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The euro area and its crises

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Overview: The euro area crises

- The European project and EMU
- The euro area crises
- How to exit the crises
- Addendum: Why is everybody so happy all of a sudden?
- Czech and Slovak counterfactuals

The four crises of the euro area

- The eurozone crisis is really a tale of four crises:

1. **a currency regime break-up crisis** (convertibility crisis or reversibility crisis
2. **a sovereign debt/fiscal crisis**
   - Liquidity crisis
   - Solvency crisis
3. **a banking crisis**
   - Liquidity crisis
   - Solvency crisis
4. **a crisis of political legitimacy**: existing democratic deficit (lack of ECB accountability, lack of accountability of European Commission, lack of accountability for the European Council (HoSHoGs)) enhanced by
   - Prospects for banking union (further powers for ECB)
   - Greater powers for EC under Fiscal Compact
   - Ability of EC and ECB jointly to invoke QMV for EMS programmes

There was once a dream…The three Ps of European integration

- **Peace**
  - Two world wars and hundreds of years of varied violent conflict in Europe
- **Power**
  - In a world of 9 billion people, how much hope can tiny European nation states have of being influential or even to safeguard their national self-interest?
- **Prosperity**
  - Efficiencies of scale and scope in Europe's Single Market
  - An 'innovation union'

→ A common currency is often seen as a key element of European integration, as much because of its political significance (sovereignty = seigniorage) as because of its efficiency-enhancing properties. Also, continental Europeans always more focused on the competitive/beggar-thy-neighbour distortions created by competitive devaluations and the 'casino' aspects of floating exchange rates than by the competitiveness restoring & shock-absorbing properties of nominal exchange rate adjustments.

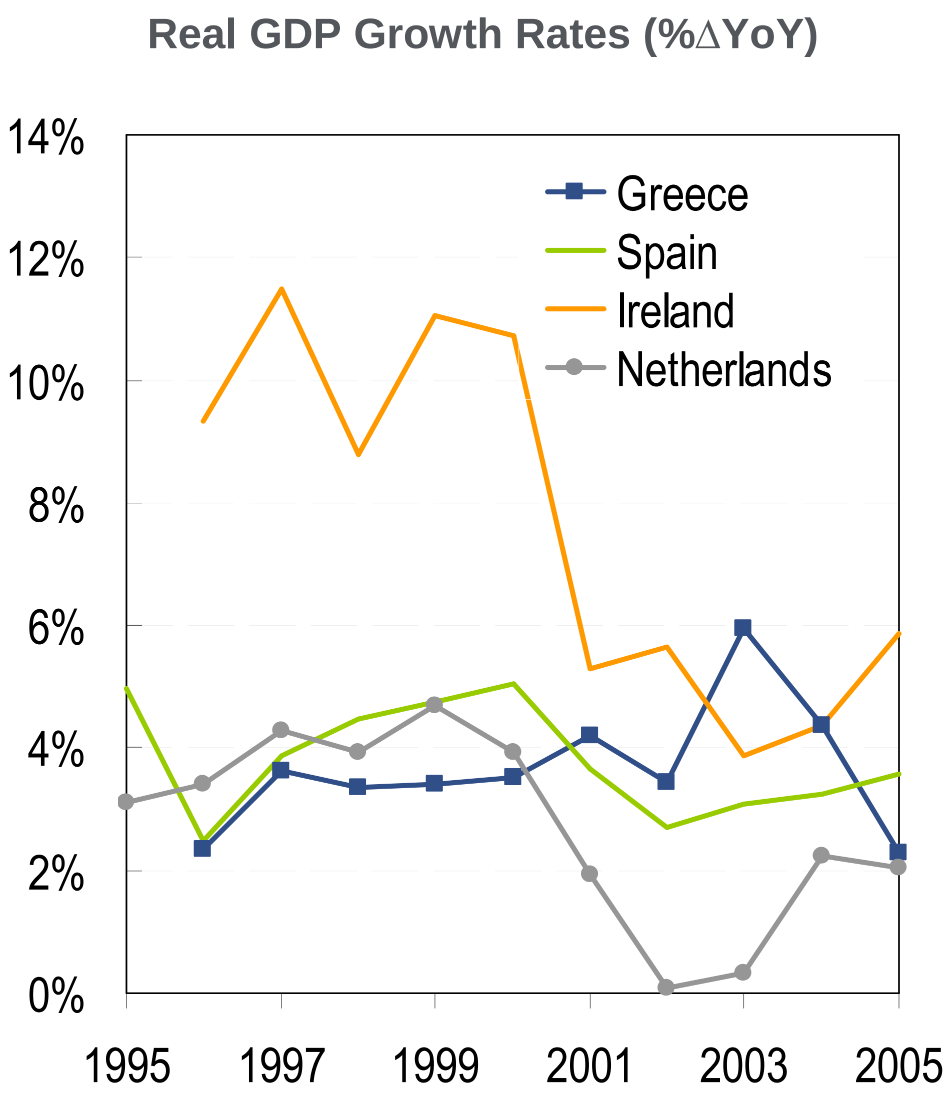
A brief history of European integration

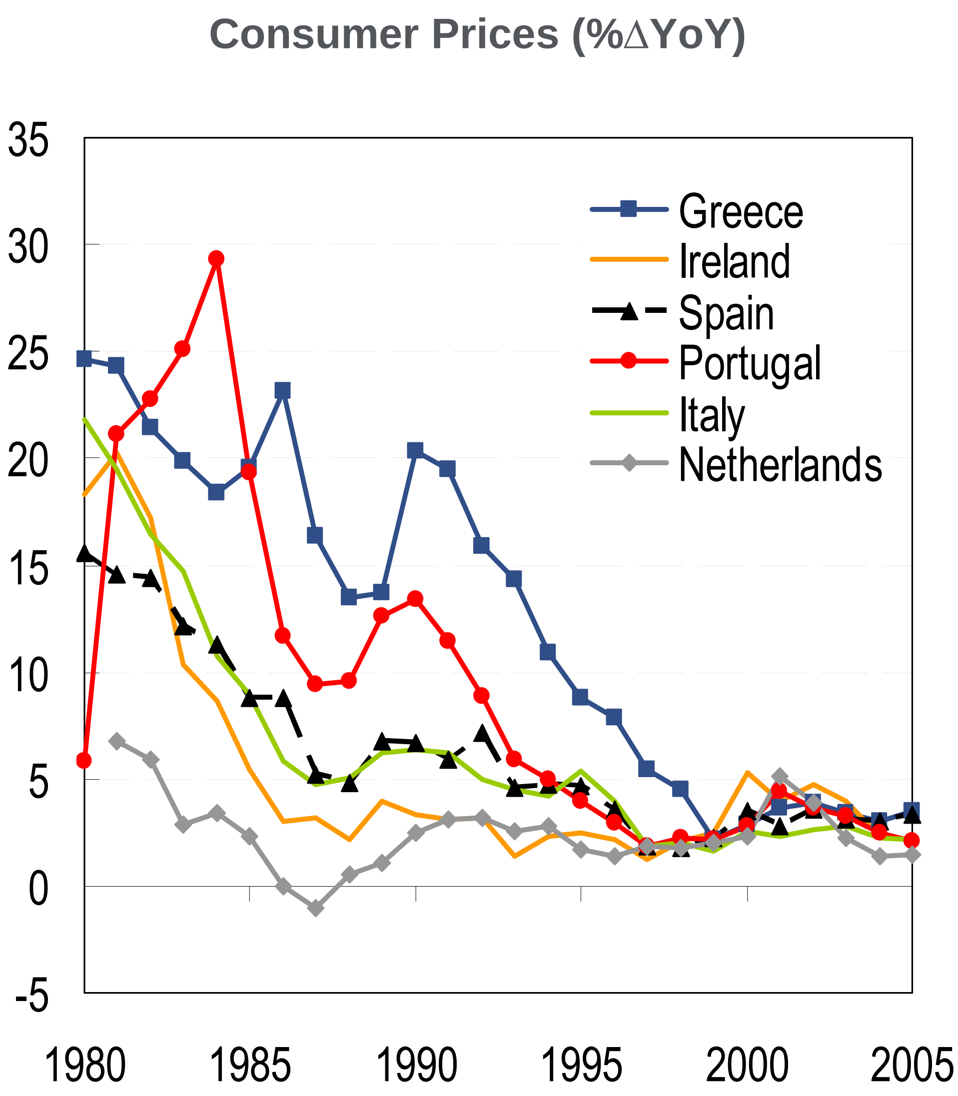
	January 1, 2011	Estonia adopts the euro
	January 1, 2009	Slovakia adopts the euro
	January 1, 2008	Cyprus and Malta adopt the euro
	January 1, 2007	Bulgaria and Romania join the EU. Slovenia adopts the euro.
	January 1, 2004	Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia join the EU
	January 1, 2002	Euro notes and coins are introduced in the 12 euro-area countries
2000		
	September 15, 1999	A new European Commission takes office with Romano Prodi as its President (1999–2004)
	January 1, 1999	EMU and euro launched in eleven EU countries
	July 1, 1998	European Central Bank inaugurated in Frankfurt, Germany
	June 17, 1997	Treaty of Amsterdam is concluded
	January 1, 1995	Spain, Austria, Finland and Sweden join the European Union
	November 1, 1993	Treaty on European Union enters into force after ratification by the member states
	December 11, 1991	**Maastricht European Council agrees Treaty on European Union**
	October 21, 1991	European Community and European Free Trade Association (EFTA) agree to form the European Economic Area (EEA)
	October 3, 1990	The five Laender of the former German Democratic Republic enter the community as part of a united Germany
1990		
	January 1, 1987	Single European Act enters into force
	January 1, 1986	Spain and Portugal join the community
	January 1, 1981	Greece joins the community
1980		
	March 13, 1979	European Monetary System (EMS) becomes operative
	January 1, 1973	Denmark, Ireland and the UK join the community
1970		
	April 8, 1965	**Treaty merging the institutions of the three European Communities signed**
1960		
	March 25, 1957	**European Economic Community (EC) and European Atomic Energy Community (Euratom) Treaties signed**
	April 18, 1951	**European Coal and Steel Community (ECSC) Treaty signed**
1950	May 9, 1950	Robert Schuman proposes pooling Europe’s coal and steel industries

The Euro: the poster child for European integration

- **The case for Economic and Monetary Union (EMU)**
  1. reducing exchange rate risk and costs of excessive volatility and misalignments – exchange rates can be manipulated and even market-determined exchange rates driven mainly by financial markets without much regard to underlying competitive conditions
  2. importing German inflation-fighting credibility
  3. encouraging fiscal, monetary, structural and governance reforms
  4. promoting and deepening the European single market (price transparency)
  5. furthering European integration – pathway to a United States of Europe?
  6. 'dollar envy'
- **1999: Euro launched with 11 member countries (now 17)**
- **2001: Greece joins**
- **2007: Slovenia**
- **2008: Malta and Cyprus**
- **2009: Slovakia**
- **2011: Estonia**
- **2014: Latvia (?)**

Some things seemed to work rather well





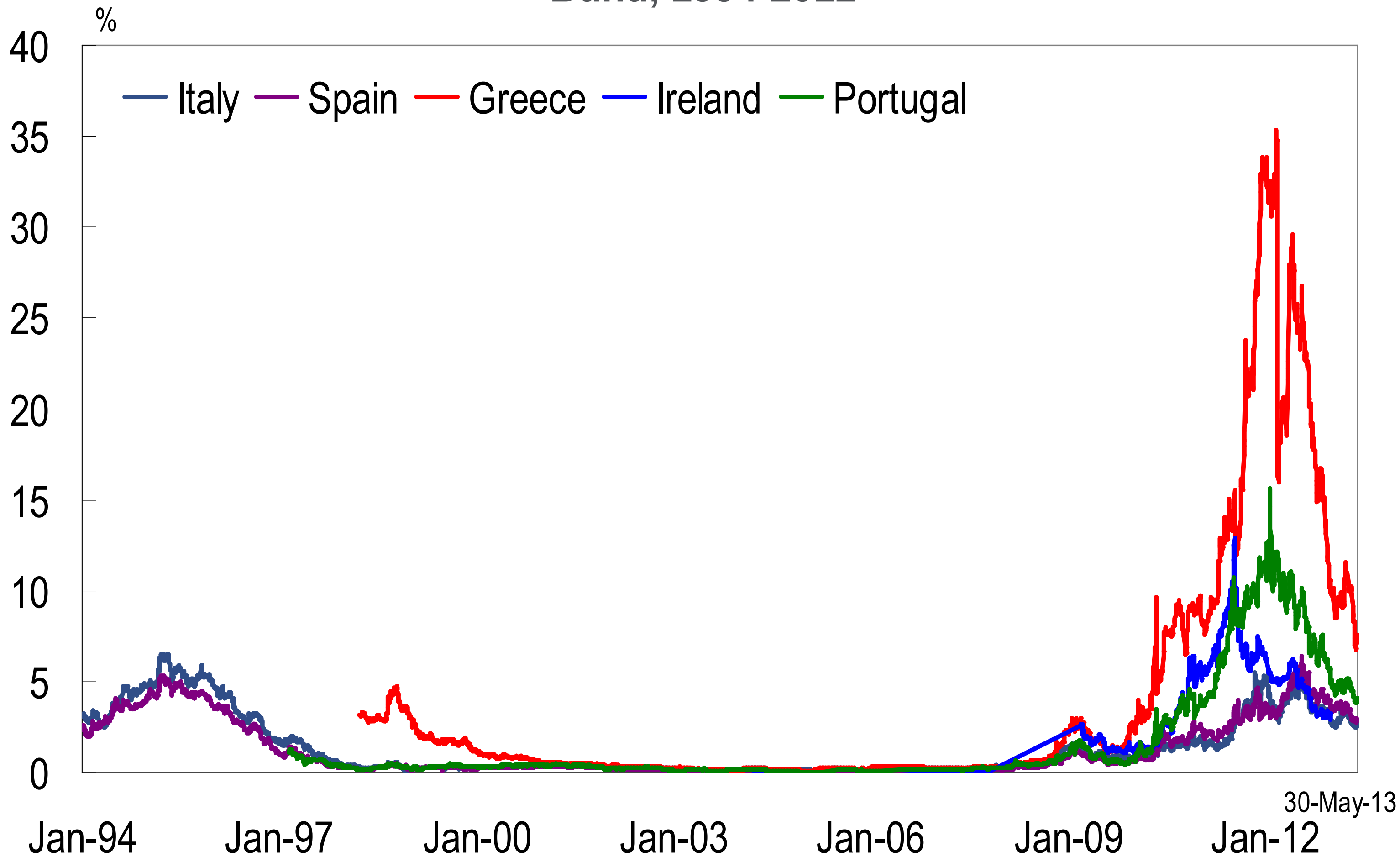
Source: Eurostat

Source: IMFWEO

…and borrowing costs quickly fell…but then…

Mispricing of risk was clearly at work in late 90s and early 00s. Greece is ‘off the chart’

