PrincetonWebinar

markus'academy

Hosted from **PRINCETON**

For **EVERYONE, WORLDWIDE**

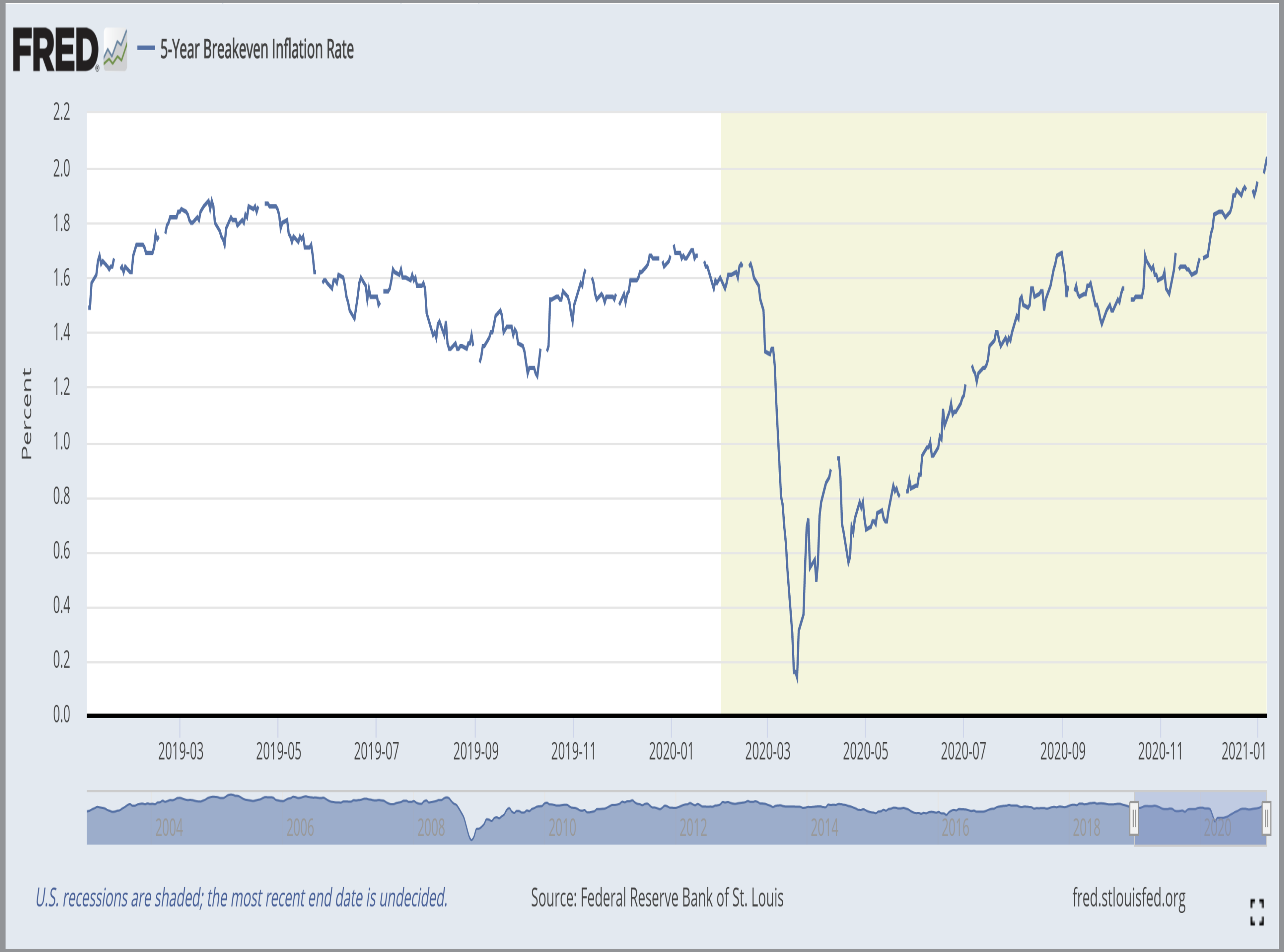
'Inflation and Interest Rates; not so much lower for longer as higher and sooner?'

