Domestic Macroeconomy Concerns

- Deflation
  - China and debt

China's accumulation of physical K underpinned by cheap land (for development), tax breaks and low-cost L (and equity injections later on).

Role of debt in the strategy:

- Preferential access to credit from the 2000s (state banks to state firms)
- GFC slowed X-led growth and fiscal stimulus was a response.
  - Local officials ran up debt;
  - Land was seized for development;
  - Property boom and infrastructure investment

2008-19: Debt ↑, 150% to 250% of GDP

Economist, "China's future: The global centre", Essay on China, 23 Feb 2019, pp. 43-8.

Domestic Macroeconomy Concerns

- Trade and domestic sector

Pandemic: China's X grew for electronics as people in West worked from home.

Global ↑π and ↓Q,C → ↓ X value in $ terms by 12% (yr or yr to June 2023).

Both main drivers of China's economy struggling (X,I), so China must ↑ C. How?

Policymakers have stopped short of large-scale stimulus, instead easing i-rates

No bailouts of firms teetering on default

Fin Times, "Does Xi need a plan B for China's economy", J. Leahy, S. Yu and C. Ho-him, 18 Jul 2023, p.15.

Domestic Macroeconomy Concerns

- Business cycles, recession, and the "great moderation"

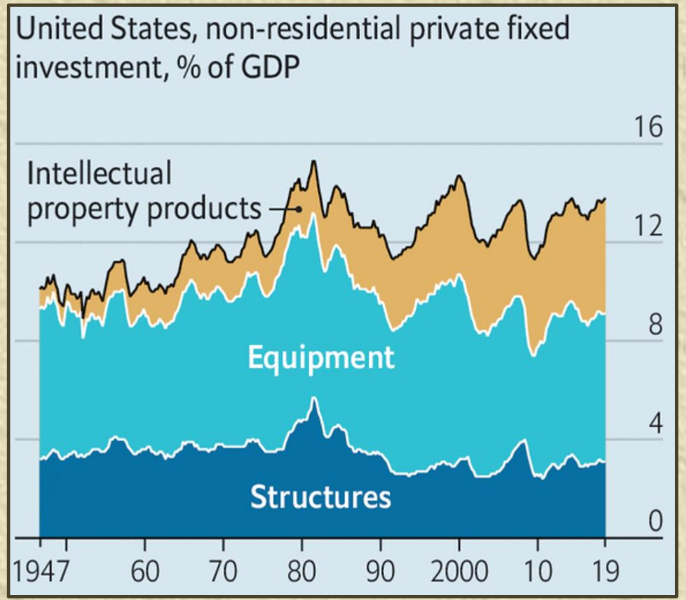
Before the GFC: a "great moderation" as CB held $\pi_t = \pi^T$, taming the boom and bust of the business cycle. Lucas (2003): "central problem of depression-prevention has been resolved".

Longer expansions and shorter recessions

Economist, "The world economy: A strangely elastic expansion", 13 Jul 2019, p. 20-2.

Domestic Macroeconomy Concerns

- Why are booms longer?
  - Manu inventories used to predict recessions
    - Q planned months in advance; ↓ D → ↓ inventory, manu Q
    - Supply-chain mgmt: ↓ inventories
    - ↑ services share of GDP
  - Blurring of manu and services
    - Services replace goods in supply chain
    - Q can be outsourced, offshored
    - Manu goods services-intensive
  - Rise of services → Δ I patterns
    - US fixed I is 14% of GDP ≈ L-T trend
      - ↓ plant & equipment; ↑ IP
      - I in IP dominated by tech firms



Economist, "The world economy: A strangely elastic expansion", 13 Jul 2019, p. 20-2.

Domestic Macroeconomy Concerns

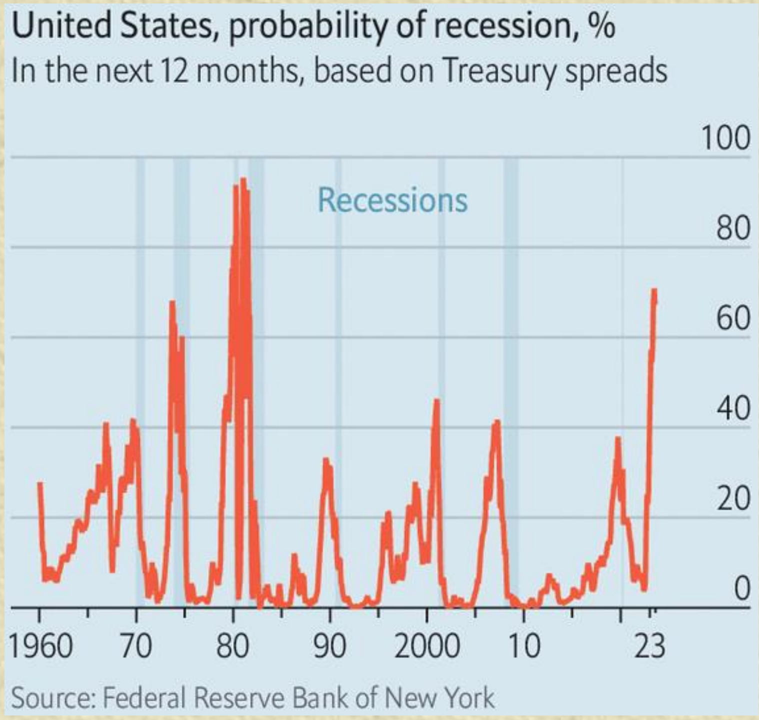
- Yield curve inversion and recessions
  - L-T rates on bonds should be > S-T rates
  - Compensate for higher risk of holding maturities into the future
  - Inversions (L-T rate < S-T rate): good indicator of recession

2022-23 yield inversion: hard landing?

Could the inversion be misleading?

↓ L-T rates coincides with Fed ↓π. As MP tightened, FP remained loose (US budget deficit is 5% of GDP).

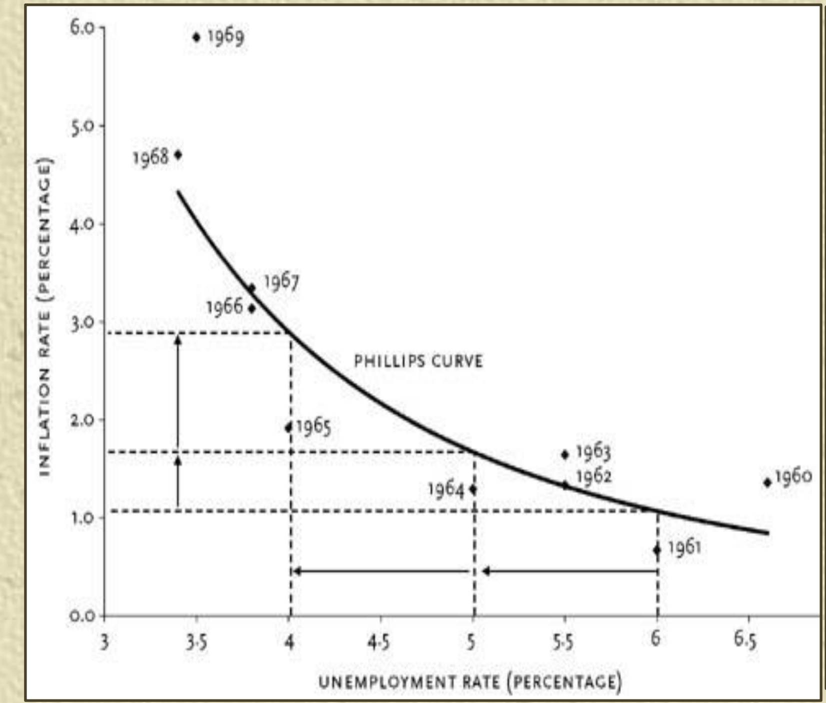
Could this avoid chance of recession?

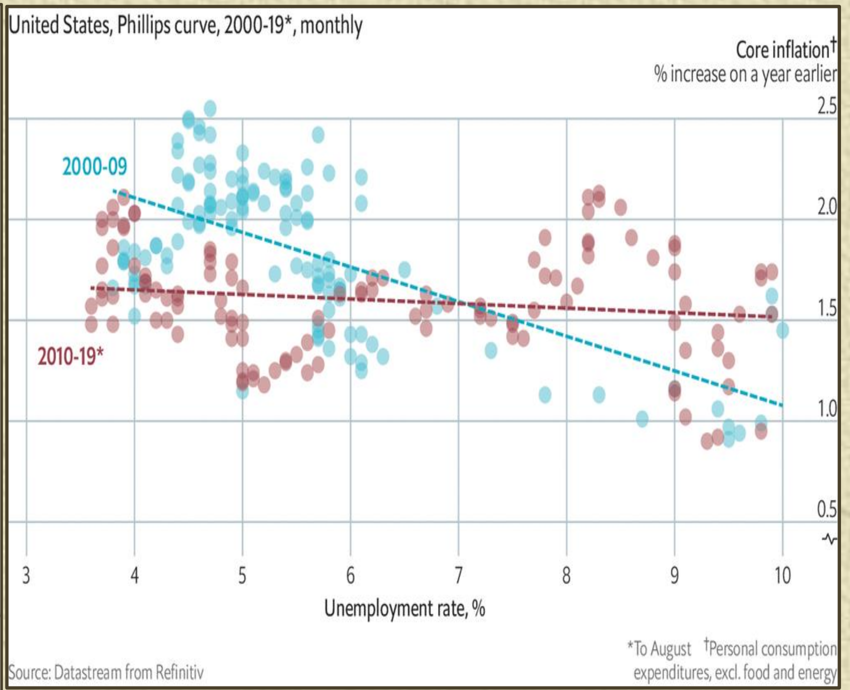


Economist, "The American economy: Turning a corner", 22 Jul 2023, p. 14-5.

Domestic Macro Concerns, . . . continued

- Revisit MP/FP debate to achieve macro objectives
  - Advantages/disadvantages
  - CB control over MP and independence?
- Relation of π, unemployment and L market
  - Phillips curve and its evolution



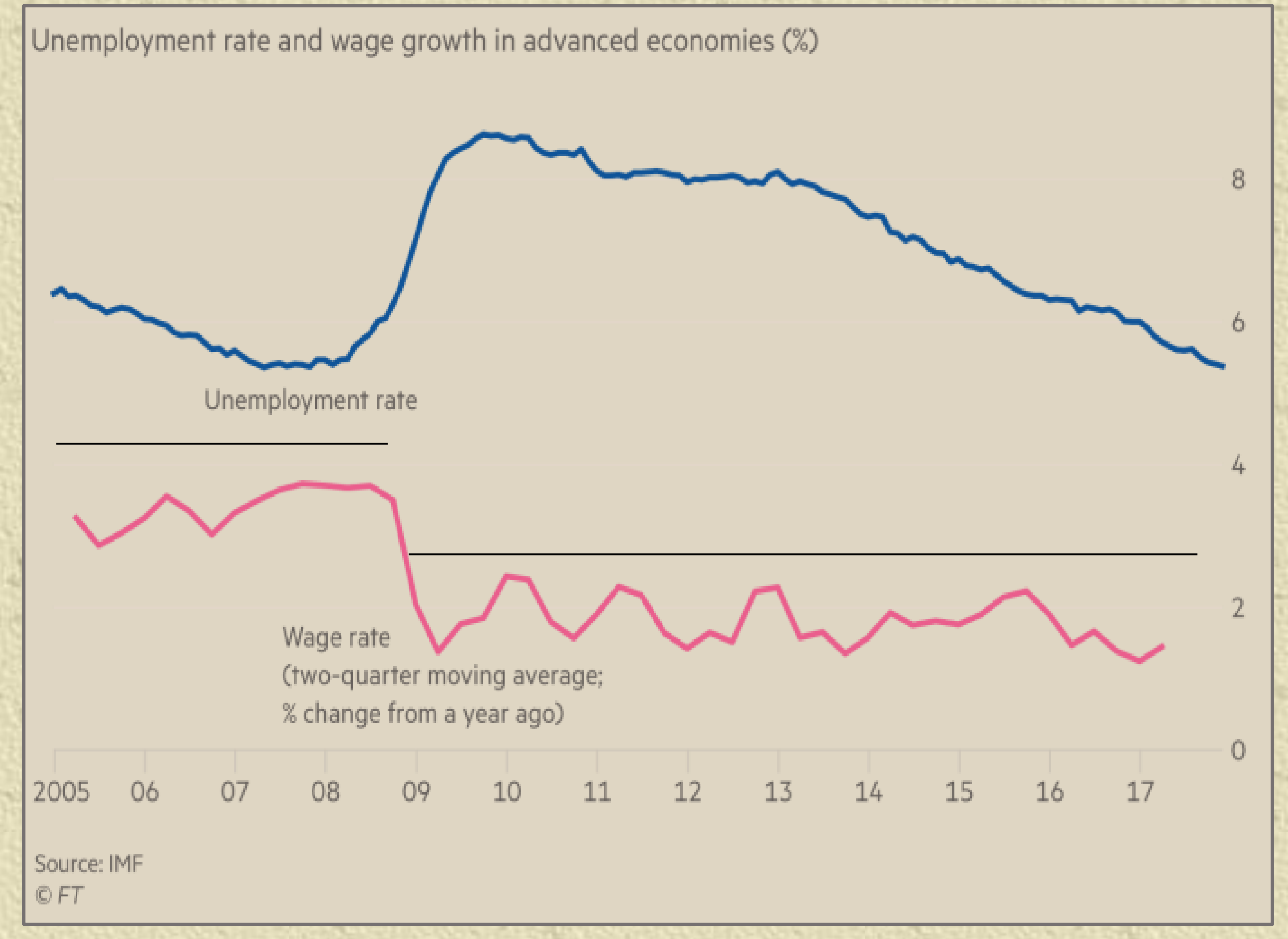


Economist, "The rich world: Finding Phillips", Special report on the World Economy, 12 Oct 2019, p. 4-6

Video link on inflation: https://youtu.be/8Enam9uNqb4

Domestic Macroeconomy Concerns

- Recent trends in PC relation (U and W)
  - Post-GFC: PC is discredited (10 years before covid shock)



Two oddities:

1. Stable wage rates despite ↓ U

and

2. Low W despite ↓U

Financial Times, "Times are good now, but the fragility is real", 18 Apr 2018, p. 9.

Domestic Macroeconomy Concerns

- Post-pandemic: PC back in fashion
  - US U = 3.6% in Jul 2023 same as when Fed ↑i in response to π
  - Debate now involves how much U must ↑ for ↓π and $\pi = \pi^T$

Economist, "American prices: Of great interest", 29 Jul 2023, p. 52; and "The US economy: Powell's dilemma", 15 Jul 2023, p. 59.

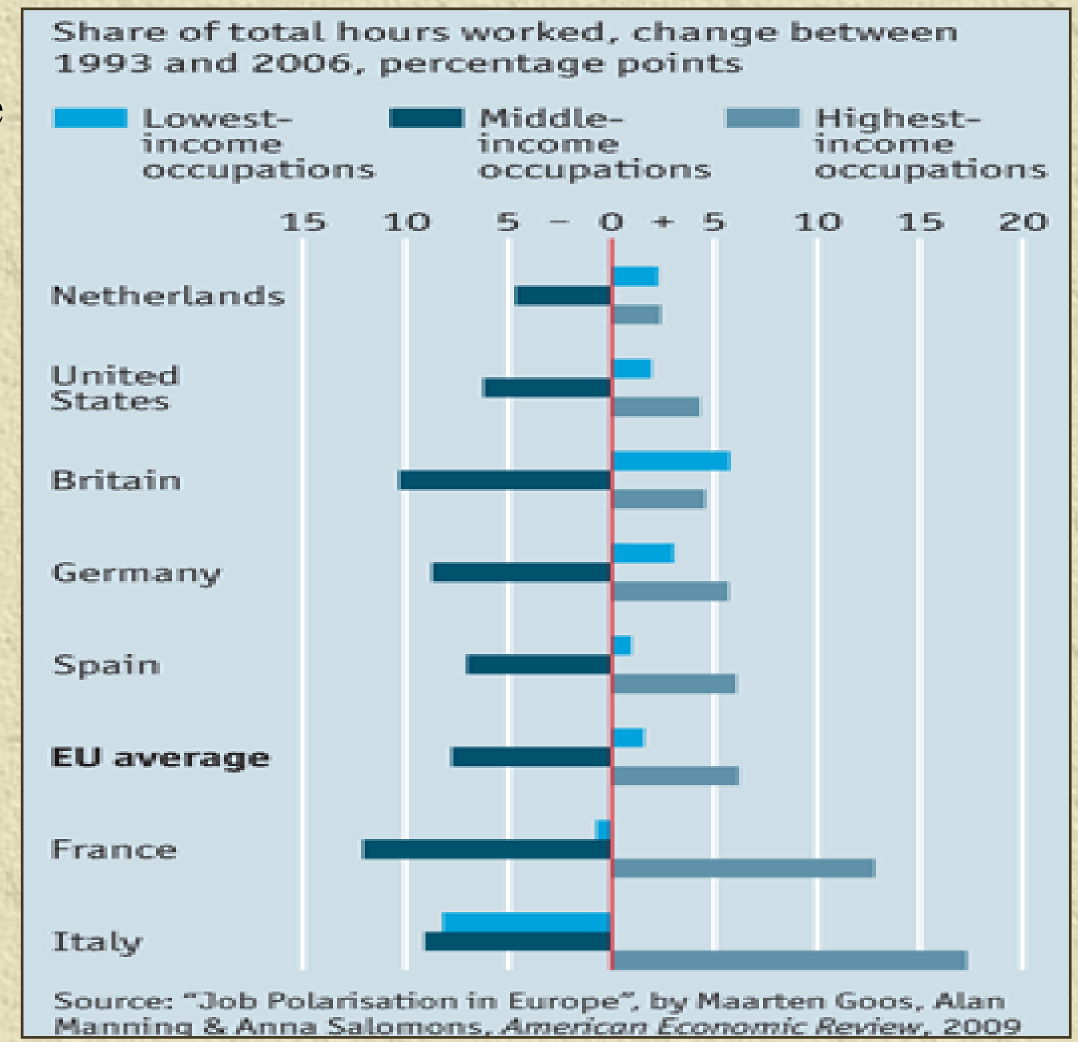
Domestic Macro Concerns, . . . continued

- Labor market: structural change, employment and technology

"Skills-biased tech" is a driver of wage inequality, mostly between rather than within firms.

