

Can we solve the productivity puzzle?

Julian Jessop

January 2025



1. Outline

- What is the **productivity puzzle**?
- Global explanations
- UK-specific factors
- Potential **solutions**
- Questions and discussion

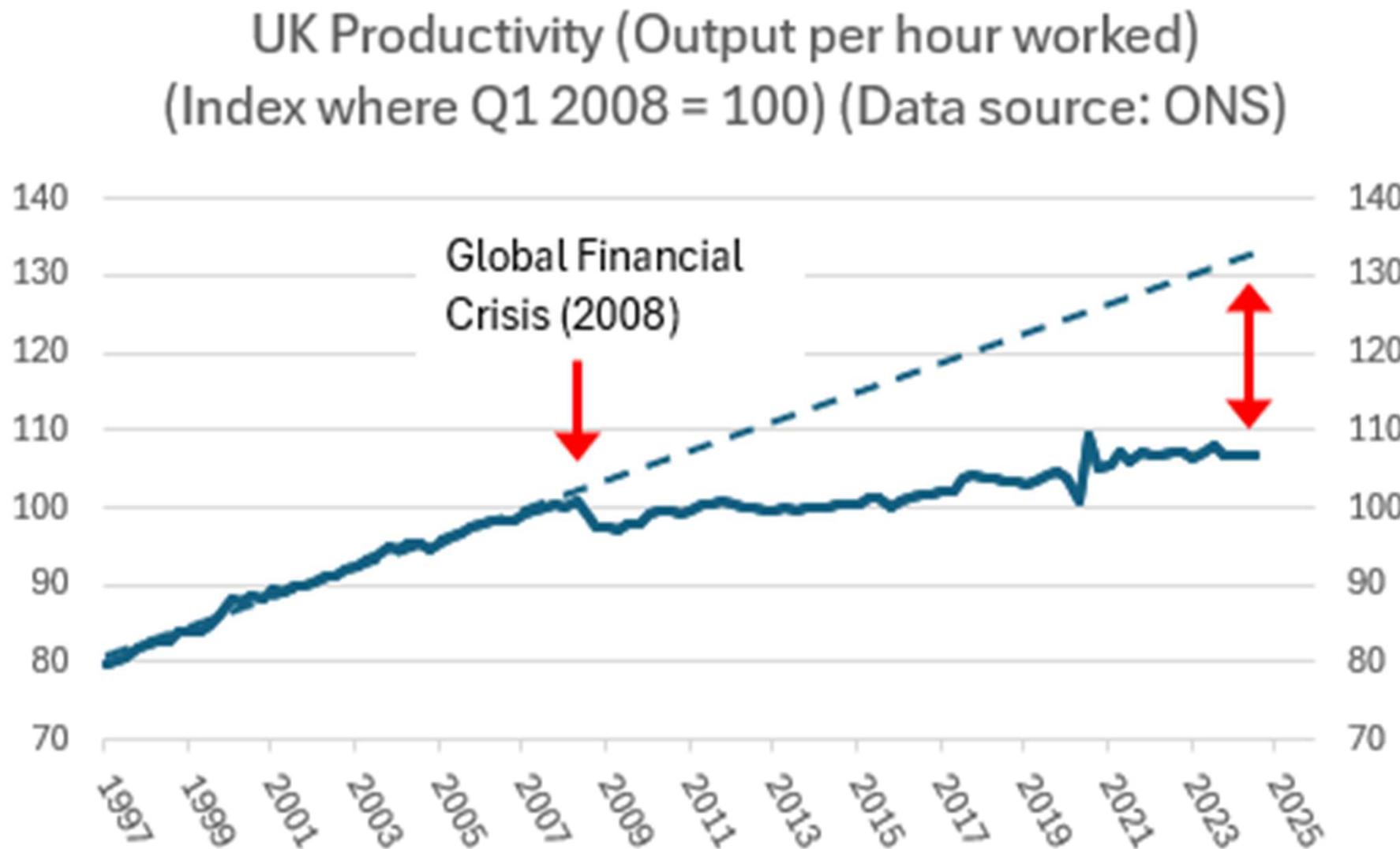
2. What is productivity?