Charles Goodhart
LSE

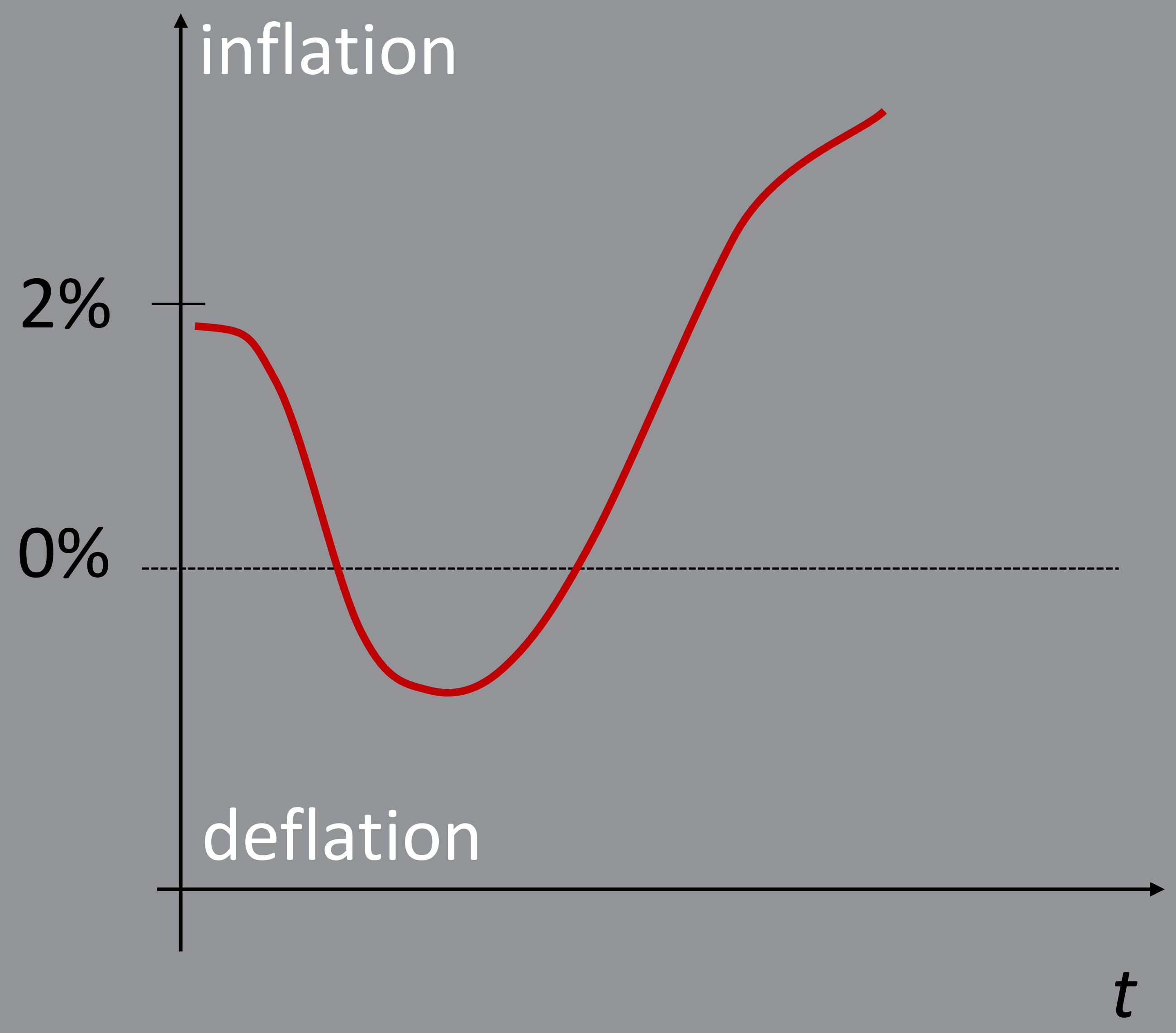
Markus Brunnermeier
Princeton

07. January 2021

Inflation Break Even Point (5 Years)



Trap Risk: "Inflation whipsaw"



Brunnermeier, Merkel, Parker, Sannikov (2020)

2 Traps

1. Deflation trap (Liquidity trap) Japan

- Precautionary savings, flight to safety
- Policy rate close to Reversal Rate (ELB) ⇒ low inflation for long

2. Inflation trap (inflation like a bank-run)

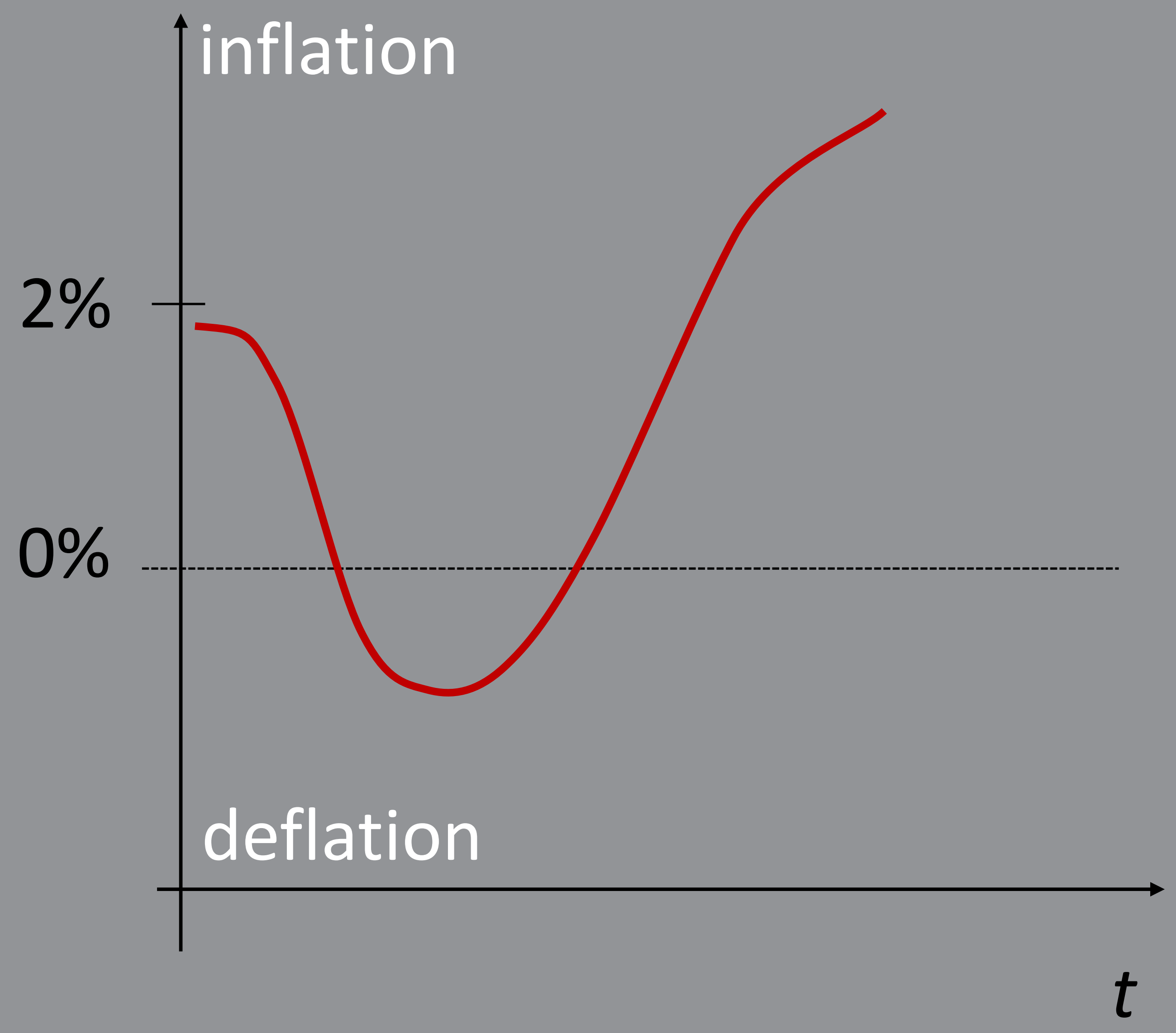
a. Run in **other** safe asset/foreign currency (digital) [Portfolio choice]
⇒ import cost push shock (for small countries)

b. Run into consumption, ***global supply shock*** [Consumption-savings]

c. Wage pressure ***demographics*** [Labor-leisure]

- High debt inhibit necessary monetary policy steps
  - Fiscal sector Fiscal dominance ⇒ threatens independence
  - Financial sector Financial dominance