Workers are sorted into two groups: those at high-wage firms (tech sector) and those at low-wage firms (retail).

Outsourcing by large firms may also play a part (spinning off low-wage activities, e.g., cleaning, catering).



Economist, "Economics focus: Automatic reaction", 9 Sep, 2010 and "Bartleby: The Tech factor", 16 Mar 2019, p. 59.

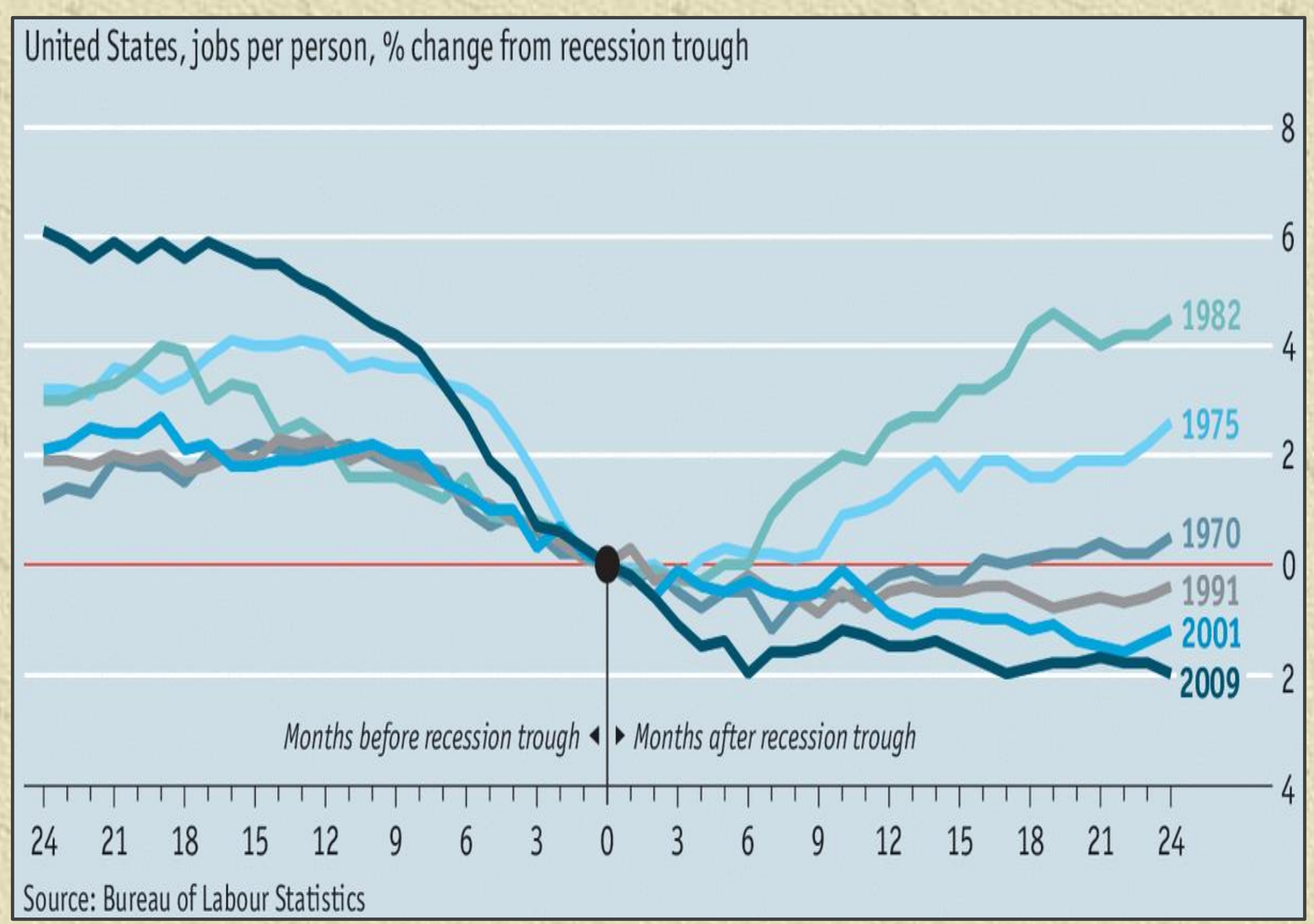
Poliquin, C.W. (2018), "The effect of the Internet on Wages", UCLA working paper;

Akerman, A, I. Gaarder and M. Mogstad (2015), "The Skill Complementarity of Broadband Internet", *Quarterly Journal of Economics*;

Song, J. et al. (2018), "Firming up Inequality", *Quarterly Journal of Economics*.

Domestic Macro Concerns, . . . continued

- Jobless recovery: is tech causing a new type of economic fluctuation?



Until the 1980s, an ↑ prodvty growth was accompanied by a boom in the economy.

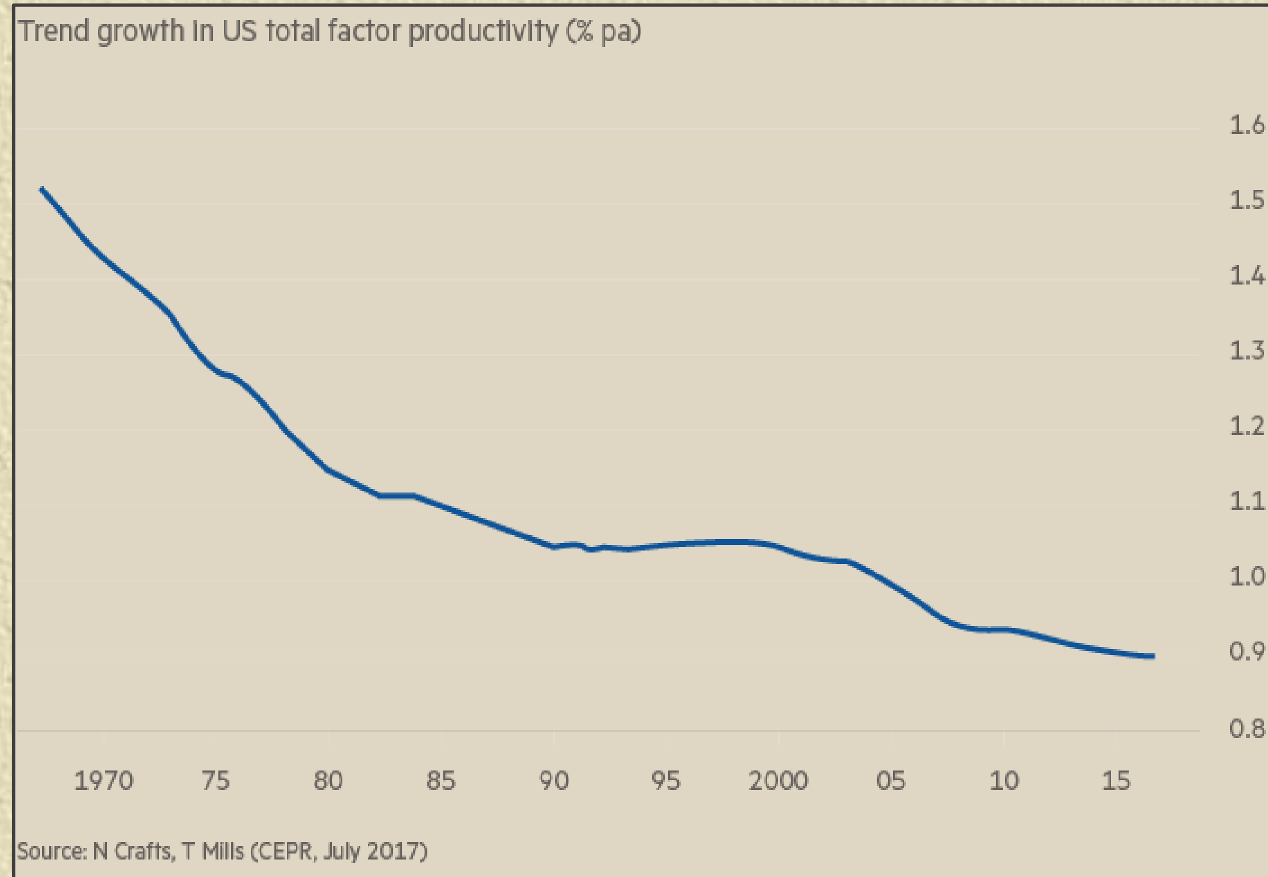
Since 1990s, growth in prodvty came during recession and slowed during booms. Why?

Firms responded to a recession by eliminating routine jobs thru: reorganization, automation and outsourcing.

Economist, "Free exchange: Diminished expectations", 24 Jun 2017, p. 64

Domestic Macro Concerns, . . . continued

- Total factor prodvty (TFP)



TFP: measure of output per unit of K, L – ability to produce more with given K, L

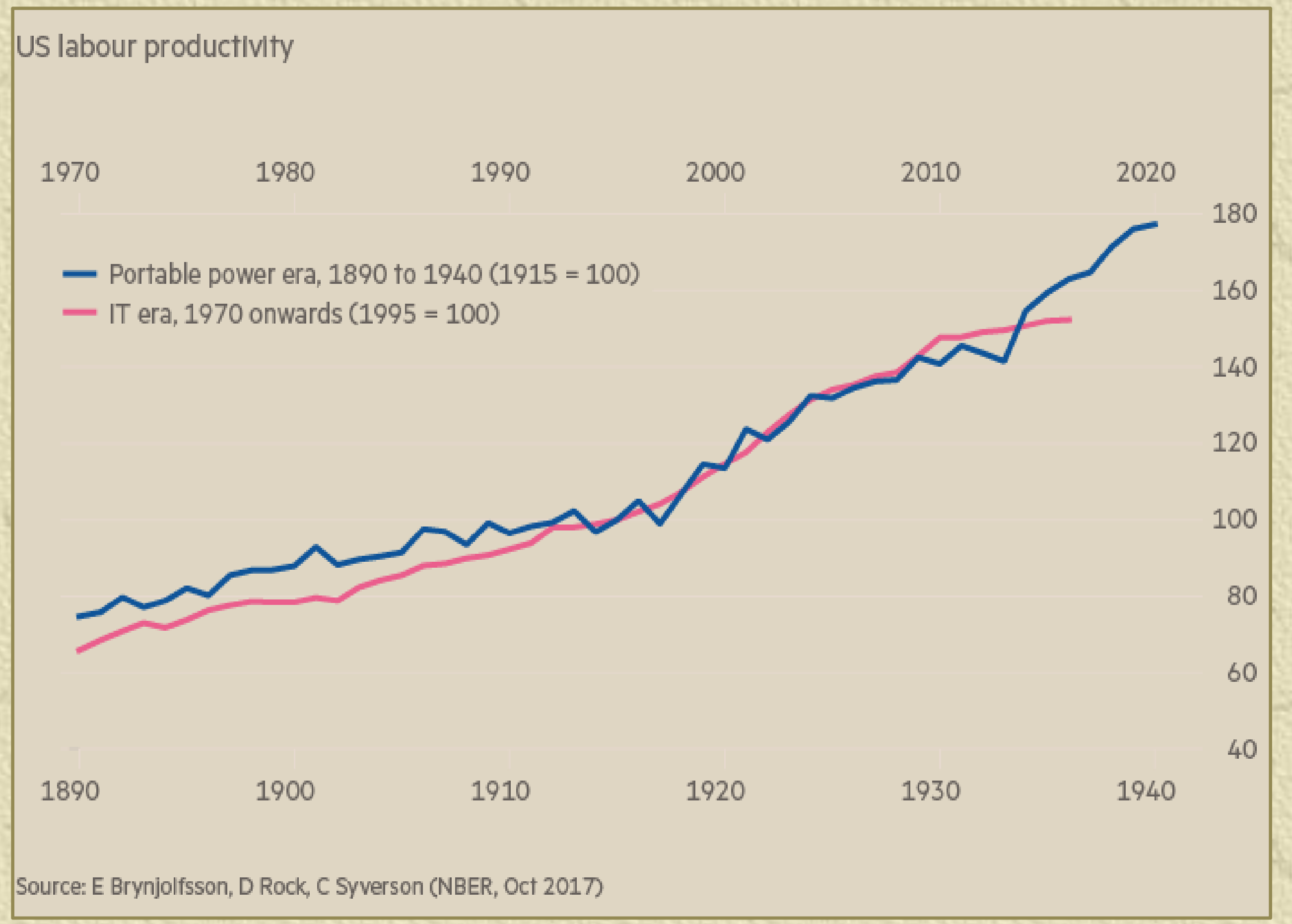
TFP measured as a residual.

Weakness of growth theory is that macro models do not explain growth adequately.

Financial Times, “Waiting for a productivity resurgence”, M. Wolf, 13 Jun 2018, p. 9.

Domestic Macro Concerns, . . . continued

- L prodvty: will IT → ↑ productivity as mechanization did?

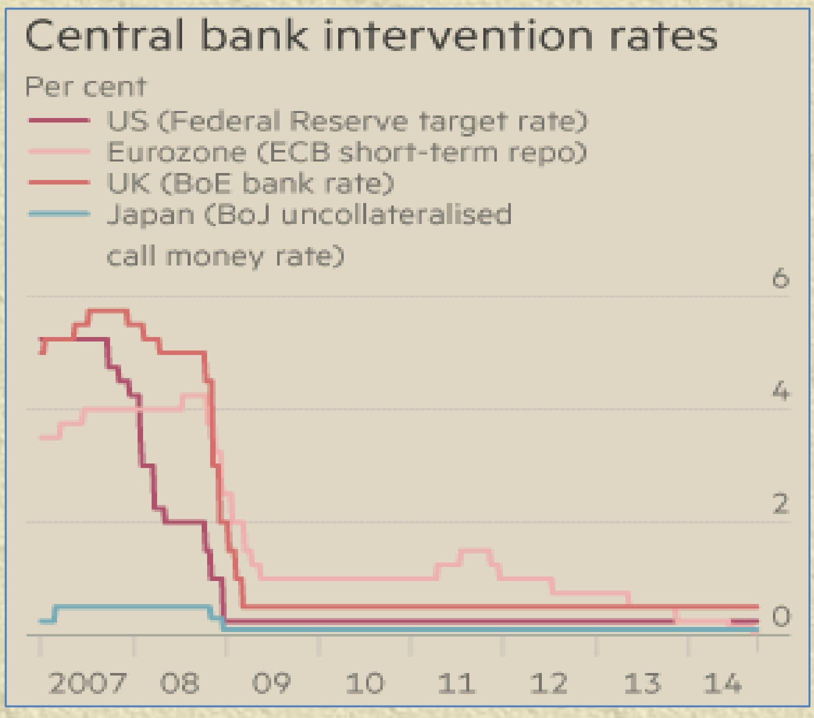


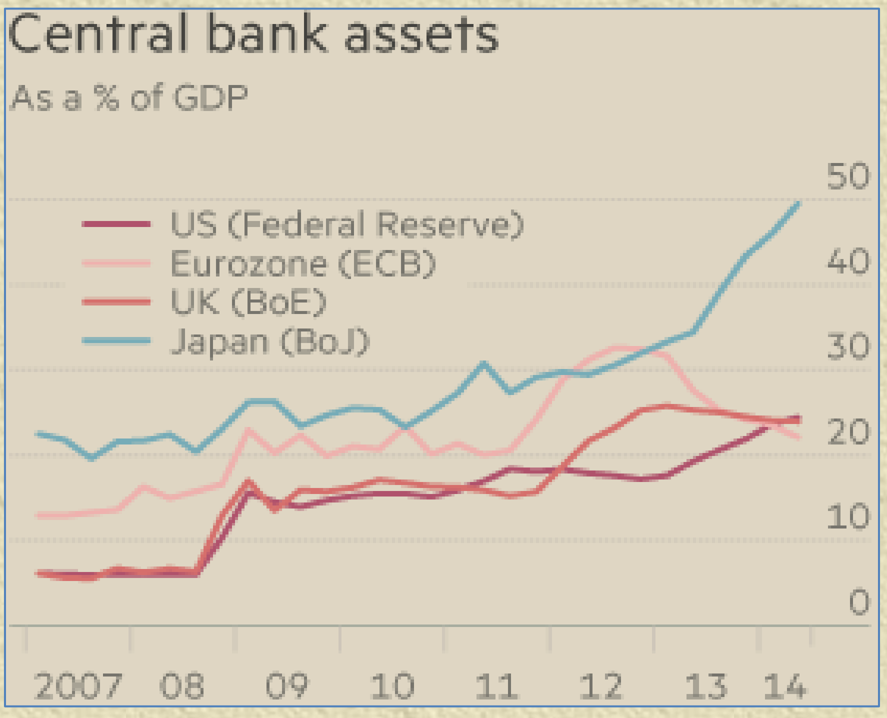
How to measure prodvty when many IT provided services are “free”?