10-year Govt Bond Spreads over Bund, 1994-2012



Source: Bloomberg
Note: 9-year yields for Ireland

Four proximate causes of the euro area crisis

1. Design flaws in euro area institutions
2. Unsustainable (credit-driven) growth and fiscal models
3. Excessive build-up of debt (sovereign & banks almost everywhere; households and NFCs in many countries)
4. Poor financial regulation –
   - regulatory capture
   - regulatory arbitrage because of financial liberalisation:

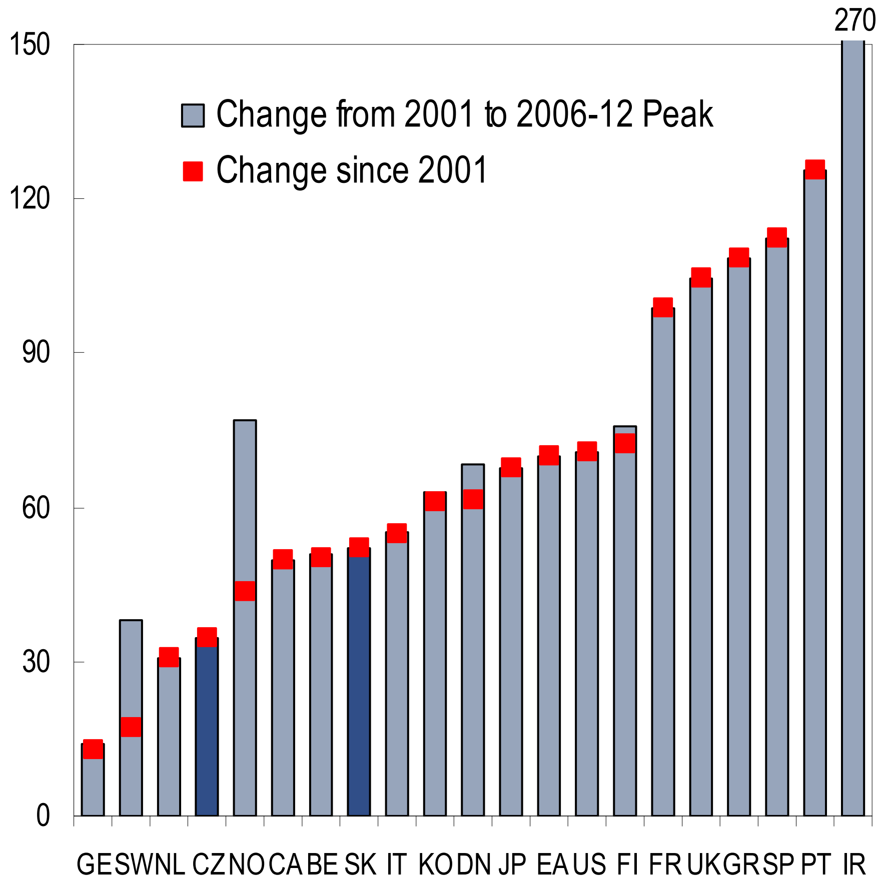
     domain of supervision & regulation ≤ domain of mobility of capital, financial enterprises, entrepreneurs & staff

→ **only one of them is unique to the euro area**

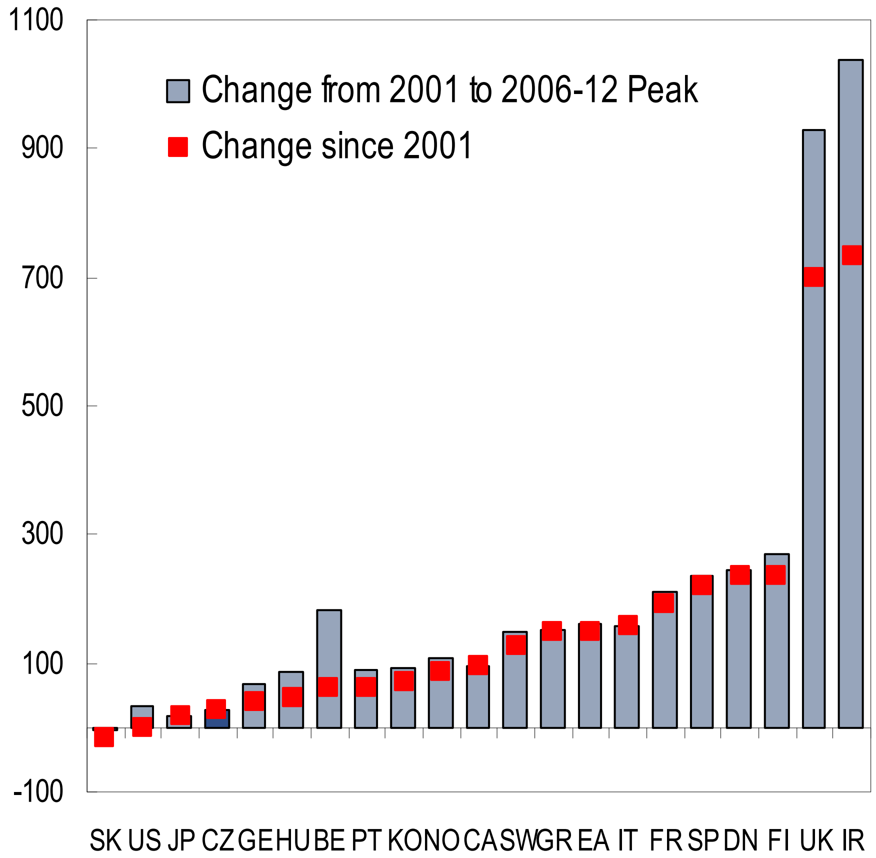
The last decade has seen large increases in debt levels

Total gross (financial and non-financial) debt has increased in virtually all rich countries over the past decade, not just in the euro area

Total Non-Financial Gross Debt/GDP Ratio



Total Financial Sector Gross Debt/GDP Ratio



Note: Non-financial sector includes households (HH), non-financial corporations (NFCs), and general government (GG). Gross debt is equal to total financial liabilities (HH and GG) less shares and other equities (NFC and MFIs) from national balance sheet statistics Financial Corporations include NCBs. For the US, financial corporations' and NFC debt correspond to "credit market instruments". All values are expressed on a non-consolidated basis except for Australia and Portugal. For Slovakia and Czech Republic 2001 corresponds to 2003.
Source: National Sources and Citi Research

Main drivers of increases in public and private sector leverage

Private sector

- Asset price increases
- Regulatory liberalisation
- Financial ‘innovations’
- Belief that risk when traded away was gone forever – failure to distinguish between diversifiable and non-diversifiable risk
- ‘Great Moderation’, ‘reach for yield’
- Convergence of borrowing rates in EMU driven by persistently irrational financial markets

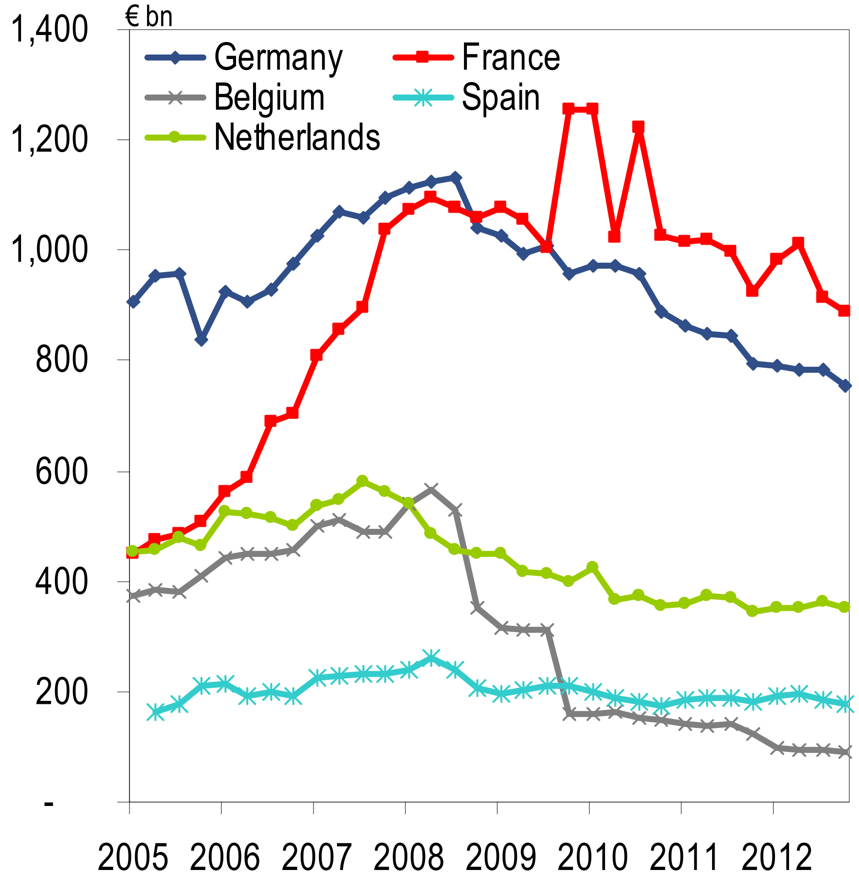
Public sector

- Budgetary and political processes decouple spending commitments from structurally matching revenue
- Demographics (should not have been a surprise!)
- Erosion of tax compliance/administration capacity
- The crisis itself
- Low yields on ‘safe’ industrial country sovereign debt

Cross-border financial integration also increased rapidly

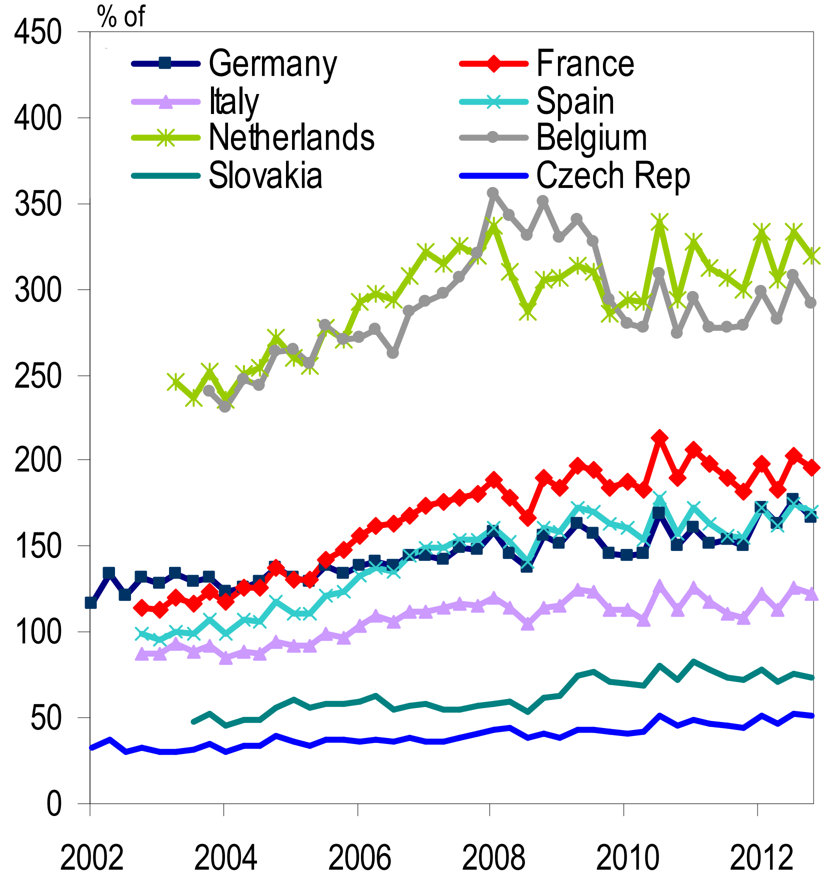
Fast-growing countries in particular enjoyed large (net) capital inflows, but gross external assets and liabilities increased almost everywhere

Bank Foreign Claims on EA Countries (€ bn), 2005-2012



Note: Consolidated foreign claims (in gross terms) of reporting banks in individual countries on the EA entities (excl. Cyprus, Estonia, Finland, Luxembourg, Malta, Slovakia, Slovenia).
Sources: BIS and Citi Research