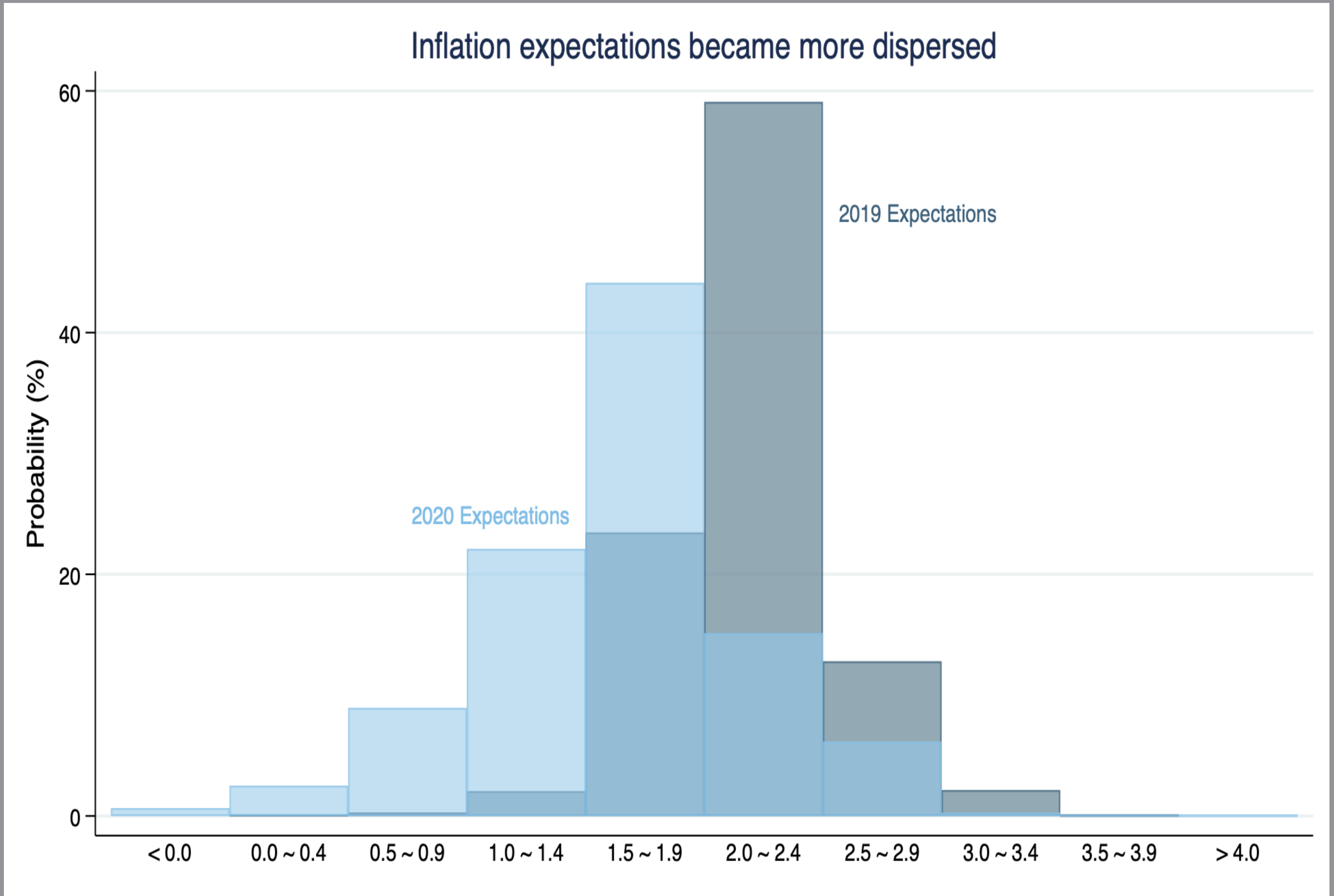
What are the inflation/deflation pressures?



- **Inflation/deflation pressures**
  - \- Risk
  - \- Forced savings
  - \+ Pent-up demand
  - \+ capital misallocation
  - \+ (re)-distribution
  - \+ government commitment
  - -/+ Lending policy
  - \+ Margin for large firms
  - \- Weak financial sector
  - \+ slow-/deglobalization
  - \+ demographics

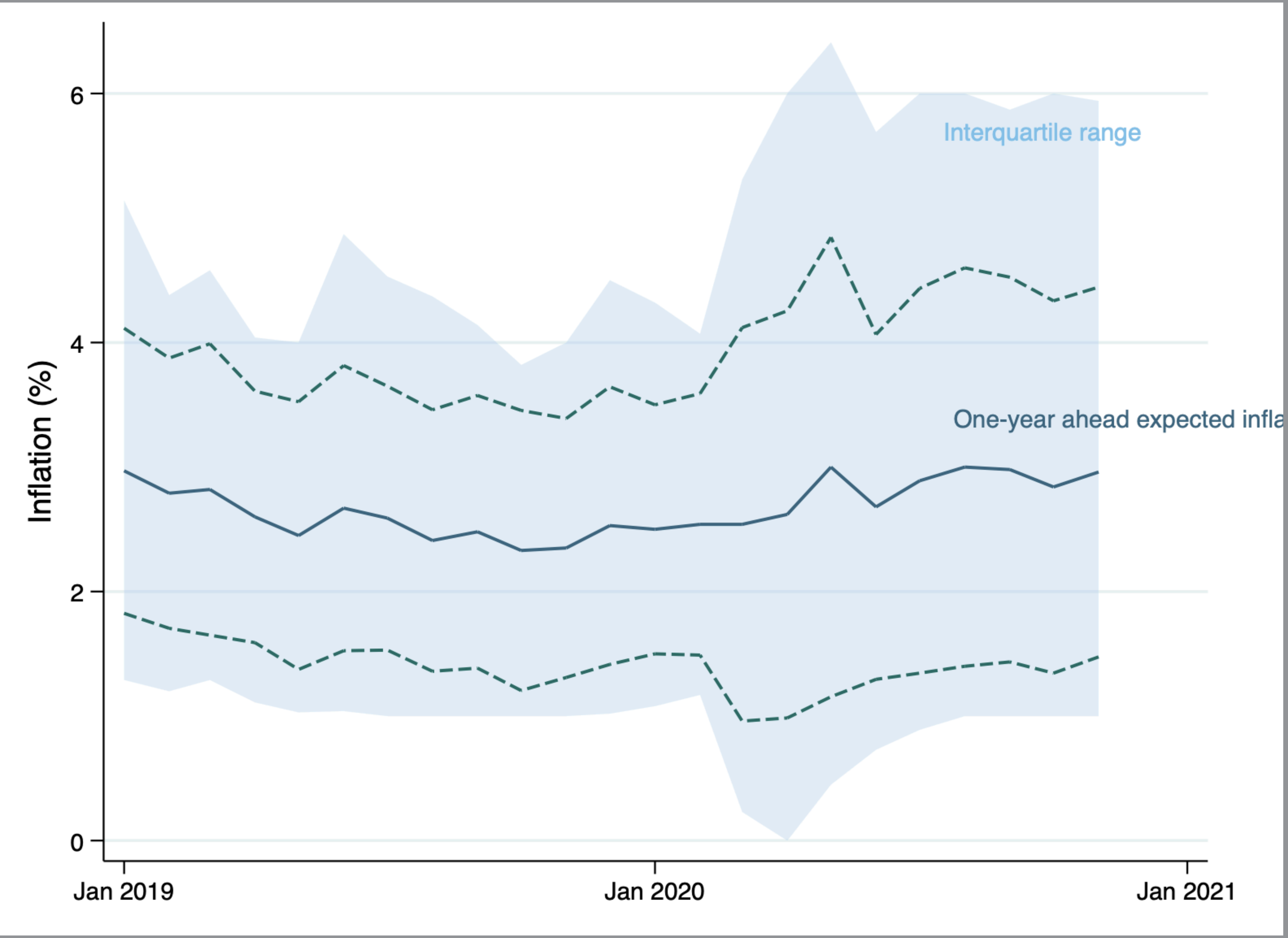
Brunnermeier, Merkel, Parker, Sannikov (2020)

