

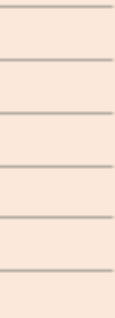


**COEN TEULINGS**

University of Cambridge

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# There is no such thing as a free lunch



Lecture in honour of Johan Witteveen  
Erasmus University Rotterdam  
31 October 2016

# Contentious debate in the Netherlands

- Was austerity needed? Was it a success?
- Much confusion in the debate
  - Interpreted as Keynesianism vs. Neoclassical
  - Keynesianism suspect: is there a free lunch?
- My claim today
  - A Neoclassical problem is at the core
  - ... low FERIR: Full Employment Real Interest Rate
  - ... which gives rise to a Keynesian problem

# Background material – VoxEU column



Centre for Economic Policy Research

**POLICY INSIGHT No.86**

October 2016

## **Secular stagnation, bubbles, fiscal policy, and the introduction of the pill**

**Jason Z. Lu and Coen N. Teulings**

Cambridge University

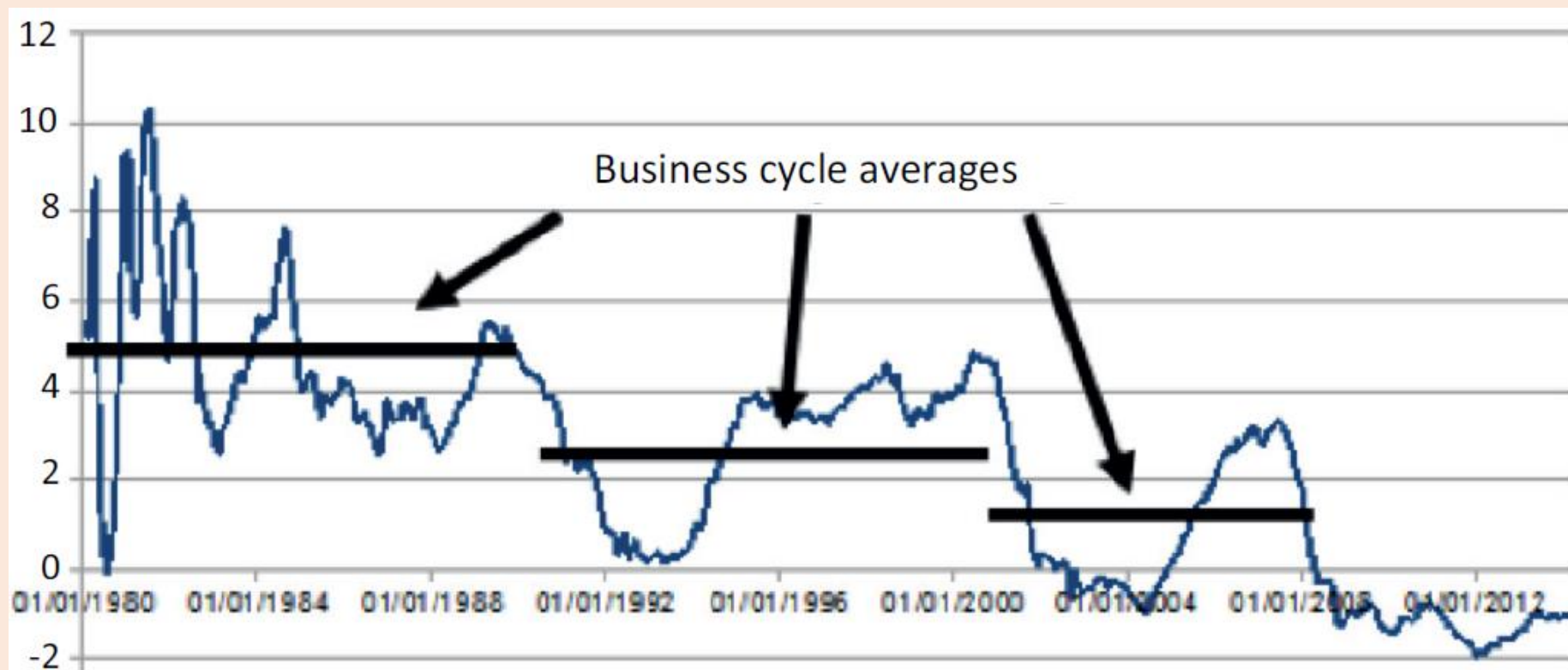
**T**he long-run decline in the real interest rate, often dubbed Secular Stagnation, can be well explained by the introduction of the contraceptive pill in the developed world. Its implications were particularly marked in Germany, where the cohort born in 1995 is half the size of that born in 1968. This leads to excess

In fact, the decline in interest rates is a trend that starts around 1980, dating back to well before the onset of the financial crisis; see Figure 1. The combination of low real interest rates and sluggish demand has created the problem of the Zero Lower Bound (ZLB) for monetary policy: nominal rates cannot be reduced sufficiently to accommodate