Financial Times, “Waiting for a productivity resurgence”, M. Wolf, 13 Jun 2018, p. 9.

Domestic Macro Concerns, . . . continued

- Monetary policy: orthodox vs unorthodox
  - Traditional MP (orthodox)
  - Unorthodox MP: QE and/or zero or neg i-rates
    - QE: large-scale asset purchases
    - Asset purchases as % GDP

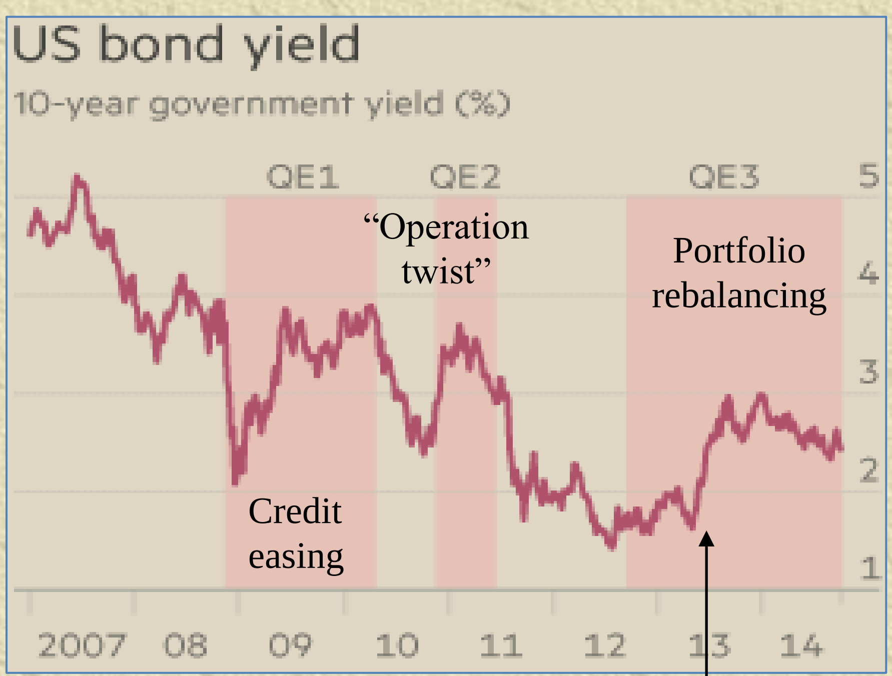


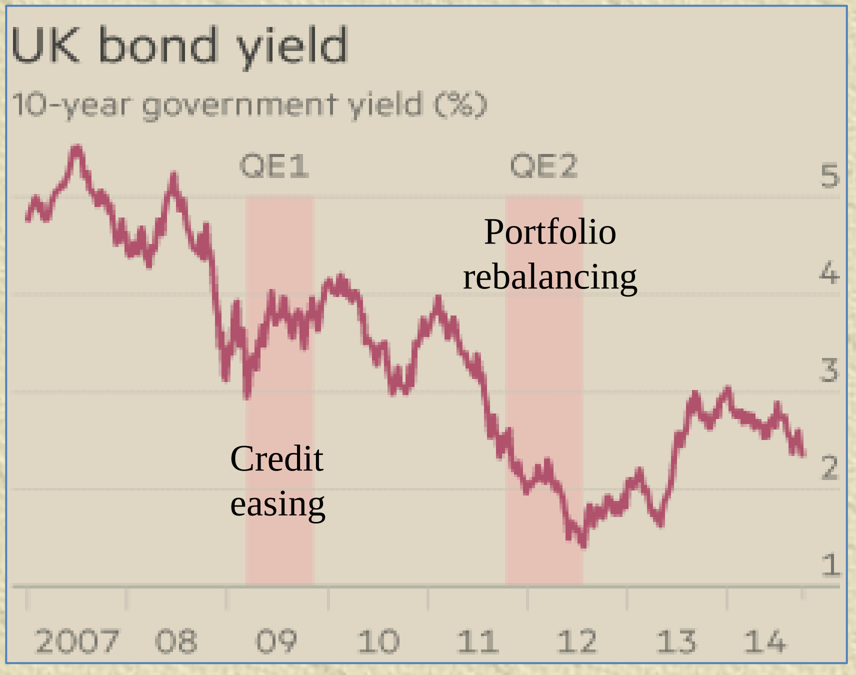


Fin Times, "Monetary policy: An unconventional tool", 6 Oct 2014, p. 7

Domestic Macro Concerns, . . . continued

- QE forms: ↑asset purchases to stop ↓i
  - Credit easing
  - "Operation twist"
  - Portfolio rebalancing



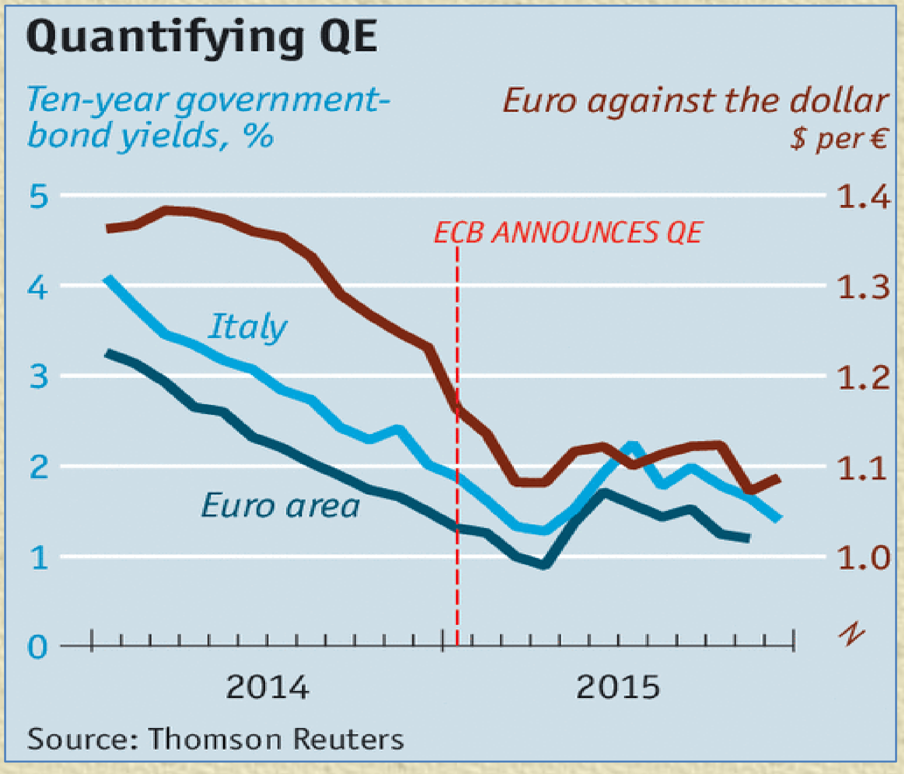


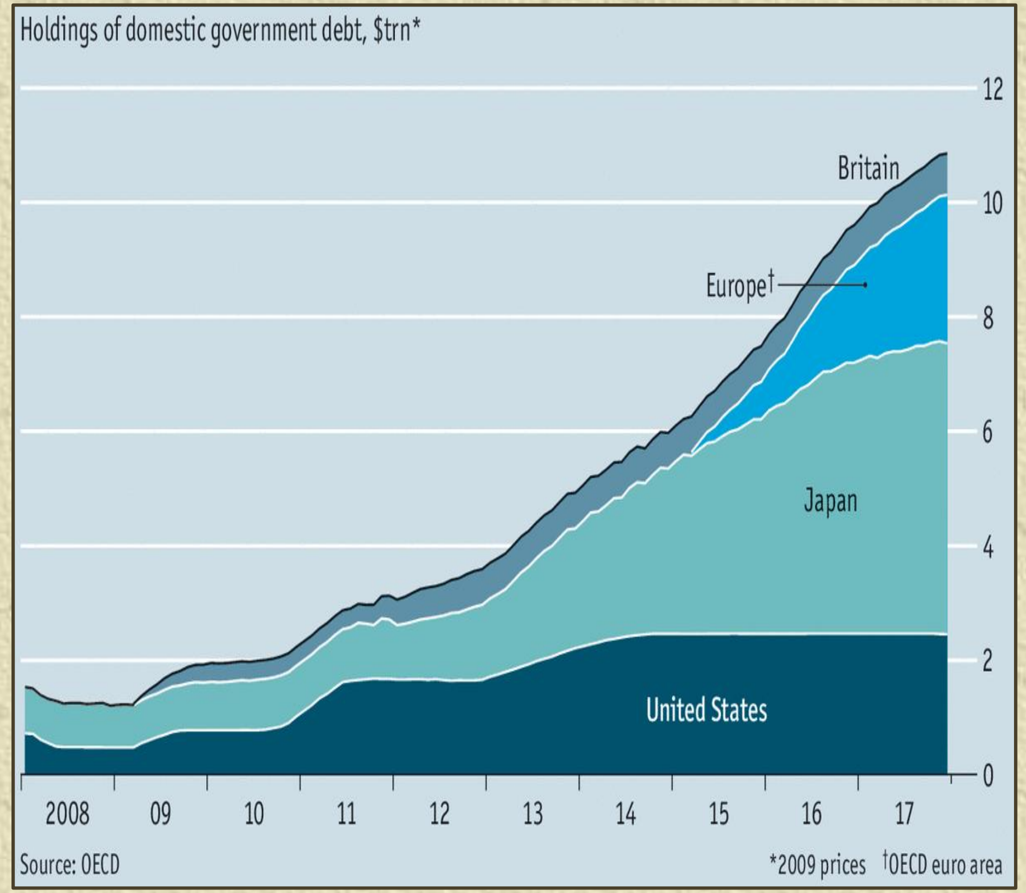
Fin Times, "Monetary policy: An unconventional tool", 6 Oct 2014, p. 7

Taper tantrum: Fed announced scaling down of QE in 2011; ↓D for bonds by Fed → ↓P bonds (↑ yld); so investors acted first by selling

Domestic Macro Concerns, . . . continued

- ECB's QE and CBs' holding of domestic gov't debt

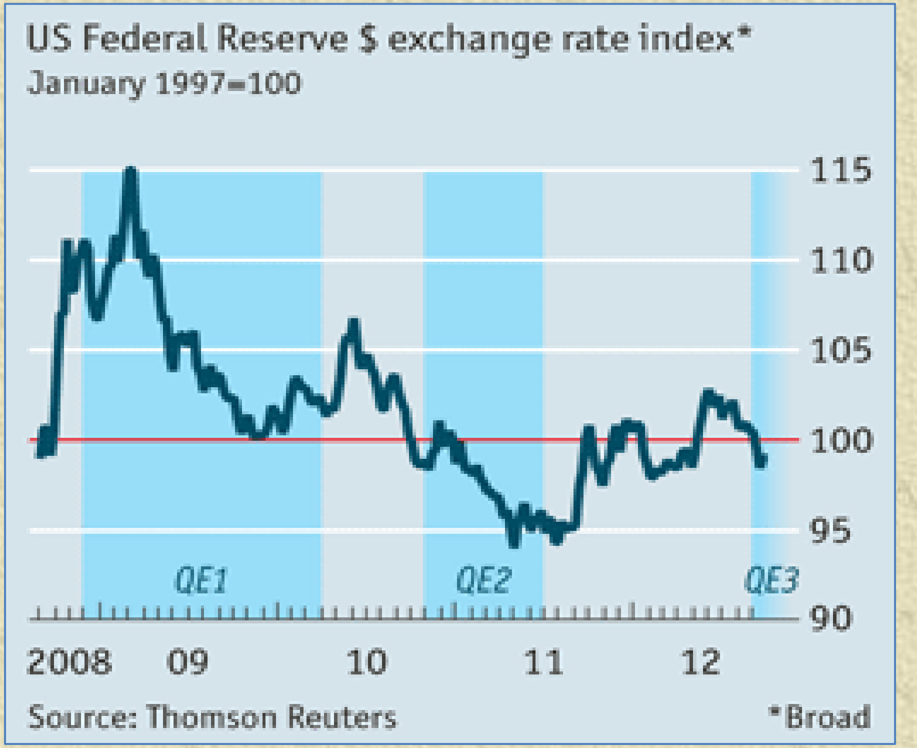




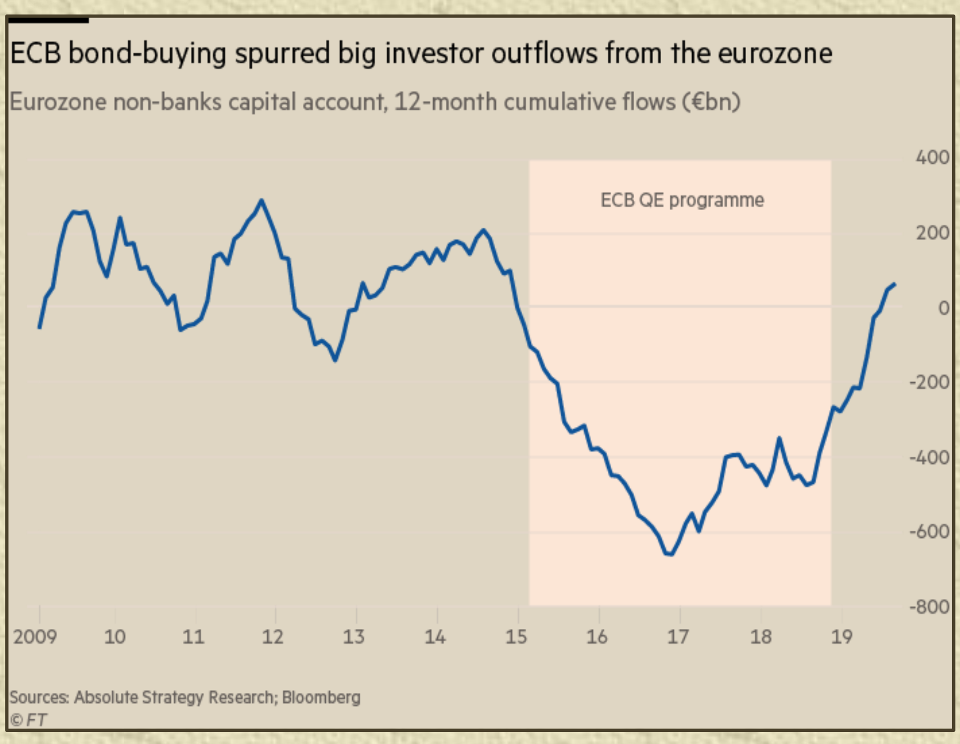
Economist, "Central banks", Economic and Financial Indicators, 2 Jun 2018, p. 81.

Domestic Macro Concerns, . . . continued

- QE: Implications for currency mkts
  - 2010: Brazil's finance minister accuses US of currency war (↓$)
    - ↑ $ value until QE2
    - Brazilian real weakened



Economist, "Currencies: The weak shall inherit the earth", 6 Oct 2012.

