

# Econ 2004:

## The Open Economy

### **Lecture 10:** Crises, macroeconomic models, and policy regimes– an overview

#### **Reading.**

##### **Core:**

Carlin & Soskice (2015) Chapter 12 Sections 5 and 6; Carlin & Soskice (2015) Chapter 7 (you covered some of this in the first term)

You will also find useful the CORE ebook *The Economy* see Unit 17 [www.core-econ.org](http://www.core-econ.org)

**Optional:** See Moodle page

# Last lecture - recap and introduction to this lecture – background to the Eurozone crisis

1. Success of the ECB
2. Divergence in member countries ... remember different motives for joining

## **Before the global financial crisis (2008):**

Common characteristic of the crisis countries: current account deficit

2 types of vulnerability to a debt crisis:

Type 1. Private sector indebtedness

Type 2. Excessive government deficits before the crisis

## **After the global financial crisis**

Common characteristics of the crisis countries: government debt problems

- Current account deficit
- High level of government debt
- Attacked by the 'bond vigilantes'
- Doubts about solvency ... can government honour its bonds?

# Indicators 1999-2007: countries ranked by interest rate spread over German Bund Q2 2011

	Current account (% GDP)	Real exchange rate (manuf.)	Real interest rate	General government balance (% GDP)
Greece	-8.1	129.9	0.9	-5.8
Ireland	-1.6	97.0	0.3	1.6
Portugal	-9.2	107.6	1.2	-3.6
Spain	-5.5	123.0	0.2	0.1
Italy	-1.1	123.6	2.0	-2.8
Belgium	3.6	104.0	2.4	-0.5
Austria	1.3	92.6	2.9	-1.8
France	0.8	98.7	2.5	-2.6
Finland	6.2	79.1	3.1	3.7
Netherlands	5.3	101.1	1.6	-0.5
Germany	2.7	85.1	3.5	-2.1

RER: 1999=100; Increase is appreciation. European Commission Economic and Financial Affairs Economic Databases and Indicators Price and Cost Competitiveness  
 RIR: 10 year government bond yields and spread over German bonds deflated by GDP deflator  
 Source: OECD

# This lecture – crises and macroeconomics

- The Eurozone crisis – a sovereign debt crisis
- The 3 global economic crises, economic models & economic policy regimes
  - Great Depression – aggregate demand-based
  - Stagflation – inflation-based
  - Global Financial Crisis – debt-based

# CCA membership and vulnerability to a sovereign debt crisis

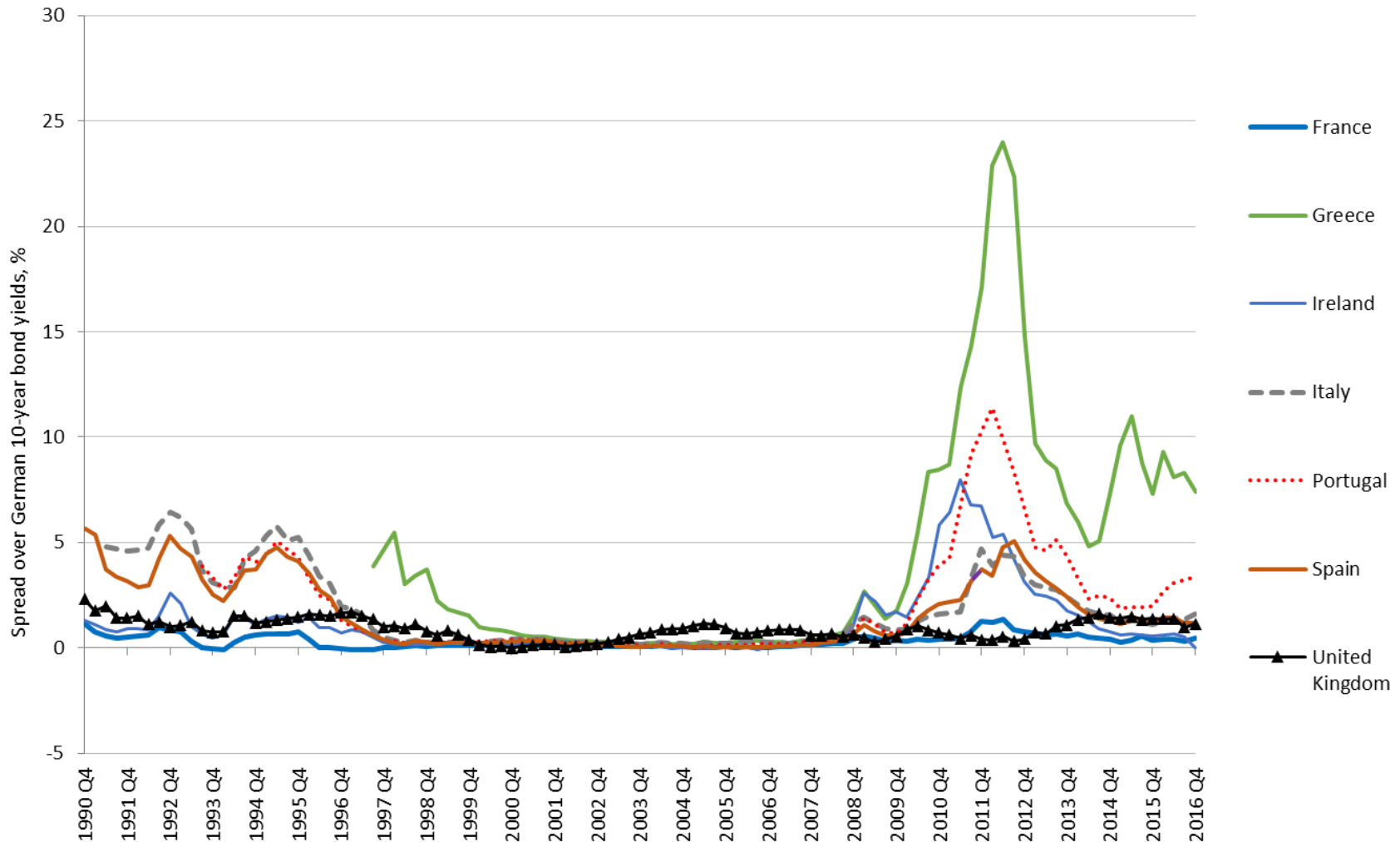
Question: Spain and the UK – why was Spain and not the UK attacked by the bond vigilantes in 2010-2011?

		Spain	UK
Primary balance % GDP	2010		
Public sector debt % GDP	2010		
Forecast growth	2012		
	2013		
10-year govt bond yields	2010		
	2011		

Answer: Spain in Eurozone; UK not  
Why does that matter?

- 1.
- 2.

# Symptom of a sovereign debt crisis: yields on government bonds



# Why is a member of a CCA vulnerable to a sovereign debt crisis? The role of governance arrangements

Q: why did the default risk disappear?

A:

Governance in the Eurozone:

- Government to government
- ECB to government
- Fiscal rules

→ view that it was unnecessary to have supra-national government

Compare relationships among *banks* – *government(s)* – *central bank* in a nation state with those in the Eurozone

# Governance arrangements in a nation state

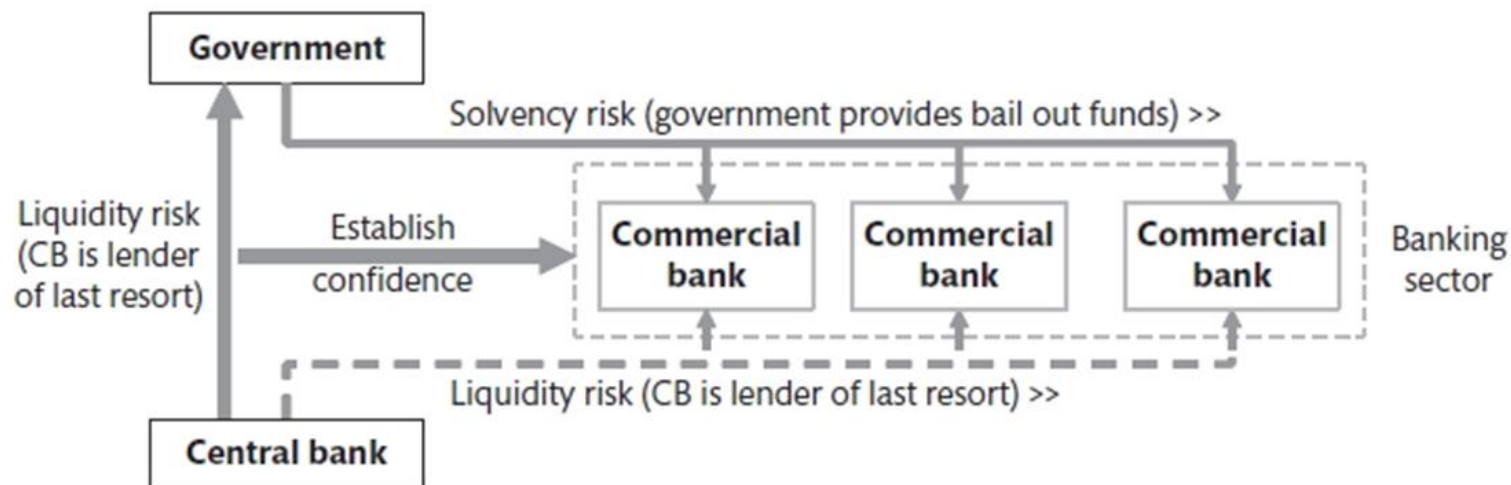


Figure 12.11 Governance arrangements in a nation state.