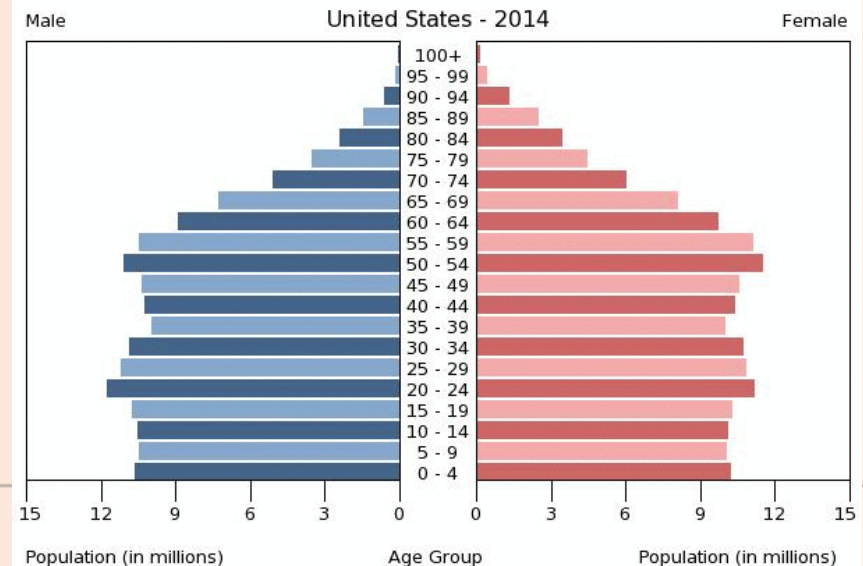
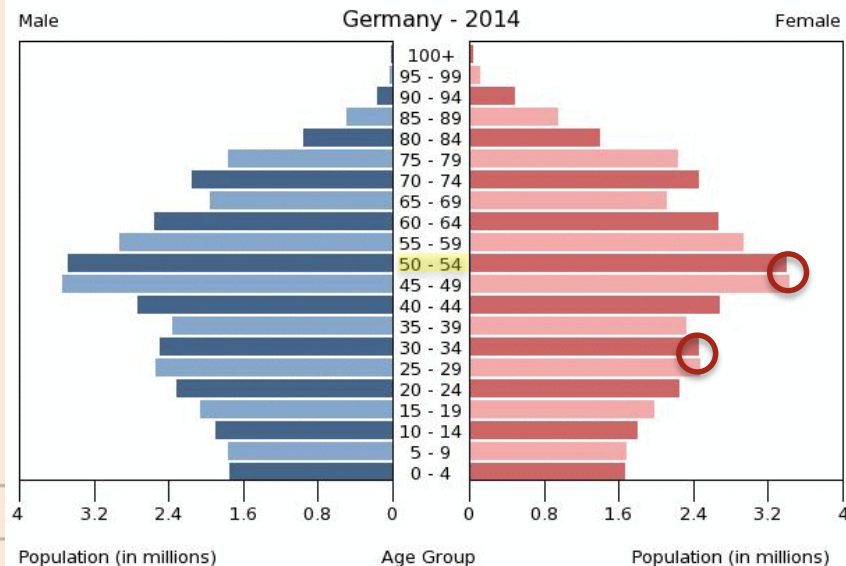
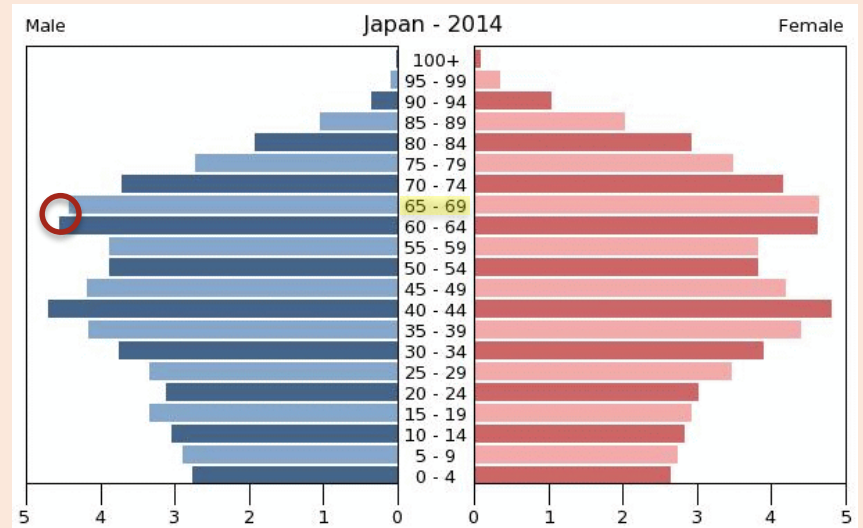
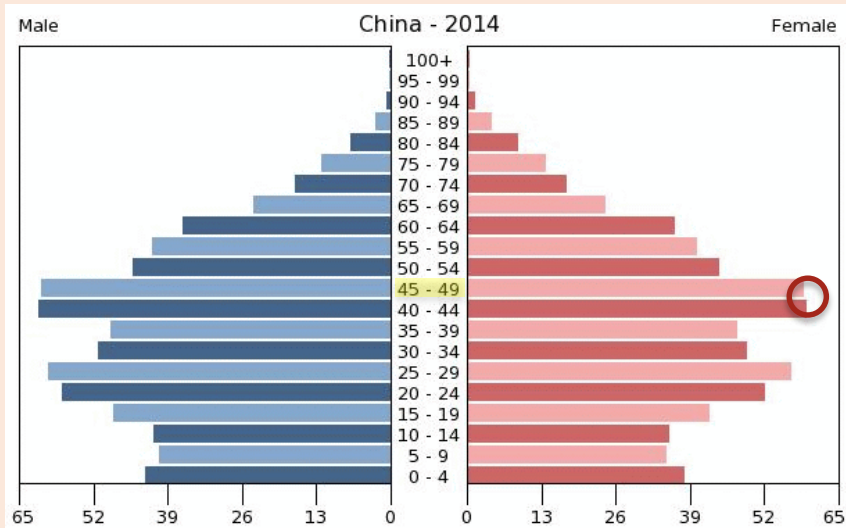
# Lessons from seventies and eighties

- Global crisis
  - Excess power trade unions after May 1968
  - Oil price shocks / Stagflation
- Crisis in the Netherlands
  - Natural gas resources / Dutch disease
  - We subsidized non-activity
- Labour market problem
- Solutions
  - Taylor rule: use interest rate to contain inflation
  - Improve incentives on the labour market ...
  - ... not so much debt reduction (debt declined only in nineties)
- Today's problem is different: Capital market

