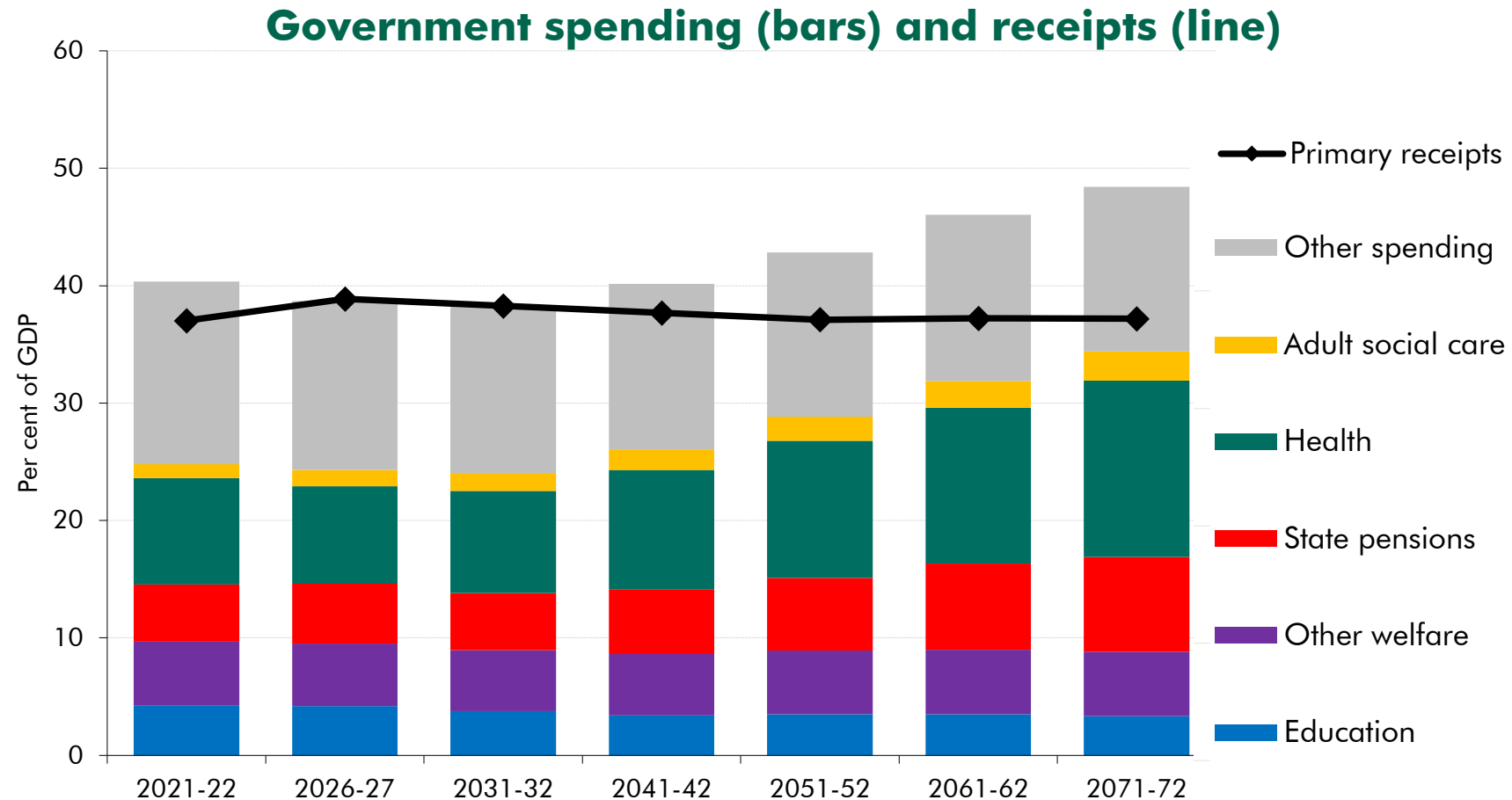
Population and age structure



Source: ONS, OBR



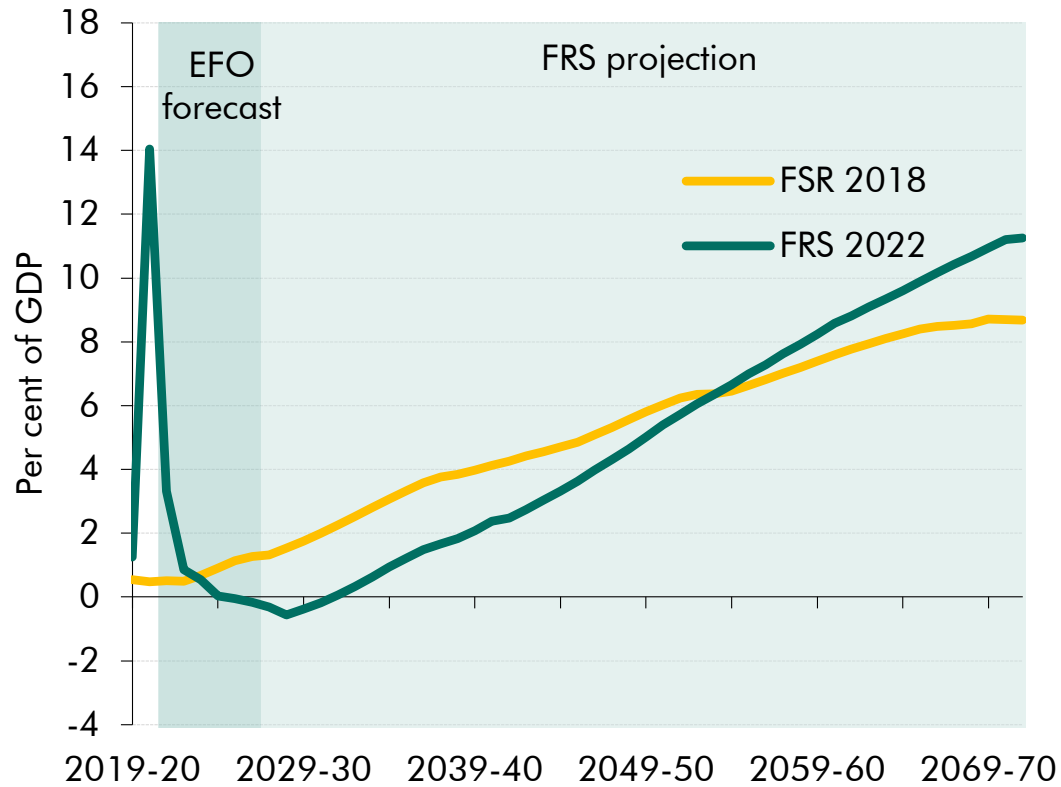