Source: adapted from Winckler (2011).

- CB is lender of last resort (LOLR) to commercial banks: liquidity support. Solvency support for comm. banks rests on gov't.
- **Key: CB is LOLR to Govt.** → CB may mitigate fear of govt. debt default by printing money to buy govt. bonds → ↓ Risk premium.



# Governance arrangements in the Eurozone

- No lender of last resort to member governments

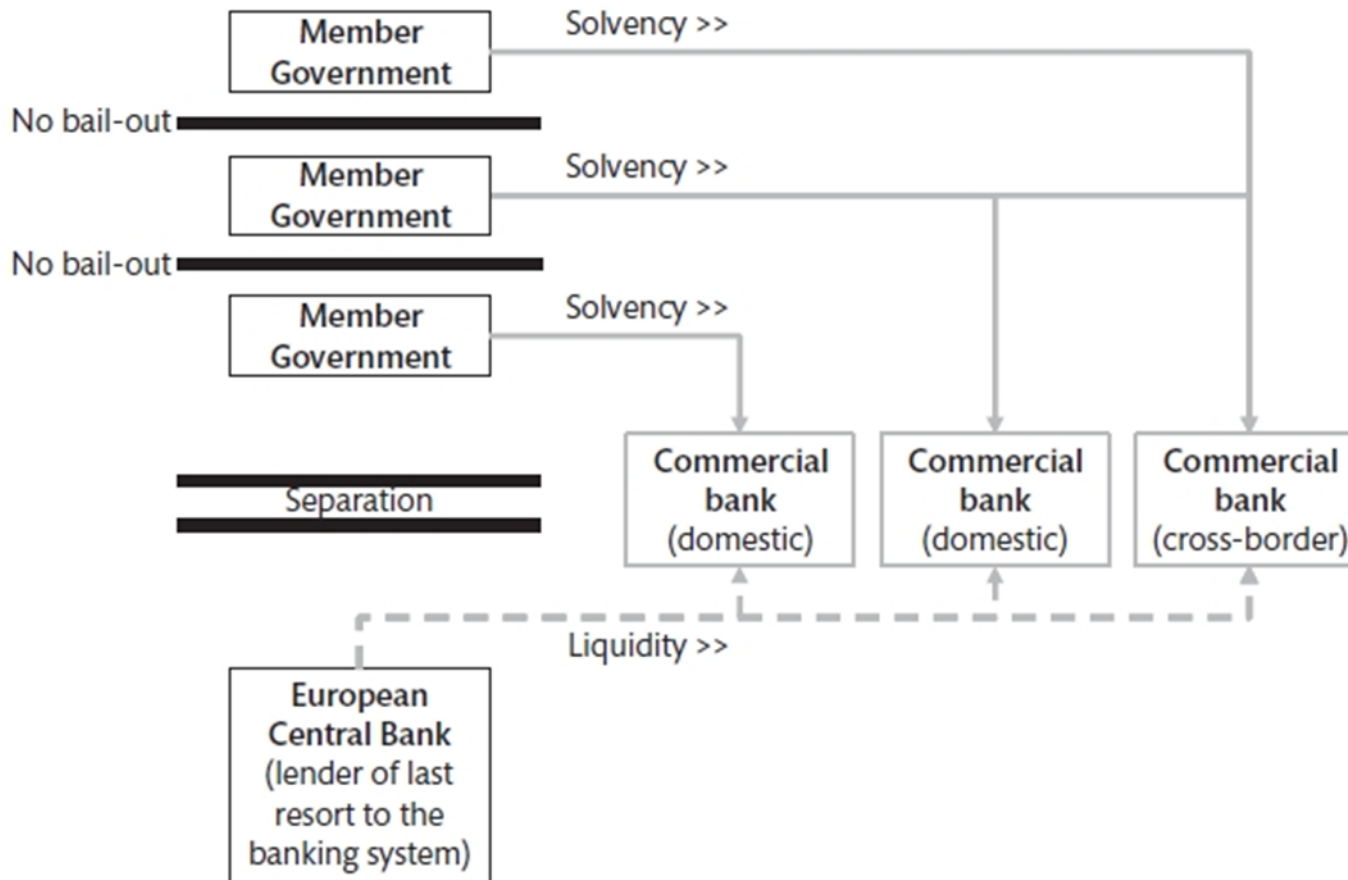
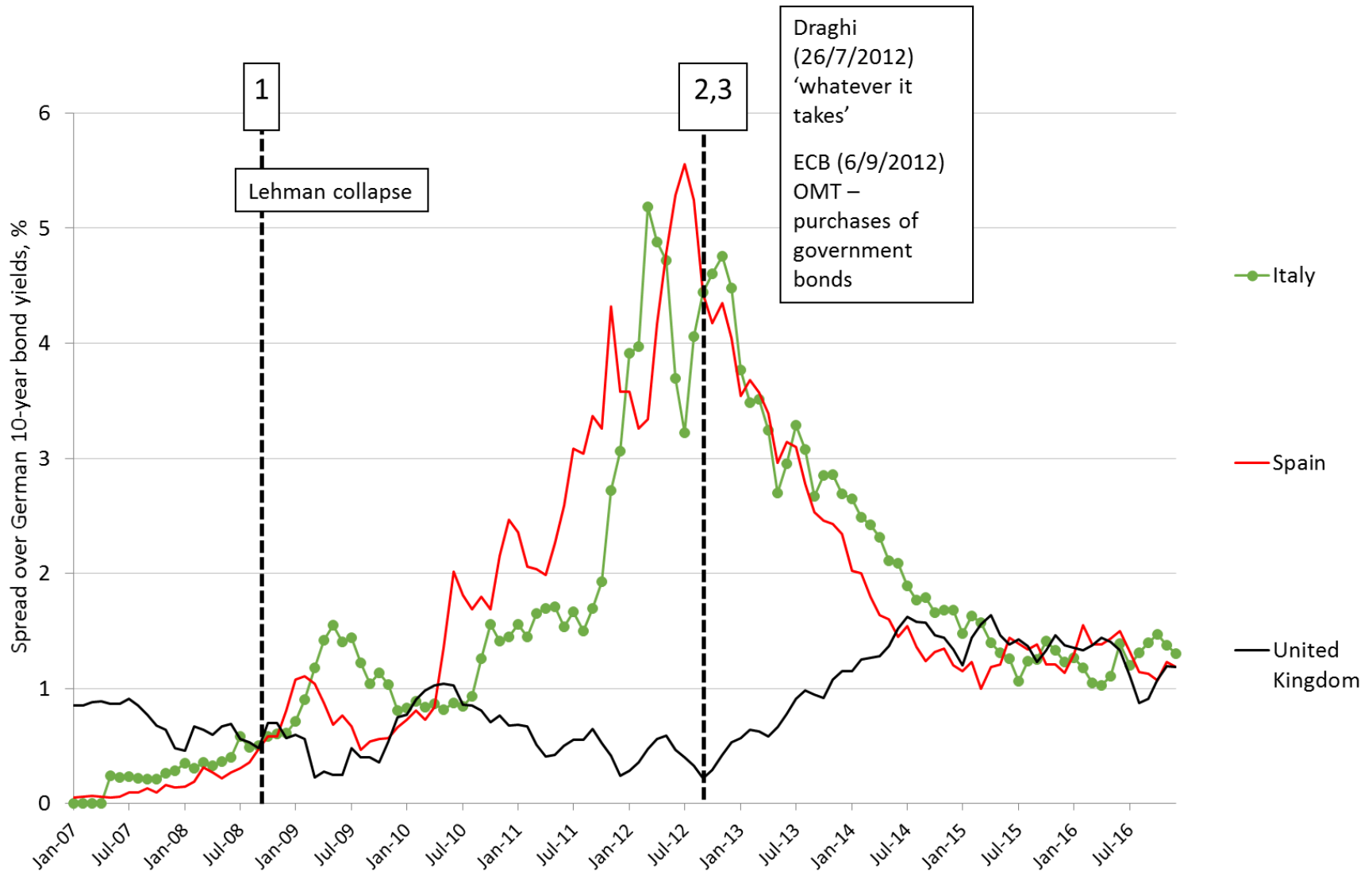


Figure 12.12 Governance arrangements in the Eurozone prior to the crisis.