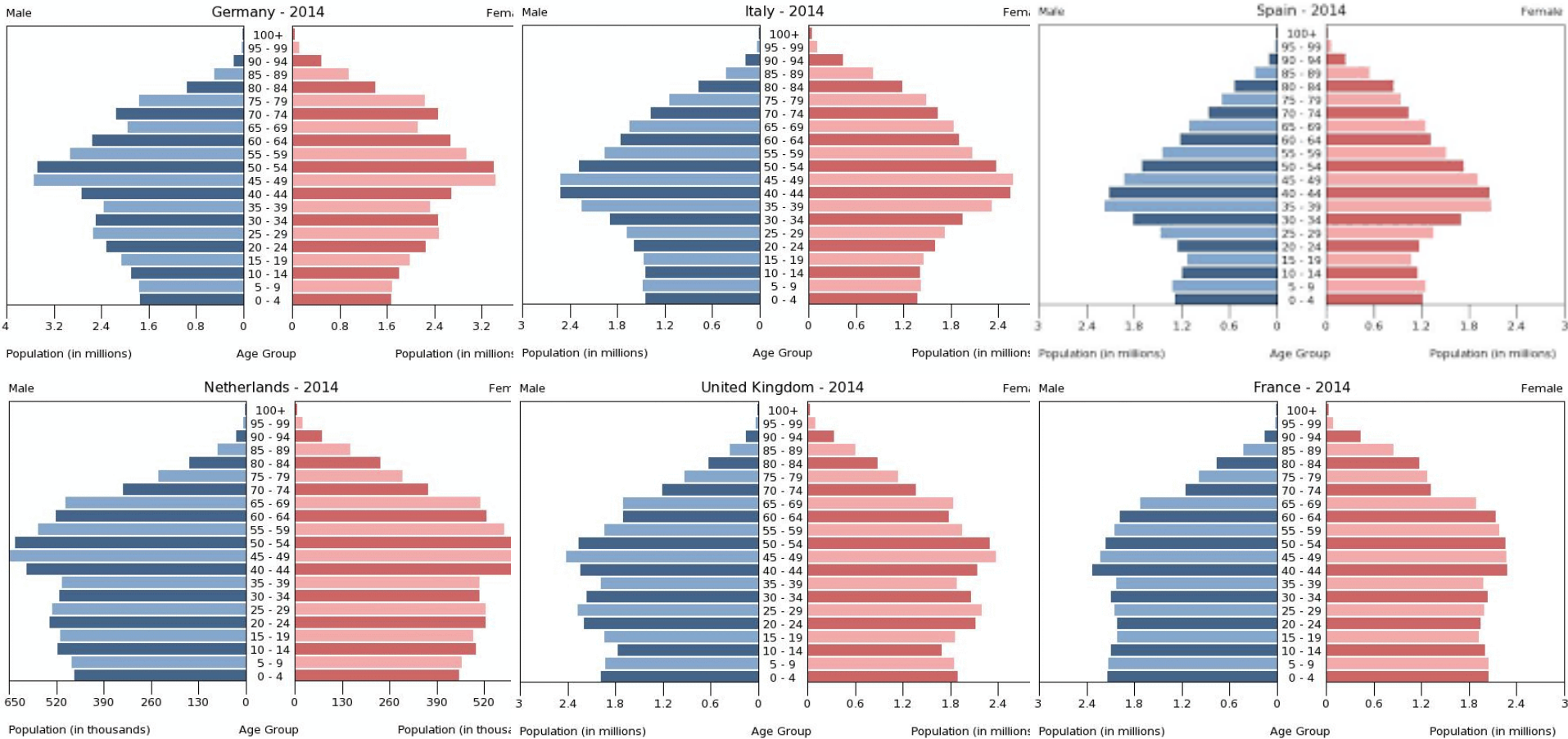
# Fall in real interest rates



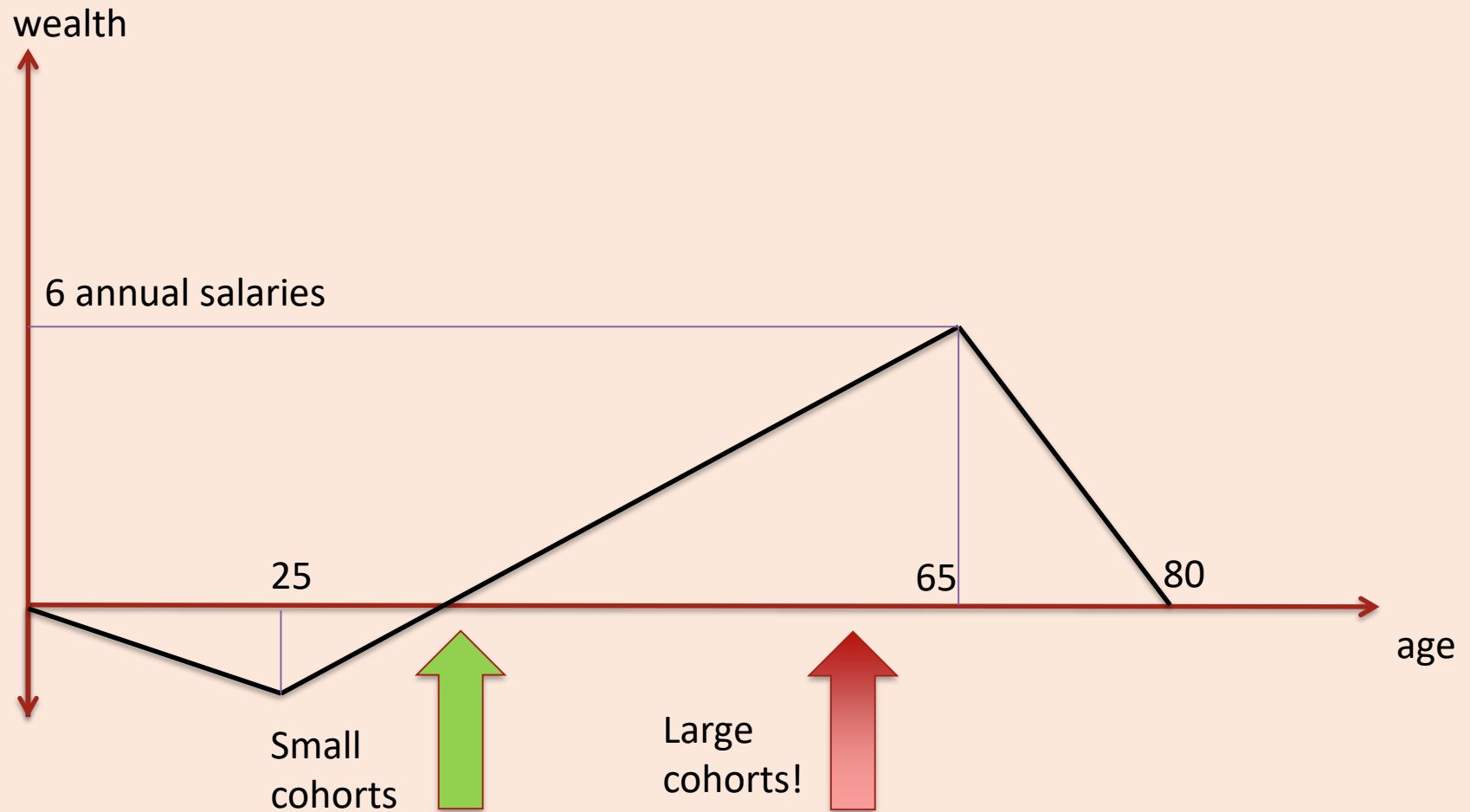
# What is the role of demography?