Primary spending and receipts



Source: DfE, DHSC, DWP, HM Treasury, OBR

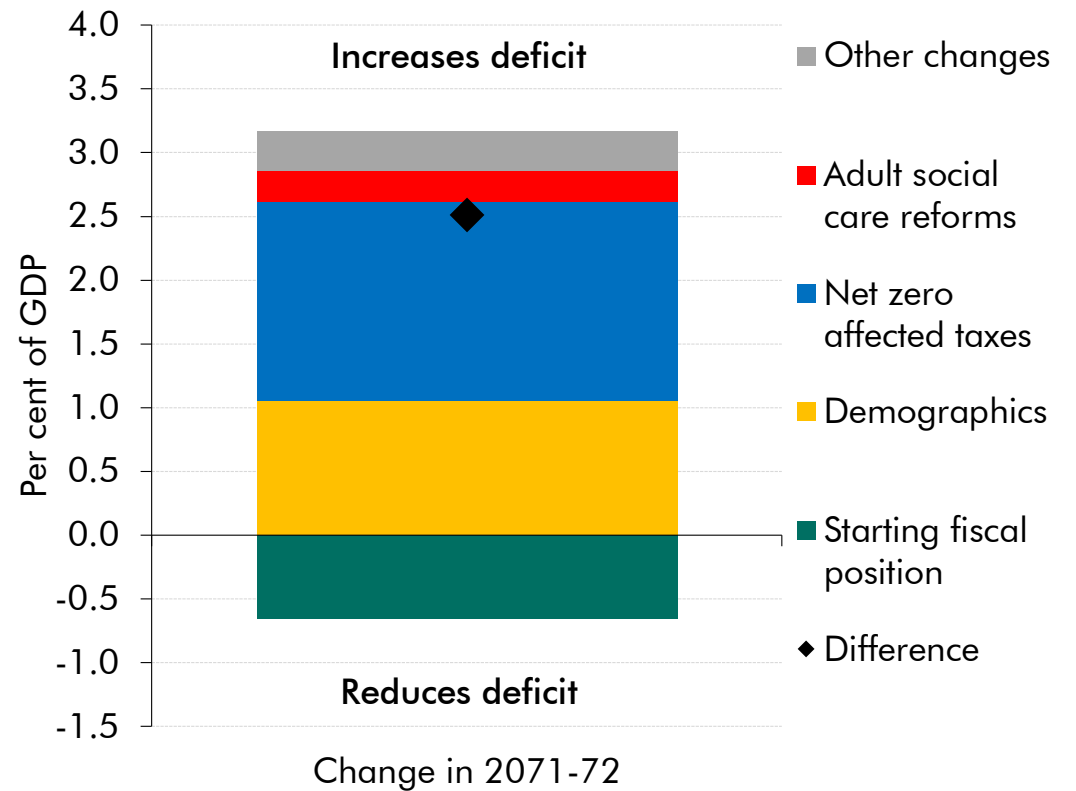
Primary deficit over 50 years