- A measure of how efficiently production **inputs**, such as labour and capital, are being used in an economy to produce a given level of **output**
- Total Factor Productivity (TFP) takes account of all the inputs associated with production, including machinery, buildings and land, as well as labour
- More common to focus on measures of **labour productivity**, notably 'output per hour worked'

3. Why it matters

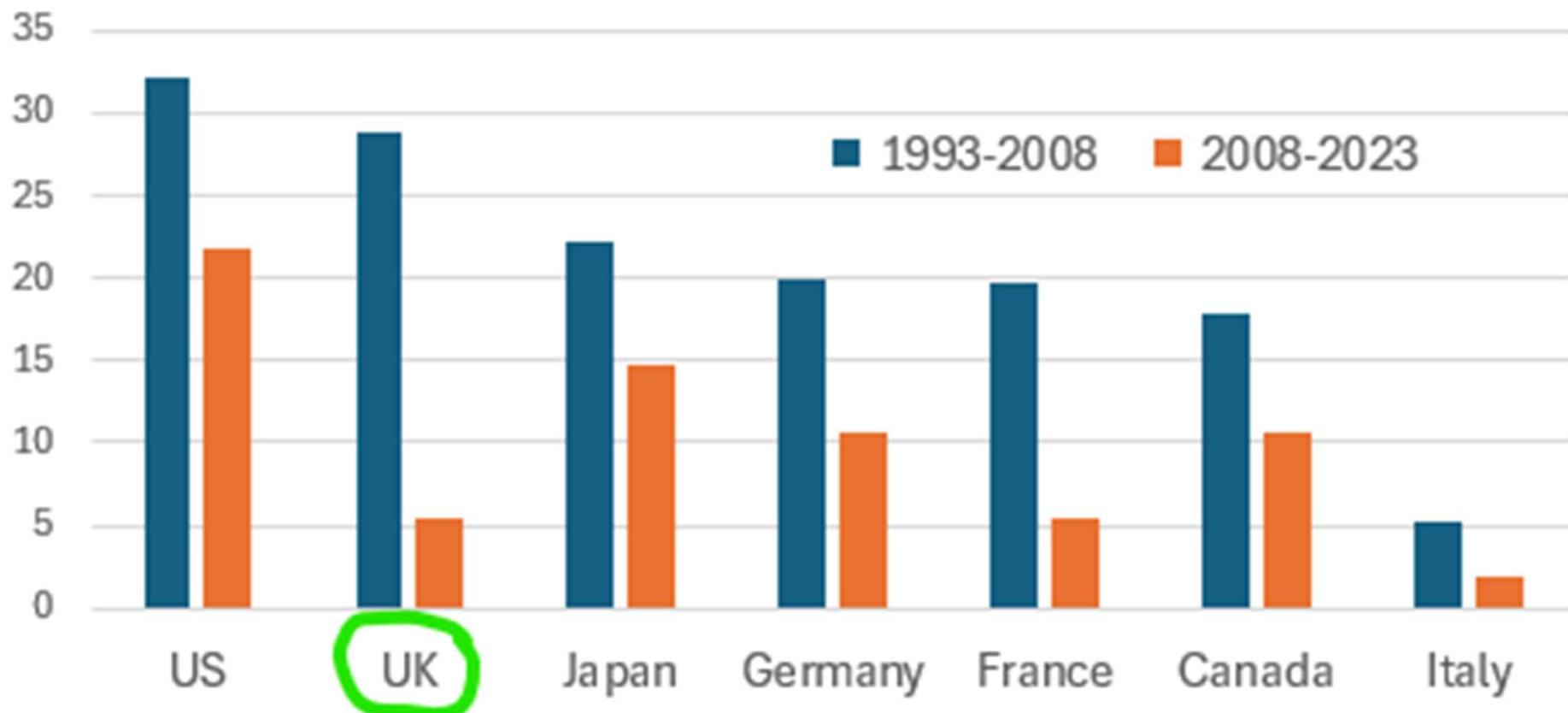
- *'Productivity isn't everything, but in the long run it is almost everything'* (Paul Krugman)
 1. higher productivity usually means **higher real wages** and allows people to work **fewer hours**
 2. productivity gains allow living standards to increase without using more resources ('**intensive growth**'), so '**good for the planet**'
 3. in contrast, low growth makes it harder to deal with social challenges and to pay for vital public services, and is a risk to **debt sustainability**