# What happened to end the panic?



# The Eurozone's problematic governance structure

Draghi's speech of 26<sup>th</sup> July 2012: "the only way out of this present crisis is to have more Europe, not less Europe. A Europe that is founded on four building blocks: a fiscal union, a financial [banking] union, an economic union and a political union."

- Citizens **of member countries**
- Governments **of member countries**
- Central Bank of the **Eurozone**
- Banking system – cross-border banks including countries outside Eurozone; **national governments** responsible for solvency; **ECB** for liquidity

"Within our mandate, the ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough."

# Reform proposals for governance in the Eurozone

Political union

- No lender of last resort to member governments

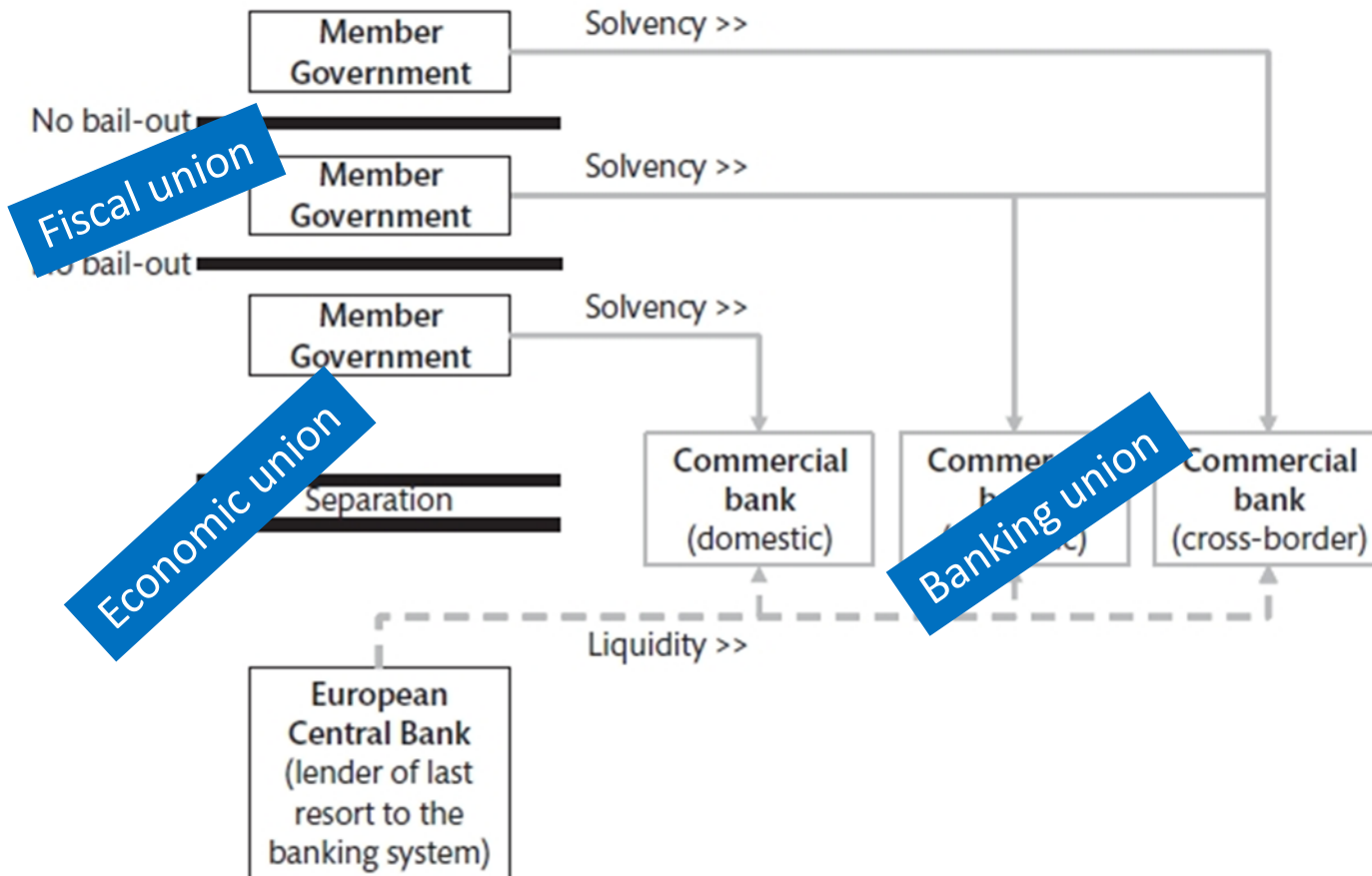
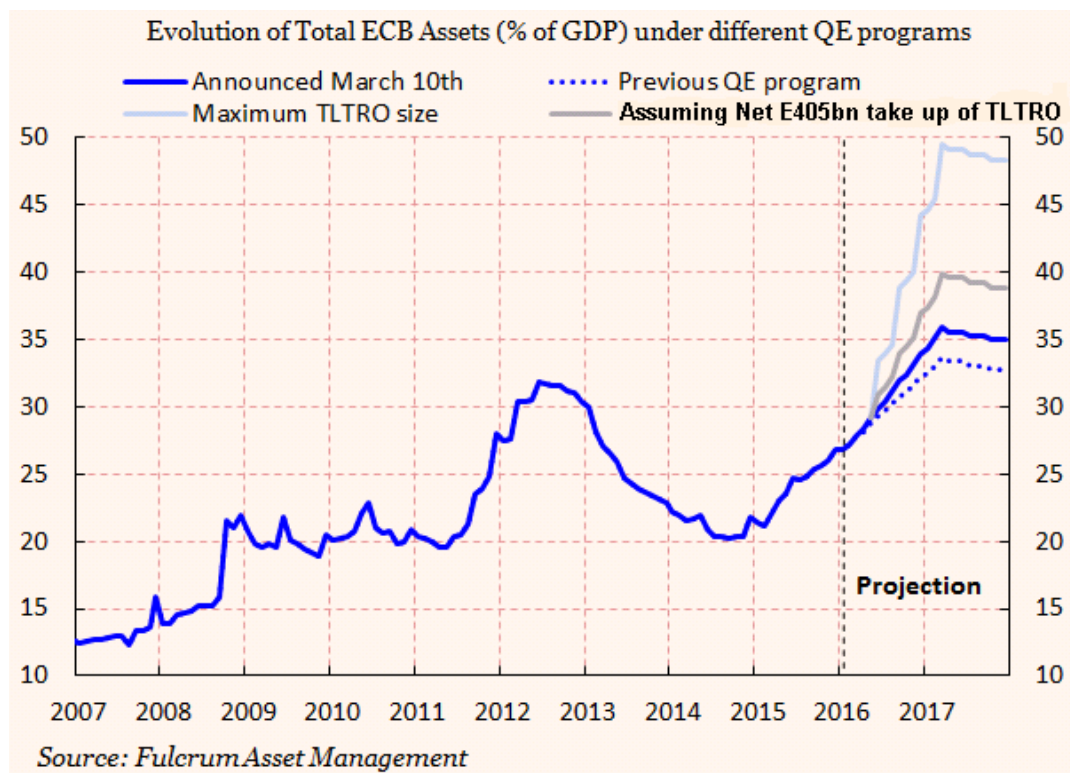


Figure 12.12 Governance arrangements in the Eurozone prior to the crisis.