Inflation (professional forecasters)



Source: Philadelphia Fed

Inflation **uncertainty** and **dispersion** (household surveys)



Source: New York Fed

Poll Questions

1. Lowflation + fallowing interest rates:
   Is the role of globalization and demography
   - (i) huge; (ii) large; (iii) somewhat; (iv) small; and (v) unimportant?

2. CBO indicates slowing economic growth slowing down and debt/ deficits rising. What is your confidence that USA political system achieve deficit reduction over the next few years:
   - (i) very; (ii) perhaps; (iii) only with luck; (iv) not at all?

3. Monetary expansion in 2020 and 2021, but dramatic fall in velocity.
   Do you expect velocity to:
   - (i) return to normal; (ii) return a significant part of the way towards normal; (iii) move back a little bit; (iv) stay constant; (v) fall further, as monetary growth continues?
   -

4. If full employment has not been re-attained by end-2023,
   would you expect the FOMC to raise interest rates when inflation is:
   - (i) averaging above 2%; (ii) averaging above 3%; (iii) averaging above 4%; (iv) averaging above 5%; (v) averaging higher; (vi) never?

Adam Posen

The Great Demographic Reversal:
Ageing Societies, Waning Inequality, and an Inflation Revival

By
C.A.E. Goodhart
Financial Markets Group, London School of Economics

and

Manoj Pradhan
Talking Heads Macroeconomics

Figure 1: Interest rates have been falling for decades

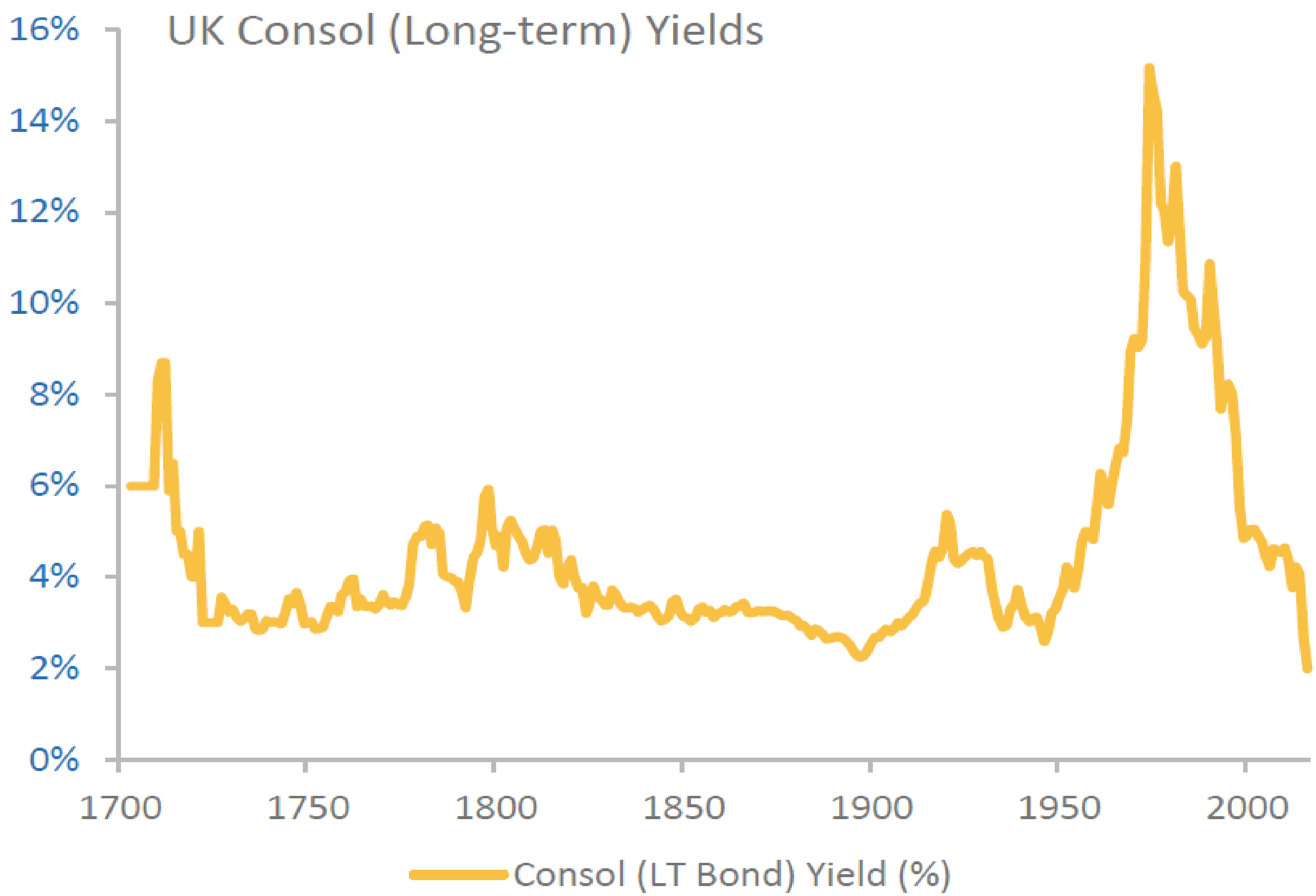
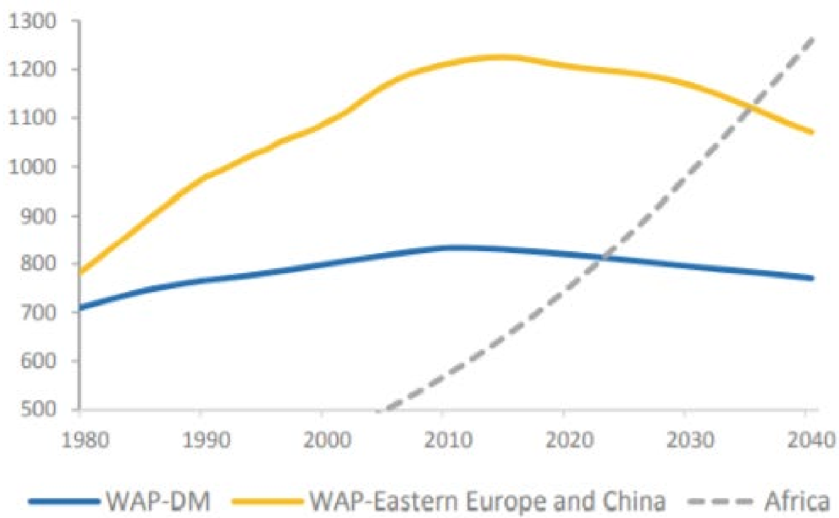