4. The UK productivity puzzle

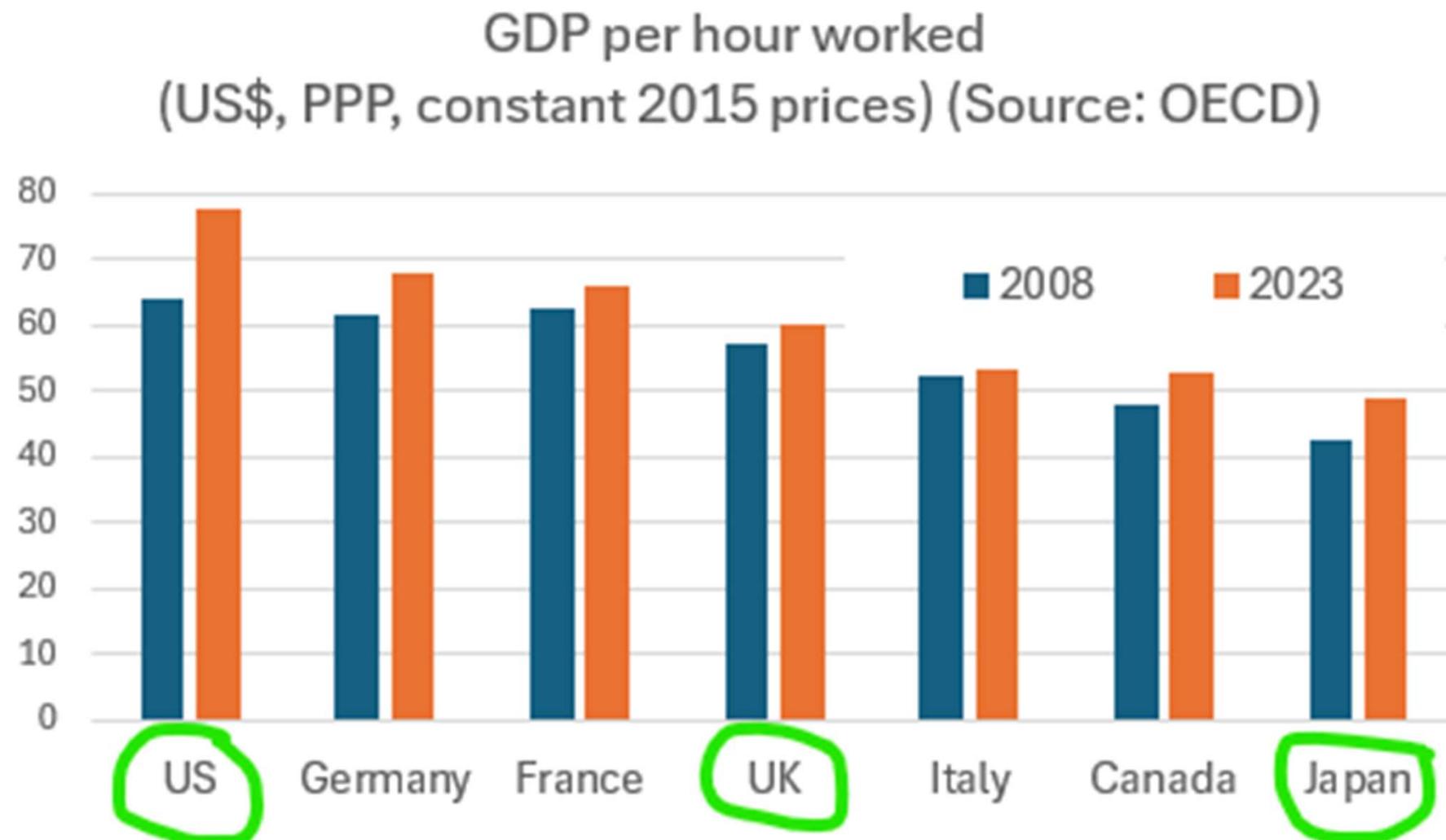


5. But the UK is not alone...

Cumulative growth in GDP per hour worked (%)
(Data source: OECD)



6. UK is mid-table on the *level* of productivity



7. US vs Japan

- Some US strengths
 - ✓ relatively flexible labour and product markets
 - ✓ strong venture capital sector, less reliance on bank lending
 - ✓ risk-taking culture
- Some Japanese weaknesses
 - ❖ demographics
 - ❖ low interest rates keeping 'zombie firms' going
 - ❖ protectionism especially in agriculture
 - ❖ conservative culture