# The Eurozone crisis – policy steps

- ECB – massive injection of liquidity ... to support the banks; the banks bought government debt ... + Draghi statement → panic receded ... the risk premia fell ... solvency of governments improved; but weak growth & fear of deflation → QE (2015); additional measures 2016
- See <http://blogs.ft.com/gavyndavies/2016/03/13/the-end-of-negative-rates-but-not-central-bank-alchemy/> for an excellent summary



## The Eurozone crisis – policy steps (cont.)

- Eurozone – bail-outs for Greece, Ireland, Portugal accompanied by harsh fiscal austerity conditions (refer back to Lecture 8 for Greece)
- Eurozone – fiscal compact (like the SGP but more stringent; harsher penalties; external surveillance of national budgets; and MIP)
- Eurozone – ‘banking union’ – arrangements for the resolution of failing banks. Limited backstop will be provided but not full mutualisation.

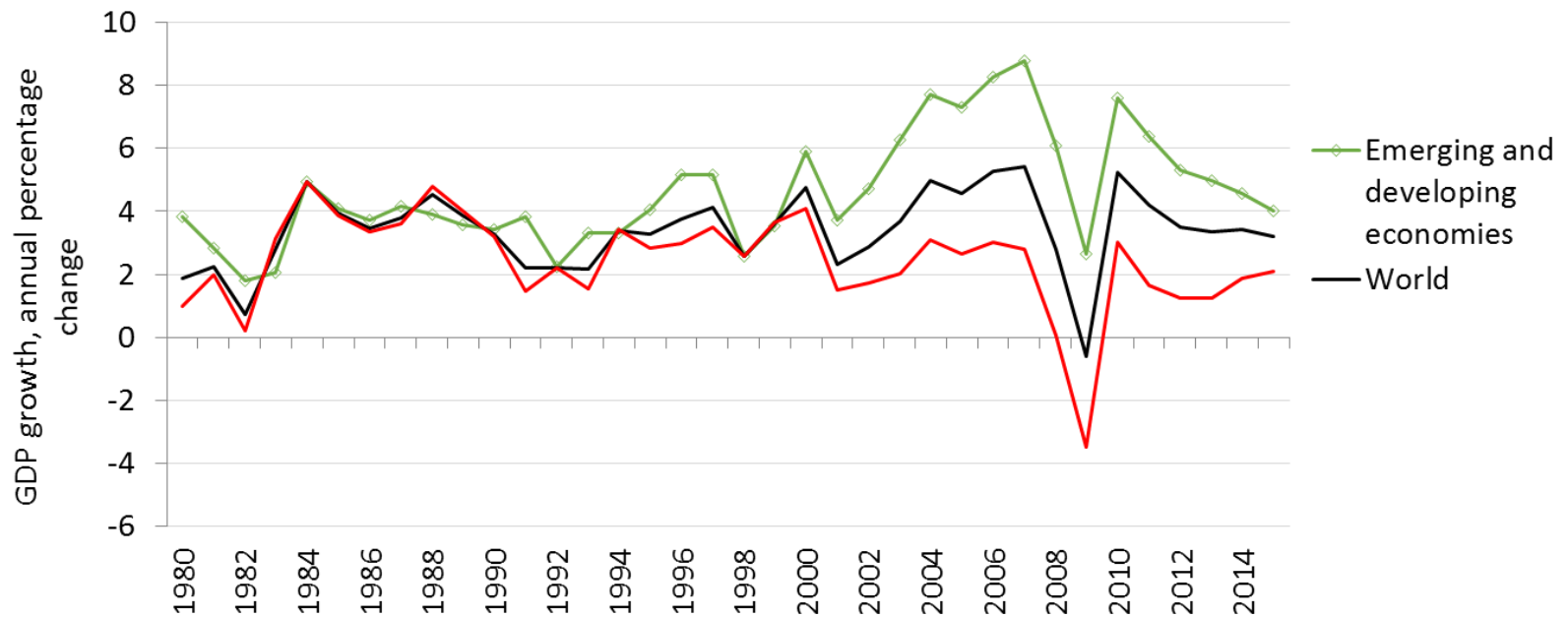
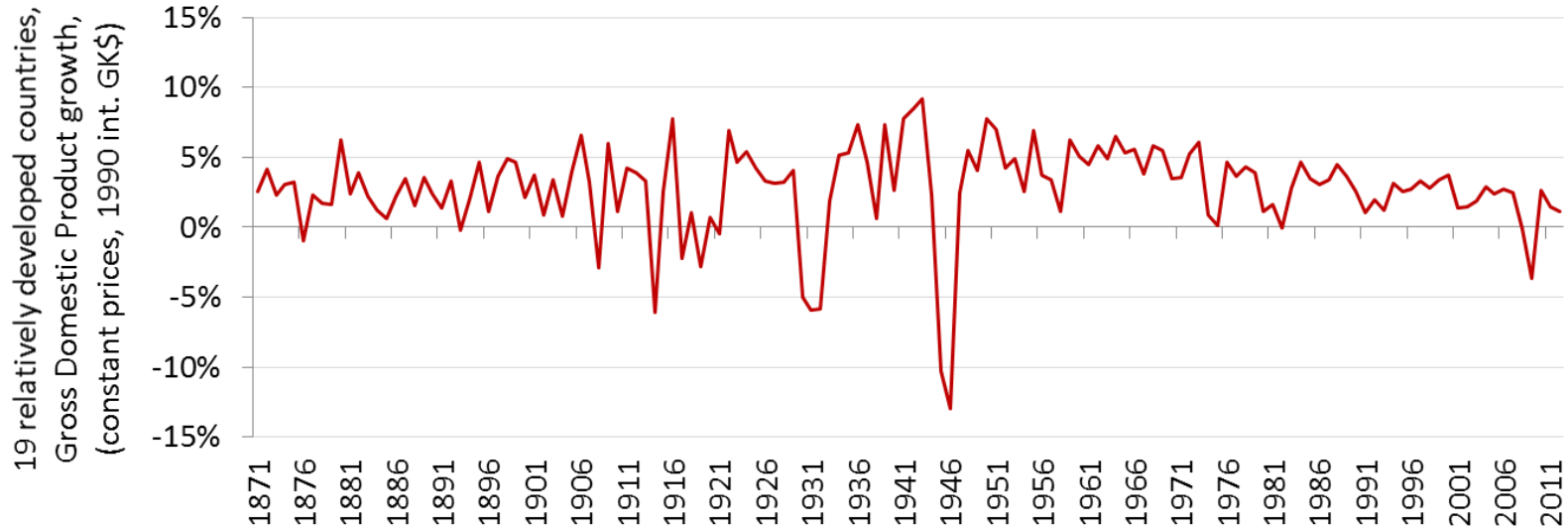
Problem: where will growth come from? Think of the sector balances ... if the government sector goes toward surplus (plans to save more), for growth not to fall, one or both of the following must happen:

- private sector →
- external sector (X-M) →

# The 3 global economic crises, economic models & economic policy regimes

- Great Depression – aggregate demand-based
- Stagflation – inflation-based
- Global Financial Crisis – debt-based