Figure 2: Working age populations falling globally – Africa is the key exception, and India to a lesser extent



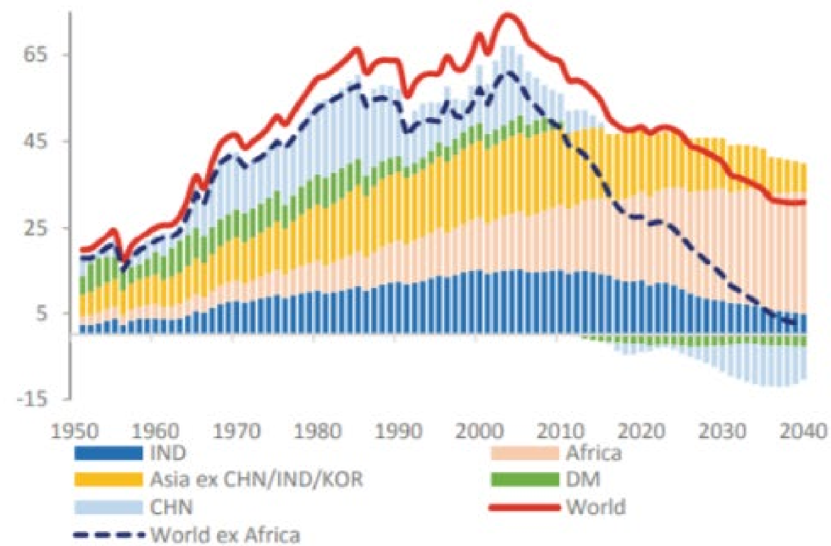


Table 1: Dependency ratios rising because of the elderly, not the young

	USA	UK	Germany	Japan	China
Young					
1970	28	24	23	24	40
2010	20	17	14	13	19
Change 1970–2010:	−8	−7	−9	−11	−21
2010	20	17	14	13	19
2019	19	18	14	13	18
Change 2010–2019:	−1	1	0	0	−1
Retiree					
1970	10	13	24	7	4
2010	13	17	21	22	8
Change 1970–2010:	3	4	3	15	4
2010	13	17	21	22	8
2019	16	19	22	28	11
Change 2010–2019:	3	2	1	6	3