Gross External Debt (% of GDP)



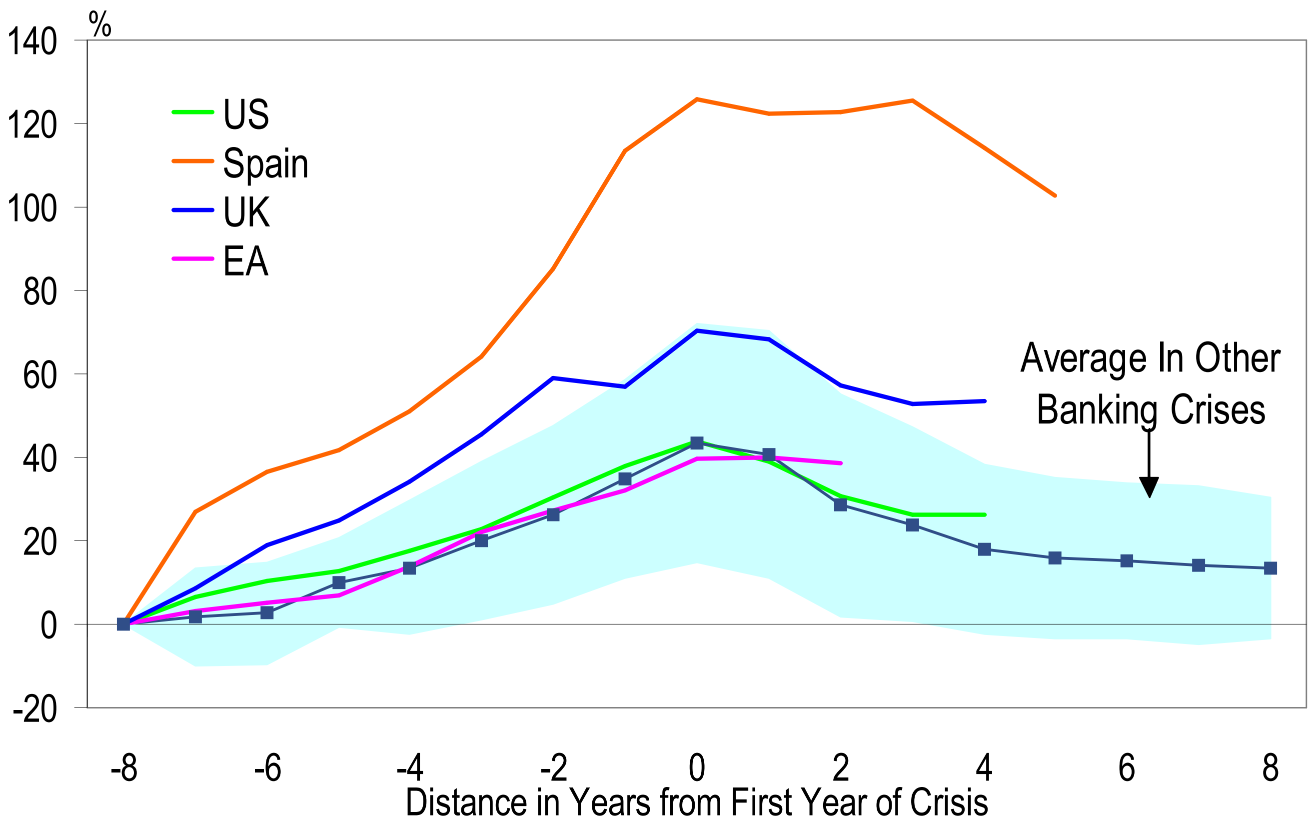
Note: Gross external debt for all sectors of the economy.
Sources: BIS and Citi Research

The crisis

Financial crises and deleveraging: the Reinhart-Rogoff story

Multi-year process of private sector deleveraging in rich countries has only just begun

Change in Gross Private Debt/GDP Ratios, 1980 – 2012

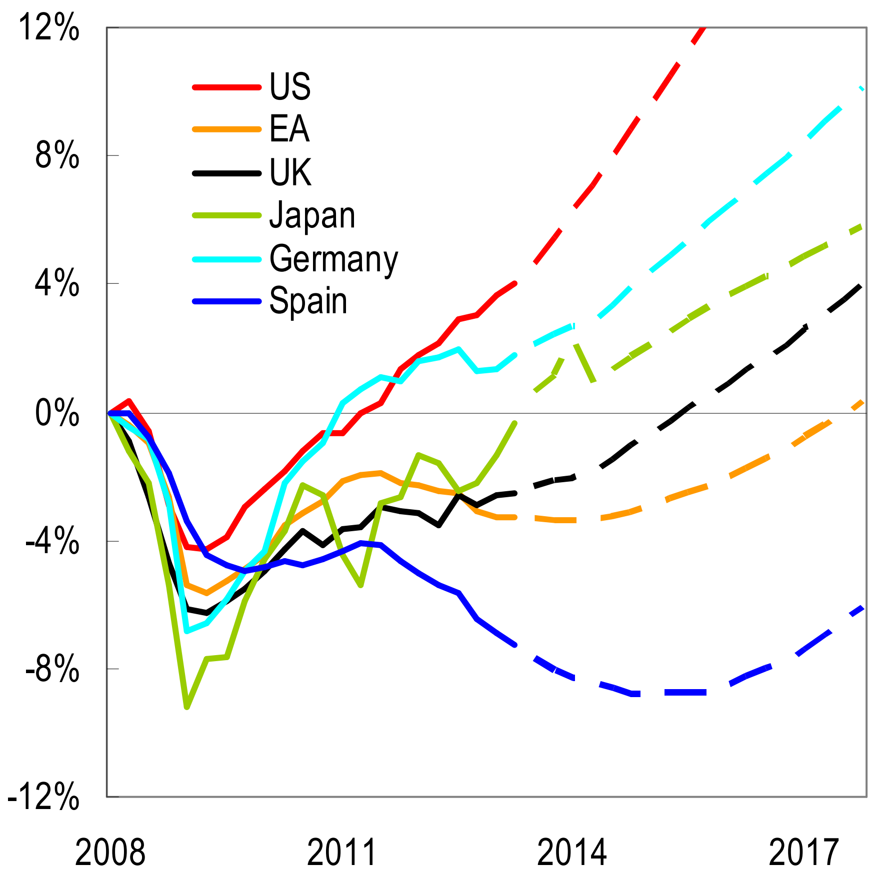


Note: t=0 (peak in private debt) corresponds to 2007 (Spain), 2008 (US, UK), and 2009 (EMU). Gross private debt includes total domestic credit to private sector and cross border lending to the nonbank private sector by foreign banks. Average is computed using sample of 12 banking crises as defined in "Debt Reduction after Crises", BIS, September 2010. Shaded area corresponds to historic average plus or minus 1 standard deviation.
Sources: US Federal Reserve, Eurostat, ONS, BIS, IMF, World Bank and Citi Research

Many EA countries are yet to reach their pre-crisis levels of output

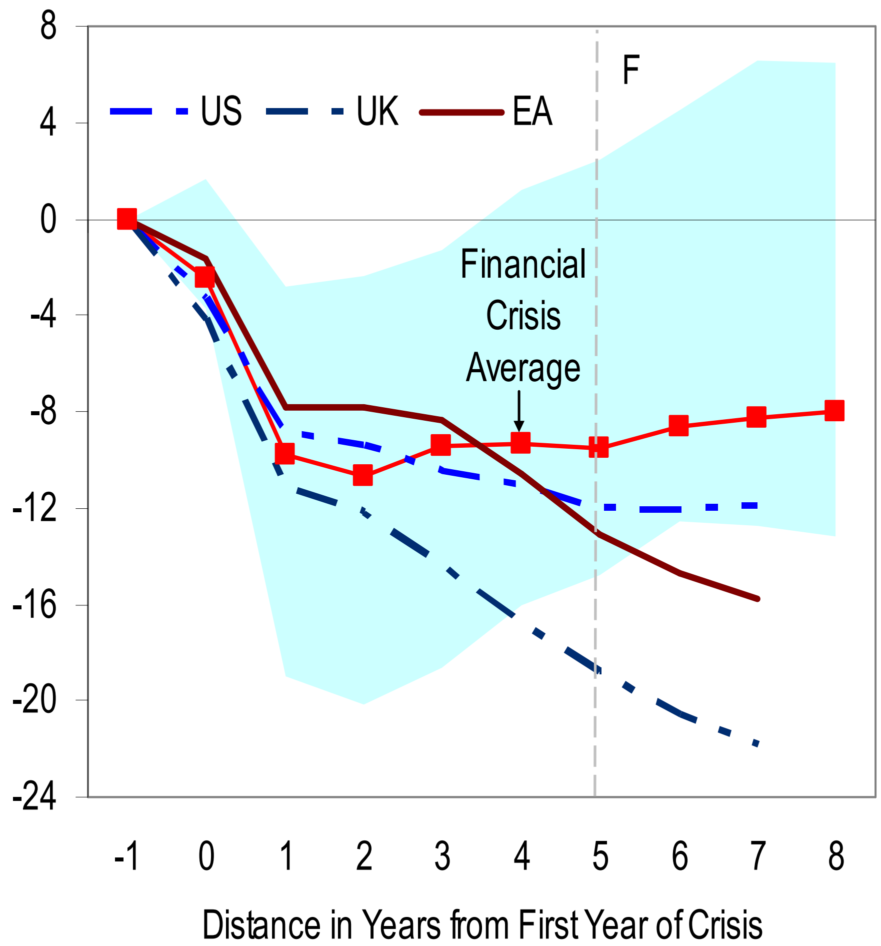
But very slow recovery is in line with the historical experience after systemic banking crises..

Real GDP (2008:Q1=100)



Note: Dotted lines are Citi forecasts. Sources: National Statistical Offices and Citi Research forecasts (May 2013)

Real GDP vs. pre-crisis trend

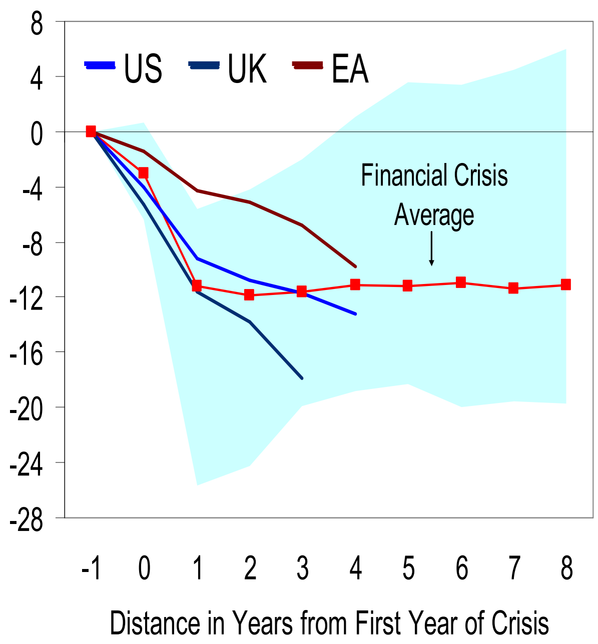


Note: The shaded area corresponds to the interquartile range of previous episodes, which indicates the middle 50 percent of all crises. From T+5 (2013), real GDP corresponds to Citi Research forecasts. Source: IMF, World Bank, BEA, Eurostat and Citi Research

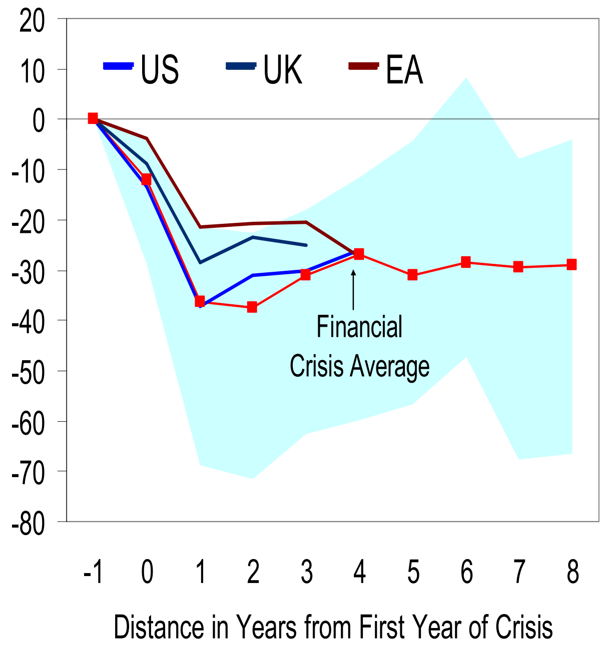
Domestic demand usually collapses in the aftermath of financial crises

Private saving rises, and net exports and government spending usually cushion the output fall – but both are more constrained in the current episodes

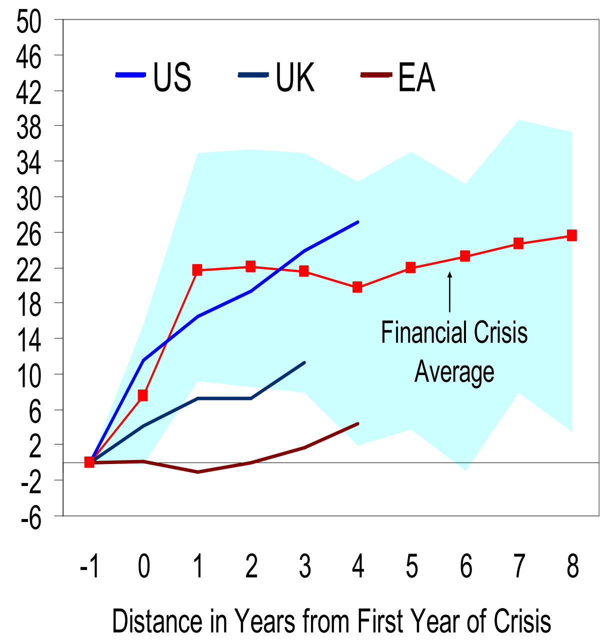
Real Private Consumption vs Pre-Crisis Trend