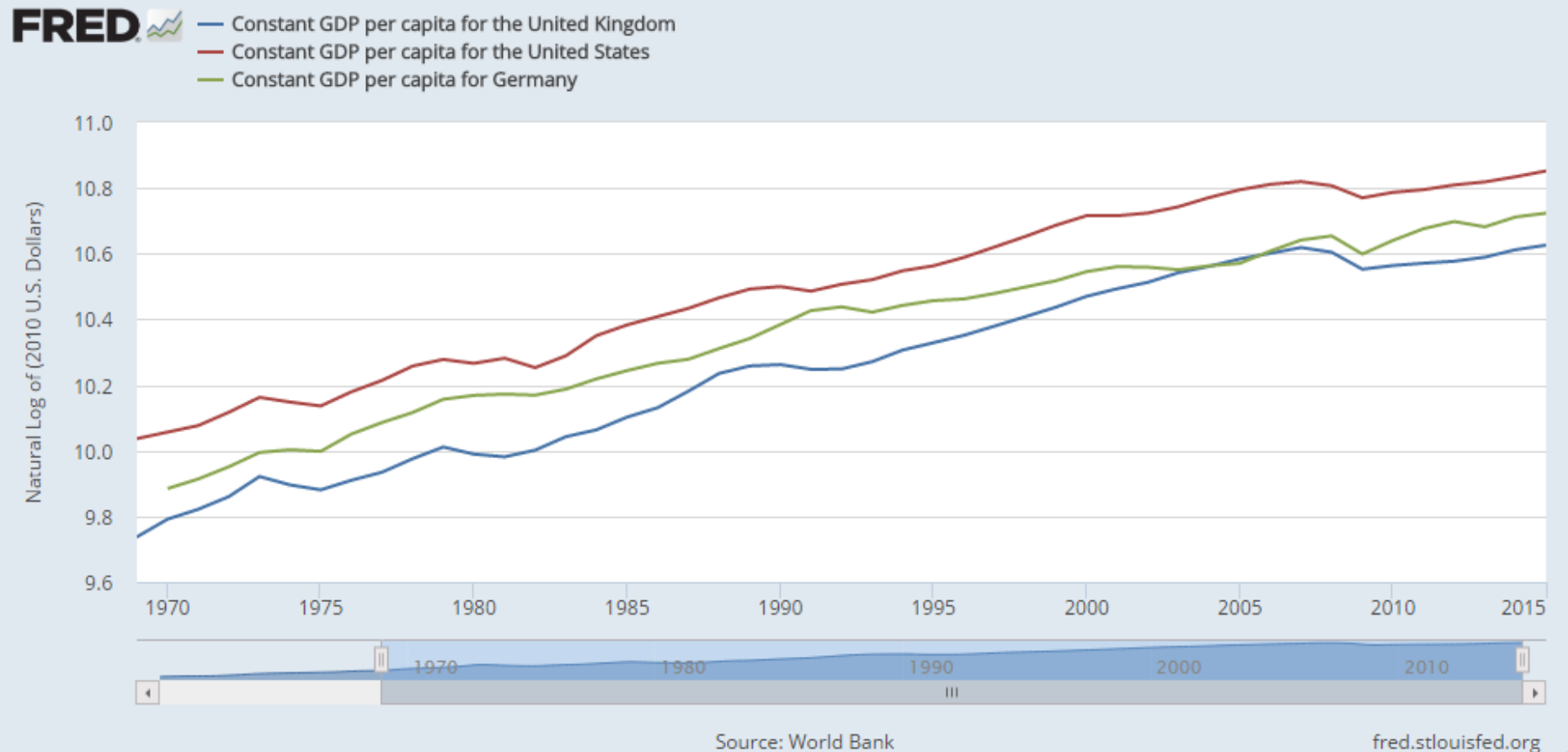
# Global economic crises



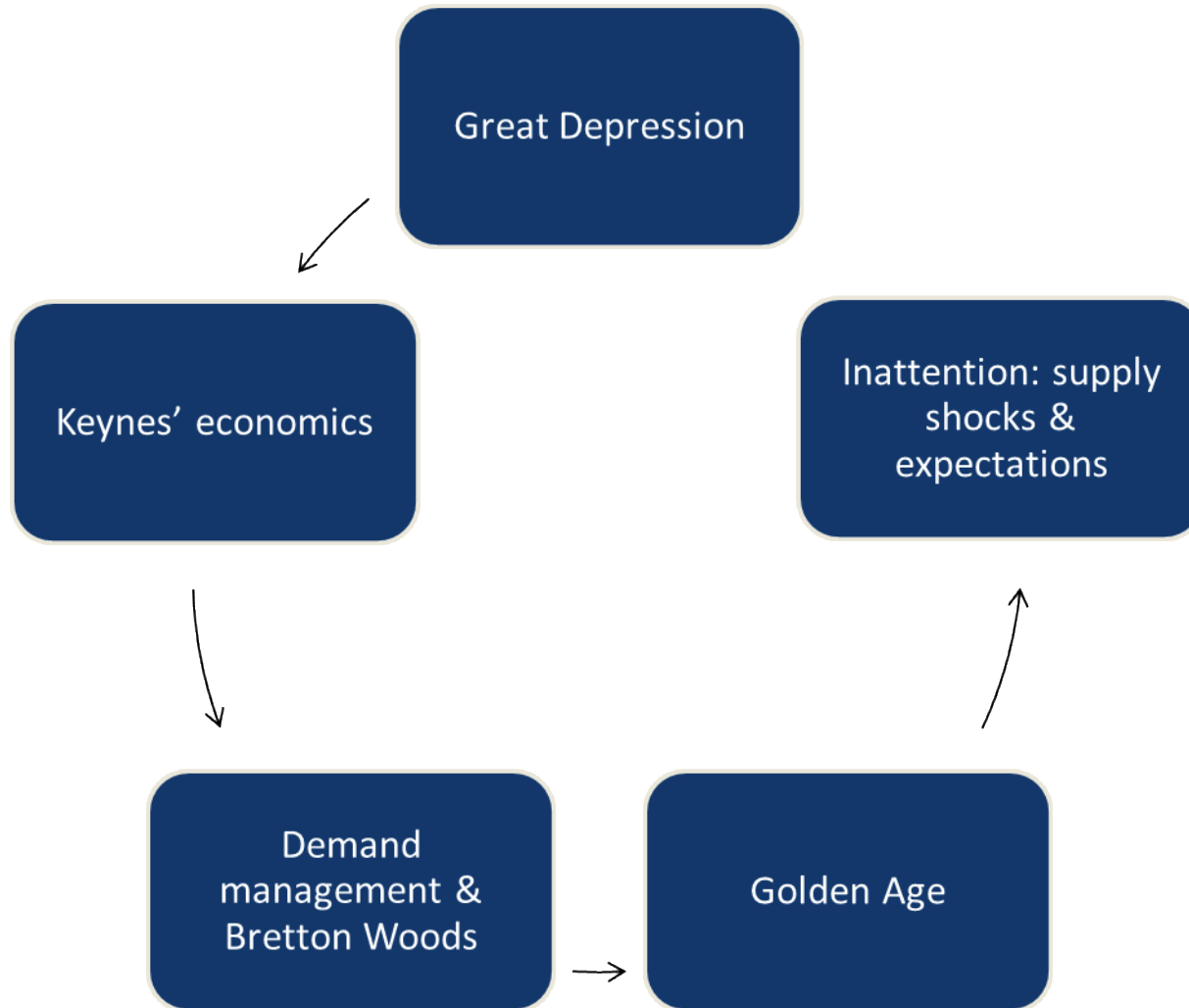


# Global economic crises – unusual post-crisis behaviour in US and UK

## Is this ‘secular stagnation’?



# Great Depression, macro models & policy regime



# Post - Great Depression paradigm & policy regime shift

## New Paradigm – Keynes' economics

- Explanation for persistence of mass unemployment
- New 'general' theory to encompass the full employment equilibrium of classical theory as special case
- Weakness of economy's self-stabilizing mechanisms meant stabilization policy was necessary

## New Policy Regime

- national – demand-management
- international – Bretton Woods

**2 decades of growth & stability – the Golden Age** (see Unit 17 in CORE ebook)

# Seeds of the Stagflation crisis

- Low U and increased economic security via expansion of the welfare state → shift in bargaining power to labour (strikes)
- By late 1960s, wage push (profit squeeze) and higher equilibrium U; exacerbated by weakening labour productivity growth and then by commodity and oil price shocks in 1970s

Figure 17.14. The end of the golden age: Strikes and wages relative to share prices in advanced economies (1950-2002)