Source UN Population Statistics

Figure 3: Consumption Increases Over Time in the AEs

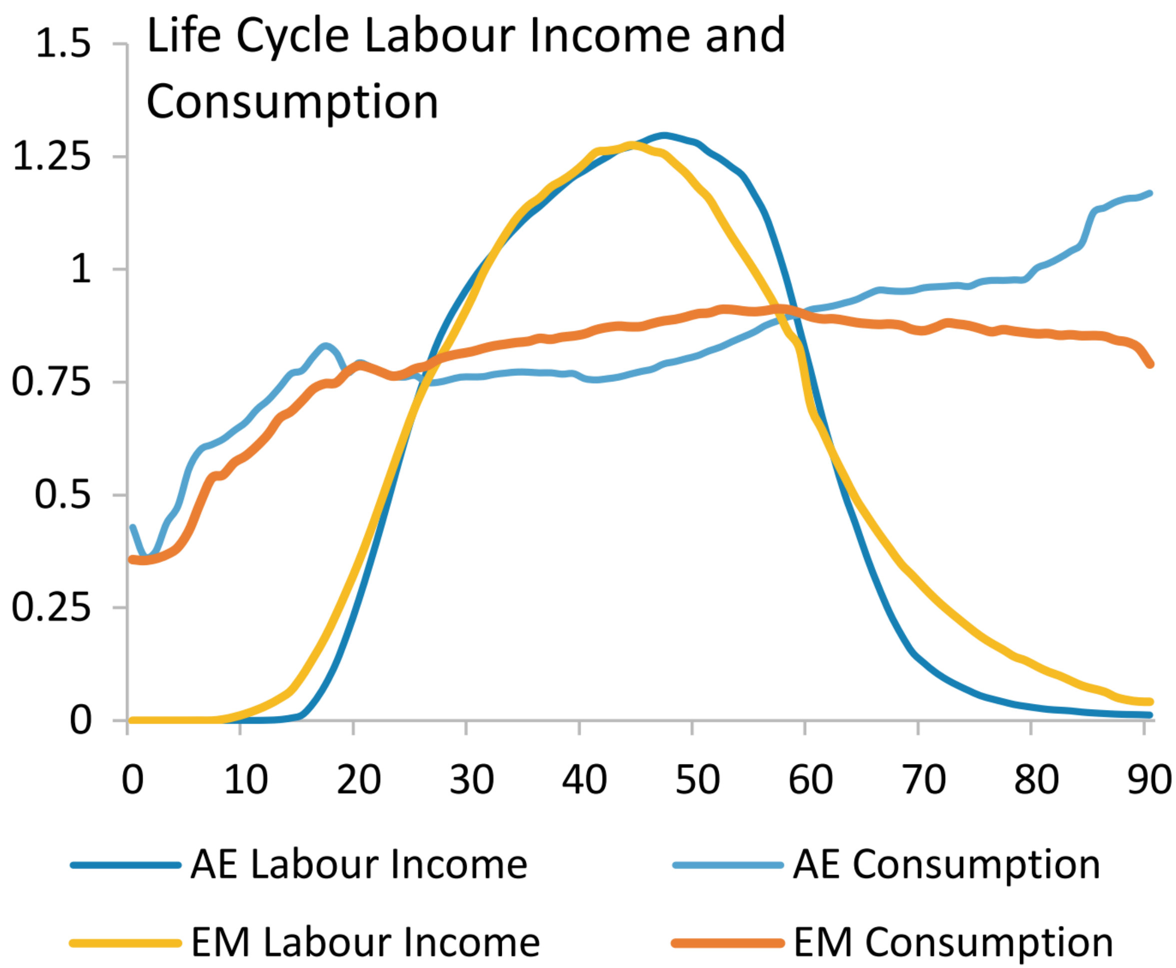


Table 2: Inequality has narrowed across countries, particularly the EMEs

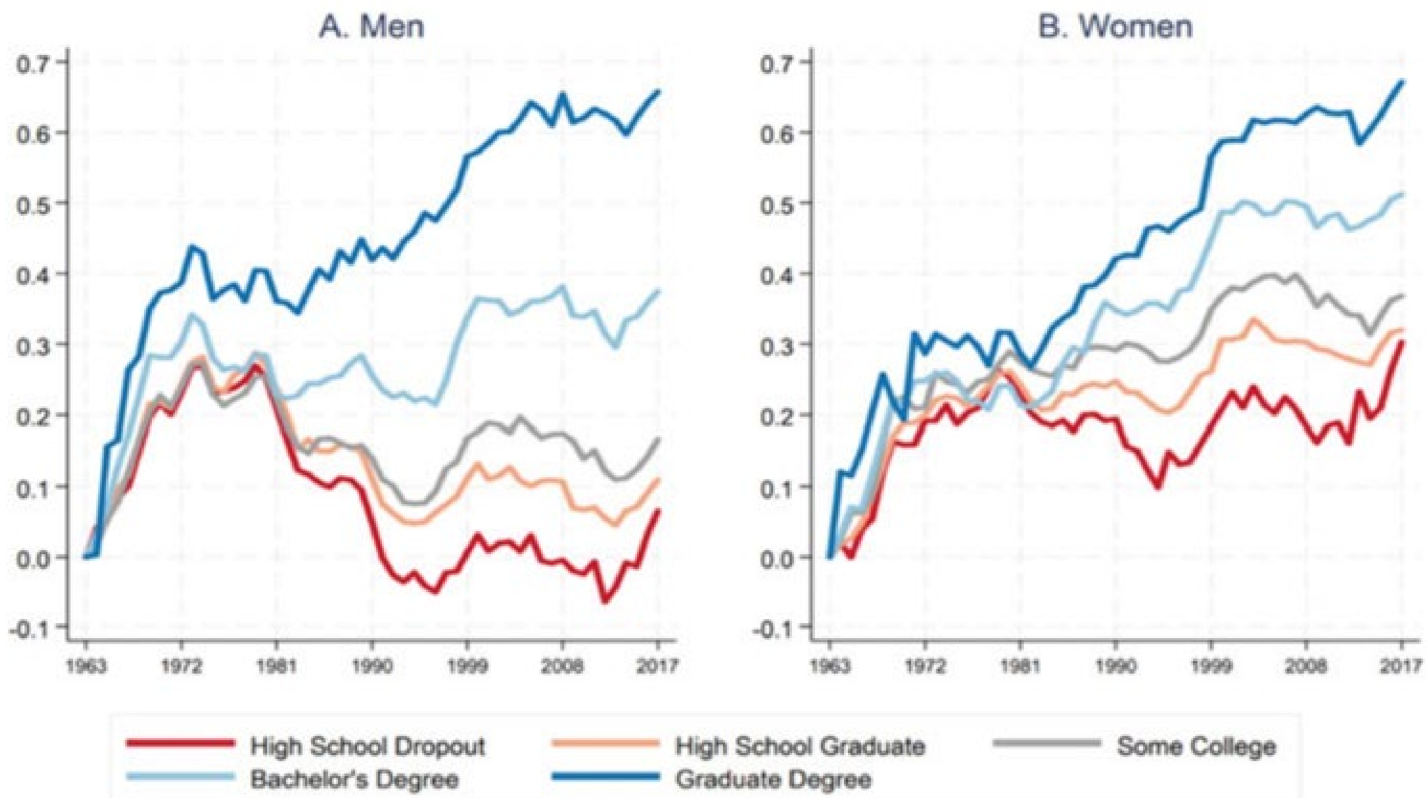
Ratio of the wages of the workers

	USA/China	France/Poland
2000	34.6	3.9
2001	30.6	3.3
2002	27.4	3.5
2003	25.0	4.0
2004	22.9	4.2
2005	20.4	3.8
2006	18.1	3.7
2007	15.2	3.5
2008	12.2	3.0
2009	10.8	3.7
2010	9.7	3.3
2011	8.4	3.3
2012	7.5	3.4
2013	6.7	3.4
2014	6.3	3.3
2015	6.0	3.4
2016	5.9	3.4
2017	5.6	3.2
2018	5.1	2.9

Source National Sources

Figure 4: Those with lower educational attainment have been most exposed to the global shock to labour

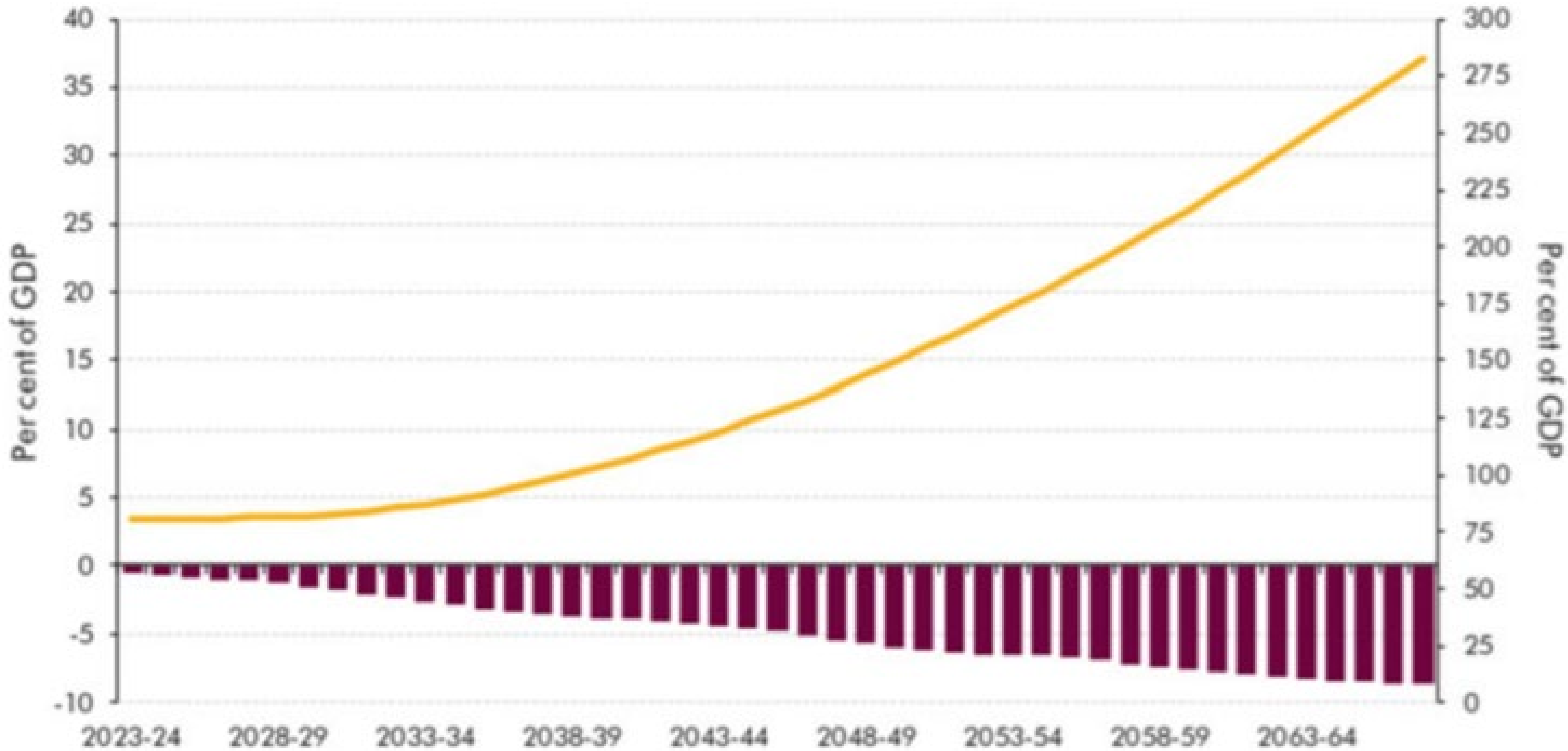
Cumulative change in real weekly earnings at working age adults aged 18-64, 1963-2017