# Demography in Europe

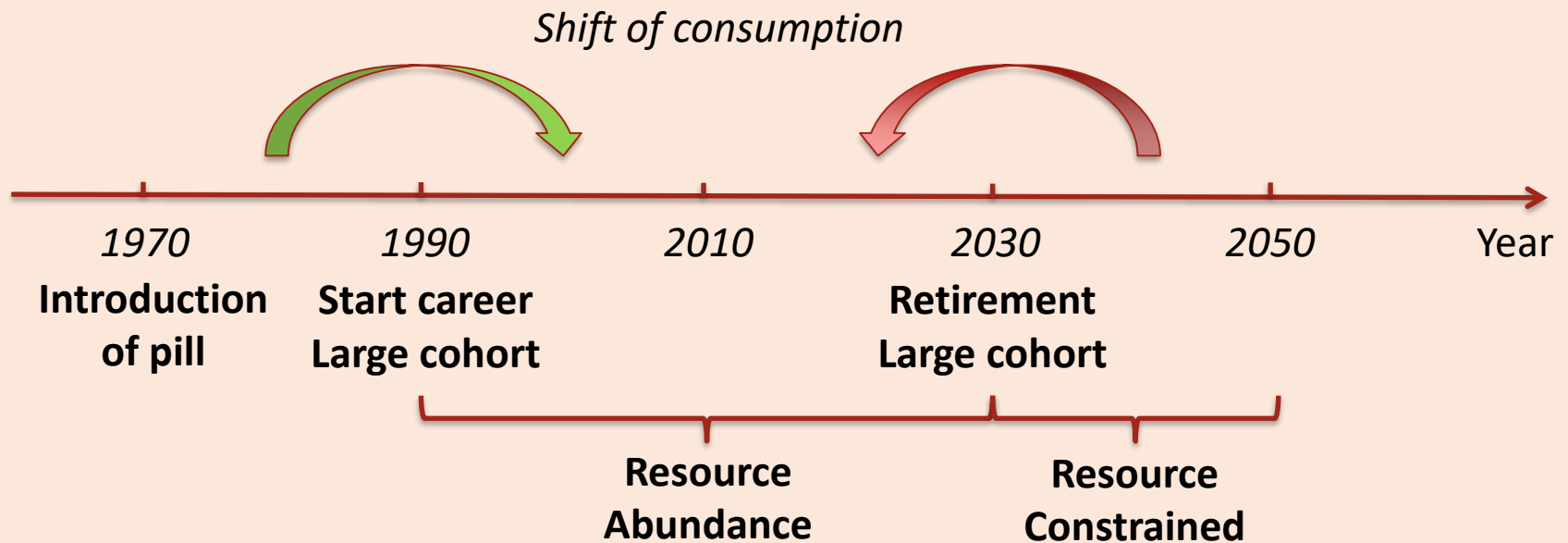


# Savings and the life cycle

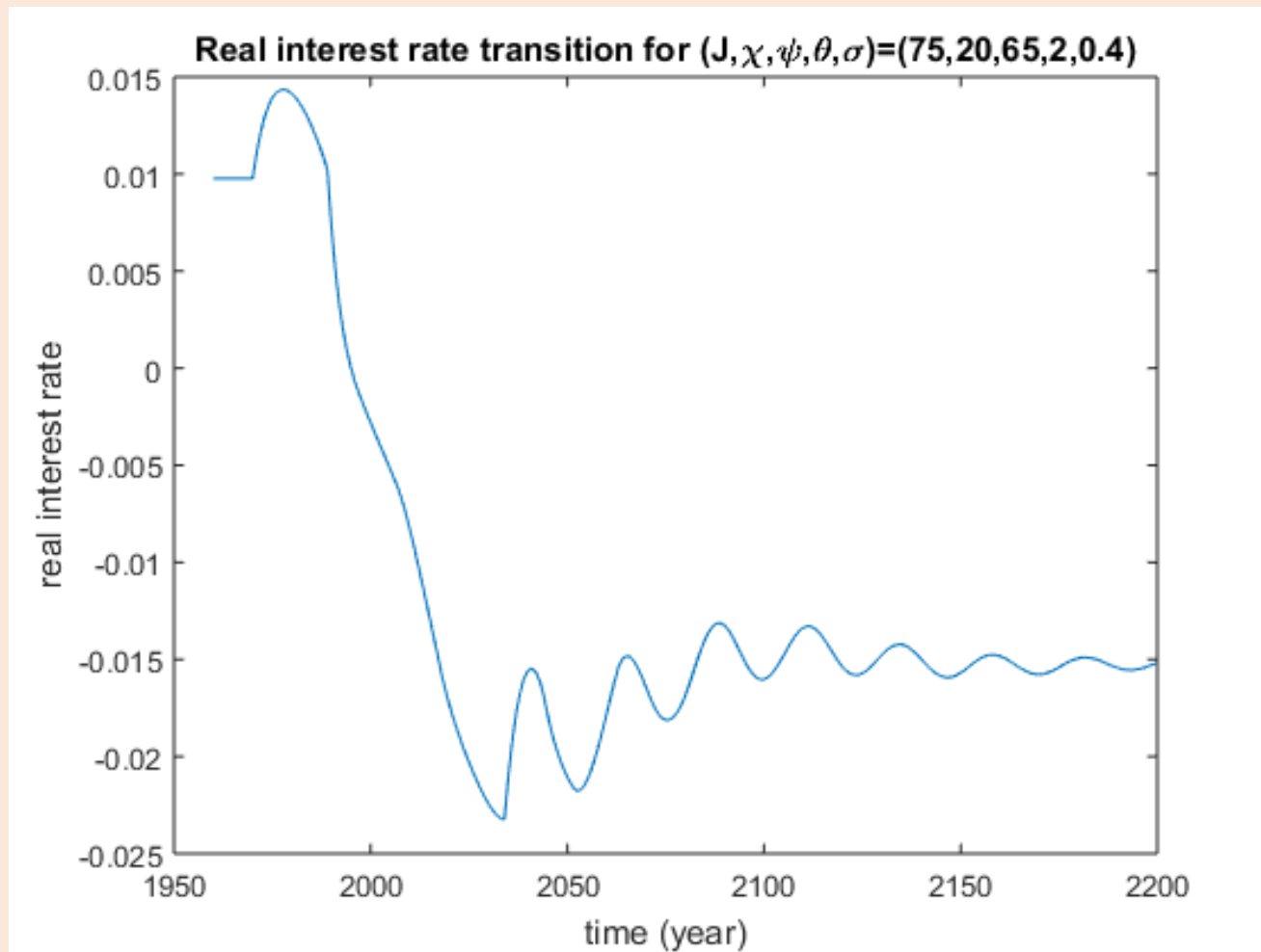