8. Is it fair to blame 'lazy' UK workers? (#QTWTAIN)

- *'Labour productivity only partially reflects the productivity of labour in terms of the personal capacities of workers or the intensity of their effort'*
- *'The ratio between the output measure and the labour input depends to a large degree on the presence and/or use of other inputs (e.g. **capital, intermediate inputs, technical, organisational and efficiency change, economies of scale**)'*

9. Productivity is cyclical

- Productivity usually falls during recessions (so ‘**direction of causation**’ from productivity to growth can run in either direction):
 1. firms are less efficient at lower levels of output and capacity utilisation (**economies of scale**, etc.)
 2. firms tend to ‘**hoard labour**’ (because firing and then rehiring workers can be expensive)
 3. lots of disruption and **dislocation** (e.g. managers time is diverted to finding new customers and suppliers, or new sources of finance)

10. Global explanations - 'Secular stagnation'

- Some economists think the slowdown might be structural and long-lasting...
- Robert J. Gordon (writing in 2015) attributed this to *"diminishing returns in the digital revolution that had its peak effect on business hardware, software, and best practices in the late 1990s but has resulted in little change in those methods over the past decade"*
- If so, the **AI revolution** could (and should) now be a game-changer for productivity and growth?

11. Other possible drivers of ‘secular stagnation’

- Gordon also identified six other problems:
 1. demographics
 2. poor education
 3. rising inequality
 4. diminishing benefits from globalisation
 5. energy and environmental constraints
 6. high levels of consumer and government debt

12. Theme 1

- Deficient demand due to rising **inequality**
- In 'Capital in the Twenty-First Century' (2014) Thomas Piketty argued that higher returns to capital than those to labour would concentrate income and wealth among a small group of people with a lower propensity to spend
- This has been seized on by many to justify more state intervention to redistribute income and wealth – but the evidence is weak
- My take: too much redistribution can backfire

13. Theme 2

- Advanced economies are running up against natural limits, especially **environmental** and **demographic** constraints
- Often used to argue in favour of moving away from GDP to focus on broader measures of ‘wellbeing’
- Demographic headwinds have been particularly strong in Japan but Germany, Italy and the UK are beginning to face the same problems
- My take: just means that productivity-led growth is more important than ever