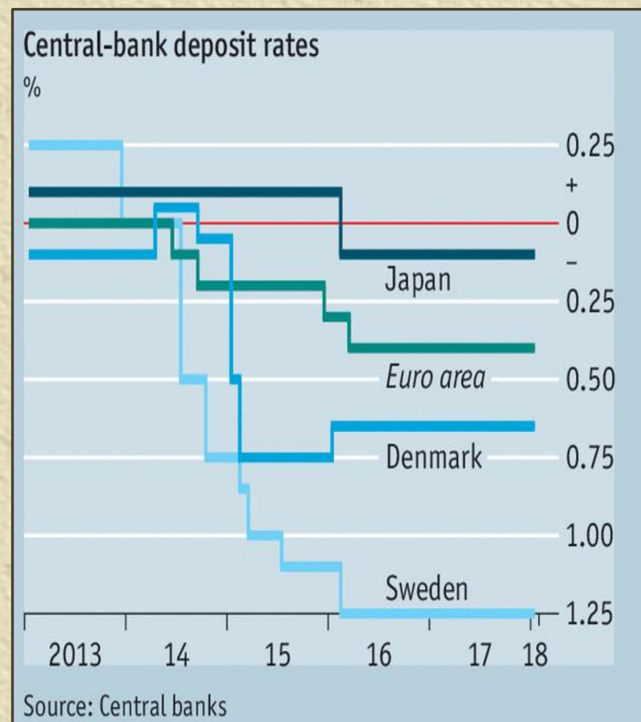


2016-19: ↑K-out of euro area (at fast pace). ECB bought €2.6 trn in debt. Investors selling bonds under QE program bought fc assets

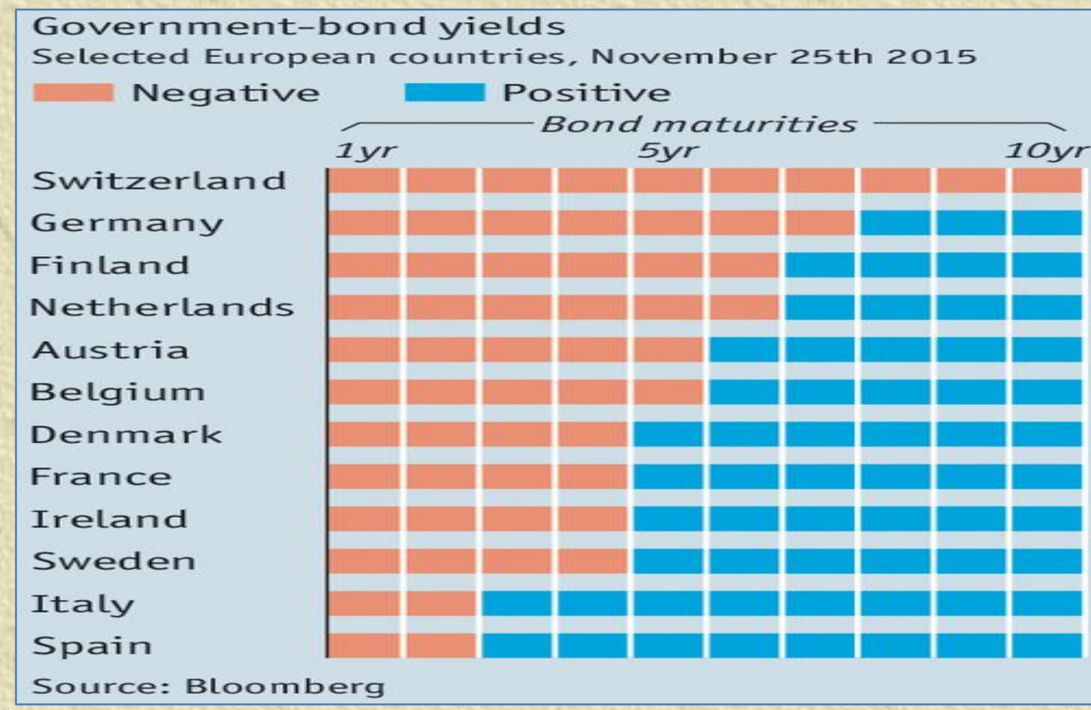
Financial Times, "Flood to trickle: QE round to bring reduced cash outflows from eurozone", 30 Oct 2019, p. 11.

Domestic Macro Concerns, . . . continued

- Negative i-rates: Fisher (1930) and Gesell (1916)
  - Rethink on i-rates: zero lower bound vs neg
  - Biggest users of neg i-rate
    - Switz: prevent ↑ CHF value; Japan had low yields since 1990s
    - Germany: bond yields had been low before € crisis



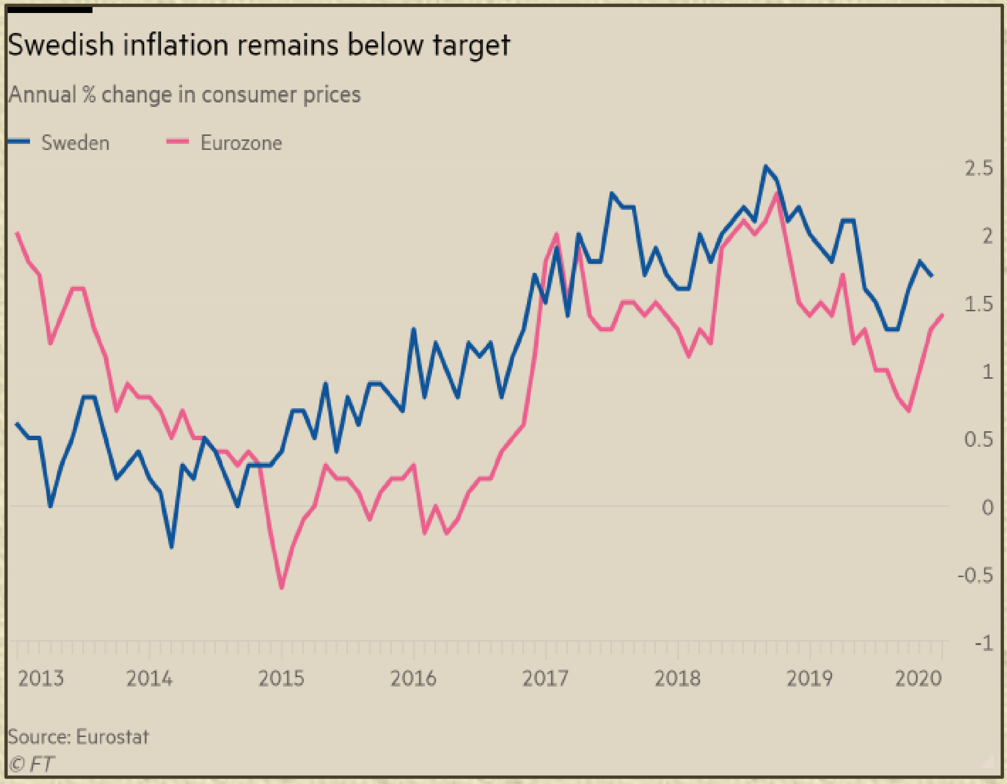
Economist, "Free exchange: Negative justice", 3 Feb 2018, p. 63

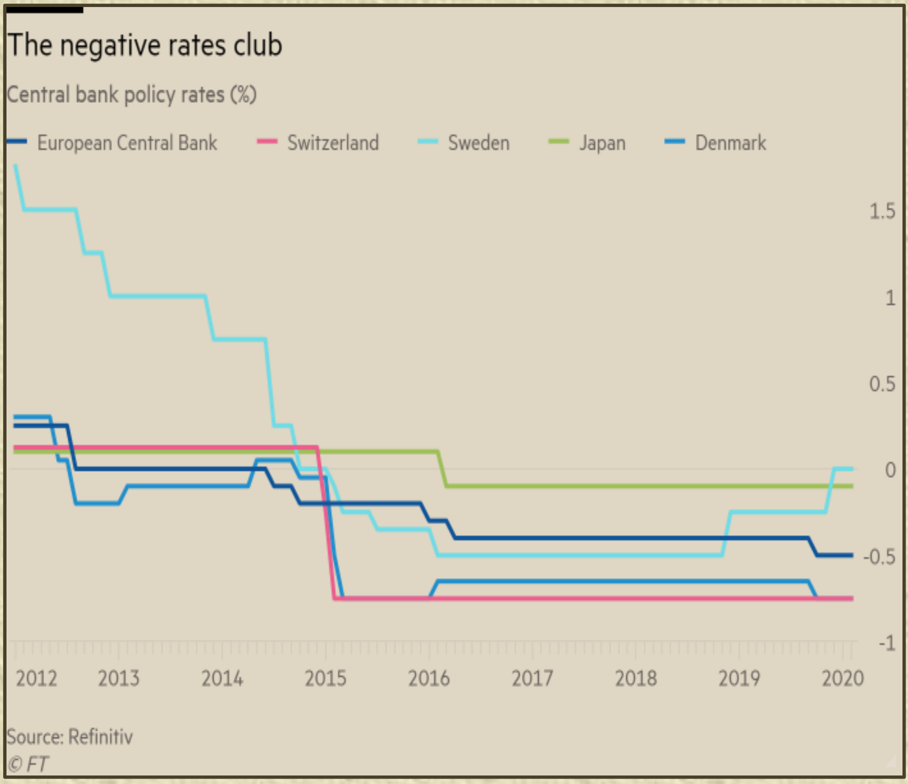


Economist, "Negative interest rates: Bankers vs mattresses", 28 Feb 2015, p. 63-4.

Domestic Macro Concerns, . . . continued

- Swedish experiment with neg i-rate ended Dec 2019





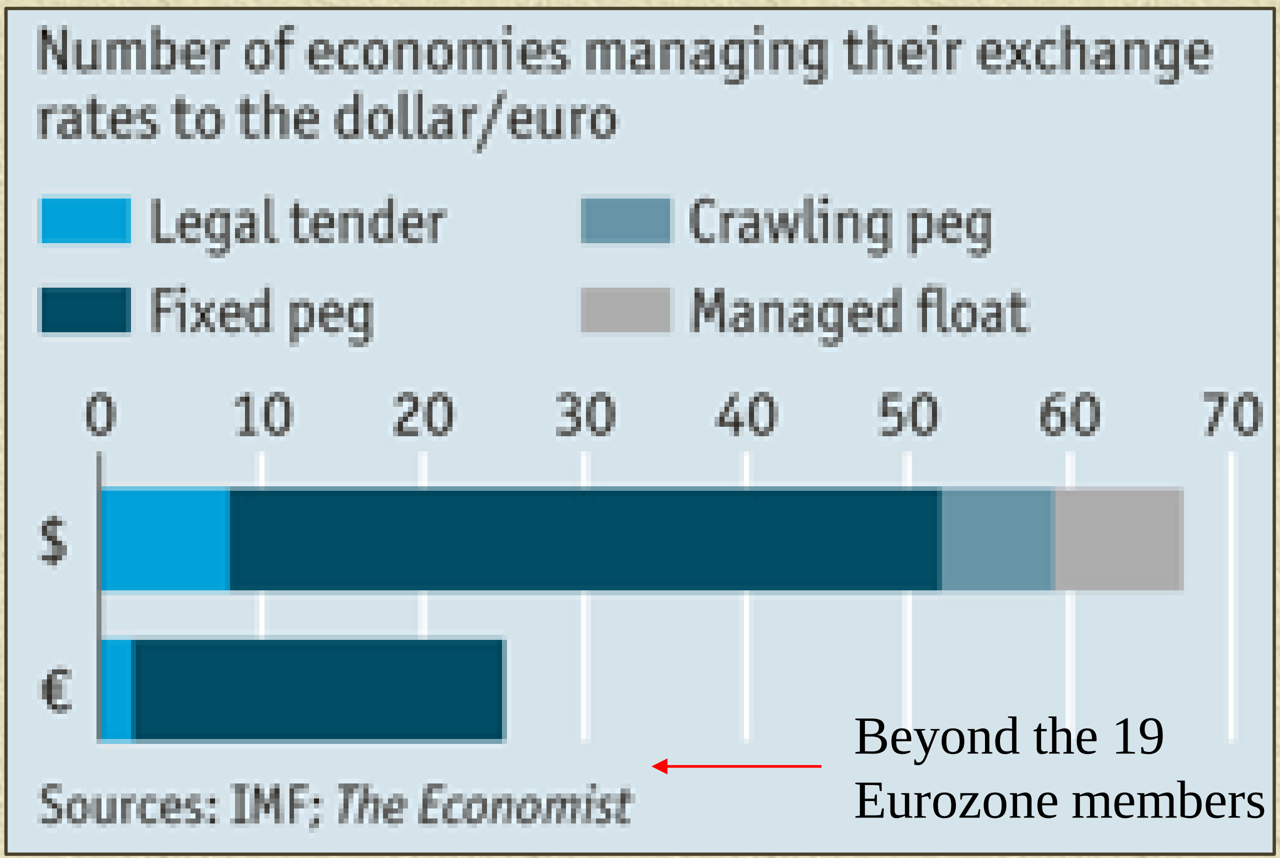
Riksbank decision, let i=0: Neg i-rates boosted real estate prices, HH and firms took on more debt; cheap loans keep zombie firms alive; lowered productivity;

Switzerland kept it to avoid increase in value of CHF

Financial Times, "Why Sweden ditched its sub-zero experiment", 21 Feb 2020, p. 7.

10. Alternative Exchange Regimes

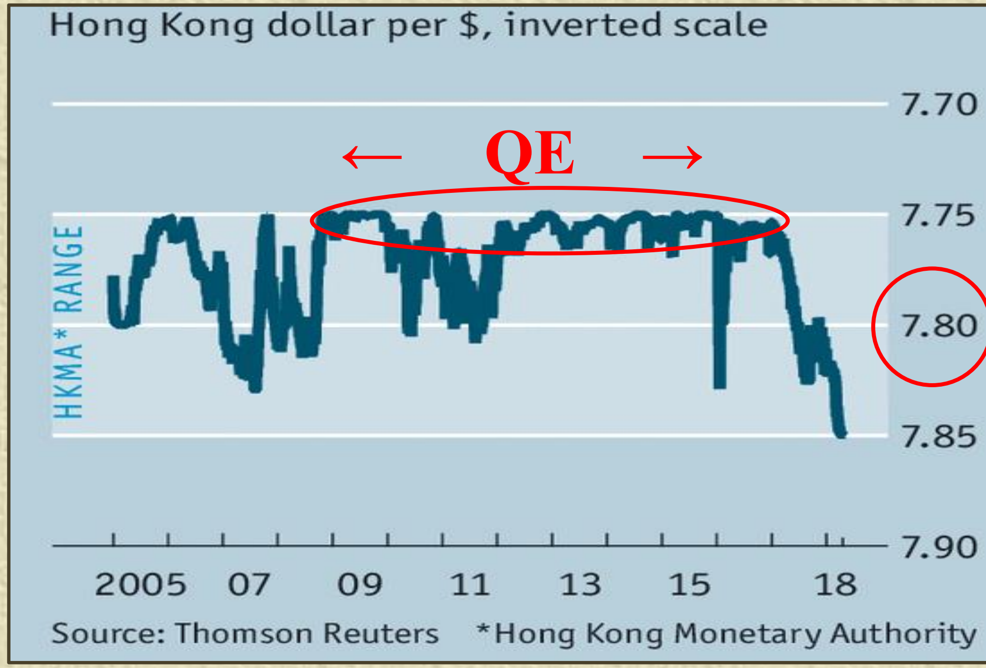
- From flexible regimes to fixes



Economist, "Currency pegs: Poor dollar standard", 13 Aug 2011, p. 57

Alternative Exchange Regimes

- Hard fixes: currency board, dollarization, monetary union



1983: Hong Kong $ pegged to $US at 7.8.

2005: band-peg, buy $US at HK$7.75 and sell $US at HK$7.85.

2008: US QE → ↓ i-rates and promise to keep i low; HK's economy overheats, ↓ u and property boom; under flexible E, HK$ value and i_{HK} would ↑. Instead, ↑P and real i-rate went negative. E is fixed, but W, P are flexible up and down.

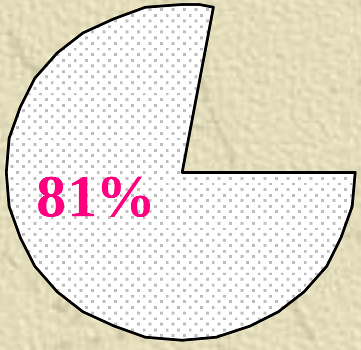
Economist, "Hong Kong dollar: Pershing missile", 24 Sep 2011, p. 92 and "Reserve peg", 21 Aug 2018, p. 65.