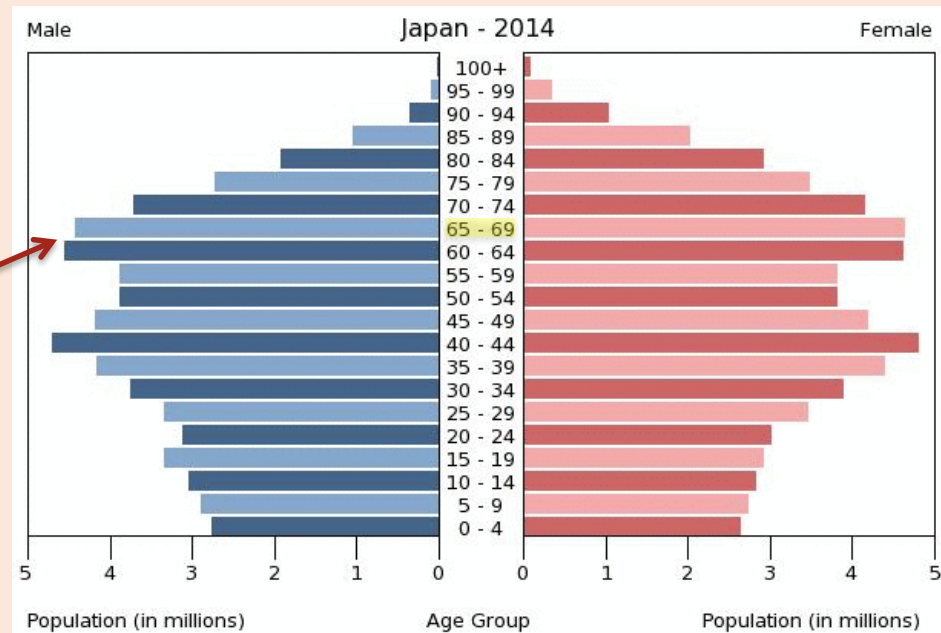
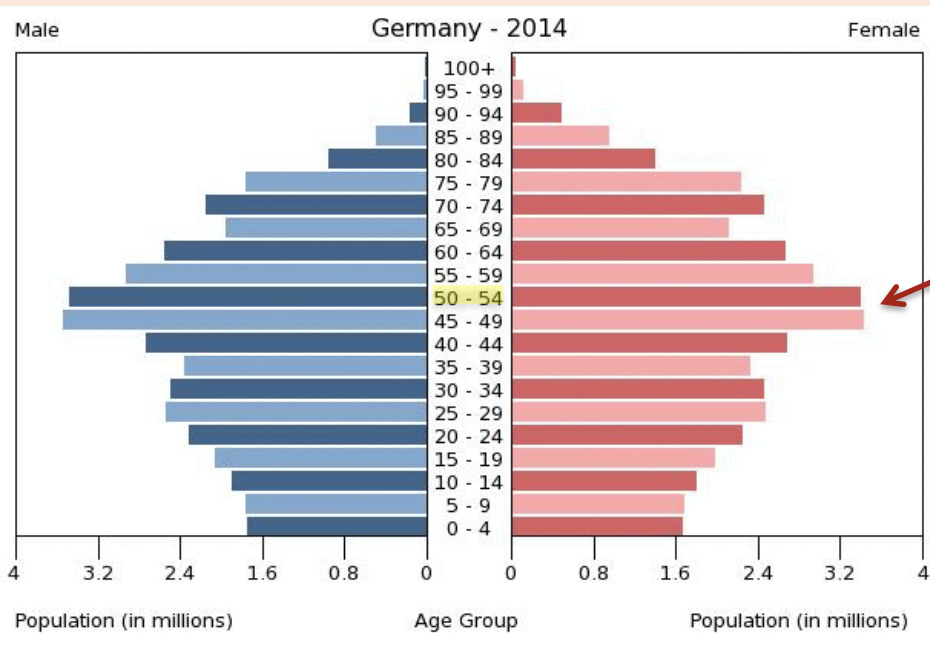
# Shifting consumption over time