Real Investment vs Pre-Crisis Trend



Real Net Exports vs Pre-Crisis Trend



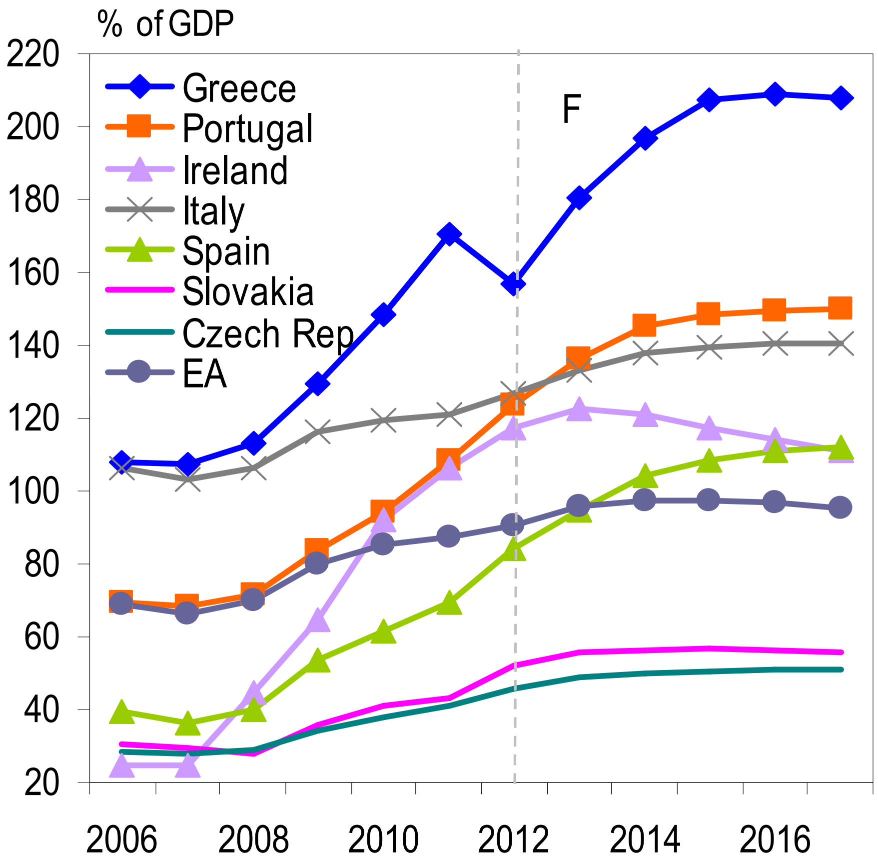
Note: The shaded area corresponds to the interquartile range of previous episodes, which indicates the middle 50 percent of all crises. Average of 18 financial crisis episodes: Argentina (2001), Bolivia (1994), Chile (1981), Dominican Rep (2003), Ecuador (1998), Finland (1991), Indonesia (1997), Japan (1997), Korea (1997), Malaysia (1997), Mexico (1994), Nicaragua (2000), Norway (1991), Paraguay (1995), Philippines (1997), Sweden (1991), Thailand (1997), and Uruguay (2002)

Source: IMF, World Bank, BEA, Eurostat and Citi Research

Public debt has risen a lot and keeps on rising

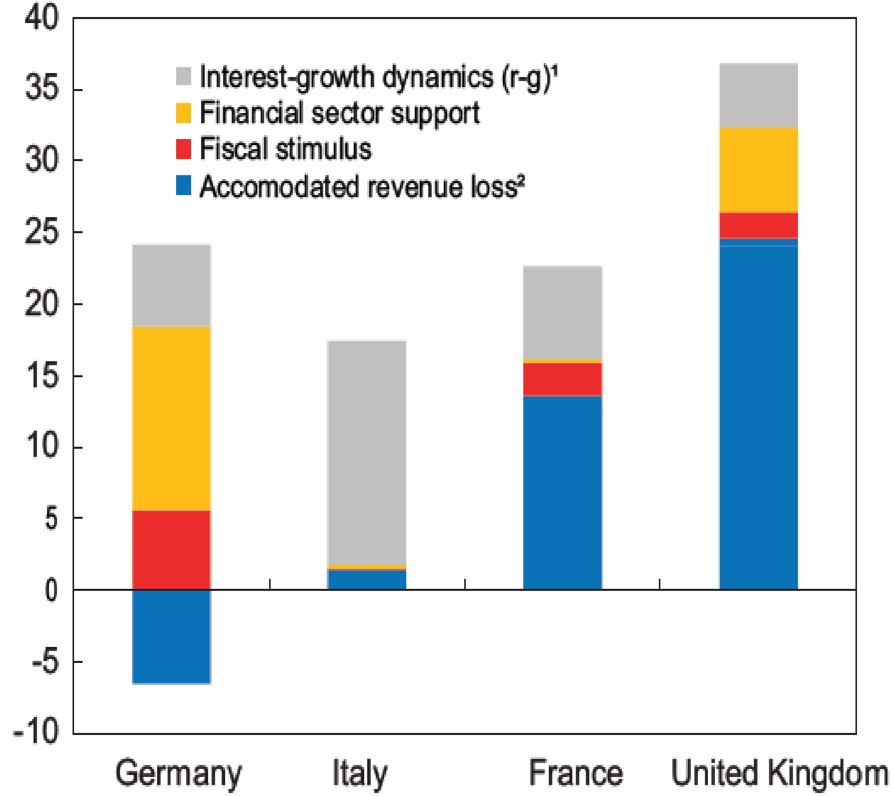
Crisis-related revenue losses, bank bail-outs & early fiscal stimuli have all led to rising public debt in the euro area – and beyond

General Government Gross Debt (% GDP)



Sources: Eurostat, IMF, and Citi Research forecasts (May-2013)

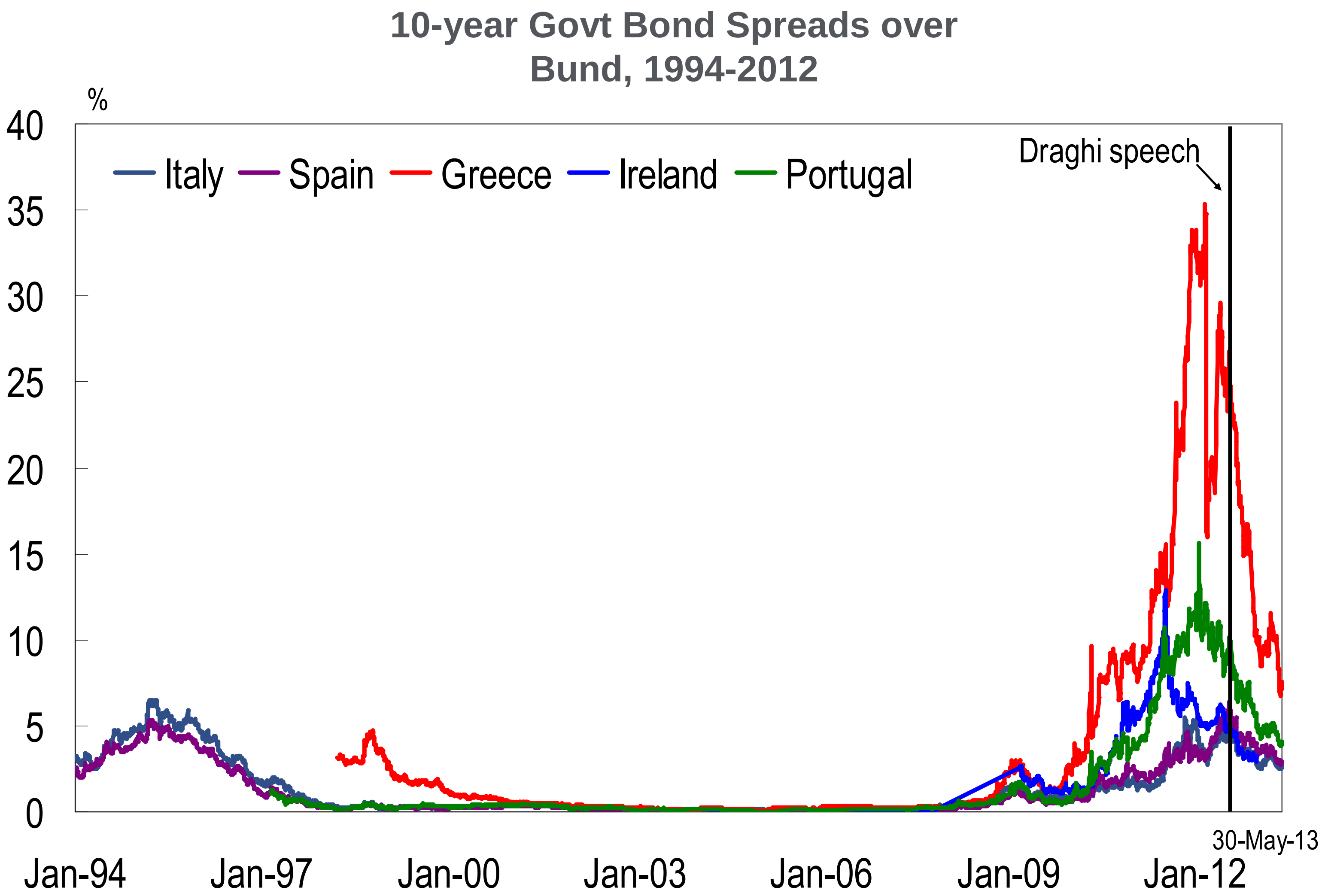
Drivers of Public Debt Increase, 2007-2011



Source: IMF – Regional Economic Outlook: Europe – Oct 2011

[1]Contribution of the interest expenditure (in percent of GDP) adjusted for growth (see Appendix 1, IMF, 2010a). [2]Revenue loss associated with output losses from the financial crisis. This is computed as a residual. If the sum of identified drivers of debt is larger than the overall increase in debt, revenue losses from lower output were minimal and/or compensated for by fiscal measures (see Box 1, IMF, 2010c).

Sovereign yields spiked in many EA countries



Source: Bloomberg
Note: 9-year yields for Ireland

How to deal with a systemic financial crisis?

We can think of three broad archetypes:

1) Decisive policy intervention

– Fiscal stimulus cum banking sector recapitalisation cum debt restructuring in many sectors

– Examples: Scandinavia in the ’90s, Iceland and the US more recently

– Note: many possible sources of funding for bank recaps and balance sheet reconstruction

2) Policy constantly behind the curve, never to catch up, ending in another systemic event

– Example: Argentina in the early 2000s? Great Depression in many countries, euro area (??)

3) Policy gradualist, but buffeted by political commitment and sources of support

– Japan (?), euro area (??)

Initial plan looked like option (2)

Original EA/EU/ECB plan (mid-2010): Hope

- Fund a few small sovereigns until mid-2013 with liquidity facilities (Greek facility-EFSF-EFSM-IMF) and ECB funds
  - Growth may come to the rescue
  - Incumbents may no longer be in office if it does not
- Why the plan did not work:
  - Growth has still not returned to the Periphery & is unlikely to soon & sufficiently
  - Position of banks in Periphery and core EA worse than assumed/hoped for
  - Facilities not big enough to handle {Greece, Ireland, Portugal} + Spain (including up to €100bn of bank losses assumed by sovereign) + Italy + Cyprus + Slovenia without open-ended & uncapped support from ECB
  - Running battle between ECB and Core EA sovereigns about who will take on exposure to risky debt of Periphery sovereigns and banks (Game of Chicken).
  - Inconsistent combination of growing political resistance – in Periphery and Core – to (1) fiscal tightening and (2) financial support from EU/IMF/ECB and (3) no burden sharing for senior unsecured bank creditors and sovereign creditors

→ main issue is how to bring down debt!

Main crisis response

- May 2009 Creation of the Covered Bonds Purchases Programme I by the ECB
- 3 May 2010 First Greek Programme (size: EUR110bn)
- 9 May 2010 Creation of the European Financial Stability Facility (EFSF)
- 9 May 2010 Creation of the Security Markets Programme (SMP) by the ECB
- 10 May 2010 Creation of the European Financial Stabilisation Mechanism (EFSM)
- 28 November 2010 Ireland Programme (size: EUR85bn)
- 17 May 2011 Portugal Programme (size: EUR78bn)
- November 2011 Creation of the Covered Bonds Purchases Programme II by the ECB
- 23 December 2011 ECB conducts Long Term Refinancing Operations (LTROs) for EUR489bn
- 29 February 2012 ECB conducts Long Term Refinancing Operations (LTROs) for EUR530bn
- 20 March 2012 Second Greek Programme (size: EUR173bn)
- 27 June 2012: Spain seeks financial support for banks
- 27 June 2012: Cyprus seeks financial support for banks and sovereign
- 29 June 2012: EC agrees on creating a European banking supervisory mechanism
- 20 July 2012: Eurogroup grants financial assistance to Spain’s banking sector (size: EUR100bn)
- 26 July 2012: Speech by Mario Draghi on ‘whatever it takes’ to save the euro
- 6 September 2012: ECB announces a new conditional sovereign debt purchase instrument OMT
- 8 October 2012: ESM is launched
- 13 December 2012: Council agree (mas o menos) position on SSM

How to reduce public and private debt over time?