Primary deficit



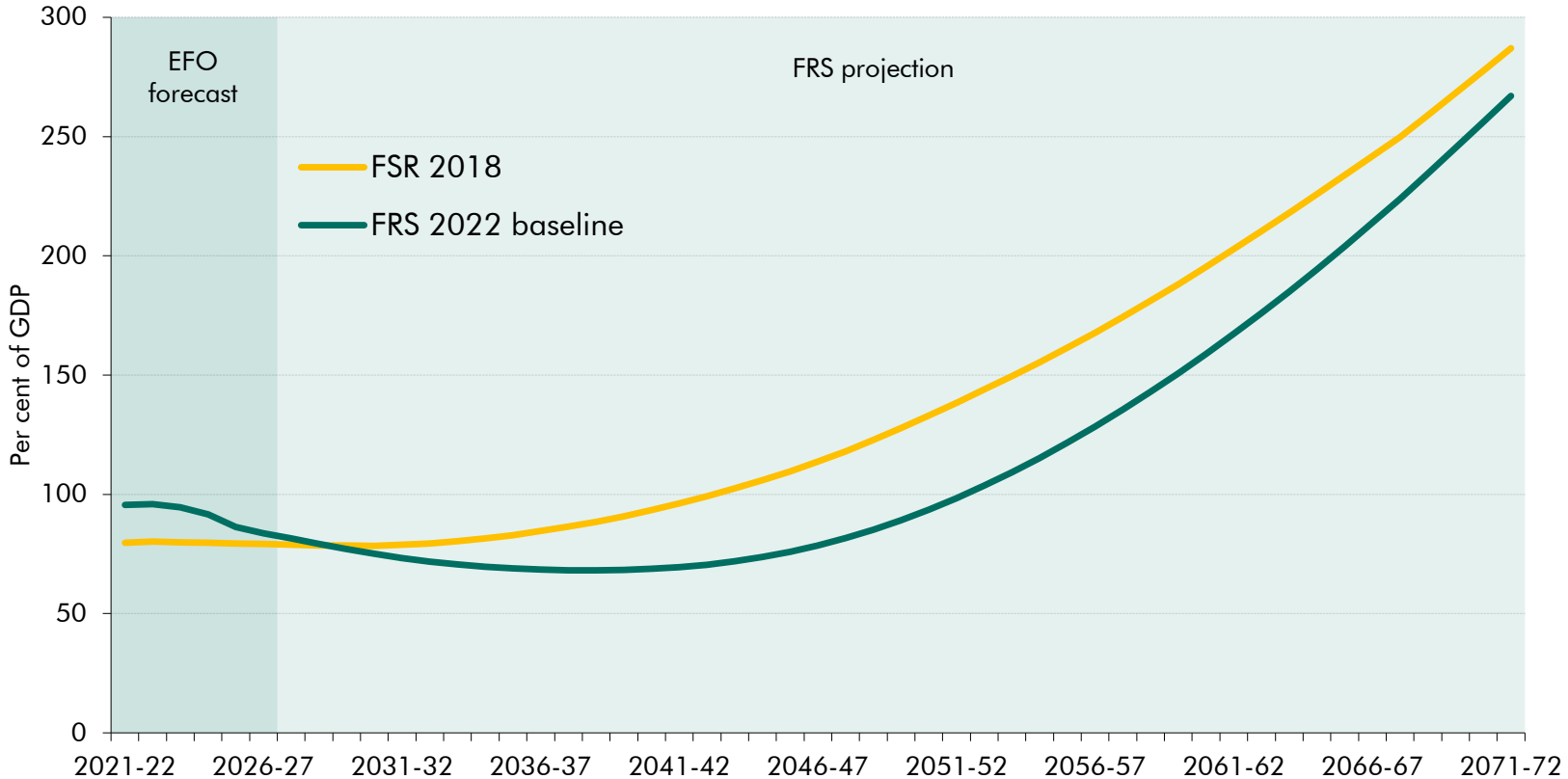
Source: OBR

Change in deficit vs. FSR 2018



Public debt over 50 years