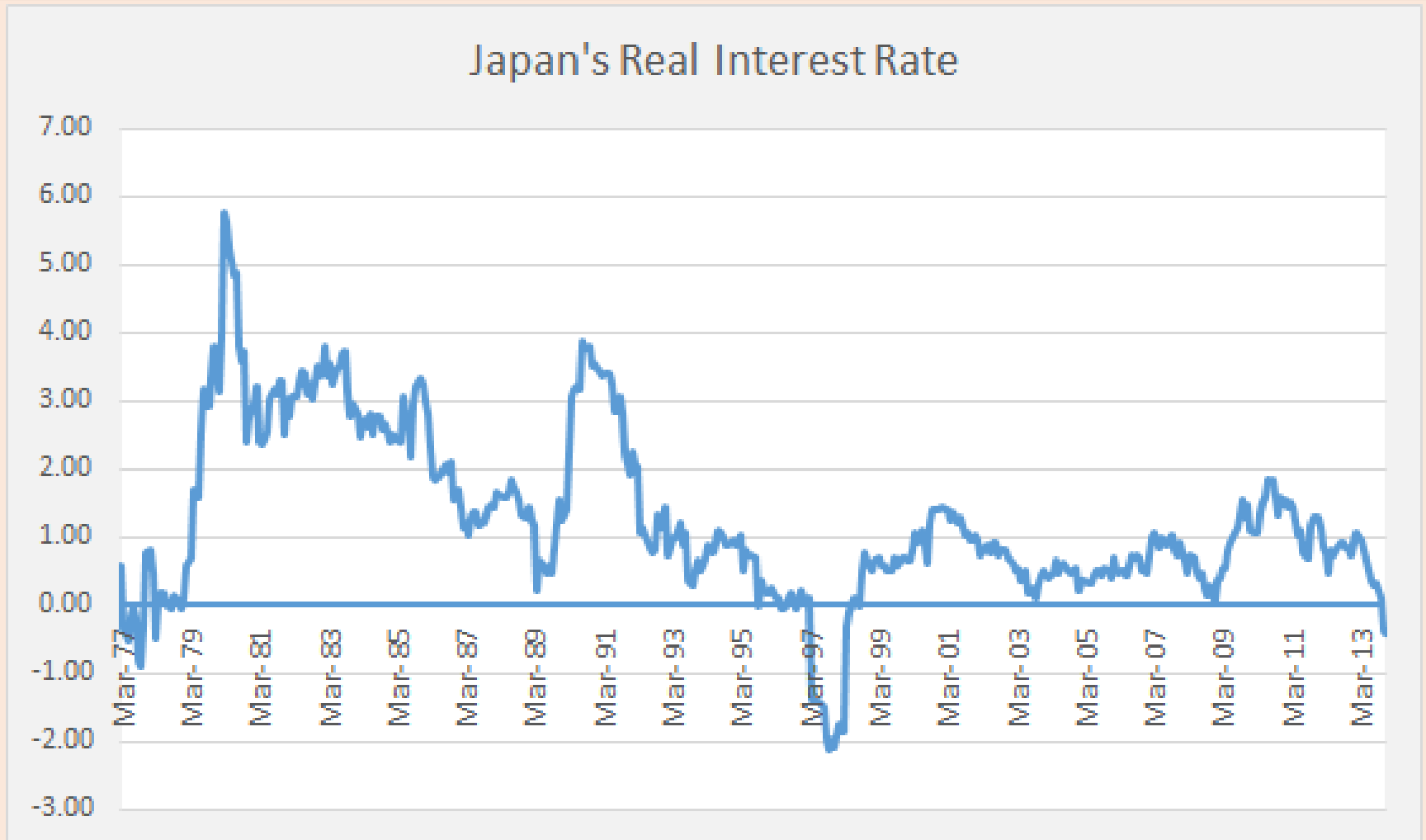
# Expected effect on German real interest rate