11. European Monetary Union

11.1 Case study of MU in eurozone

- Free trade in goods/services over integrated area
  - Single market initiative supports intra-regional trade
  - Intra-regional trade

Intra-regional trade as % of total, 2016



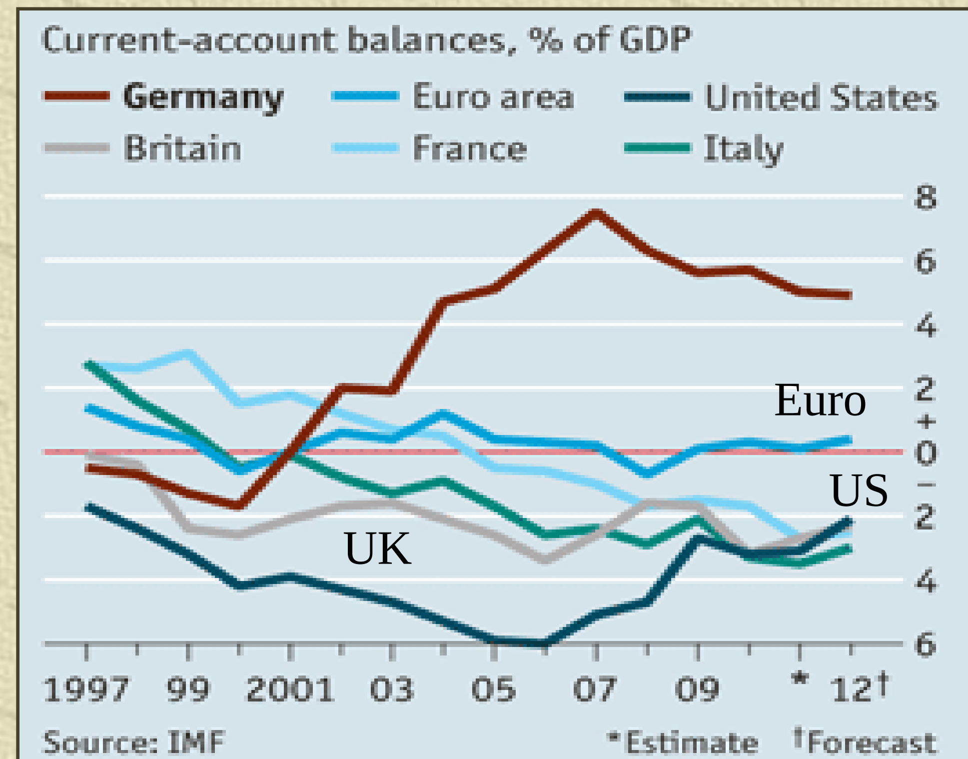
EU

Source: WTO

Economist, "Trade in Latin America: Unity is strength", 10 Mar 2012, p. 19

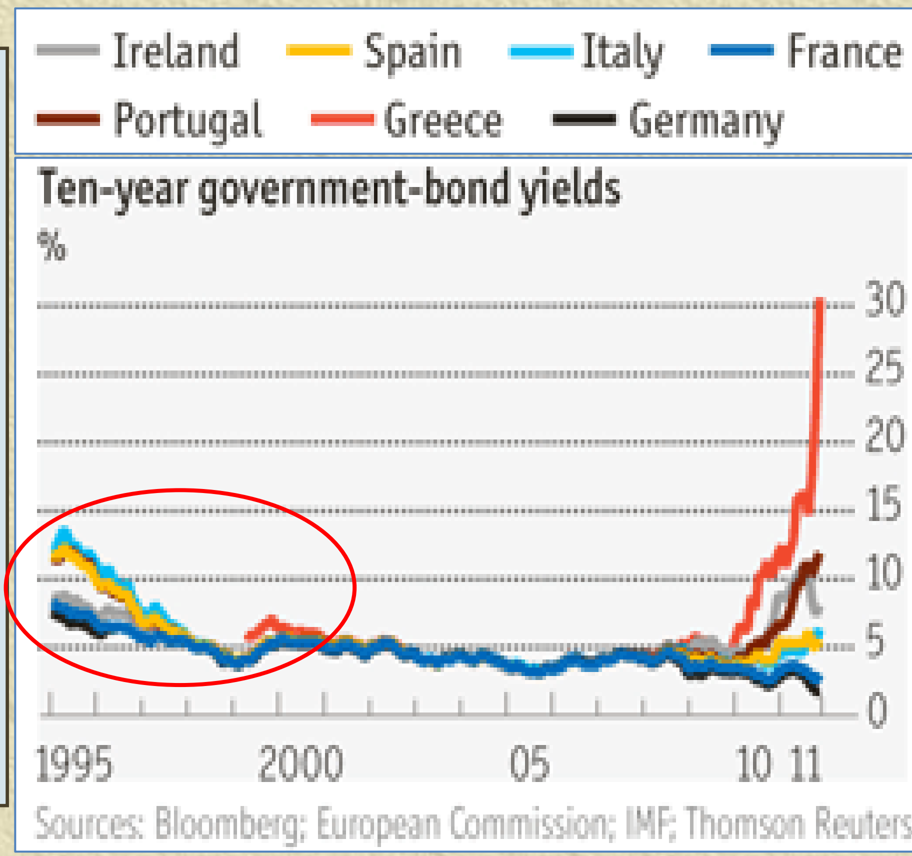
European Monetary Union, continued . . .

- Overall Eurozone BOT ≈ 0 masked underlying imbalances



The origins of the GFC and the euro crisis were macro imbalances and failure of the financial system's mgmt over supervision.

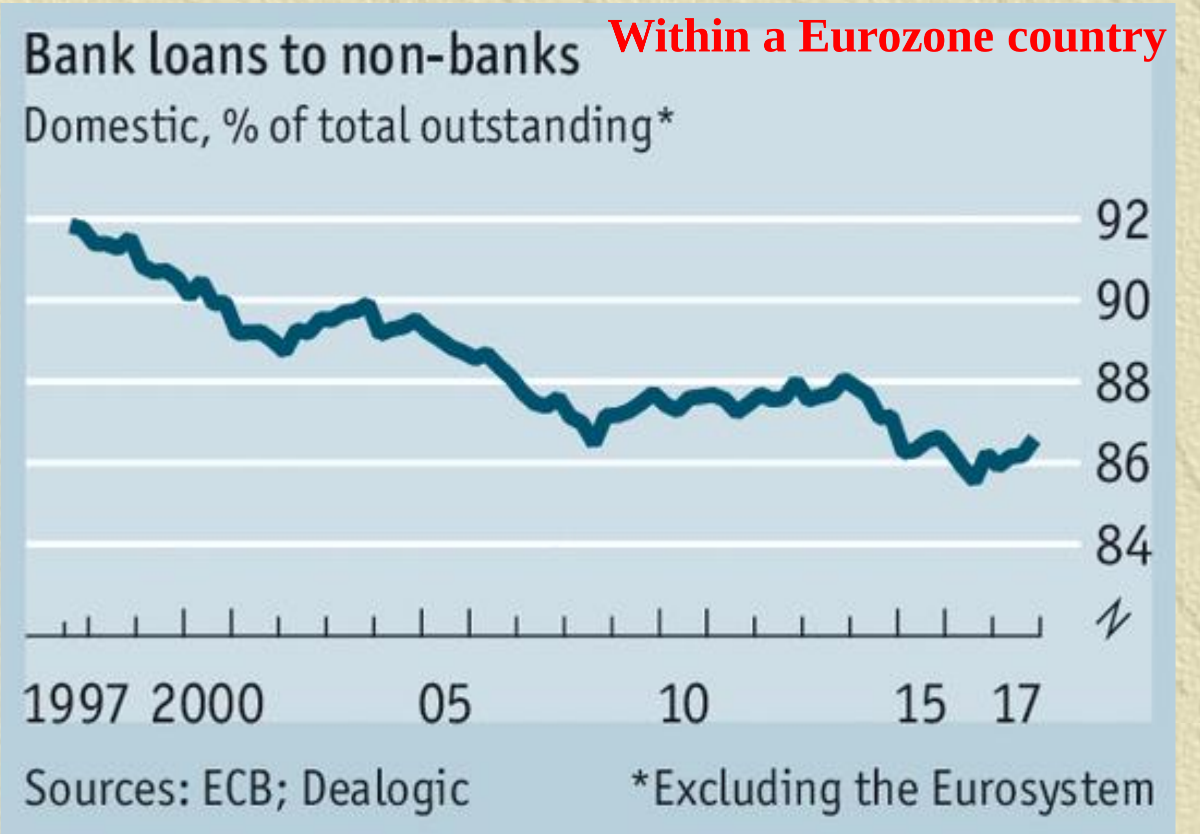
- Integration of K-mkts
  - Convergence in i-rates



Economist, "The causes: a … short history", Special report on Europe and currency, 12 Nov 2011.

European Monetary Union, continued . . .

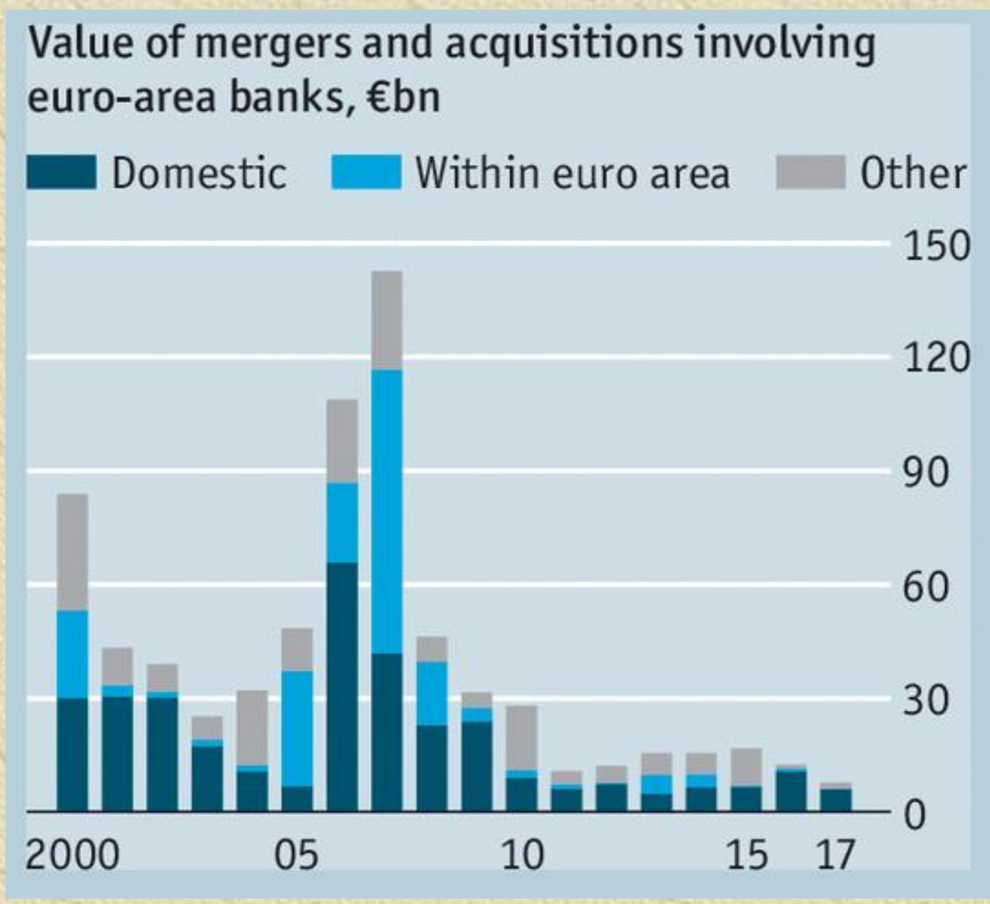
- Eurozone banking mkts still essentially national
  - Pan-zonal banks would ↓ risk of intertwined lenders and national gov’ts
    - 7/8 of lending is domestic
    - 3/5 of banks holdings of corporate and gov’t bonds are from “home”



Economist “European banks: Fumbling in the dark”, 14 Jul 2018, p.63.

European Monetary Union, continued . . .

- Trend toward K-mkt integration thru M&A activity – before crisis



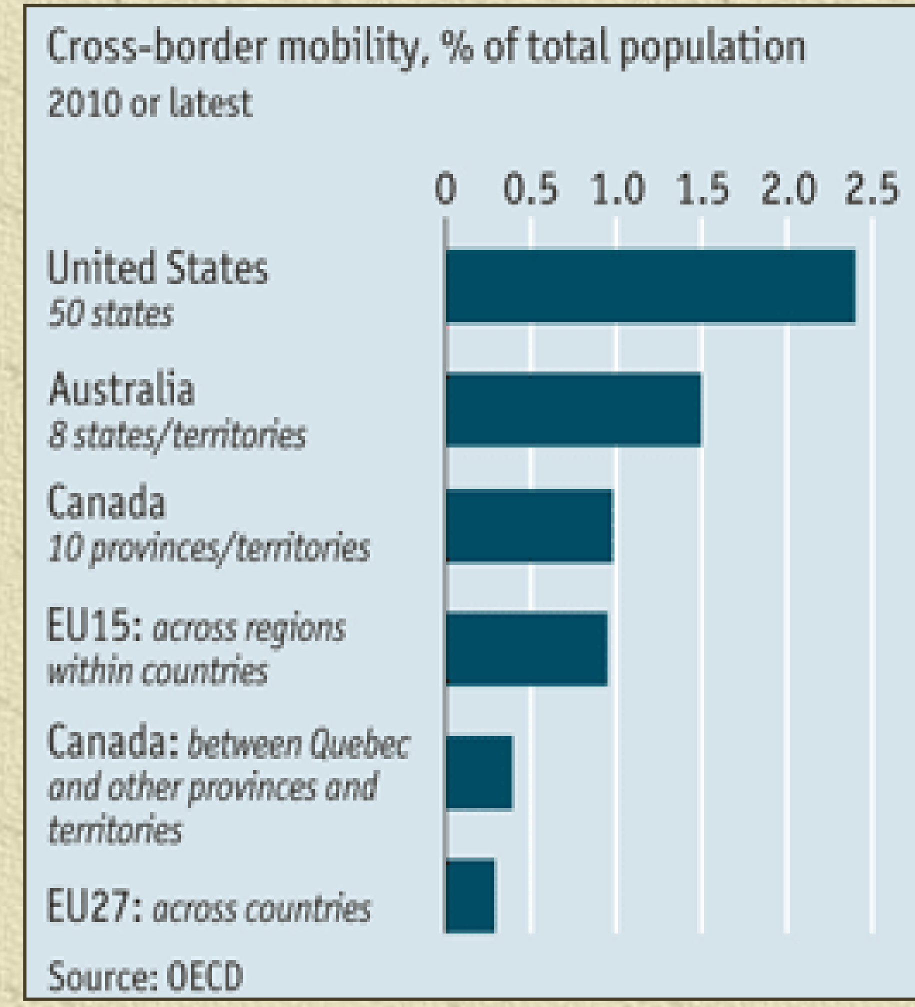
Economist, "European bank mergers: Passport check", 28 Mar 2015, p. 70-1; and "European banks: Fumbling in the dark", 14 Jul 2018, p.63.

Regulators still not keen on the idea (incomplete banking union).

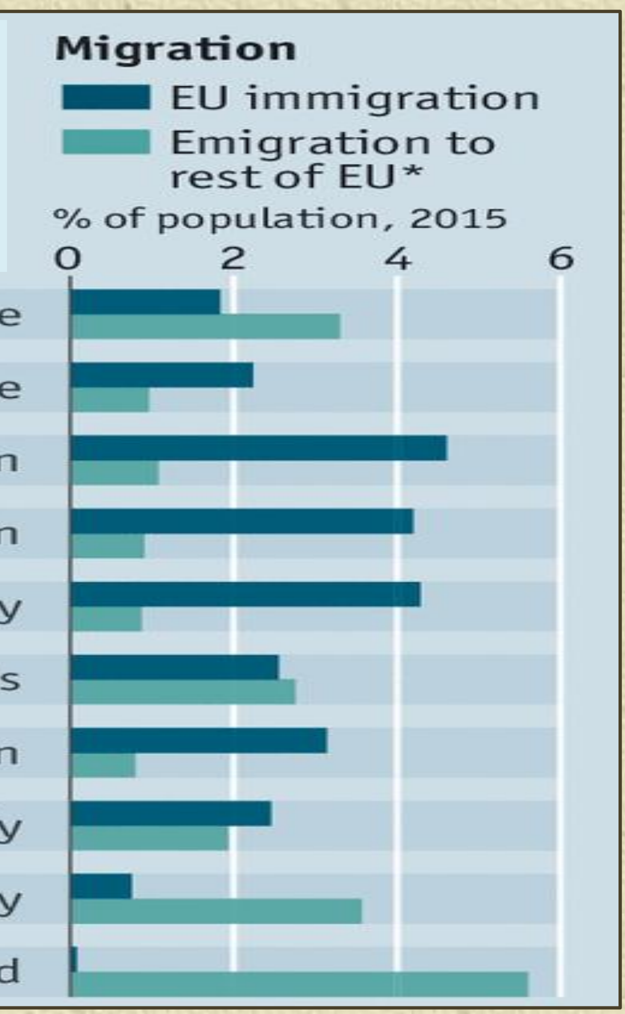
- Big banks that operate across eurozone complain that local regulators prevent a bank from putting deposits raised in Germany to use in K-scarce areas of the eurozone.
- The ECB as a single regulator has not changed much: more leniency on the liquidity side but none on capital side
- Concern is scale is offset by complexity of cross-border banking – need banking union.