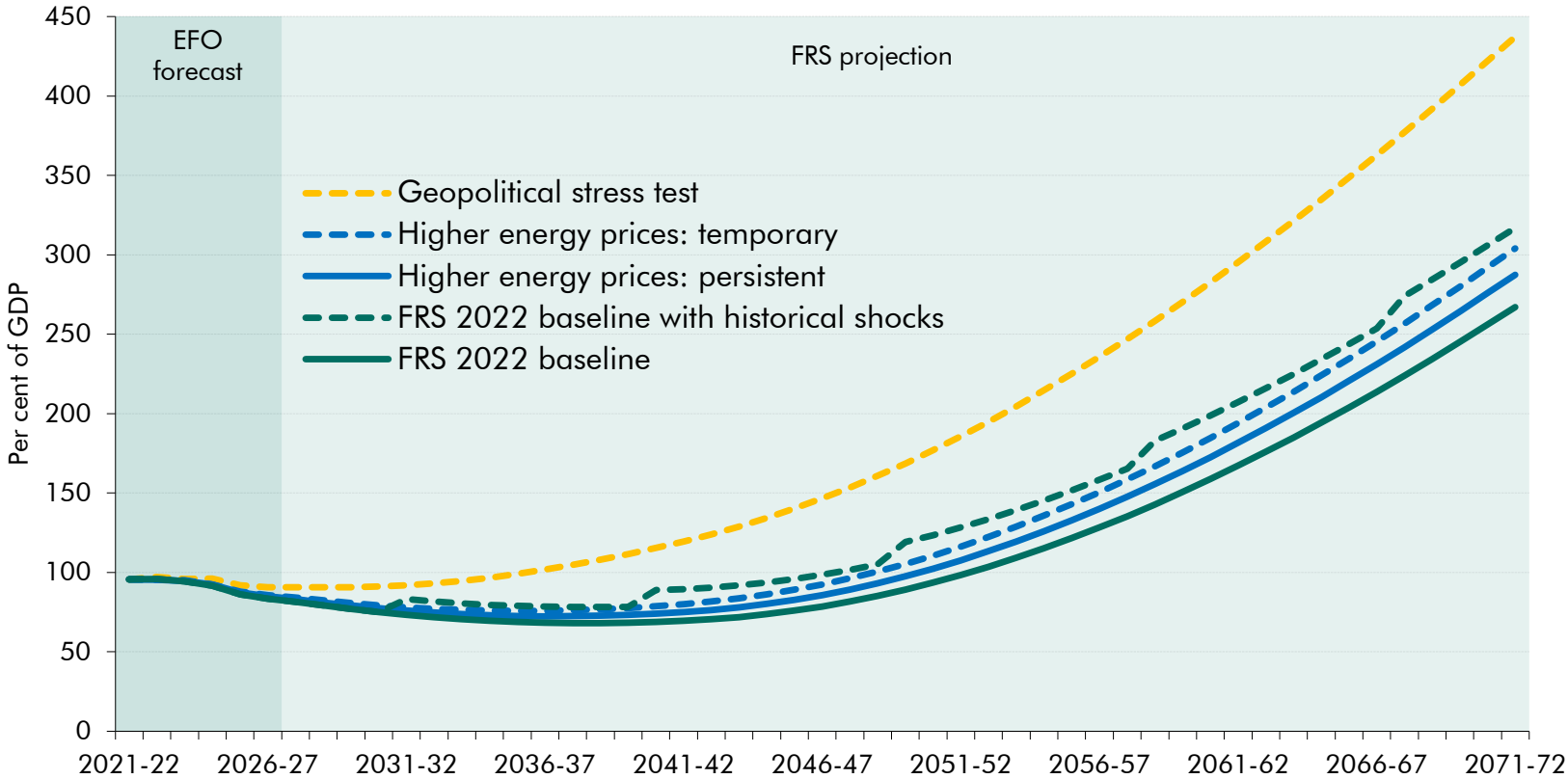
Public sector net debt



Source: OBR

Public debt over 50 years with shocks

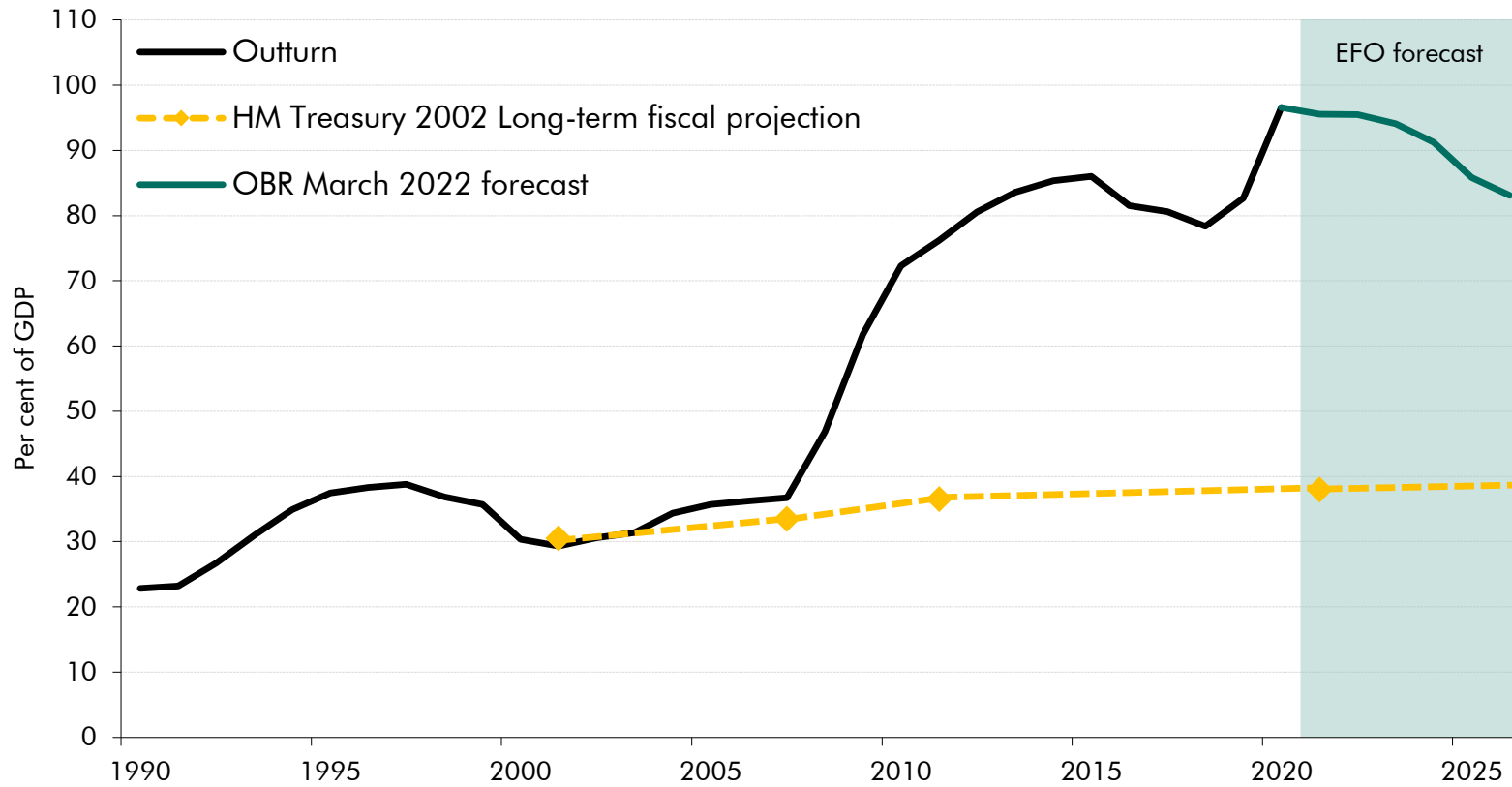
Public sector net debt



Source: OBR

Conclusion

Public sector net debt: projections vs outturns



Source: HM Treasury, OBR