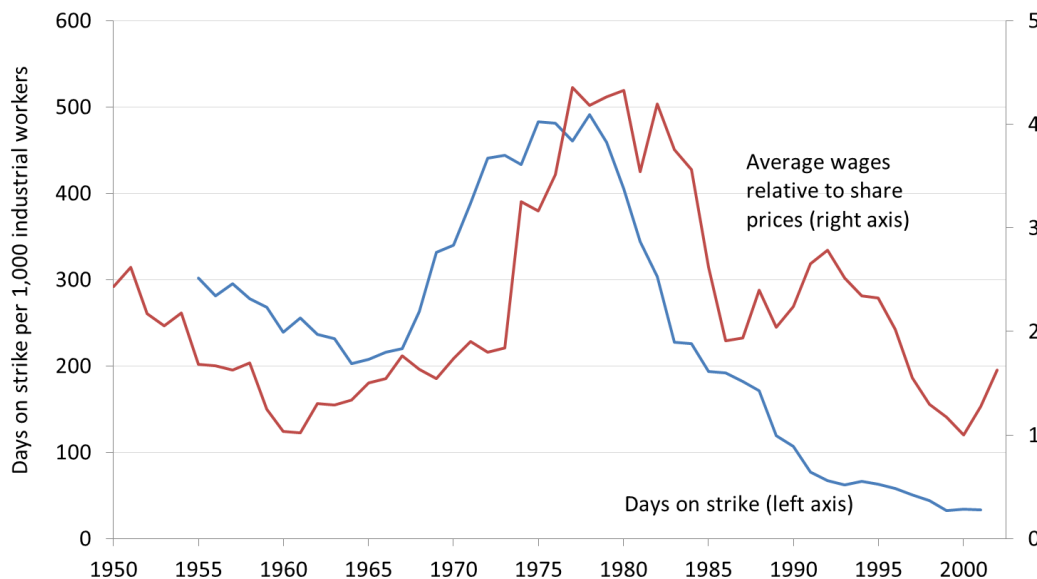
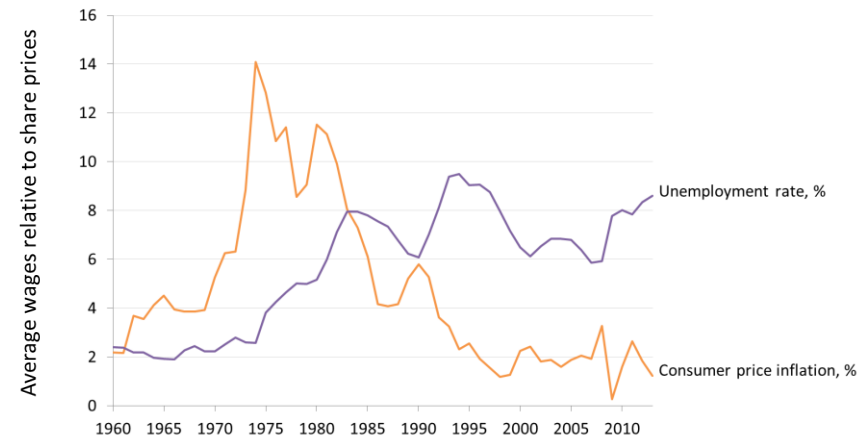
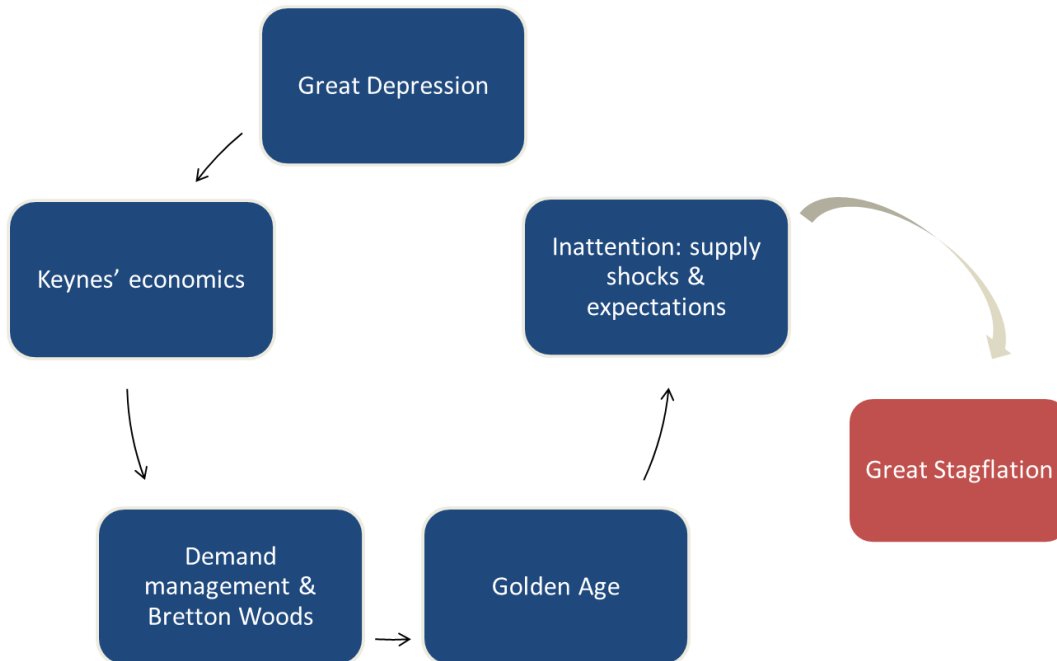


Figure 17.16. After the golden age: Unemployment and inflation in advanced economies (1960-2013)



# Problems for the prevailing paradigm (Keynesian economics e.g. IS/LM & Mundell-Fleming models) & policy regime

- Supply-side effects on equilibrium unemployment neglected
- Consequence that macroeconomic policy was oriented to sustaining aggregate demand
- Using prevailing models of inflation, such policy intervention was forecast to be effective (remember 1973 oil shock)



# Post - Great Stagflation paradigm shift

## A research programme comprising

- a methodology (the origins of DSGE models studied in MSc macro courses – see **Chapter 16 of CS2015**)
- new classical assumptions of perfect competition, rational expectations, flexible prices (the neoclassical growth model)
- a single model to describe growth and cycles – technology shocks → RBC (Real Business Cycle) models

**Problem for RBC models to explain persistence in inflation;  
unemployment costs of disinflation**

## → **New Keynesian (NK) model**

combines RBC methods with sticky  $P$ ,  $W$

summarized in a 3-equation model for policy analysis: IS, PC, MR (similar to the model we have studied)

# Post - Great Stagflation policy regime shift

## New Policy Regime (national & international)

- Inflation targeting central banks
- No international coordination – flexible exchange rates and capital mobility

## 2 decades of growth & stability – the Great Moderation

### Seeds of the next crisis

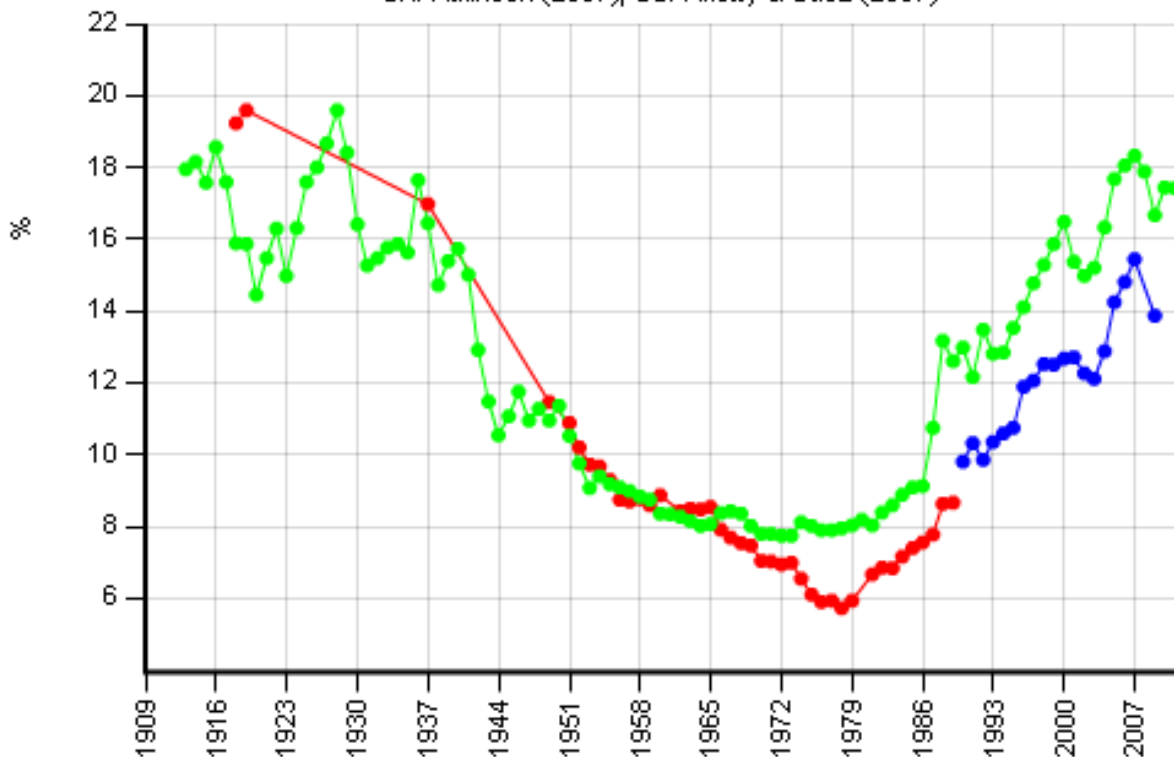
- Low U but rising inequality (wage squeeze)
- Financial liberalization
- Interdependent global growth patterns – export-based (China & Germany) + finance-based (US, UK)