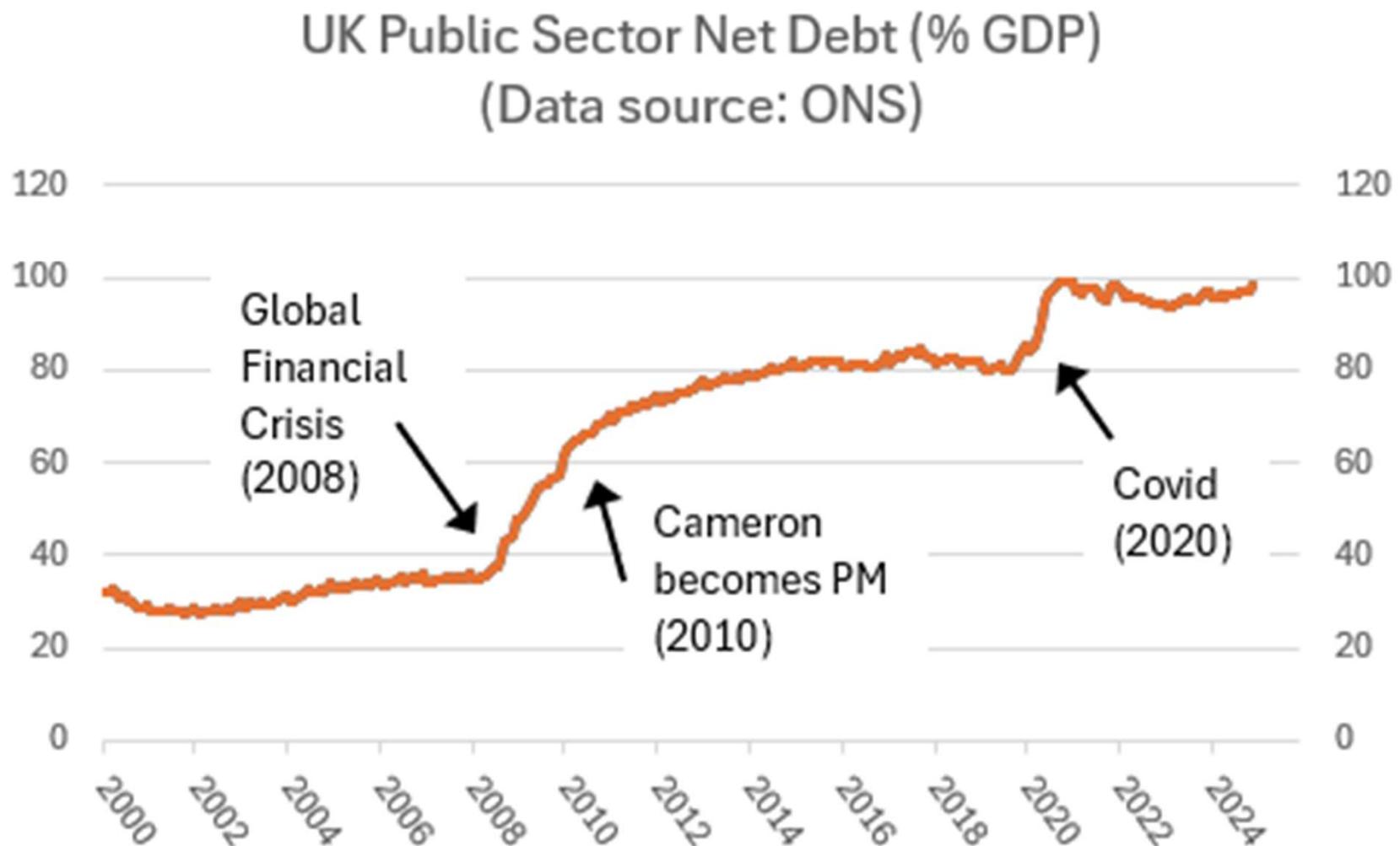
14. Theme 3

- An **interest rate trap**
- It may be impossible to lower official interest rates sufficiently to boost demand when they are already near their ‘zero lower bound’ (Krugman, Summers)
- Requires more activist fiscal policies, notably increased public spending on investment
- Also, more Quantitative Easing (QE) to lower long-term interest rates?
- My take: counter-cyclical fiscal policy is OK, but this doesn’t justify a permanently bigger state (one of many downside risks of QE too)

15. An alternative explanation

- State simply too dominant
- Classical Liberals (Adam Smith, David Ricardo, JS Mill) emphasised the role of private markets and free trade in driving productivity e.g. via benefits of specialisation and competition
- Friedrich Hayek coined the term '**spontaneous order**' to describe the emergence of complex social institutions – including markets – that are far more efficient than central planning
- Big government bad for innovation