Source: American Economic Association

Figure 5: Ageing will lead to a massive rise in deficits and borrowing

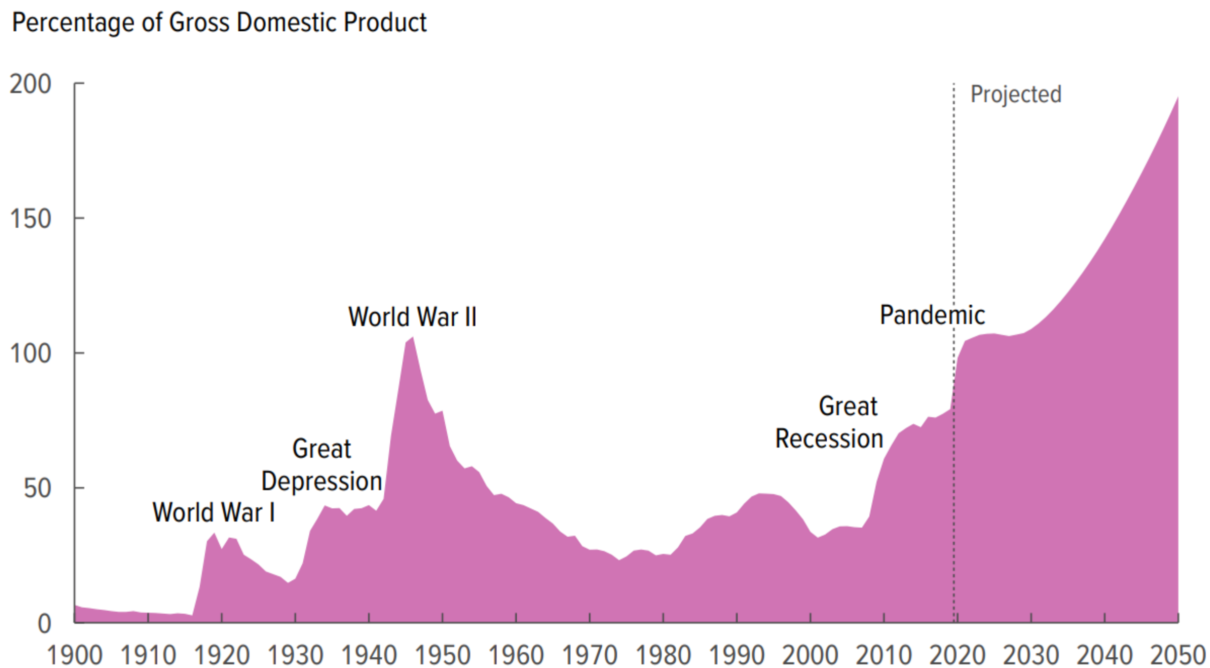
Baseline projections of the primary balance and PSND



Source: OBR

Figure 6: Debt Falls After Wars, But That Will Not Apply to Ageing

Debt and Deficits Federal debt held by the public is projected to equal 195 percent of gross domestic product (GDP) in 2050, and the deficit is projected to equal 13 percent of GDP.



In CBO's projections, federal debt held by the public surpasses its historical high of 106 percent of GDP in 2023 and continues to climb in most years thereafter. In 2050, debt as a percentage of GDP is nearly 2.5 times what it was at the end of last year.

<u>The Endgame? Inflation</u>

Dealing with Debt

- Growth – unlikely
- Productivity – yes, but modest
- Inflation – unattractive, but necessary

The Pandemic:

- Monetary Aggregates
- Markups

Mitigants

- Africa/India
- Limit benefits to old
- More participation of elderly
- Technology
- “Why didn’t it happen in Japan?”

Table 3: The oldest-old form the dominant cohort among 'medical dependents'

UK, 2017

		Total population	Dependents	Percentage
Young–Old	65–75	5276	1621	30
Old	75–85	3130	1539	49
Old–Old	85+	1318	1023	78