# Income distribution; imbalances within and between countries

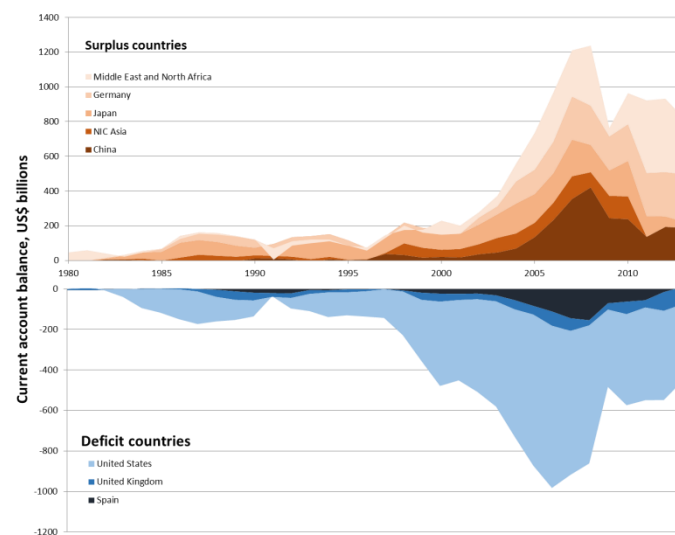
## Top income shares. 1909-2011

Sources: The World Top Incomes Database. <http://topincomes.g-mond.parisschoolofeconomics.eu/>

UK: Atkinson (2007); US: Piketty & Saez (2007)

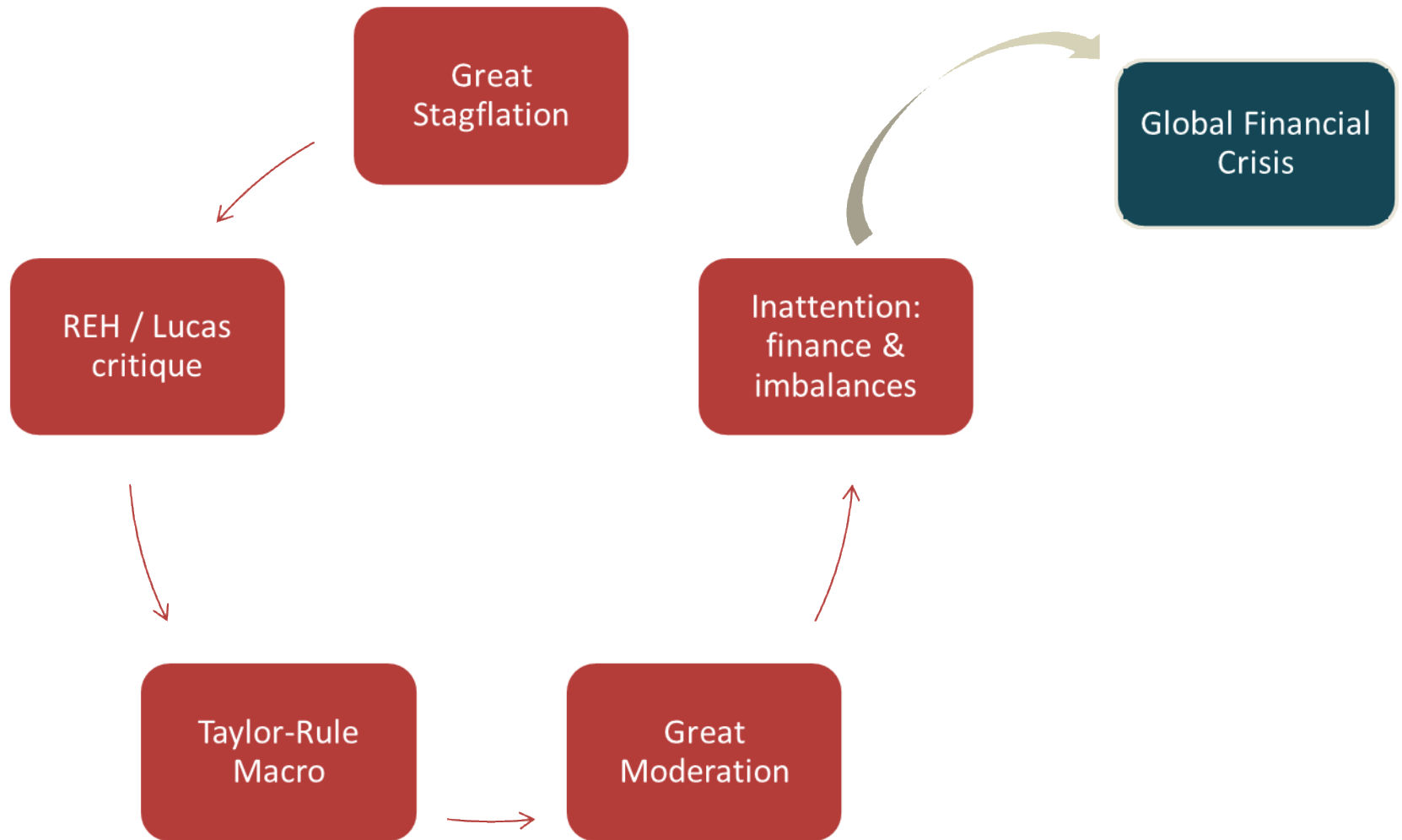


- ✓ Top 1% income share-married couples & single adults (United Kingdom)
- ✓ Top 1% income share-adults (United Kingdom)
- ✓ Top 1% income share (United States)





# Post- Great Stagflation paradigm & policy regime shifts



# Problems for the prevailing paradigm (RBC & NK macroeconomics e.g. 3-equation model) & policy regime (inflation-targeting CBs)

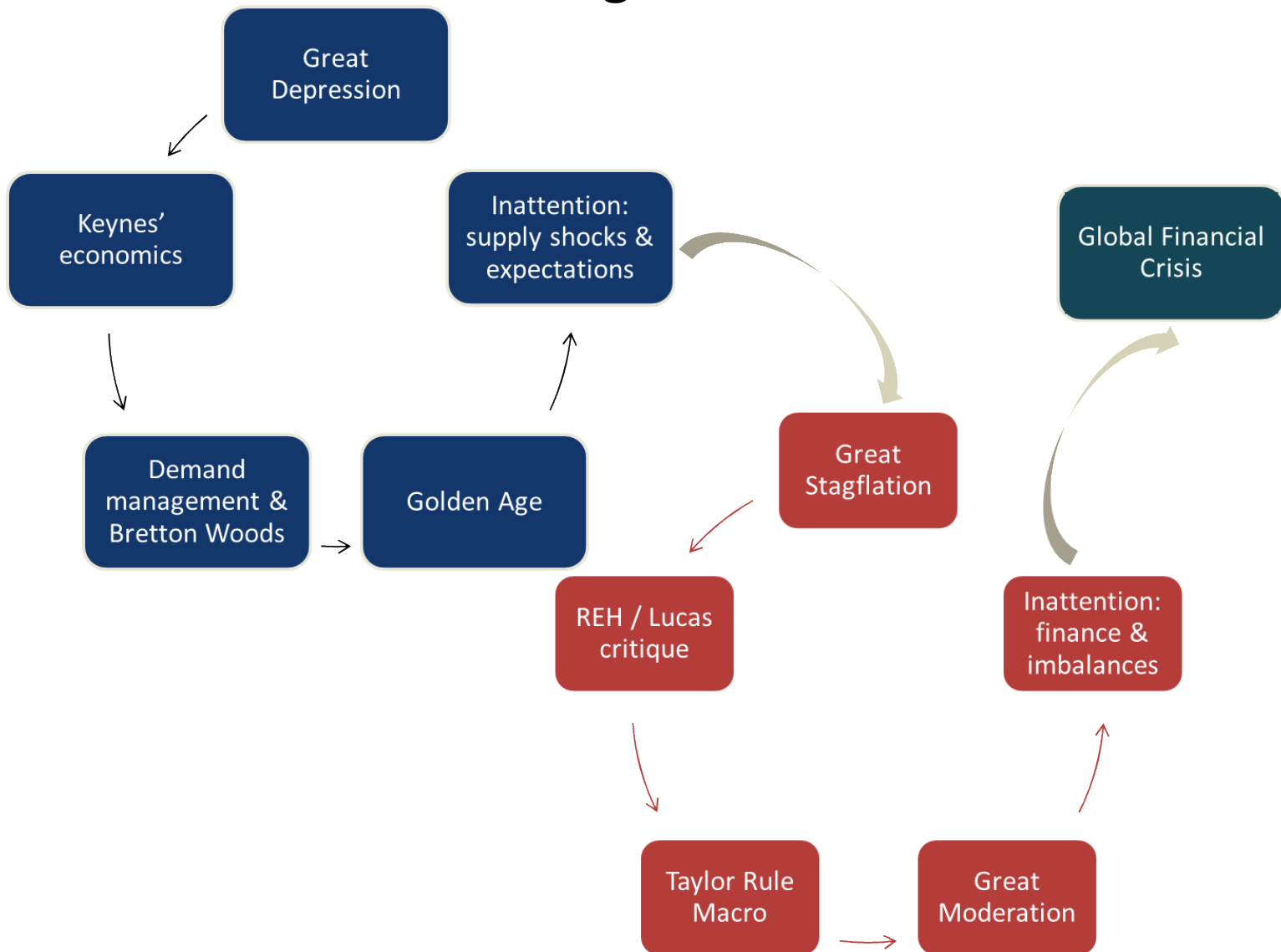
## Problems for the paradigm

- NK-type models do not have banks etc. in the model – that is why you studied Chapters 5-7