# Compare Germany and Japan



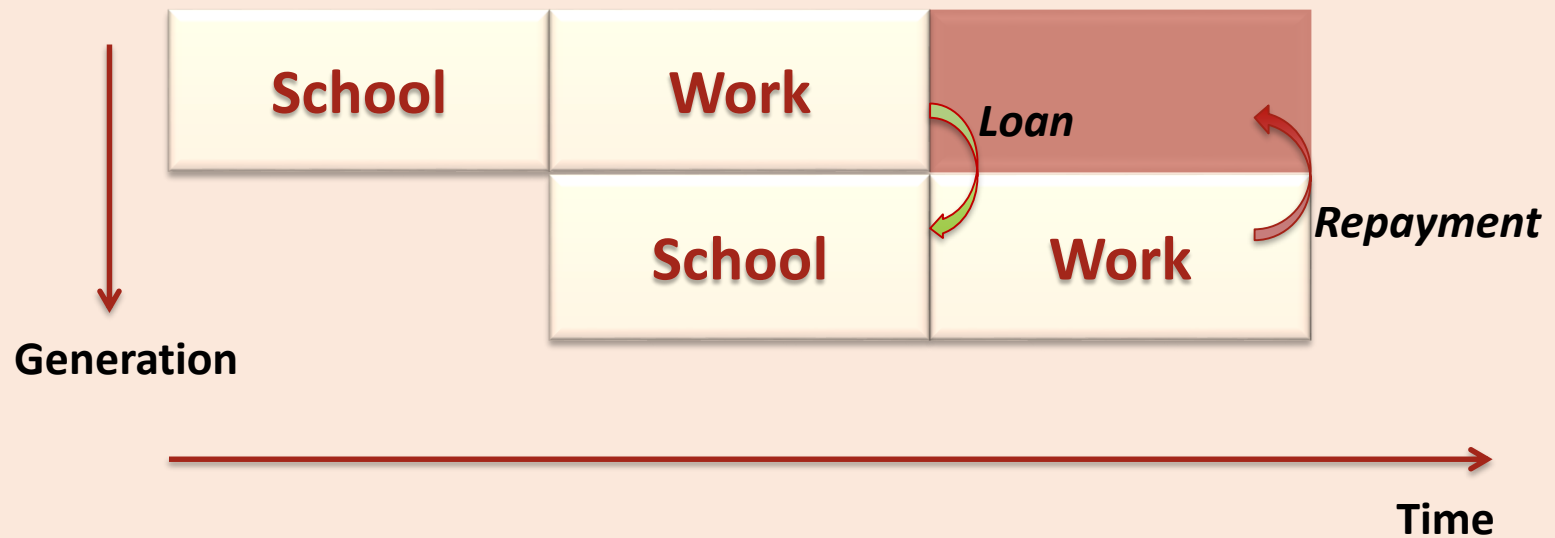
# Japan's real interest rate



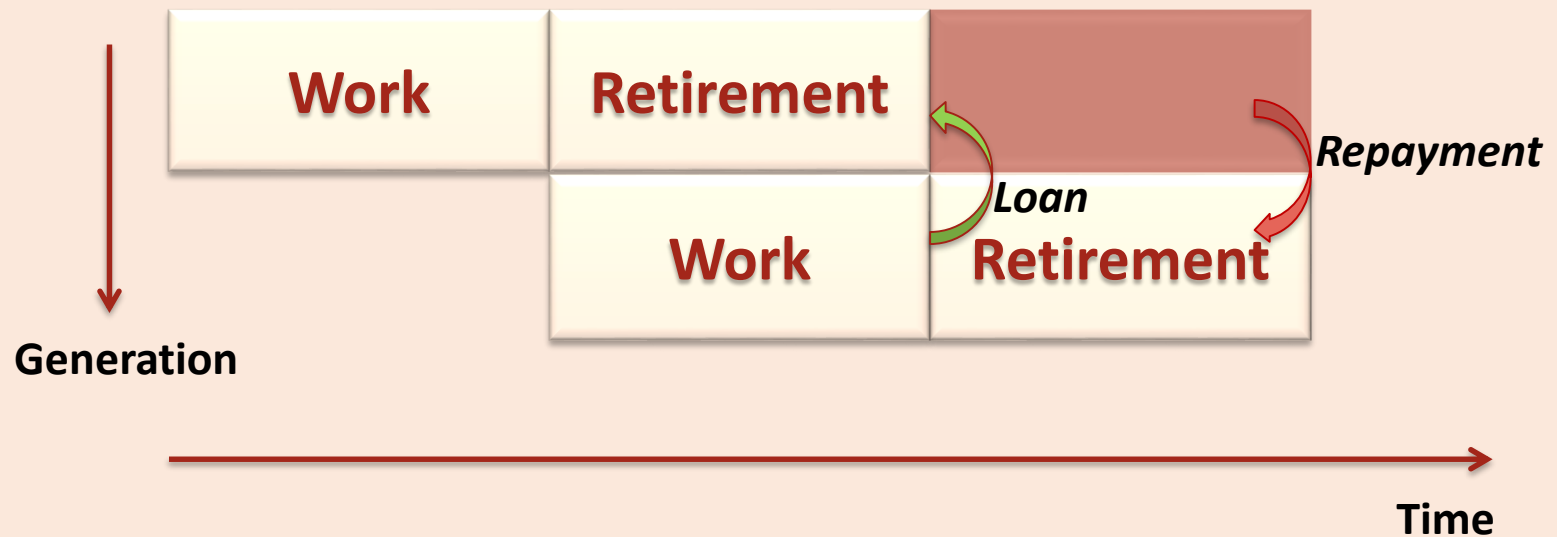
# Japan preceding the Euro-zone?

- 1970's: fastest growing economy in world
  - Would it overtake the US?
- Real estate crisis in 1990
  - Deflation and low interest rates
  - Bankruptcy life insurance companies
  - Low growth
  - Response: high sovereign debt
- Was Japanese policy response a success?

Capital shortage:  $r > g$



Asset shortage:  $r < g$



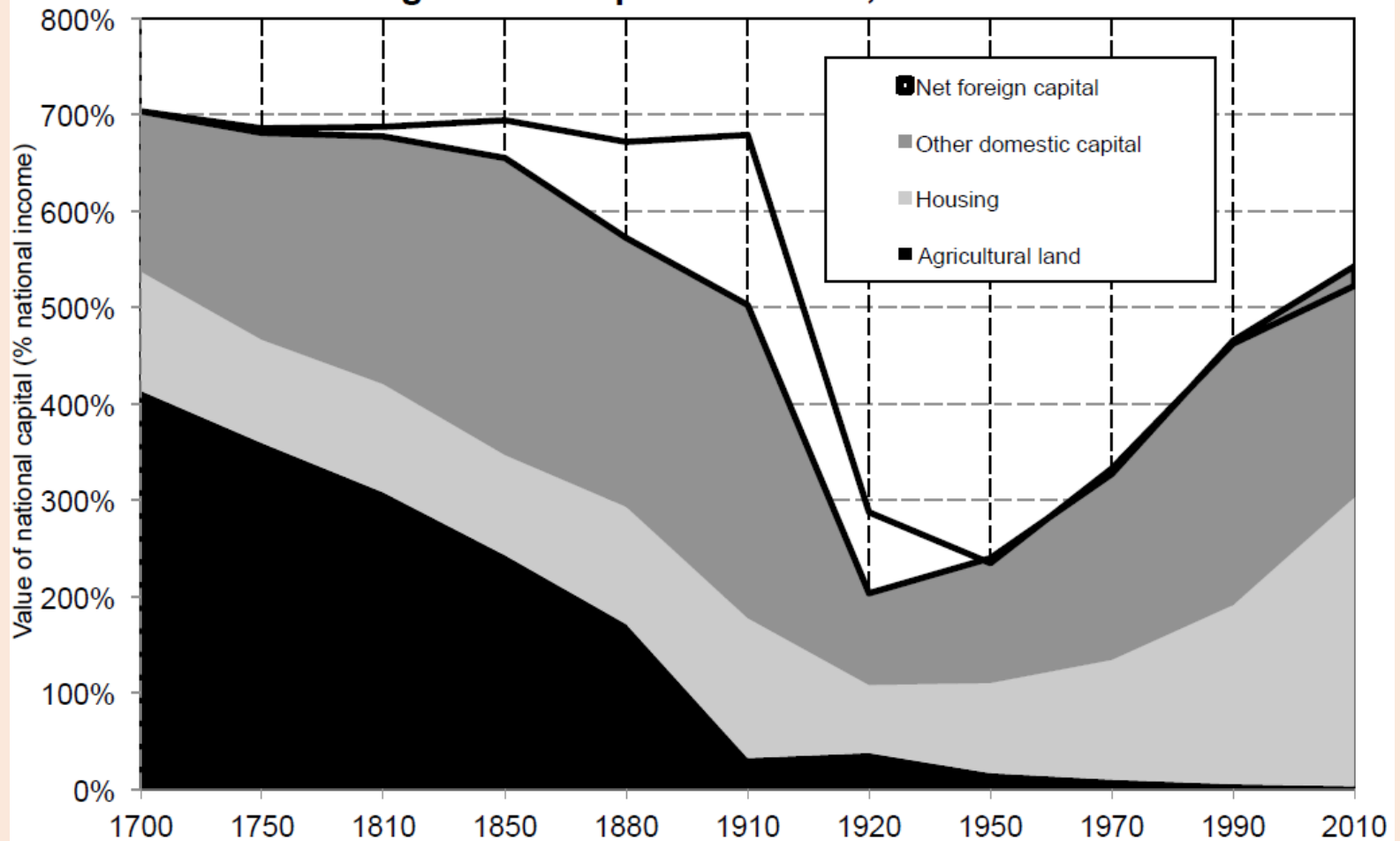
## 3 equivalent solutions for asset shortage

<b>Pay-As-You-Go (PAYG)</b>	<b>Sovereign Debt</b>	<b>Bubbles</b>
Mandatory pension contributions	Voluntary bond purchase	Voluntary bubbly assets purchase
Government guaranteed pensions	Government guaranteed debt servicing	Market sale of bubbly assets