Figure 7: Participation Rates are Already High Thanks to Pension Degradation

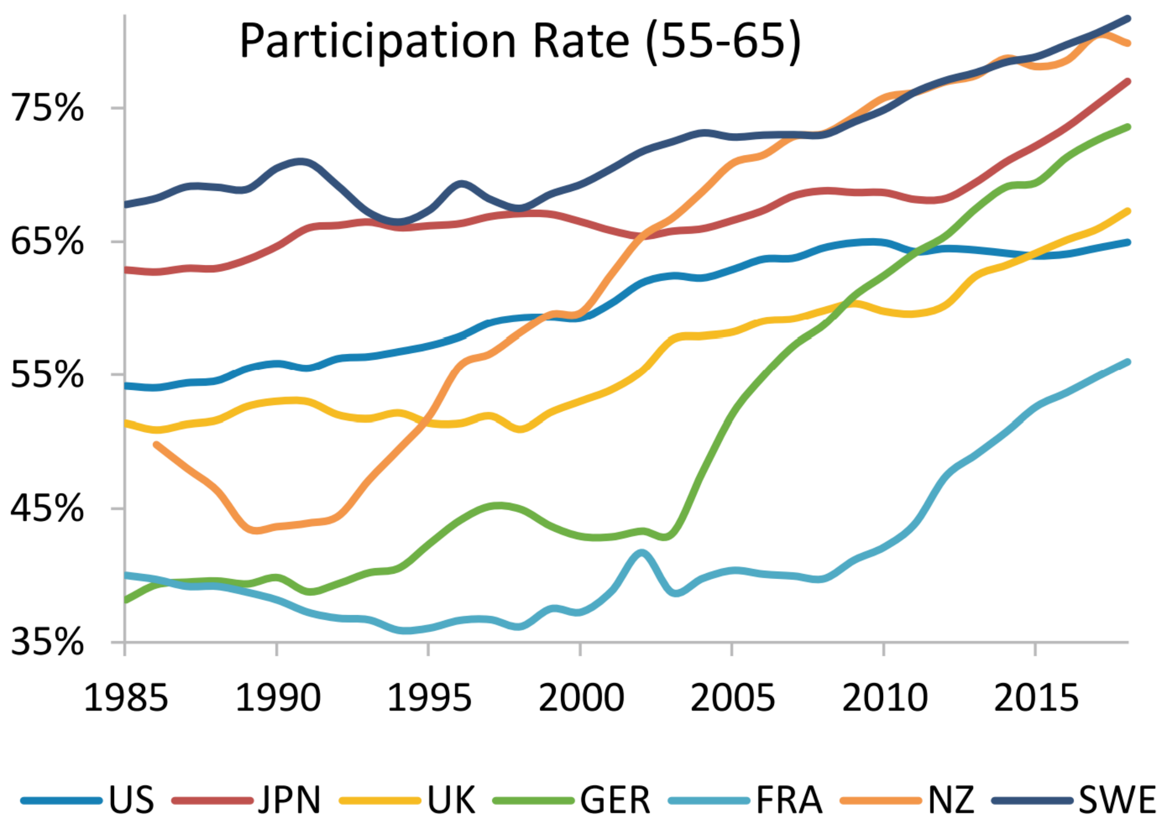
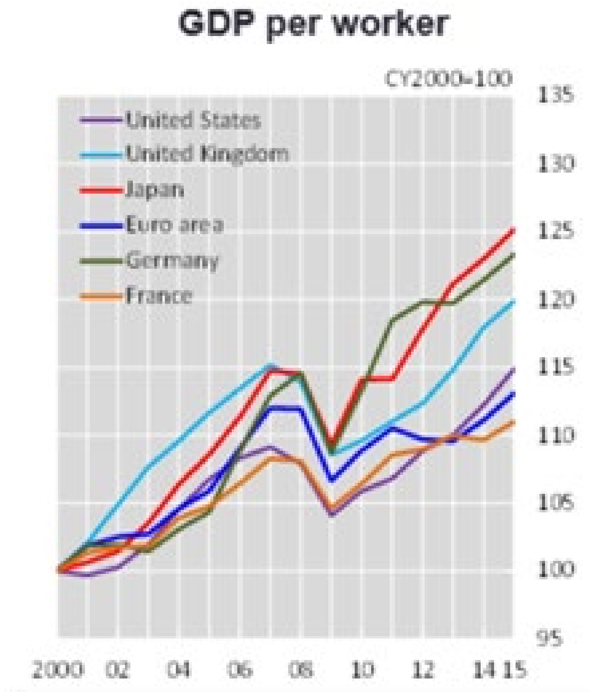
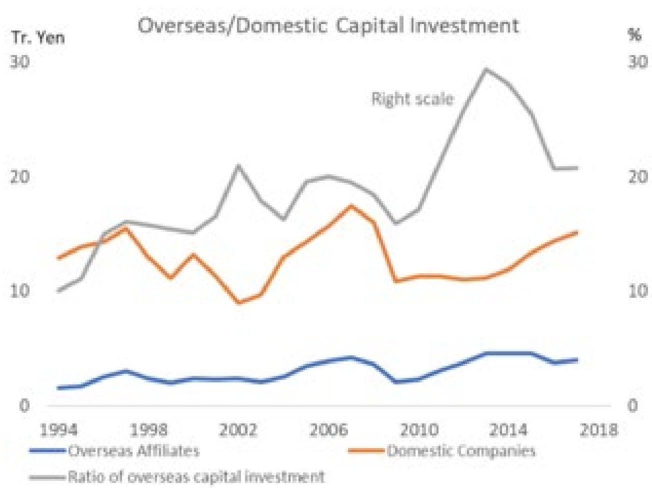


Figure 8: "Why Didn't It Happen in Japan?"

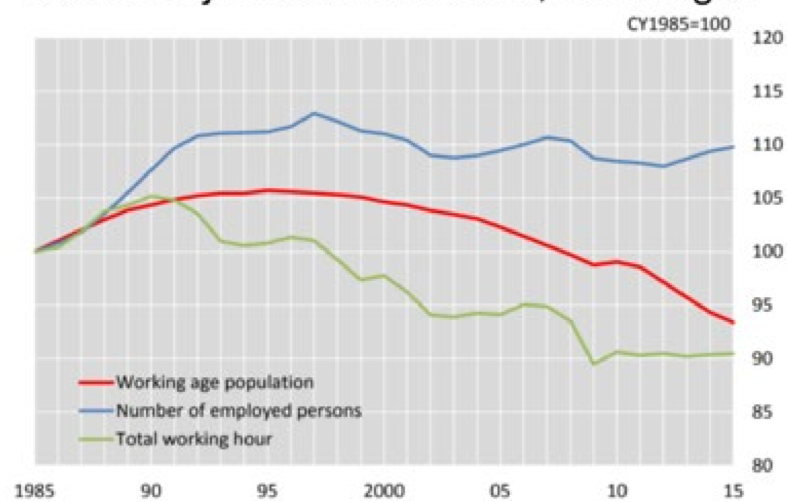


Sources: OECD; Eurostat.

Japan Inc. Invested Heavily Abroad



Labour Adjustment via Hours, Not Wages



Conclusions

- Inflation is coming – unlike the post-GFC recovery, stimulus has gone to the real economy, and demand will outstrip supply in the presence of policy that will become increasingly procyclical

- The yield curve will steepen – if ‘Yield Curve Control’ is imposed, it will act in a procyclical manner to push inflation even higher

- Asset returns will be harder to extract

- Lower within-country inequality

- Central bank independence will come under increasing threat