Public Sector

- A higher growth rate of GDP
  → Not an instrument, unfortunately
- A lower interest rate on the public debt
  → QE
  → Financial repression
- Fiscal pain
- Increased recourse to revenues from CB (possibly, but not necessarily requiring excess inflation)
- Bailout – mutualisation
- Default/restructuring of debt

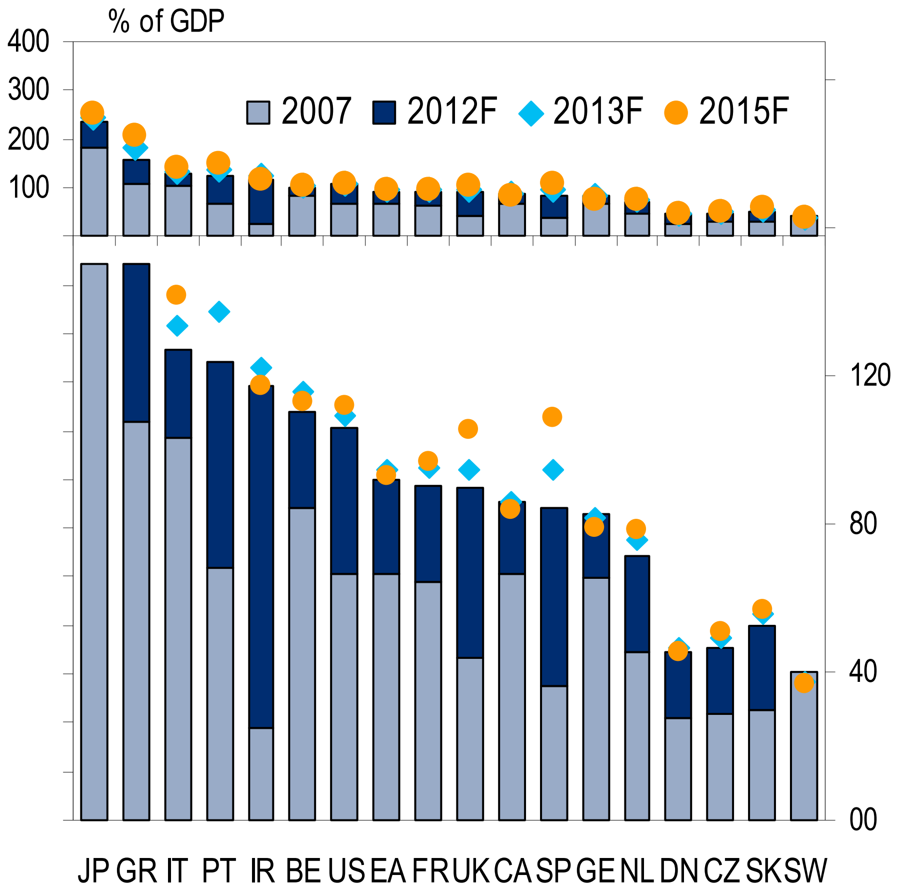
Private Sector

- A higher growth rate of GDP
  → Not a choice variable for private entities
- A lower interest rate on the outstanding debt
  → Financial repression is not a private sector instrument (but governments can for concessions from lenders)
- Financial surpluses
  → raising revenue not generally an option
- Bailout from the govt, foreign govts or CB
- Default/restructuring of debt

Ingredient I: Austerity

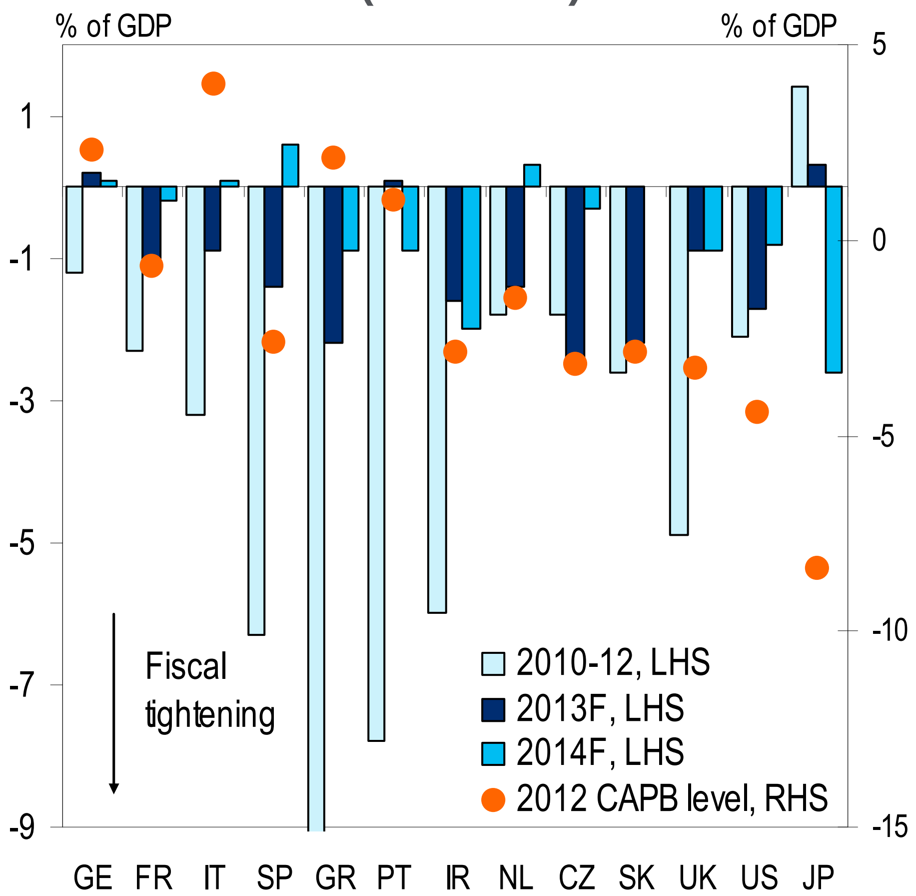
Public finances were on an unsustainable trajectory in many EA countries, so austerity was necessary

General Government Gross Debt (% of GDP)



Note: Debt corresponds to general government gross debt.
Source: IMF and Citi Research Forecast (May-2013).

Change in Gen Gov Cycl-Adj Primary Balance (% of GDP)



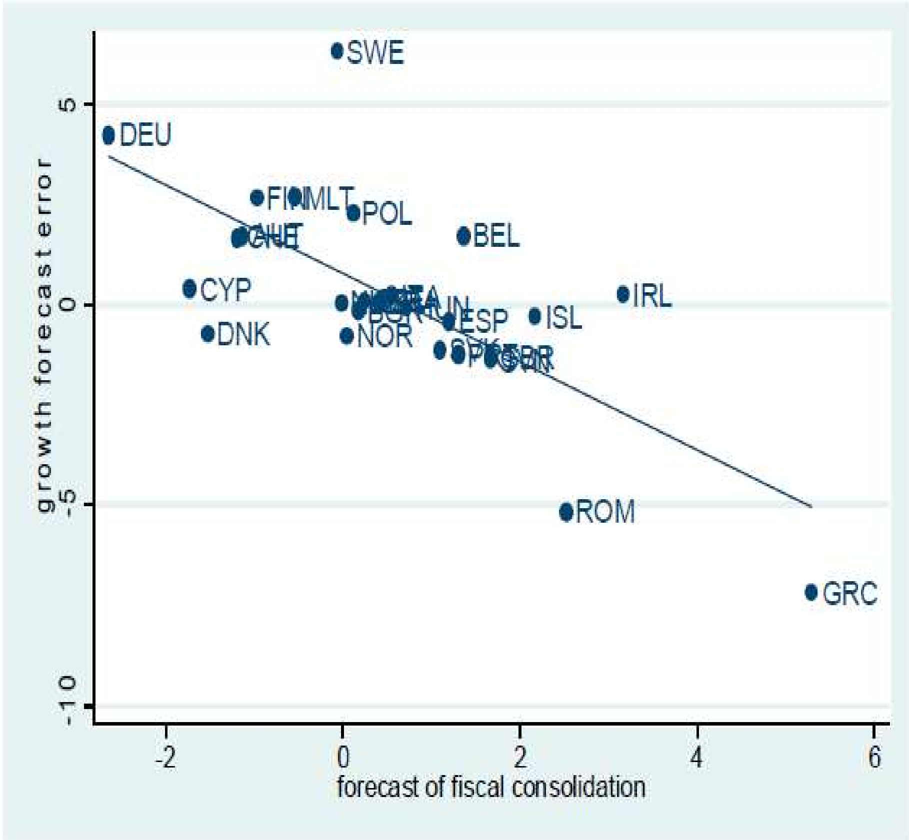
Note: Public refers to the general government. CAPB is cyclically adjusted primary balance.
Source: IMF and Citi Research.

Sense and Non-sense in the austerity vs growth debate

Recessionary environments raise fiscal multipliers – but what is the alternative? Social acceptance matters but so do funding constraints and political economy

- Both more and less austerity to come
  - ‘More’: future austerity>0, (in fact > current austerity), but ‘less’ than originally planned
- ‘Growth’ is not the only constraint: funding, loss exposure, political economy within and between countries
  - And ‘growth’ is not a policy
- What is the alternative to austerity:
  - If it is more spending/tax cuts, who will fund it? Who will pay it back? Is that credible?
  - Does fiscal austerity increase the deficit? Is there a Keynesian Laffer curve?
- Reinhart-Rogoff made an error – but another mistake was to interpret their findings as a strict one-directional causal relationship
- Debt *is* an impediment to growth even if there is no ‘cliff’ effect

Europe: Growth Forecast Errors vs. Fiscal Consolidation Forecasts



Note: Figure plots forecast error for real GDP growth in 2010 and 2011 relative to forecasts made in the spring of 2010 on forecasts of fiscal consolidation for 2010 and 2011 made in spring of year 2010; and regression line. Source: Blanchard and Leigh, “Growth Forecasts Errors and Fiscal Multipliers”, 2013, IMF

Ingredients 2 & 3: banking union and sovereign debt restructuring

Only banking union & sovereign and bank debt restructuring can save euro

Banking union and bank restructuring

- Only single supervisor and single EA resolution regime/fund and recapitalisation fund were proposed at the June 2012 Summit
  - Even there, the timetable and conditions remain unclear
  - To save euro, actual bank recovery/restructuring /resolution/recapitalisation has to start immediately, not wait till 2018 (!), for Greece, Portugal, Spain, Cyprus, Slovenia and core EA, before bad bank assets migrate further to sovereign
- Common regulatory framework (single rule book), necessary to save euro (banks as *Societas Europaea*)
- EA-wide deposit guarantee regime and fund
  - helpful to contain the effects of Grexit, & fear of depositor bail-ins but not essential for survival
- EA-wide unsecured term funding guarantee fund for banks;
  - not essential for survival, but likely necessary for normally functioning bank term unsecured funding markets

Sovereign debt restructuring

- Extensive mutualisation of sovereign debt remains unlikely
  - Applies to joint issuance (E-bonds or Euro bonds for legacy or new issuance), large fiscal transfers and back-door mutualisation through the ECB
- Sustainable private market access also remains elusive for many EA sovereigns

→ **Debt restructuring** is necessary
  - to save the euro
  - for growth to resume
- The candidates are plentiful:
  - Greece
  - Portugal
  - Ireland (w/out further restructuring of bank bailout (OSI), risk of PSI)
  - Possibly Cyprus, Italy, Spain and Slovenia if bad private assets migrate to sovereign

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Complement to austerity I: Monetary support, but not activism

ECB has saved the day on many occasions during this crisis so far

1) Rate cuts

- 375bp cuts since 2008 to 0.5% for MRO

2) Asset purchases

- SMP for unconditional, outright sovereign debt purchases
- CBPP for covered bonds

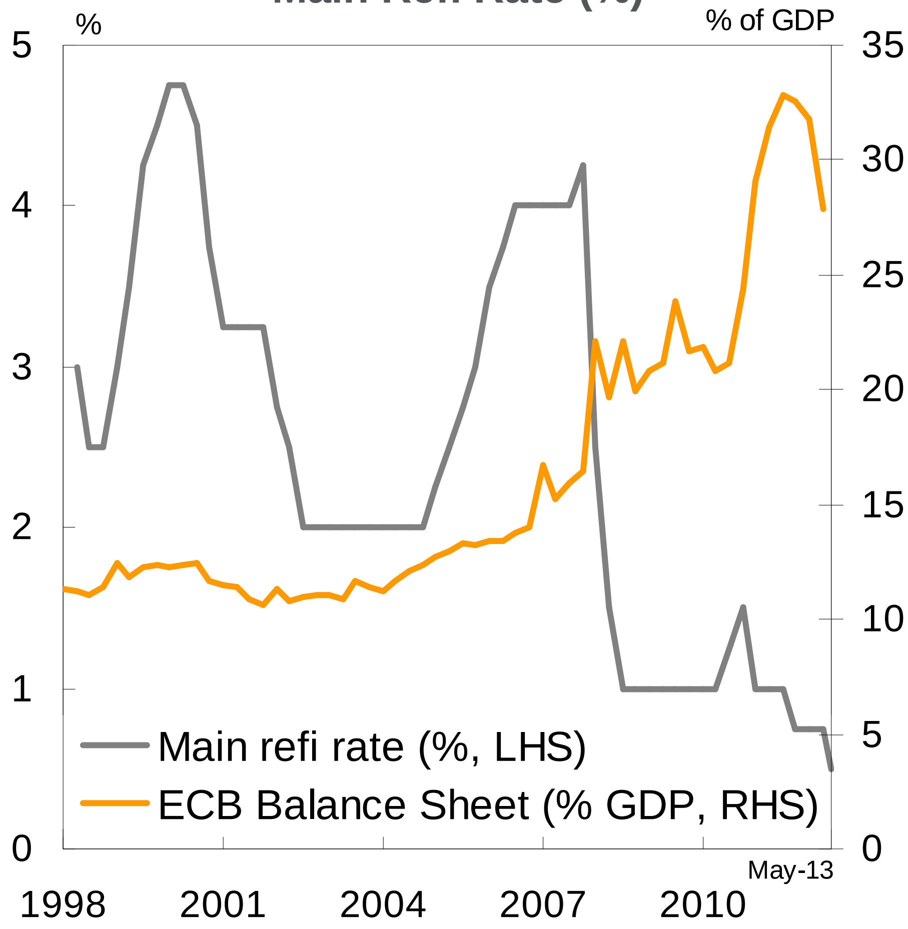
3) Bank funding facilities

- Repeated easing of collateral standards
- 3-year LTROs in early 2012

4) OMT

- Yet to be used; conditional outright sovereign debt purchases

ECB Balance Sheet (% of GDP) vs. Main Refi Rate (%)



Source: ECB

MRO= Main Refinancing Operations fixed rate or refi rate
CBPP= Covered Bond Purchase Programme

Could the ECB still do more?