European Monetary Union, continued . . .

- Integrated EU labor markets
  - Labor mobility



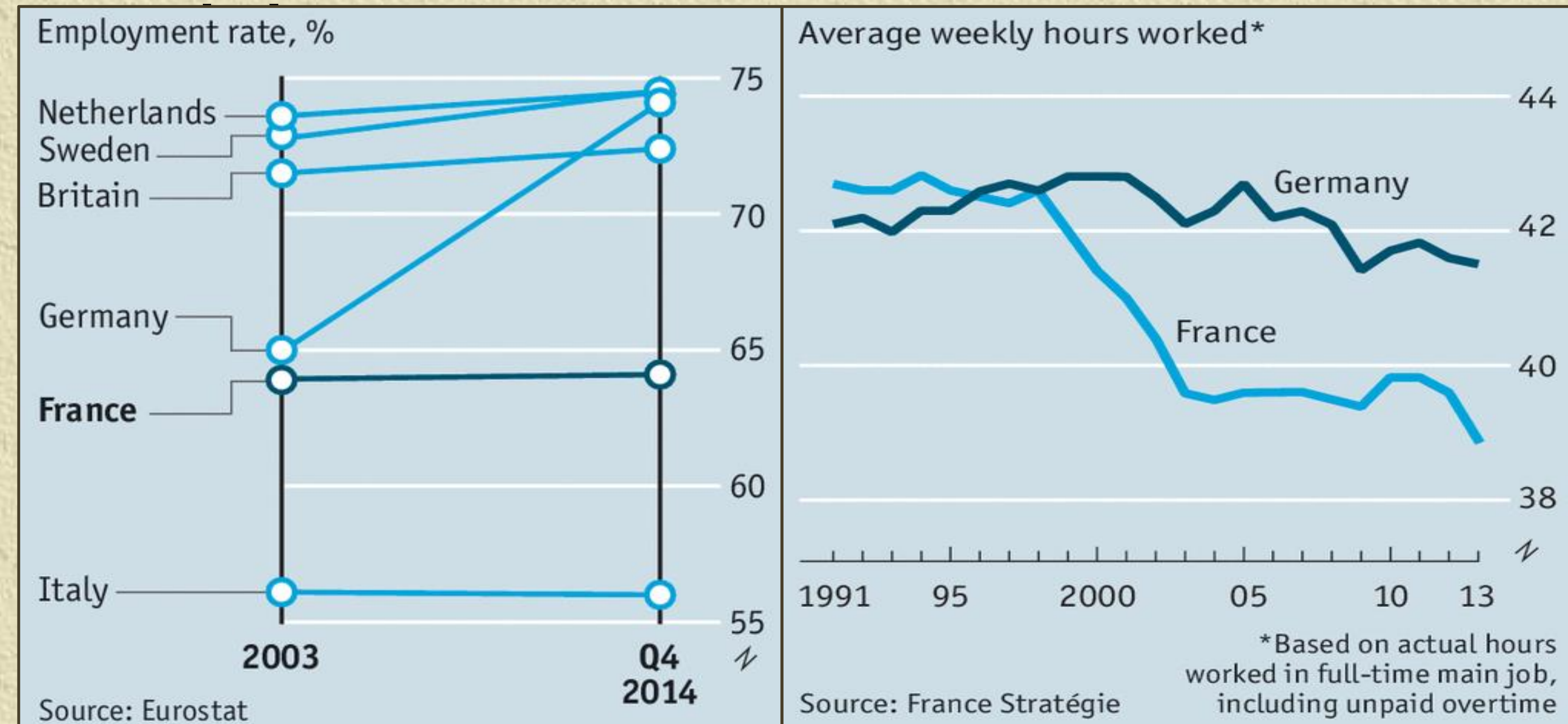
Selected countries in EU



Economist, “Building euro-zone competitiveness”, 28 Apr 2012 and “Brexit: An aggravating absence”, 2 Jul 2016, p. 19-20.

European Monetary Union, continued . . .

- Employment patterns after EU L mkt reforms; average hours



In 2003, France and Germany had similar employment rates and both broke euro stability-pact rule not to exceed 3% budget deficit ceiling agreed in 1997. Germany used its fiscal space to become more competitive and loosen its labor mkt. France introduced a 35-hour work week.

Economist, “France and labour-market reforms: Holland’s … journey”, 25 Apr 2015, p. 23-4.

European Monetary Union, continued . . .

- Wage flexibility: unit L costs, internal devaluation and competition

German unit L costs fell in 2000. This helped Germany's competitiveness (at a cost to domestic demand).

In the wake of the 2008 crisis, workers struck deals that prevented job cuts in return for moderate wage increases or pay cuts.

Economist; *Fin Times*, "Germans in a bullish mood", 30 Jan 2018, p. 2.

European Monetary Union, continued . . .

- Productivity and wages

Financial Times, "Macron and the battle for the eurozone", M. Wolf, 17 May 2017, p. 9.

European Monetary Union, continued . . .

- Tax wedge (% of labor costs) and unemployment rates differ

France's high tax wedge on employment reflects its costs of unemployment-insurance, social charges and costs-related to job protection, i.e., it is a measure of labor inflexibility. Different unemployment rates suggest immobility.

Economist, "Labour reforms in Europe: Slowly doing better", 25 Apr 2015, p. 24-5

European Monetary Union, continued . . .

- Employment protection indicator

OECD job protection index shows southern European countries did most in response to the euro crisis to liberalize firing of workers. Flexibility matters. Despite Germany's high job protection score, its labour market functions because its collective bargaining has been adaptable – firms can strike deals with labor.

Economist, "Labour reforms in Europe: Slowly doing better", 25 Apr 2015, p. 24-5

European Monetary Union, continued . . .

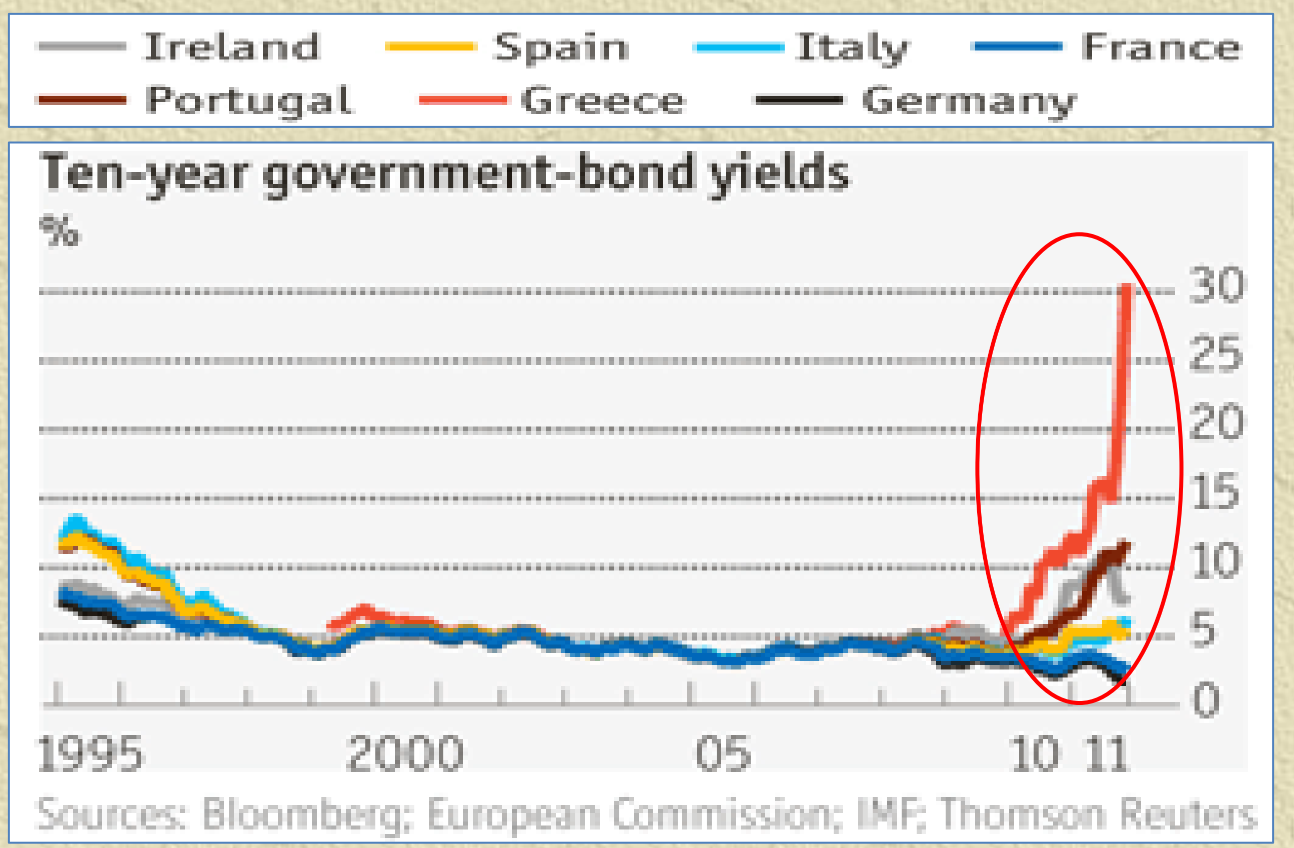
- Fiscal stabilization in euroarea
  - Not envisioned
    - Small EU budget
    - No bailouts
    - G>T: 3% GDP
    - Debt level: 60% of GDP

Federal transfers in US

European Monetary Union, continued . . .

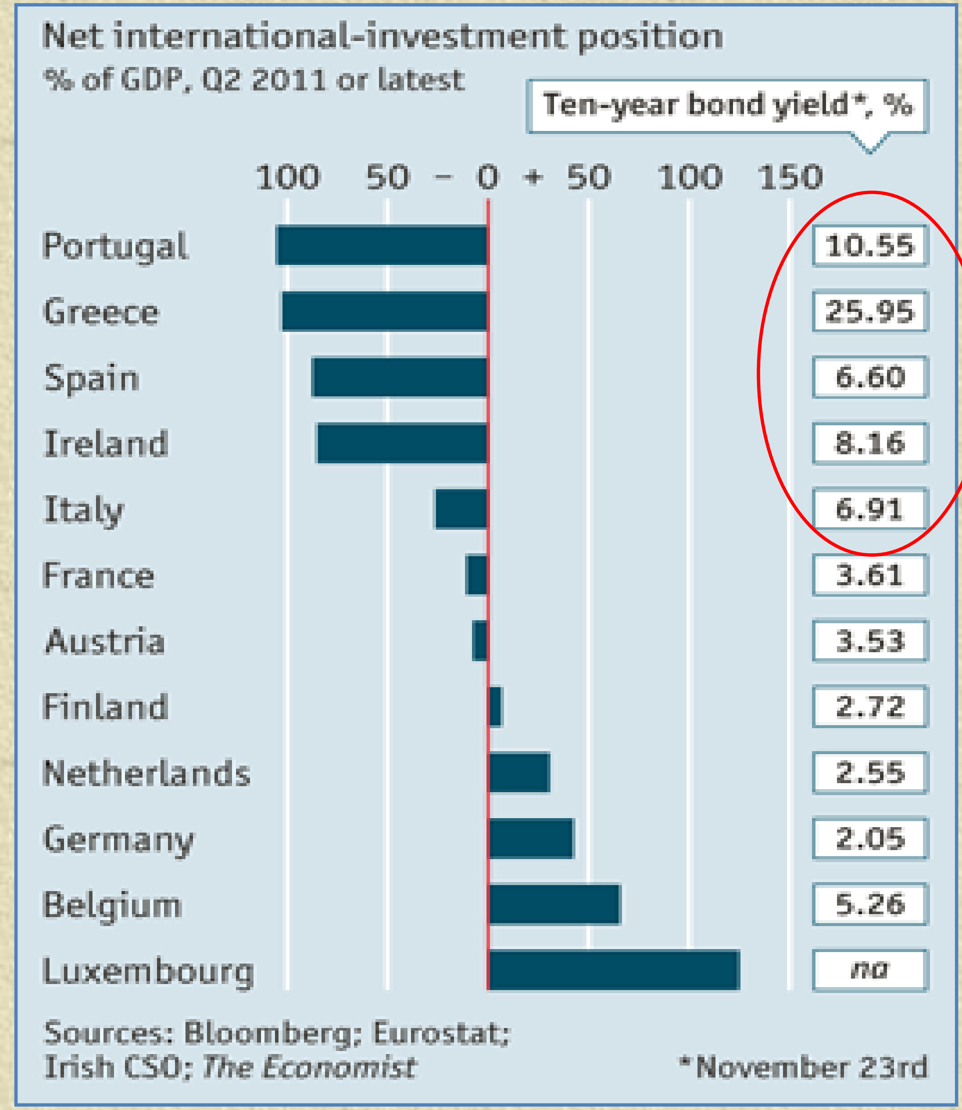
11.2 The euro crisis

- Pre-crisis: Maastricht Treaty shortcomings
- Initial response wrong or slow
- Signs of a financial crisis



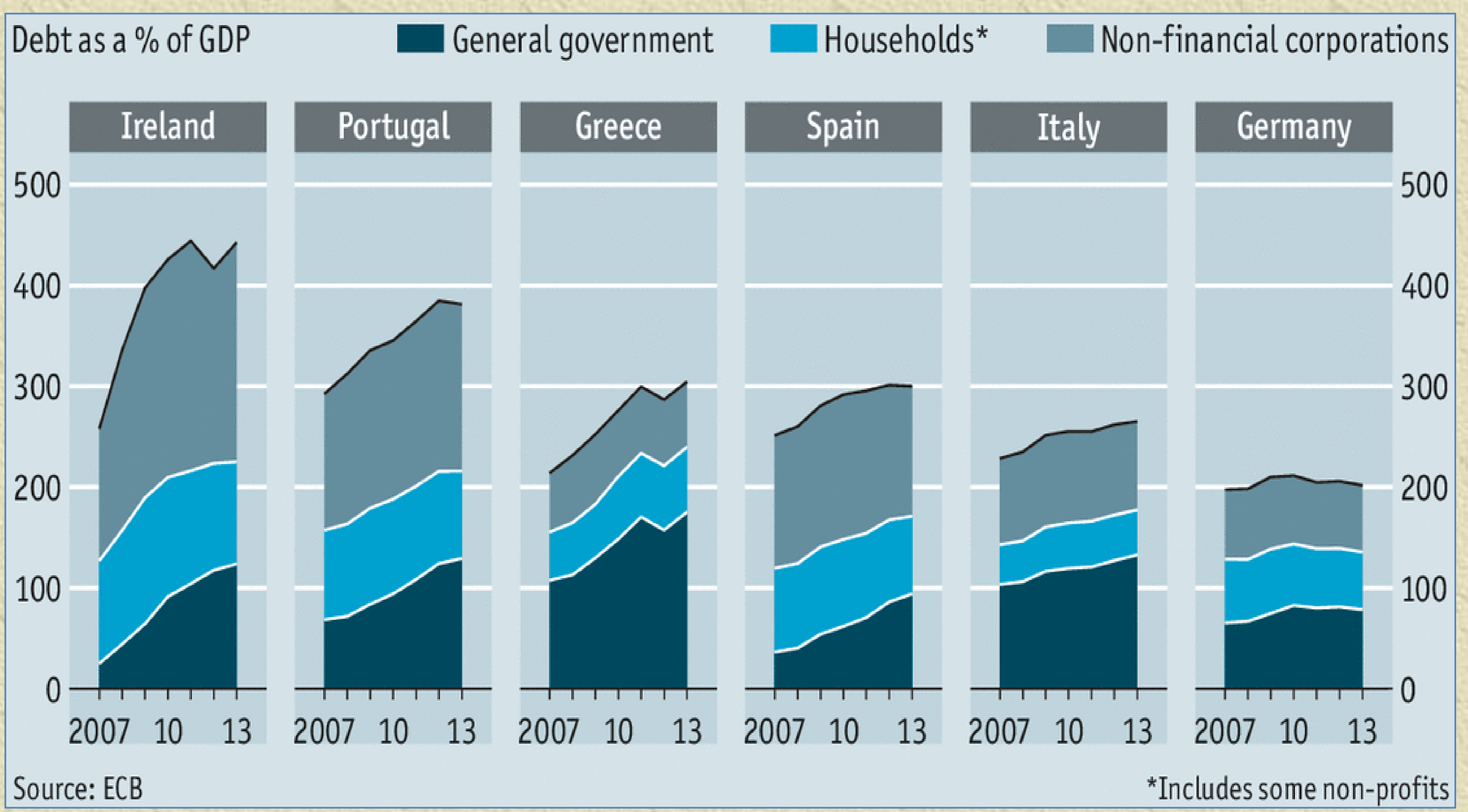
European Monetary Union, continued . . .