## & policy regime

- Inflation targeting macro regime (called ‘Taylor Rule’ macro) was consistent with stable inflation alongside growing leverage and growing global financial imbalances
- Success of inflation targeting regime reduced macro risk & fuelled leverage cycle (expansion of household and bank debt)
- Policy inattention ‘paradox of credibility’ permitted Minsky type crisis to occur ... view that aggregate risk had fallen ... fuelled more borrowing (see Minsky box in CORE Unit 17)
- Inattention to implications of trends in income distribution for financial fragility – reliance on sub-prime lending to sustain aggregate demand

# Overview: Global crises, macro models & macro policy regimes



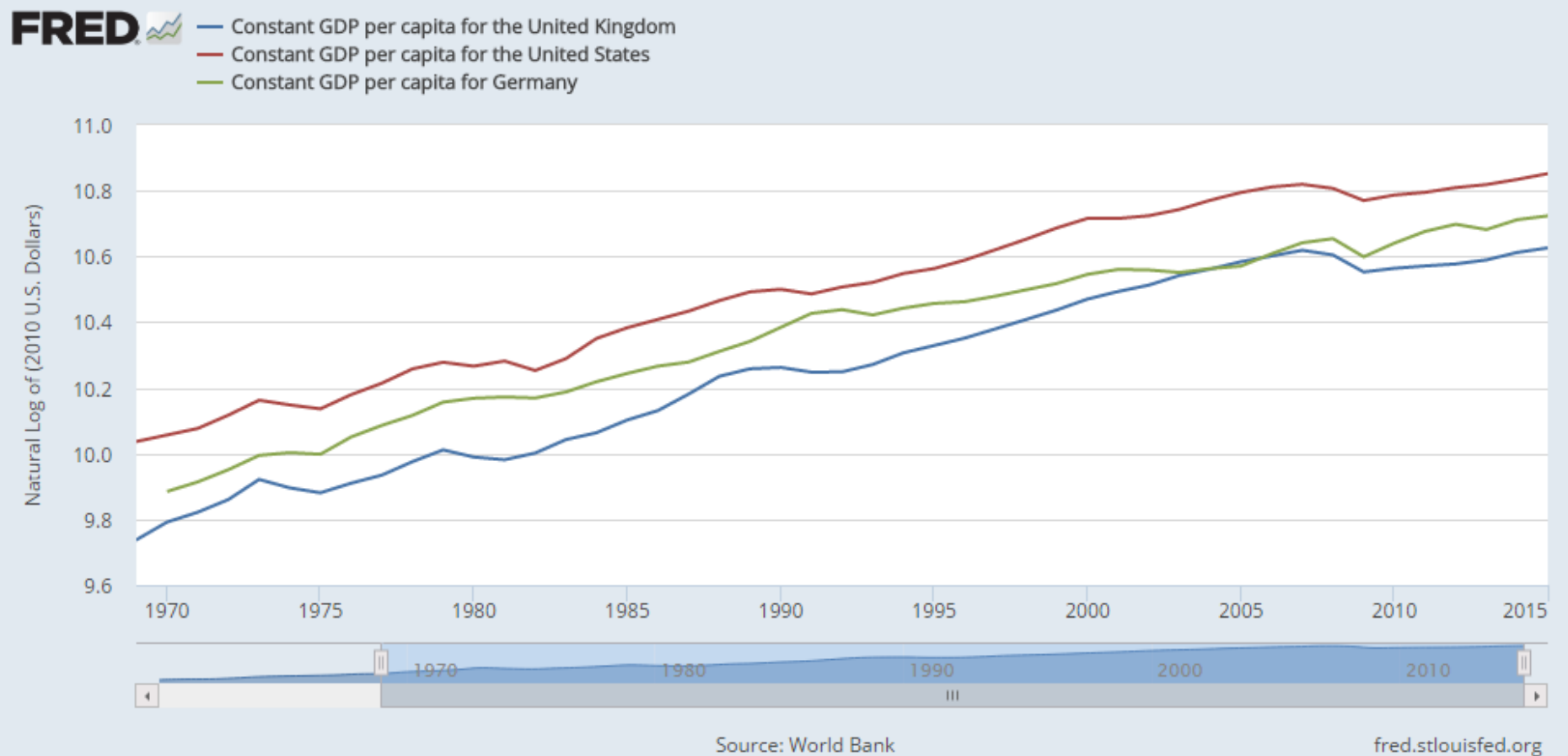
# Learning in macroeconomics

- Lessons of economic history are important ... claim (made during the 2 decades of the Great Moderation prior to the GFC) that *the new policy regime had brought boom & bust to an end* was not sensible
- Assumption that advanced economies would not have banking or sovereign debt crises was mistaken
- BUT there is evidence of learning by economists & policy-makers:
  - policy responses to the crisis reflected lessons of the Great Depression (see charts in Chapter 7 comparing post-GFC with post-Great Depression)
- BUT history shows recovery from debt-type crises is slow & painful & and that 'too early, too harsh' austerity can delay recovery (more recent research is pointing in this direction)

# Unusual post-crisis behaviour in US & UK

Questions:

1. Is this 'secular stagnation'?
2. What are the implications for monetary policy of a low natural or stabilizing rate of interest? (and of  $r^*$  at a global level)



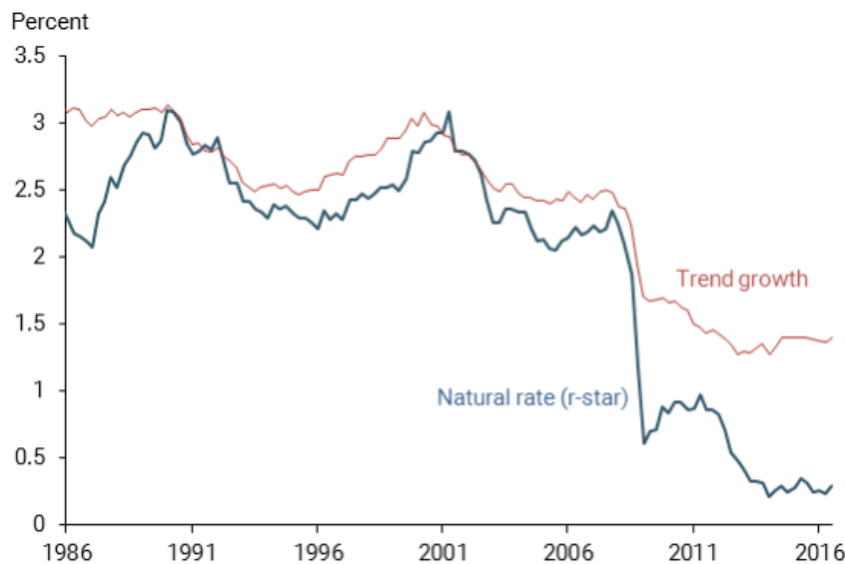
# Unusual post-crisis behaviour in US & UK

## Questions:

1. Is this 'secular stagnation'?
2. What are the implications for monetary policy of a low natural or stabilizing rate of interest? (and of  $r^*$  at a global level) – uncomfortable times.

Figure 3

Average  $r$ -star estimates and trend growth for four economies



Source: Estimates from Holston, Laubach, and Williams (2016) of GDP-weighted average for United States, Canada, the euro area, and the United Kingdom. Weights are GDP at purchasing power parity, OECD estimates. Pre-1995 euro area weights are total weights of the 11 original euro area countries.

In our model, the question is: what keeps the IS curve depressed at the global level?

Which supply-side and demand-side factors

- a) are depressing investment
  - S-side – falling innovation potential (e.g. Robert Gordon), slowing labour force growth
  - D-side – coordination problem of low aggregate demand
- a) are raising savings
  - S-side – aging populations, increasing inequality, rising risk aversion

We do not yet know the answer – there's much still to learn in macroeconomics!