The ECB has not emptied its coffers, but there are considerable political, cultural, financial and some legal hurdles to further decisive action

1) More rate cuts

- Negative deposit rates (at least on excess reserves)

2) Helicopter money

- Cash transfers to households or public spending on infrastructure financed permanently by increasing the monetary base
- Always raises real output and/or prices
- Conditions right in Japan, EA and US

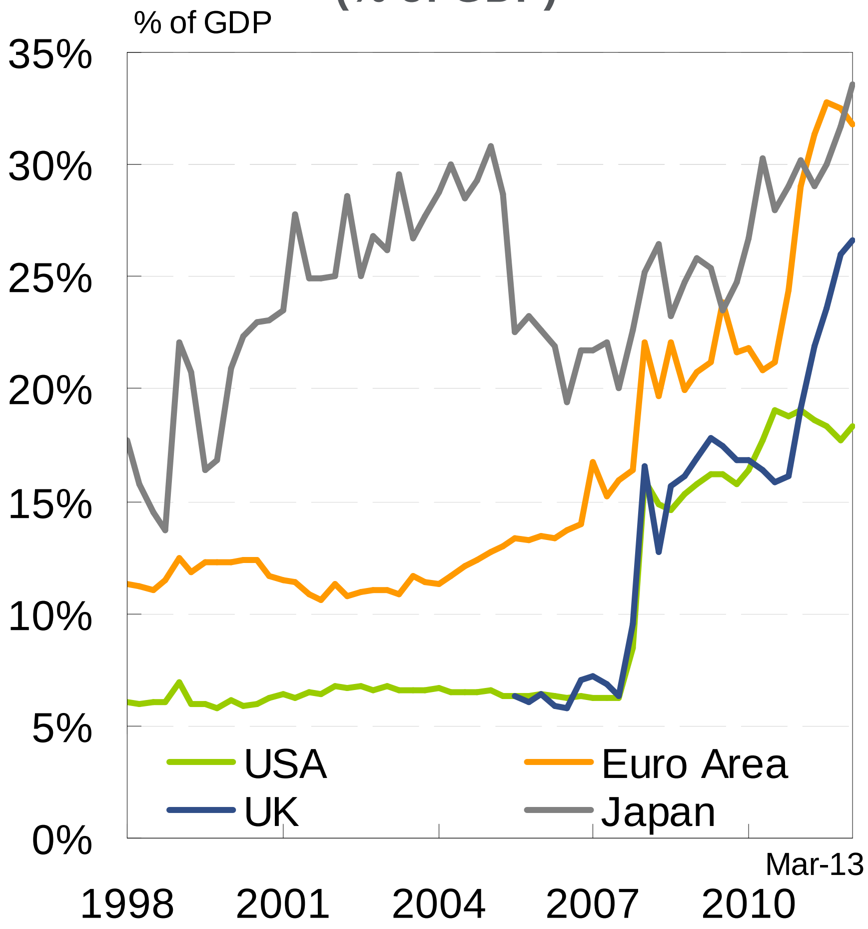
3) Further easing of collateral standards

4) Purchases of private assets

5) QE

→ **Other AE central banks have in fact been even more active than the ECB recently**

Balance sheet size of Central Banks (% of GDP)

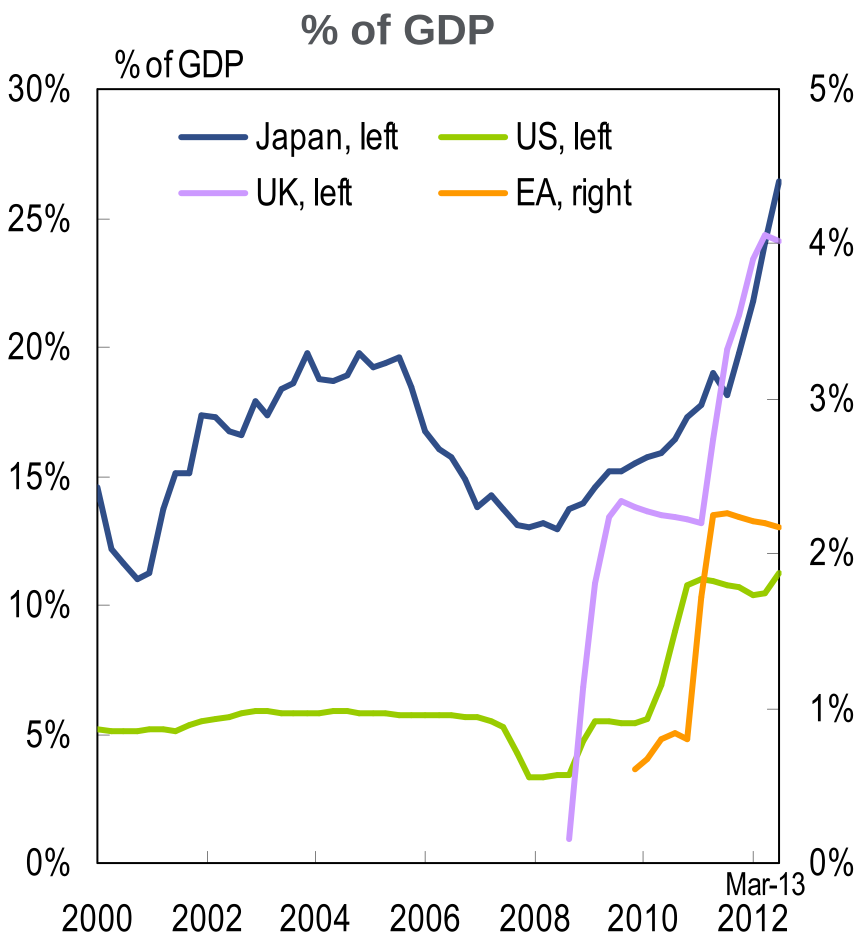


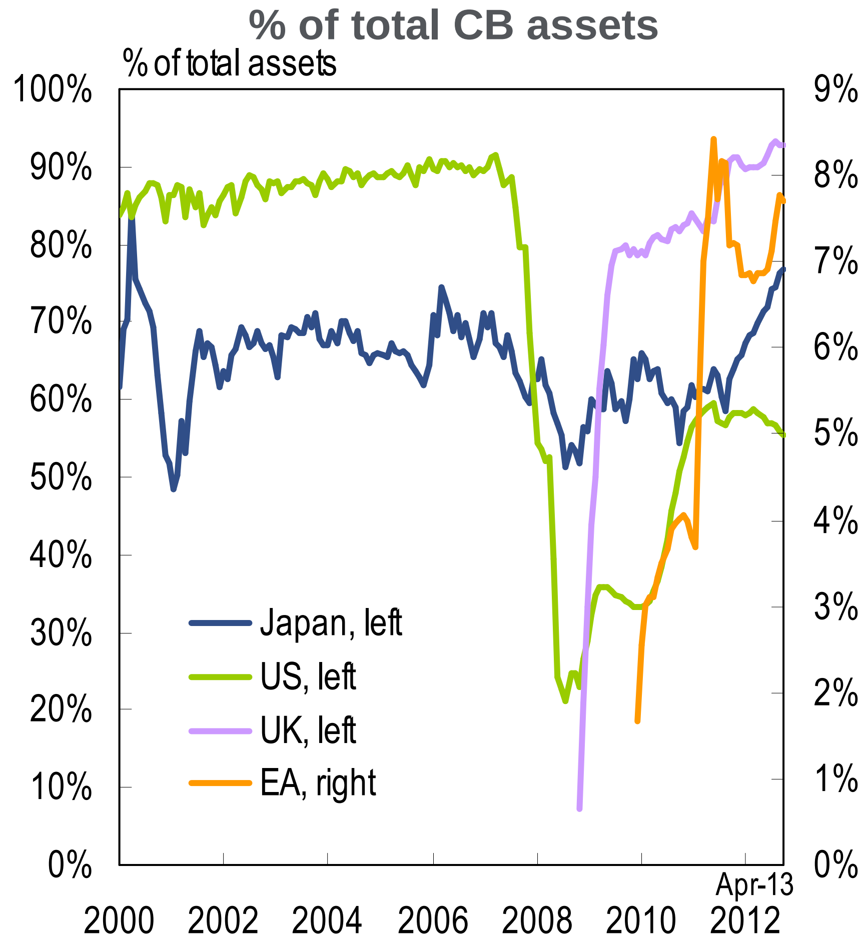
Source: National Central Banks

Central banks as buyers and market makers of last resort

Central banks are holding more government debt outright, both in absolute terms and relative to the size of their balance sheet, but in the EA far less than elsewhere

Central Bank outright holdings of government debt





Sources: National Central Banks and Statistical Offices

Complements to austerity II: Financial repression

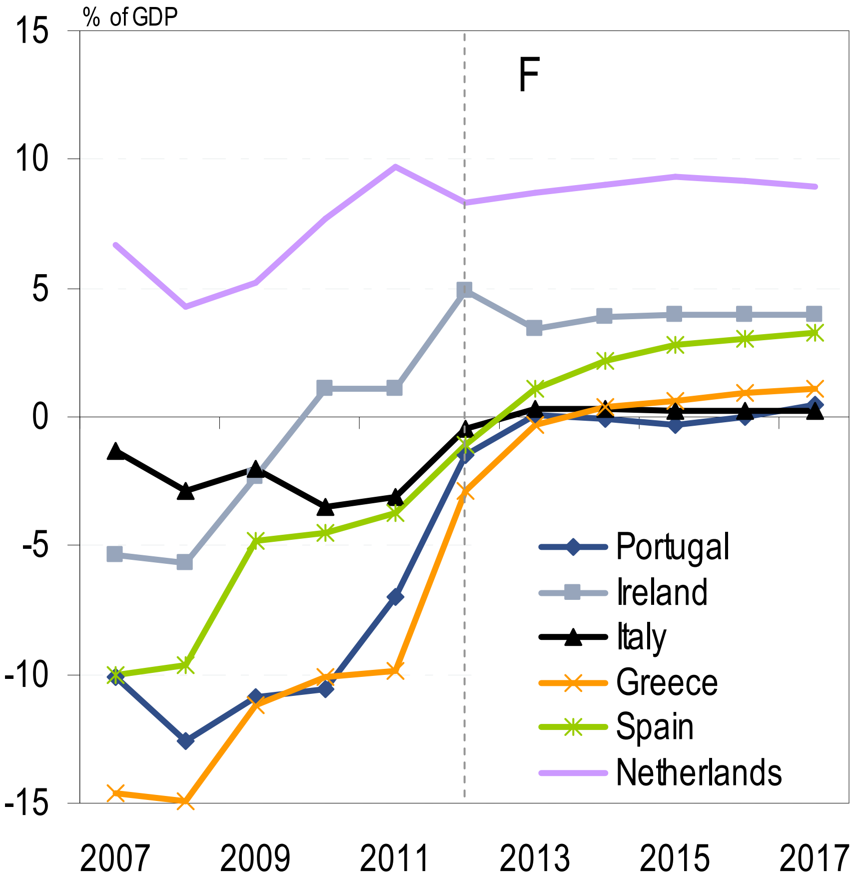
In many countries, governments likely to aim to lower cost of carrying their debt burden by engaging in financial repression

- **Financial repression**:
  - *"the use of regulatory or administrative measures, moral suasion and other pressures to induce banks and other regulated/politically susceptible entities to hold more sovereign debt than they would otherwise hold and/or hold it at lower yields".*
- **Forms of financial repression**:
  - Regulatory minimum 'liquidity buffers' for banks
  - Very low (zero) risk weights of sovereign debt for banks' RWAs
  - Mandating use of government bond yields as discount rates for insurance portfolios + mismatch penalties through insurance premia.
  - Reserve requirements for banks
  - Restrictions or mandates on credit allocation
  - Binding interest rate ceilings on deposits or other financial assets
  - Capital controls
  - Application of 'soft power' on regulated institutions (banks, insurance firms, pension funds) by governments, regulators and central banks to buy more sovereign debt