- Differing net int'al investment position



European Monetary Union, continued . . .

- Debt as % GDP



European Monetary Union, continued . . .

- Exposure of foreign banks to debt from PIIGS

The exposure to the debt shows how integrated K-mkts became interlinked in banking and finance. Solving the euro crisis became a necessity within and without the Eurozone.

European Monetary Union, continued . . .

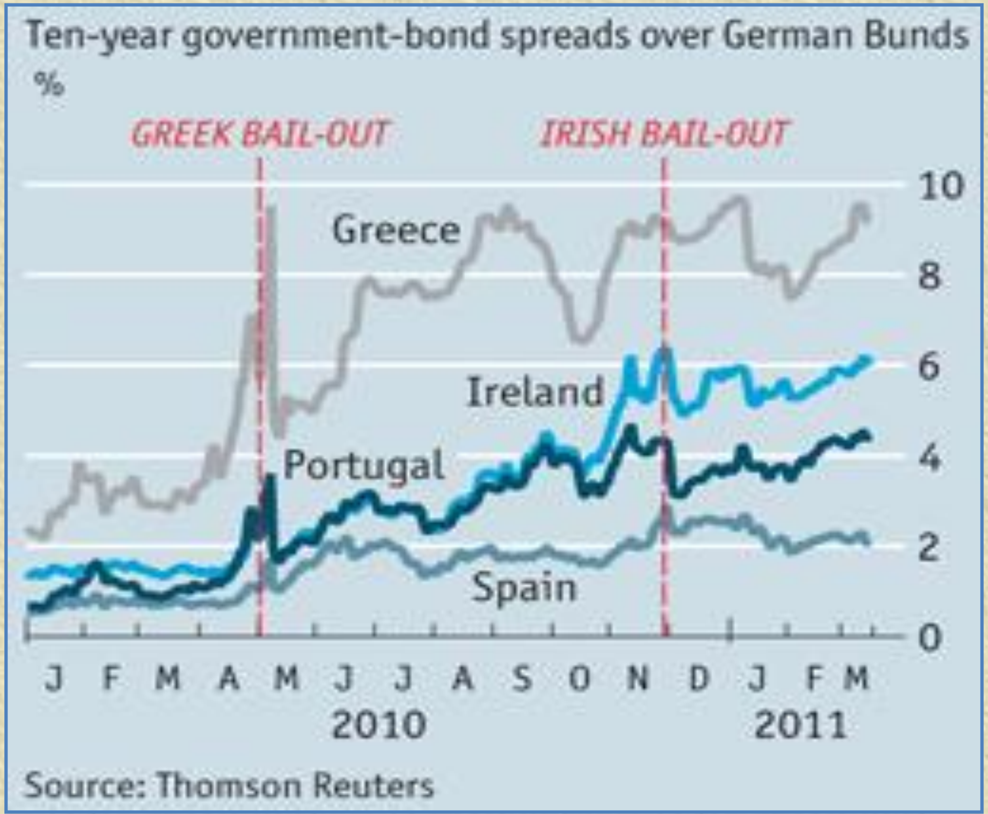
- Convergence – divergence: video, St. Louis Fed, 4:08 minute mark to 9:05 mark

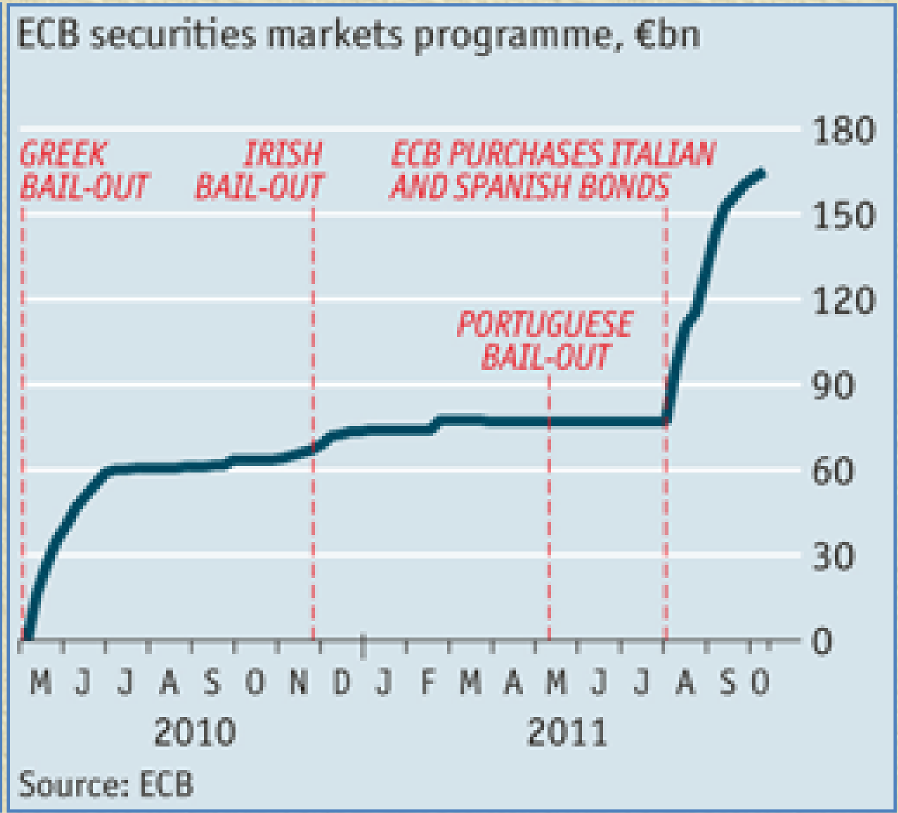
http://www.stlouisfed.org/publications/ar/2011/index.cfm

European Monetary Union, continued . . .

11.3 Chronology of EU's response to euro crisis

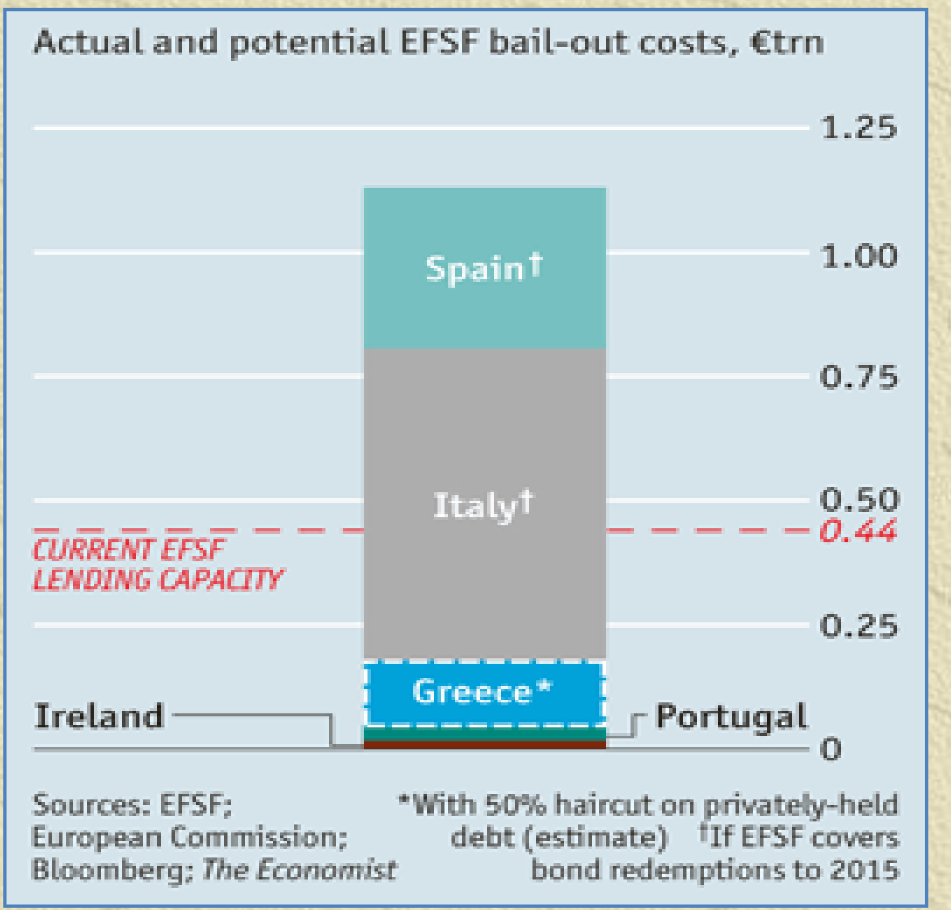
- ECB only existing institution able to react
  - 2007: ECB's light version of credit easing
  - 2010: ECB Securities market program – light QE





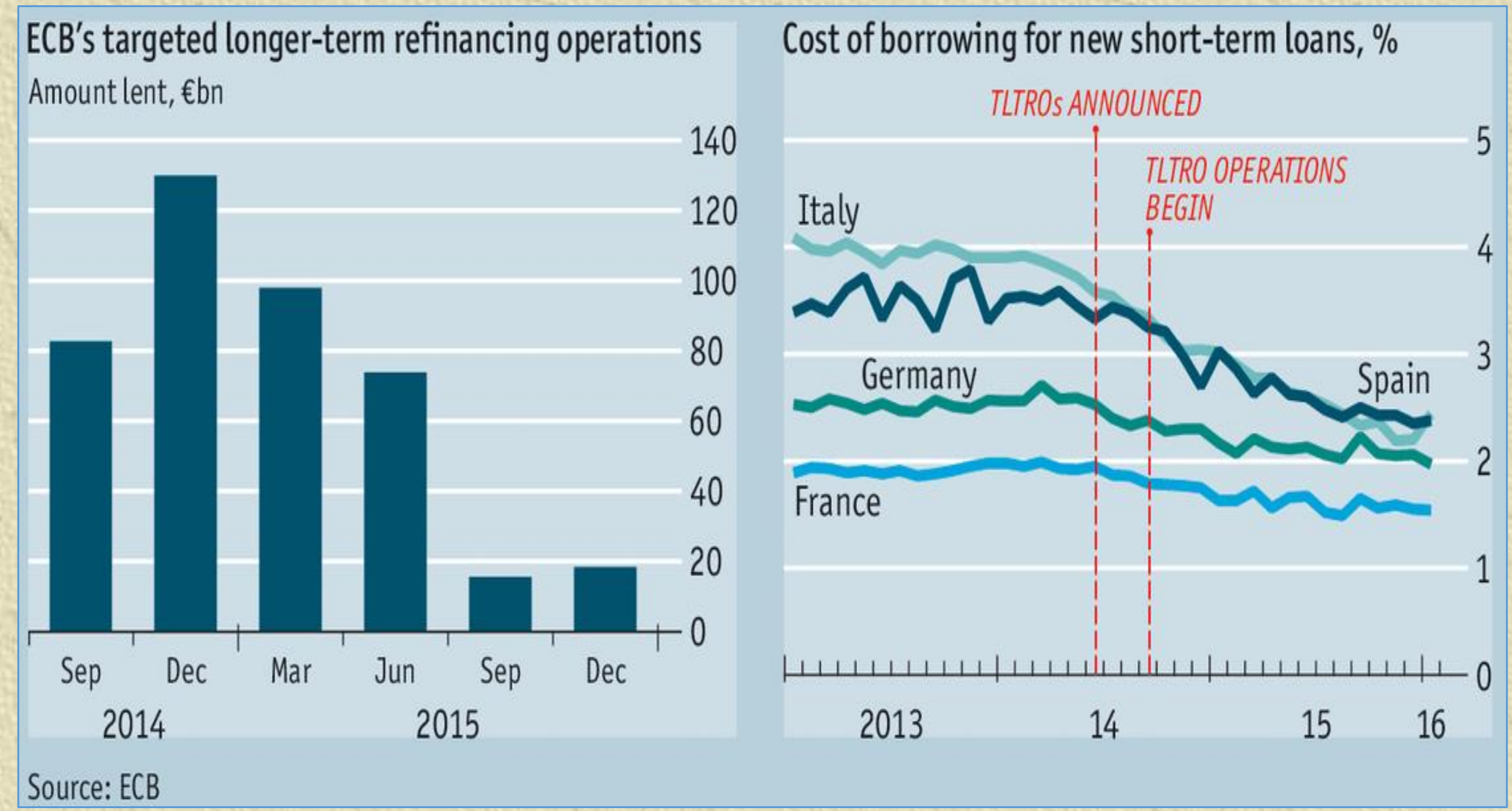
European Monetary Union, continued . . .

- Non-ECB financial stabilization mechanisms – moves asset purchases away from ECB
  - 2010: European Financial Stabilization Facility (EFSF)
    - Issuing debt to raise funds
    - EFSF funds rose to €750bn from EC funds and EU guarantees and the IMF
  - 2012: European Stability Mechanism (ESM)
    - Permanent mechanism
    - ↑ lending capacity of €500bn + €700bn in guarantees



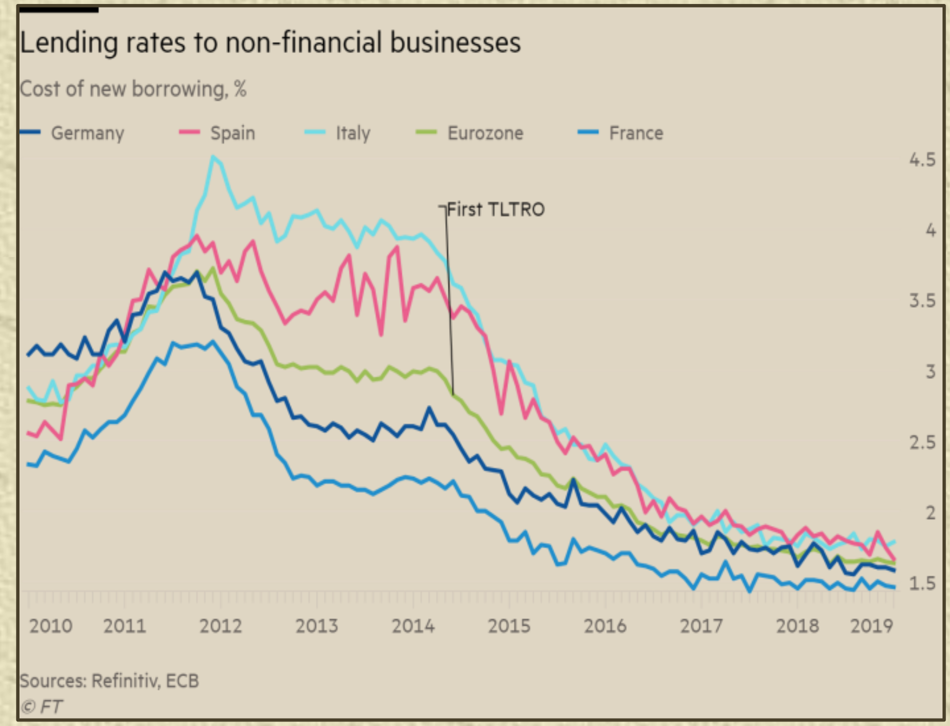
European Monetary Union, continued . . .

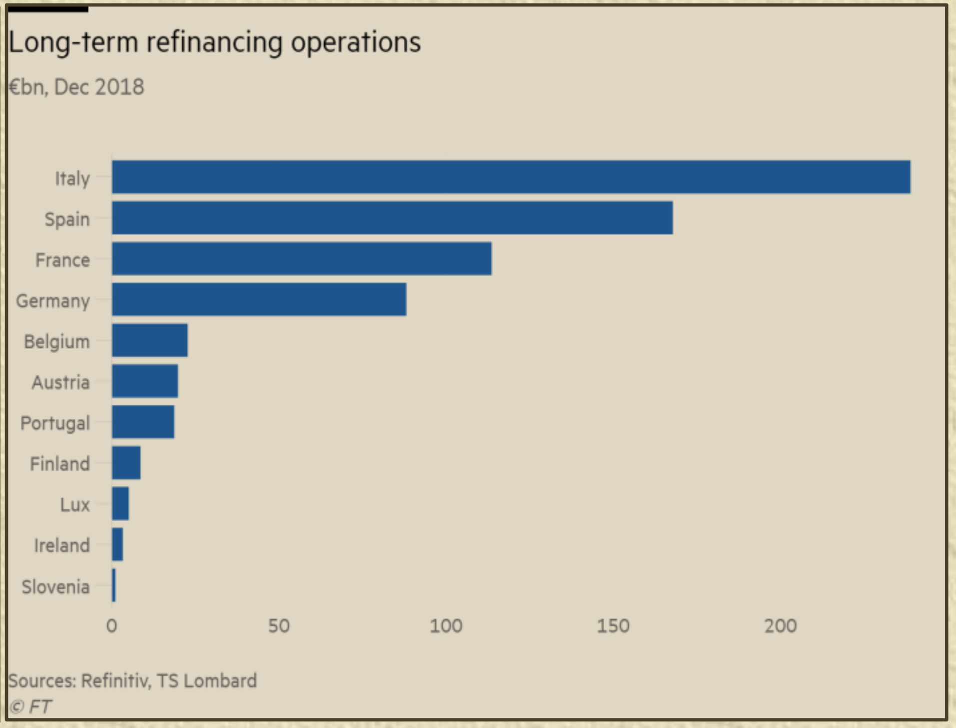
- ECB signals low long-term i-rates
  - Long-term refinancing operations (LTRO) by ECB
    - 2011-12: LTRO - cash injections to banks
    - 2014: Targeted LTRO to expand the program
    - 2016: Second round of TLTRO



European Monetary Union, continued . . .