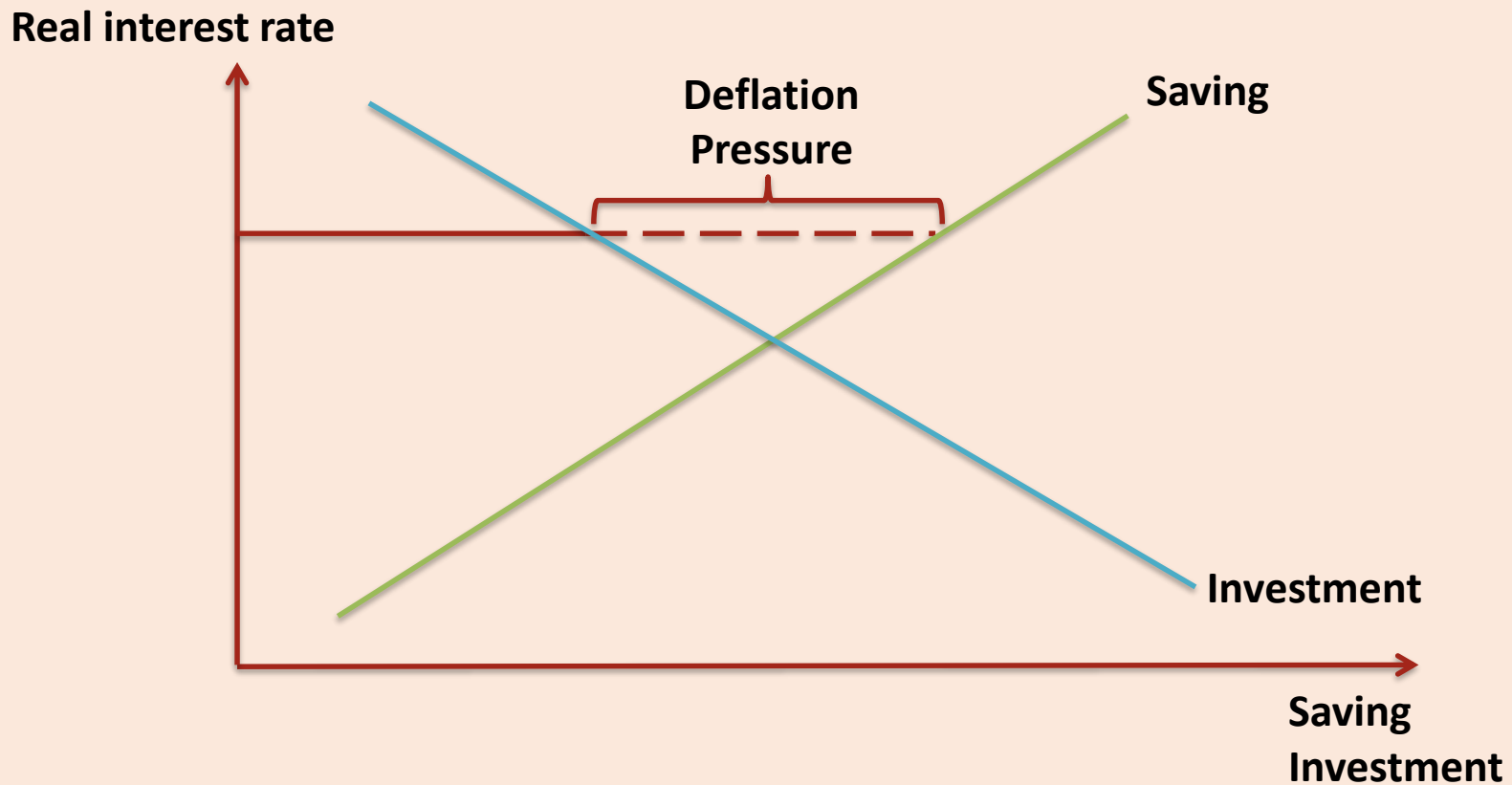


# House prices in Britain

**Figure 3.1. Capital in Britain, 1700-2010**



# Capital Market Equilibrium and FERIR



# Arguments against low interest rates

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1. Relaxes pressure on governments
2. Leads to investment in bad projects
3. Leads to investment in risky projects
4. Leads to bubbles

These arguments deny the central issue:

- Declining marginal productivity of capital

Higher interest rate equivalent to a minimum wage

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# Are bubbles as good as sovereign debt?

- Theory till sofar suggests
  - PAYG/public debt/bubbles: perfect substitutes
- True in a world of perfect information
  - ... but not in a world of uncertainty
  - Bubbles: put but risk on the elderly
  - PAYG/public debt: can share risks equally
- As an theoretical sideshow:
  - Taylor rule replaces quantity theory of money
  - Money determined by demand for stores of value
  - Theoretical innovation by Woodford in 2003

# Balance of payments surplus Eurozone

- Total Eurozone                      +346 bn                      +3.2%
  - Germany                              +270 bn                      +8.4%
  - Netherlands                          +56 bn                      +9.8%
  - Italy                                      +49 bn                      +2.3%
  - France                                   -20 bn                      -0.5%
  
- China                                      +231 bn                      +2.7%
  
- High surplus = free riding on others
  - Due to general equilibrium effect on interest rate

# Remedies for the Neo Classical problem

- No regret: Structural reforms
  - Good for growth anyway
  - Boost investment, hence helpful for  $I = S$
  - However: wealth transfer to future generations
- Raise the retirement age: reduces savings
- Extend PAYG social security systems

# Remedies for the Keynesian problem

- Higher inflation target ECB: 2-4% per year
  - Allows the application of the Taylor rule
  - Low inflation no acute problem: close to full capacity
  - ... however it will become when a recession hits
  - Evidence shows higher inflation to be harmful...
  - ... but only above 10% per month (Barro)
- Higher inflation
  - “Easy” to achieve: increase wages civil servants
  - See pleas of Klaas Knot and Jens Weidmann

# Stability and Growth Pact SGP

- Suppose: 60% debt target
- 3 a 4 % nominal growth
  - 2 % inflation
  - 1 a 2 % real growth
- Hence: deficit =  $60\% \times 3 \text{ a } 4\% = 2 \text{ a } 2.5\%$
- SGP target = 1%
- Hence: annual debt reduction 1 a 1.5%
- Consistent with 25 a 30% debt target
- Cyclical fluctuation +/- 3%, hence max 5 a 5.5 %



# Why this debate?

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1. Dutch unemployment still high
  2. Our stance crucial for the future of Europe
  3. Eichengreen's *Hall of Mirrors*
    - *Policy makers respond to new crises through the lens of history*
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