Many measures are taken, some are working…

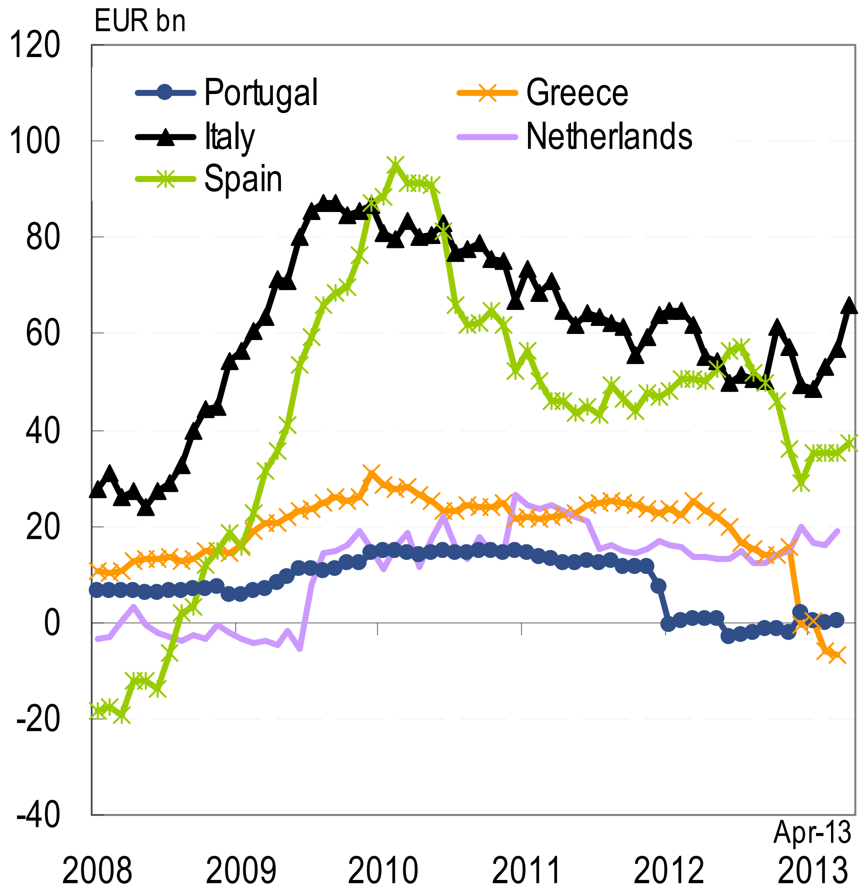
Austerity is painful, but not self-defeating. Competitiveness is improving

Current Account Balance (% of GDP), 2007 – 2017F



Source: IMF World Economic Outlook.

12-month cum Budget Deficits (€ bn), 2000 – Apr 2013

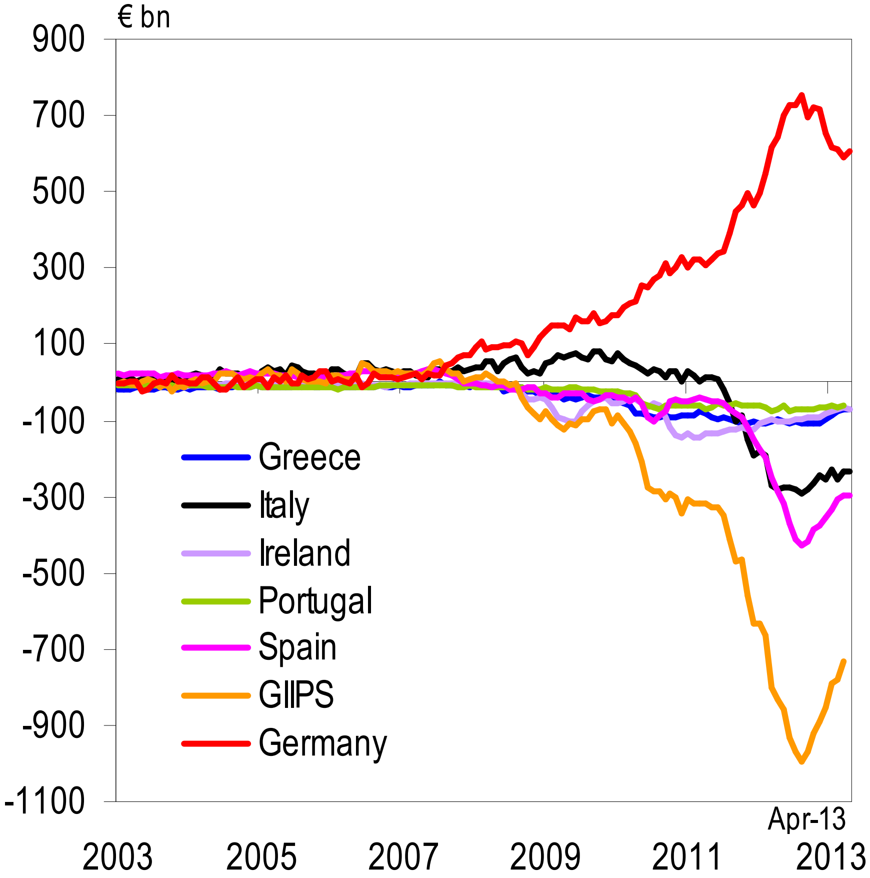


Sources: National Central Banks
Note: 12-month accumulated Central Government Deficit

But many large imbalances remain and some are widening

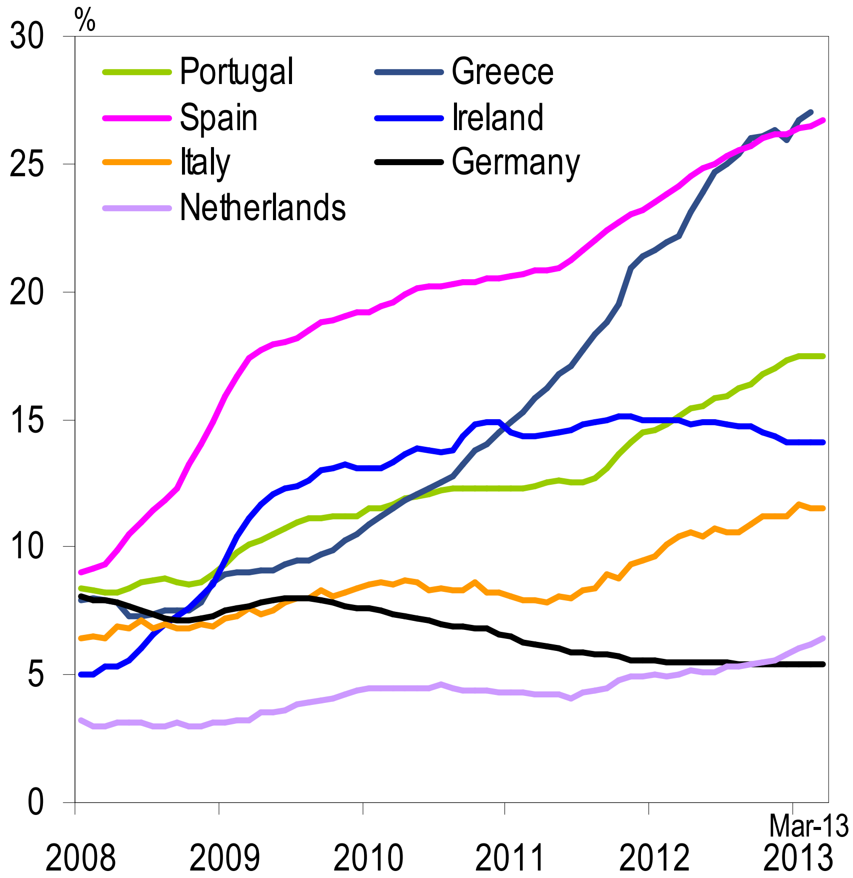
Target2 imbalances are still very large. Unemployment rates are now at historical highs in many countries

Target2 balance outstanding (EUR bn), 2003 – 2013



Source: National Central Banks and Citi Research.

Unemployment Rate (%) 2003 – 2013



Source: Eurostat

‘The euro area will not fall apart’

…but it’s likely to be rocky and ugly at times in years to come

- **EA approach to resolving the sovereign debt and banking crisis**
  - **Piecemeal** and reluctant agreements to extending fiscal firewall (EFSF/ESM, SDRM)
  - Continued focus on **austerity** in the fiscally weak countries
  - **Regulatory forbearance** for banks and **financial repression** to purchase govt bonds
  - **Lender of last resort** support for sovereigns and banks (but not in words) by the ECB
  - Some **structural reforms**, notably in the fiscally weak countries

- **Implications:**
  - Many years of **low growth** and even lower domestic demand growth
  - Intermittent **crisis periods**
  - **Additional sovereign bail-out programmes**
  - Additional sovereign debt restructuring (OSI and also some PSI)
  - Low credit growth, zombie banks in vast majority of EA member states until banking union is completed
  - **Greek and/or Cypriot exit still** plausible, wholesale EA breakup remains unlikely
  - **no (domestically generated) inflation; material risk of deflation in 2014 and beyond**

What does it take for the EA to survive *and* prosper?

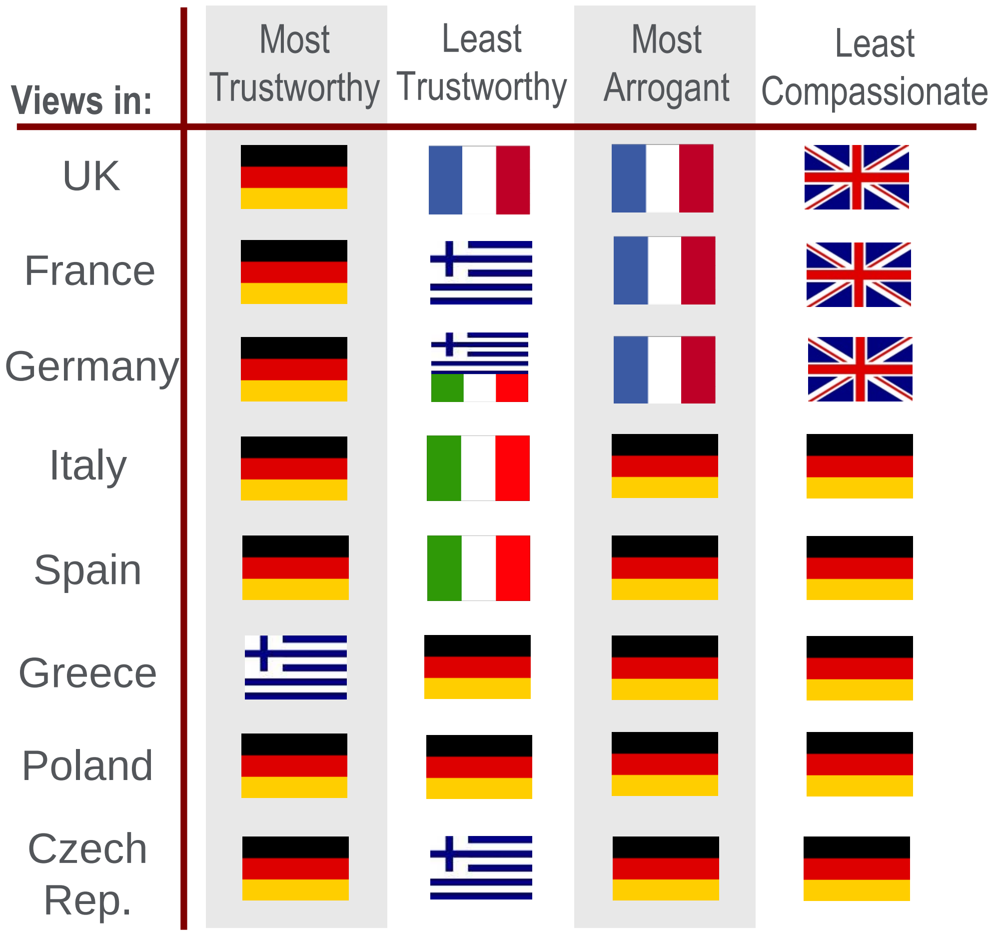
1. More flexible, contestable labour markets, professions and product markets
2. Moving from protecting existing jobs to *flexicurity*
3. Large-scale immigration to fill the demographic vacuum
4. Active life-long learning/education

→ **Without 2. 3. and 4., the euro area will be viable, solvent but increasingly poor and unproductive.**

Why not move to fiscal union?