- 2019: TLTRO III starts 2nd round's maturity date approaches



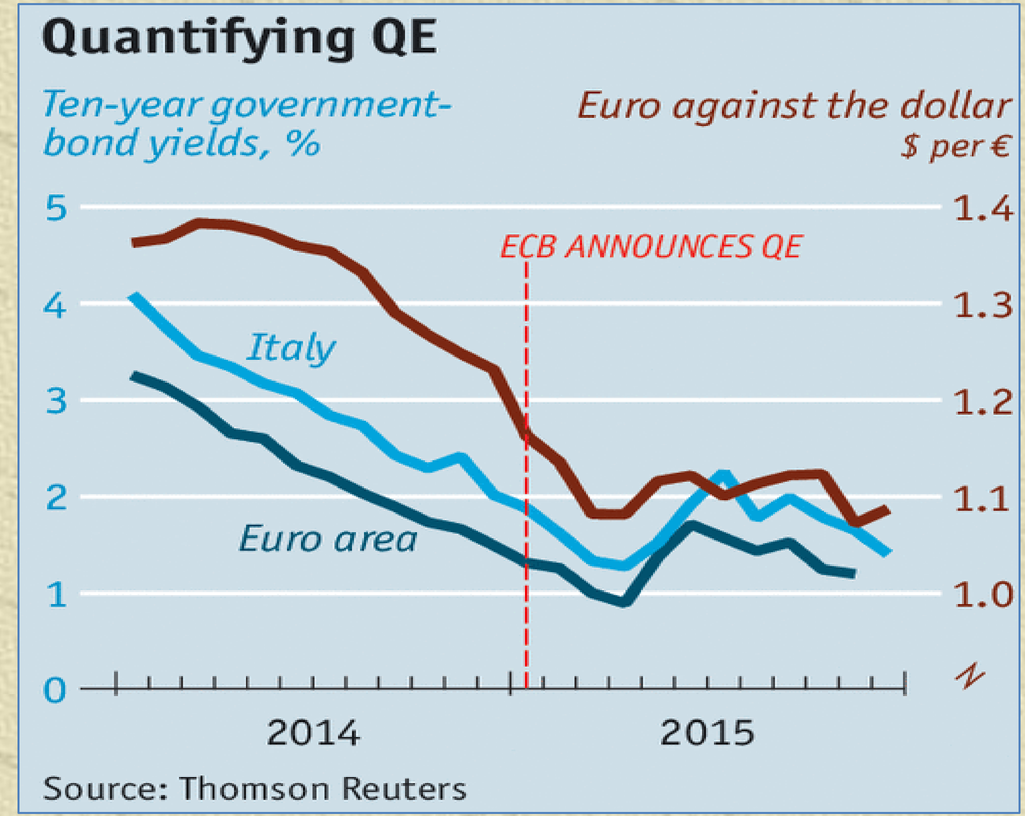


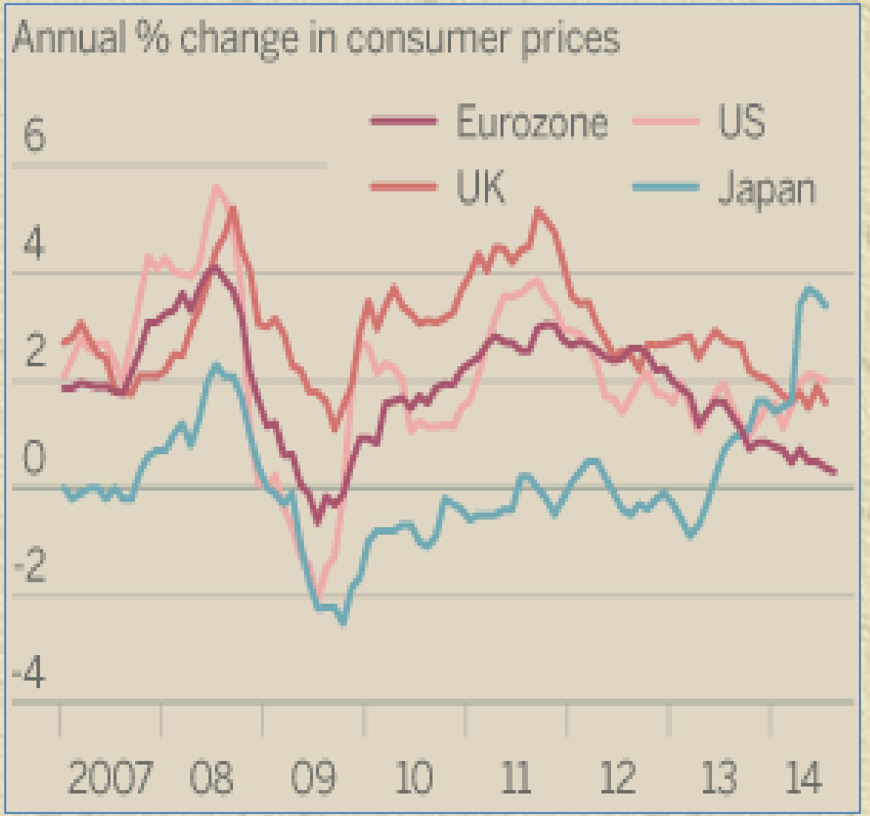
The differences in lending rates ↓ as higher rates in troubled countries ↓ as intended, but the appetite for debt across euro area faded. LTRO did not → ↑ steady lending despite rock bottom rates.

Financial Times, "ECB loans fail to ignite bank lending", 10 Apr 2019, p. 19.

European Monetary Union, continued . . .

- QE proper by ECB- 5 years after US, UK
  - 2014: Pursues QE aggressively despite critics
  - 2015: Purchases ↑ to €60bn/mo from €10bn/mo
  - 2018: ‘Tapering’ of purchases ↓ €80bn to €60bn no end date





European Monetary Union, continued . . .

11.4 Institutional mechanisms to prevent reoccurrence

- Mutualize debt: create a eurobond
  - ESM necessary but not sufficient
  - EC Commission's proposal: blue and and red bonds failed
  - Next-Gen EU: €750bn stimulus – 1 time mutually back debt

- Fiscal union: stabilization, coordination & governance
  - New rules on (G-T)>0 (3% of GDP), debt (<60% of GDP)
  - Supra-nat'al surveillance on fiscal budgets

- Banking union: 3 pillars
  - ECB: single supervisor and single resolution authority
  - No joint deposit-insurance (tabled is €100 000 insurance)

- Three pillars

Fully-fledged banking union

Single supervisory Mechanism (SSM)	Single Resolution Mechanism (SRM)	Single Deposit Guarantee Scheme
* Homogenous supervisory stds across euroarea * ECB directly supervises 128 biggest banks, 85% of toal euro-area bank assets * Comprehensive assessment of banks (stress tests)	* Single authority responsible for resolution of euro area banks * Resolution financed by shareholders and creditors (bail-in = 8% of total liability (pre-defined liability * Bank levies (at nat'al level) to raise funds	* No single deposit scheme created * Harmonized deposit guarantee scheme as set out in Single Rule Book * Deposit guaranteed up to €100,000 everywhere in EU * Funds from deposits collected from banks over 10-yr period

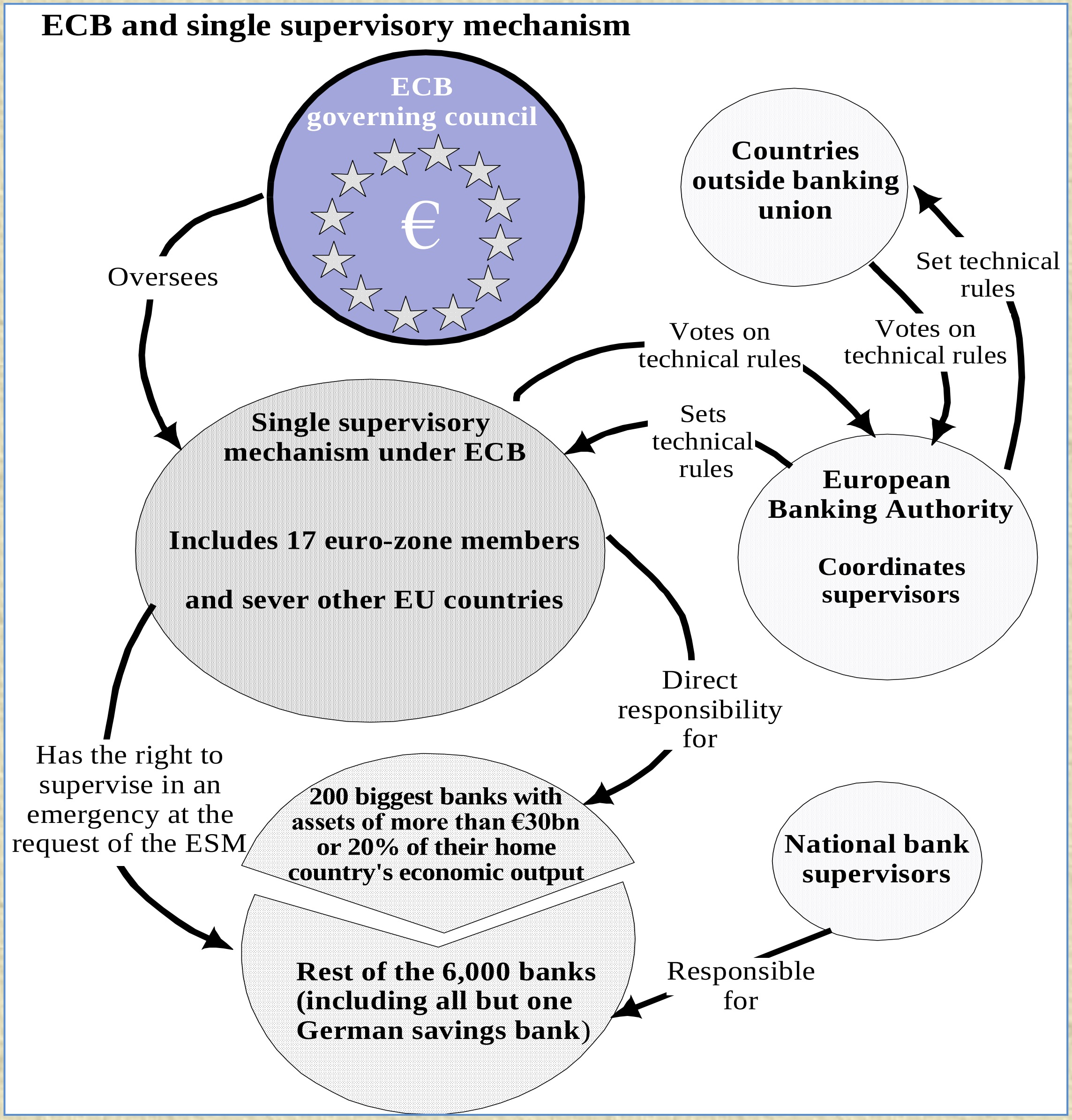
Based on EU-wide rules for banks, the Single Rule Book, e.g, Dir. On Capital Requirements (Basel III) since 2014, Bank Recovery and Resolution and Deposit Guarantee Scheme (DGS) starting in 2015.

Banks no longer "European in life, but national in death". Bail-in should become the rule, bail-outs the exception.

Source: Allianz GI Global Capital Markets and Thematic Research, May 2014

European Monetary Union, continued . . .

- ECB's supervisory role



European Monetary Union, continued . . .

- Video clip, *Financial Times*, “How the euro was saved”

http://video.ft.com/3567899112001/How-the-euro-was-saved/World

European Monetary Union, continued . . .

11.5 Euro area institutional and policy response now

Pandemic suspensions: FP, state aid, transfers (Nextgen EU)

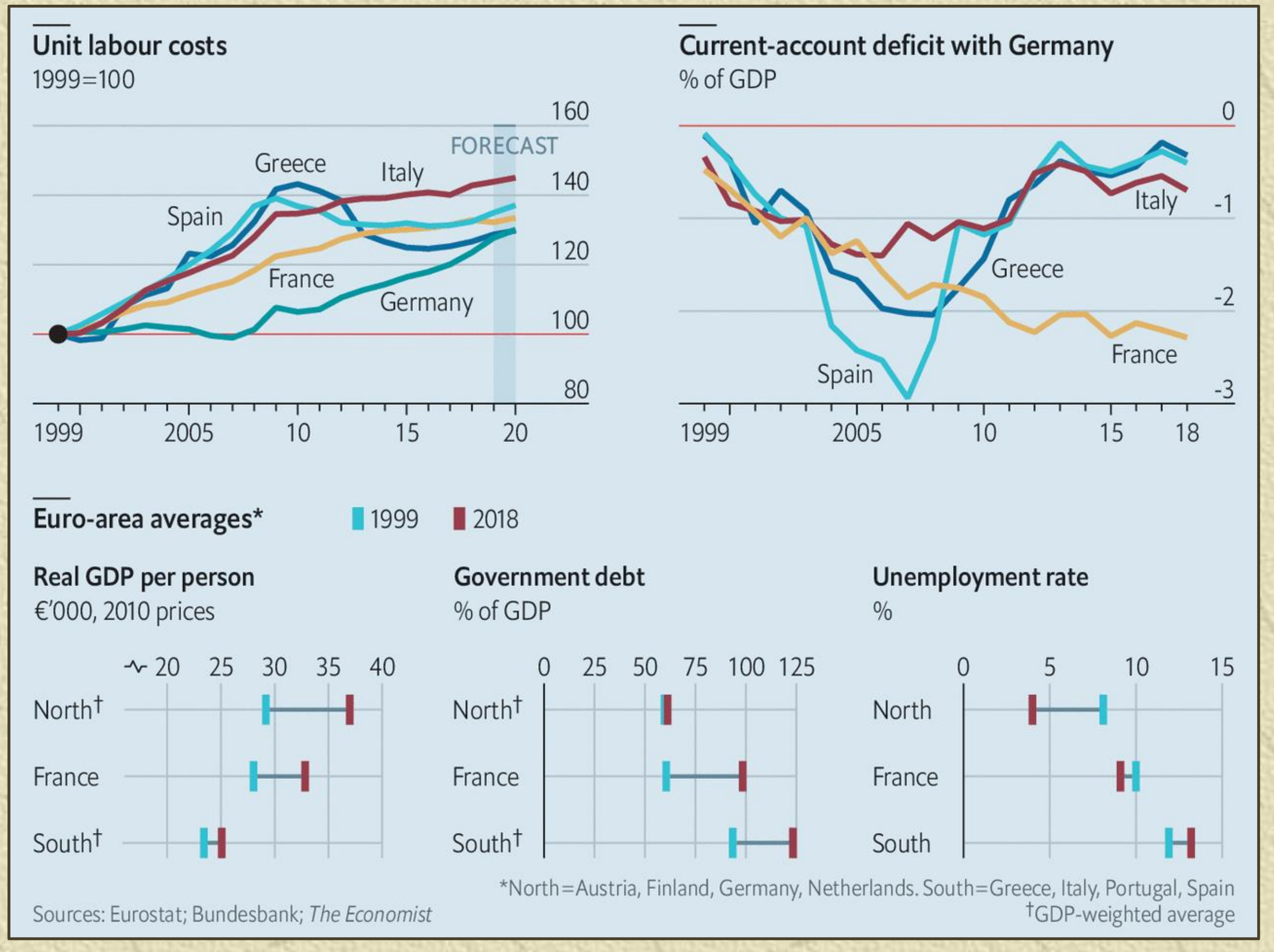
- ECB and banking relatively same
- Fiscal union: long-run fiscal position
  - Fiscal rules in place – those that apply to all
  - Country-specific rules – when fiscal rules violated "excessive deficit procedure (EDP)" can be enacted
    - Tailored structured budget balance
    - Limit a country's real spending growth at/below potential output

    Despite violations EDP has not been enforced (Italy in 2019 came close)
  - EU-wide spending rule could make possible anchor for FP
  - Tying nominal spending growth to output makes rule less procyclical
  - No common euroarea budget highlights difficulty

Financial Times, "Europe's fiscal rules need comprehensive overhaul", 30 Aug 2019, p. 8.

European Monetary Union, continued . . .

- Intra-euro area convergence or divergence?



Economist, "The euro area: Rift in the union", 9 Nov 2019, p. 60-1.