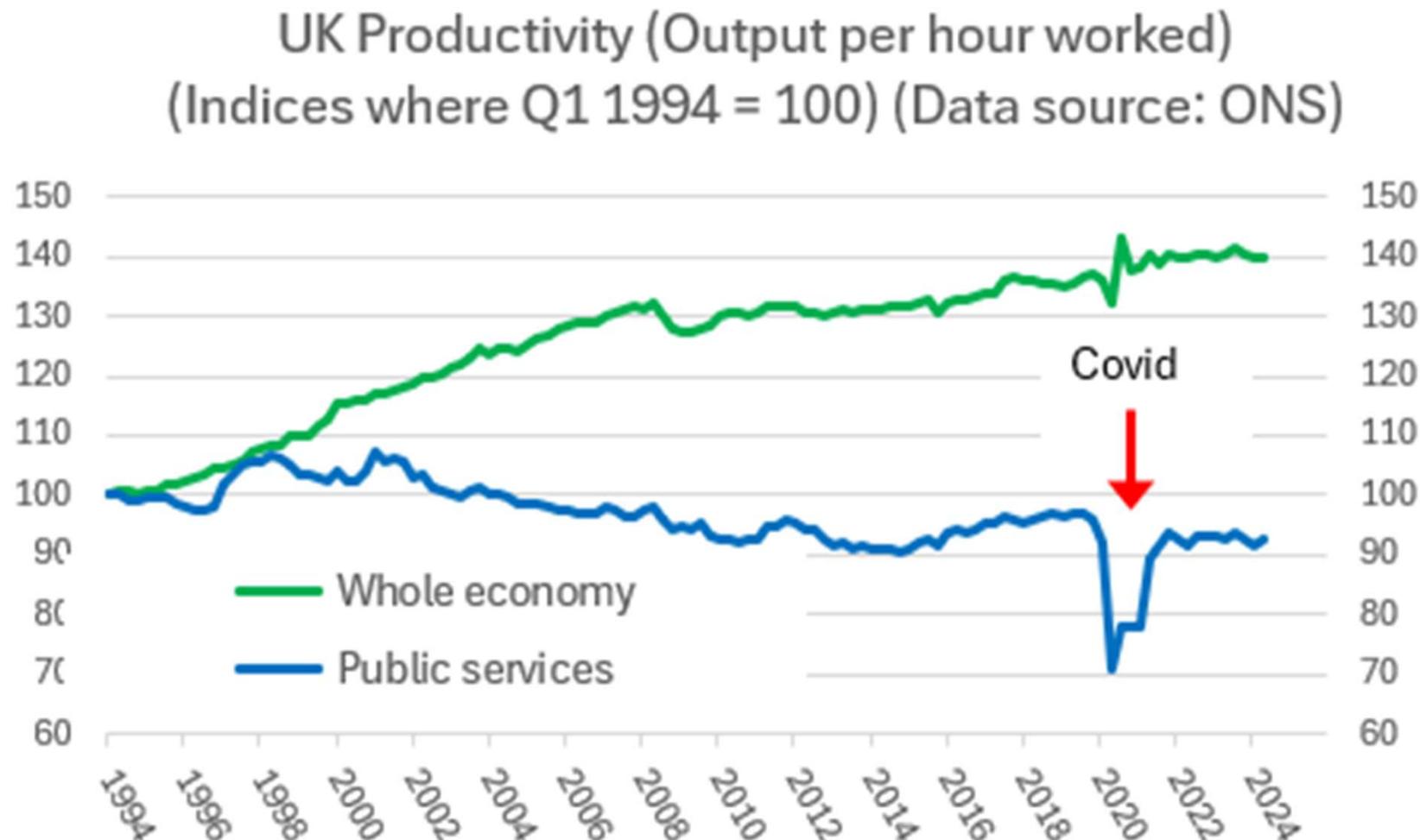
16. State just getting bigger



17. Global explanations – legacy of the GFC

- Seems too much of a coincidence that these factors all kicked in after the **Global Financial Crisis**
- The fallout from the GFC could have contributed to low productivity growth in several (related) ways:
 - plenty of unemployed, cheap workers
 - nervous businesses reluctant to invest
 - weakened banks reluctant to lend
 - low interest rates keeping '**zombie firms**' going
 - public sector austerity, especially capital spending

18. Even bigger problem in the public sector



19. Why might productivity growth be lower in some public services?

- The nature of what they do: consumer-facing services requiring lots of personal contact
- Baumol's example of an orchestra

1. Reliance on Treasury (and politicians) for funding
2. Weakness of competition and other market forces
3. Strong trade unions resisting change

- NHS illustrates all of these well



20. Government-led solutions

- Increased **public investment** in infrastructure and ‘human capital’ (health, education and skills training)
- Strategic government involvement in key sectors, esp. manufacturing (aka ‘**industrial policy**’)
- ‘**National Wealth Fund**’ to provide ‘patient’ (long term) capital to supplement or replace lending by ‘short termists’ in the City
- Redistribution of income and wealth

21. Market-led solutions

- Facilitate ‘creative destruction’ and disruptive technologies (governments tend to protect incumbents)
- Lower, simpler and more certain taxation, especially of investment, with smaller, more efficient state
- Deregulation, e.g. liberalise planning laws, make it easier for private pensions to invest in infrastructure
- Market-based reforms of public services, esp. the NHS (borrowing on best practice elsewhere in Europe)
- Reduce barriers to international trade and cross-border investment, smarter policies on migration

22. My conclusions

1. The productivity slowdown is global and so we need to start with global explanations
2. Many have argued for policy solutions that would involve more intervention by governments, but my view is that a bigger state has actually contributed to the productivity slowdown
3. The relative resilience of productivity in the **US** provides some valuable lessons here

Questions and discussion

Julian Jessop