Fiscal union is neither necessary nor politically feasible currently

EU Poll - Stereotypes in Europe: Which EU nation is most likely to be named…



EU Poll - Most Important Challenge to Address First (%) …

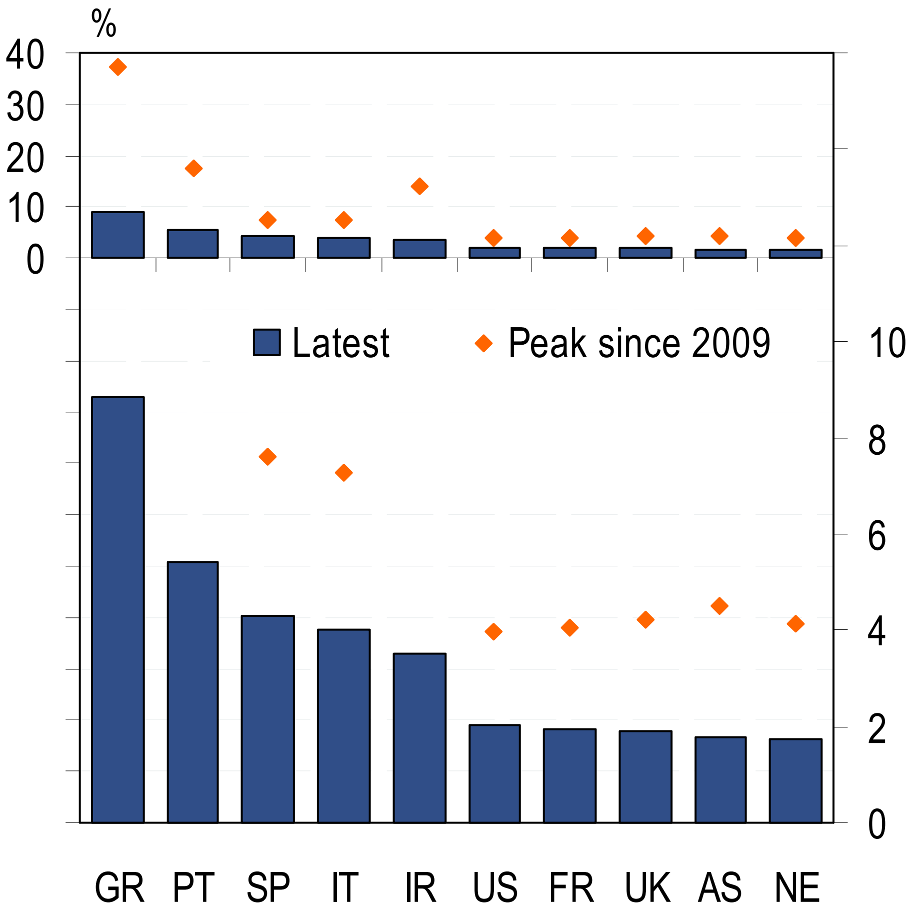
	Lack of emply. opport.	Public debt	Rich-poor gap	Rising prices
Britain	46	22	16	11
France	51	20	21	8
Germany	23	21	42	6
Italy	64	9	6	10
Spain	72	12	11	2
Greece	52	17	8	13
Poland	61	4	10	16
Czech Rep.	64	17	6	5
Median	**57**	**17**	**11**	**9**

Note: Poll conducted in eight EU countries among 7,646 respondents from Mach 2 to March 27, 2013.
Source: Pew Research Centre

So why are financial markets so happy currently?

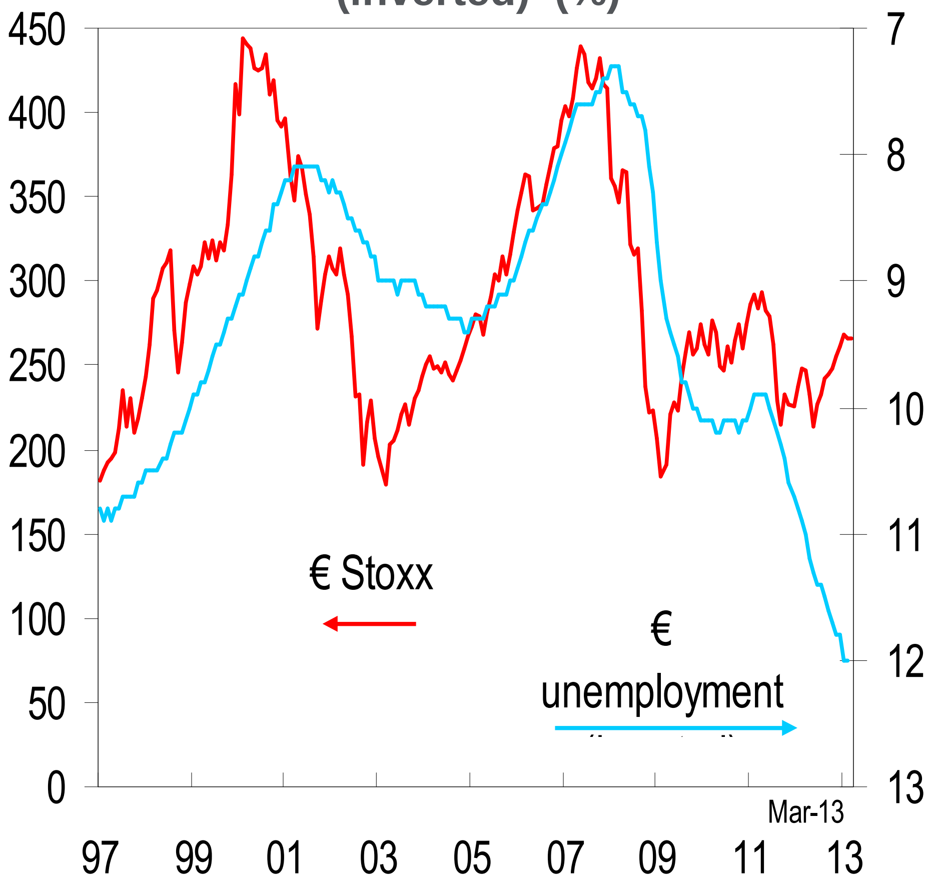
A case of 'Financial markets can remain irrational longer than you can stay solvent'? Liquidity, reach for yield, and career incentives play a large role.

10-year Sovereign Bond Yields



Note: Latest refers to 23 May 2013. Source: Bloomberg

EA: Stoxx equities vs unemployment rate (inverted) (%)



Note:EA – Euro Area. RHS axis is inverted. Sources: Bloomberg and Citi Research

Some near-term tail risks didn't materialise & other good news

No hard landing in China, no double dip in the US, unexpected recovery in Japan and no partial or full EA break-up in 2012

- Growth in China appears to have stabilised – **no hard landing** likely in the near term
- Growth in the US seems to have stabilised – **no double dip** in the US unless we run into a fiscal confidence crisis over the debt ceiling, sequestration etc.
- Thanks to *Abenomics*, Japan looks likely to have up to two years of cyclical recovery and an end to deflation
- The risk of **Grexit** has receded in the short term
- … and risk of near-term sovereign **default** in Italy and Spain or large-scale **break-up** in the euro area has diminished
- **BUT**: there remain risks galore

The ‘Grexit’ question – should Greece leave?

Grexit would likely be very costly for Greece

- **Benefits of euro area exit for Greece:**
  - Debt default/restructuring
    - But they can do that within the euro area!
  - Devaluation of the currency
    - But it’s the real ER that matters and overshooting/volatility would likely be large
  - ‘Catharsis’: An end with horror might be better than a horror without end…
- **Costs of euro area exit would be much bigger**
  - Loss of troika funding for sovereign and ECB funding for banks
    - Some ‘aid’ would be very likely even post-exit – Greece would likely remain EU member
  - Even bigger capital flight, run on banks
  - Further deterioration of prospects for governance, fiscal and structural reform
    - High inflation, volatile growth at best
  - Major hardship for population likely during transition period
    - Risk of major social, political and economic turmoil

The 'Grexit' question – what happens to the rest, i.e. us?

Implications of Grexit depend crucially on the policy response by ECB

- **Without decisive policy response:**
  - 'exit fear contagion' likely to spread from Greece to Portugal, Ireland, Italy and Spain
    - Defaults of financial institutions and sovereigns likely
    - Large falls in asset prices across the board
    - Substantial negative effects on growth in Europe, but also elsewhere
    - Risk of full euro area break-up

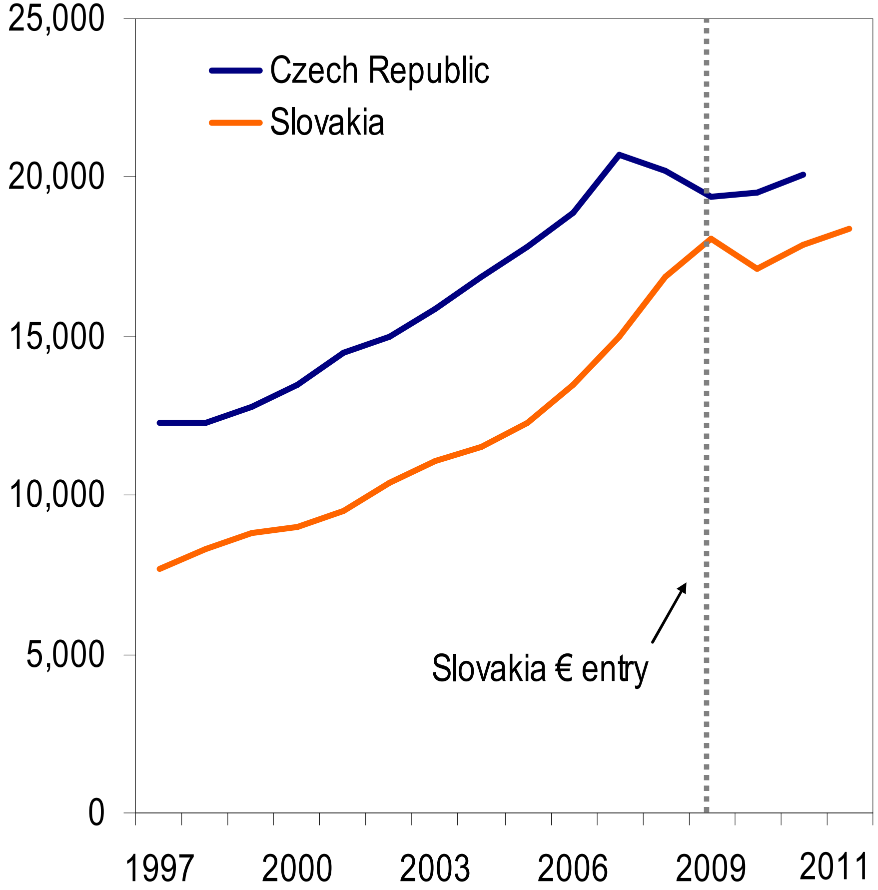
  → Costs would be in the trillions of euros!

- **With decisive policy response (activation of OMT, possible new LTROs)**
  - **'exit fear contagion' would be contained: euro area would live for another day**
    - Negative effects on growth and asset prices still likely, but more moderate

Better to be in or out? Not an easy question to answer.

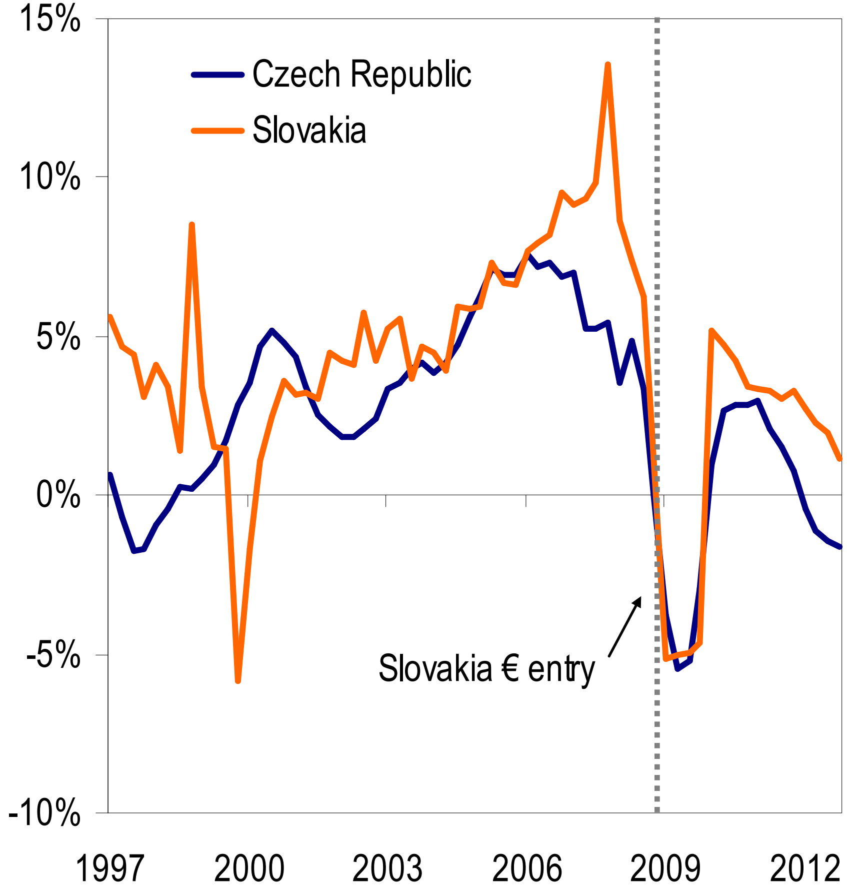
SK catching up faster over the (short) period since EA membership, but EA entry may have spurred overheating. Overall, EA entry likely net beneficial, assuming EA moves to banking union soon. Once in, staying in is usually clearly superior.

GDP per Capita (PPP €)



Note: GDP per capita in purchasing power adjusted euros.
Source: Eurostat

Real GDP (%YoY)



Source: Eurostat

Conclusion: The EA crisis is not over yet, but the euro will survive

- Real progress is being achieved or envisaged on various fronts…
  - Deficit reduction, structural reform, banking union, bail-out facilities
- … but actions to date remain clearly insufficient
  - On all of the above!
- Removal of near-term tail-risk of large-scale breakup should not be confused with crisis resolution & absence of default risk on sovereign & bank debt
- EA comprehensive break-up remains unlikely…
  - BUT its avoidance likely requires decisive action on banking union and sovereign & bank debt restructuring
- The most likely scenario remains 'muddling through':
  - gradual policy measures
  - low growth
  - no (domestically generated) inflation

Appendix A-1

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