The 2012 Euro Plus Monitor: The Rocky Road to Balanced Growth

- „Tough love“: the European approach is working
- Euro crisis: progress amid the turmoil
- Euro periphery: adjusting rapidly
- France: urgent need to shape up
- UK: huge fiscal problems but very flexible markets

Holger Schmieding

29 November 2012

Looking back: Results of 2011 Euro Plus Monitor

Progress amid the turmoil: Crises are handmaidens of change.

•Under the pressure of crisis, the **peripheral economies** are adjusting rapidly.

•Imbalances within the **Eurozone** are diminishing.

•**Wage pressures** have started to converge within the Eurozone.

•Dramatic turnaround in **net exports** at the euro periphery.

•Wave of **fiscal repair** and **structural reforms** like nowhere else in the Western world

•"Alarm bells should be ringing for **France.**"

•**Spain** is making relatively speedy progress but still has a long way to go.

•**Greece** suffers from a dismal starting situation but is now adjusting rapidly.

•**Cyprus** is a potential problem.

•Evidence shows: **countries can and do adjust within the Eurozone**. The assertion that the Eurozone needs to fracture is nonsense.

•We see an urgent need to refocus debate **away from mere fiscal austerity**…

•…**towards pro-growth structural reforms**

The 2012 Euro Plus Monitor

Updates 2011 results for all 17 Eurozone members

Adds United Kingdom, Sweden and Poland

Two separate rankings for all 20 countries

Ranking 1: Overall Health

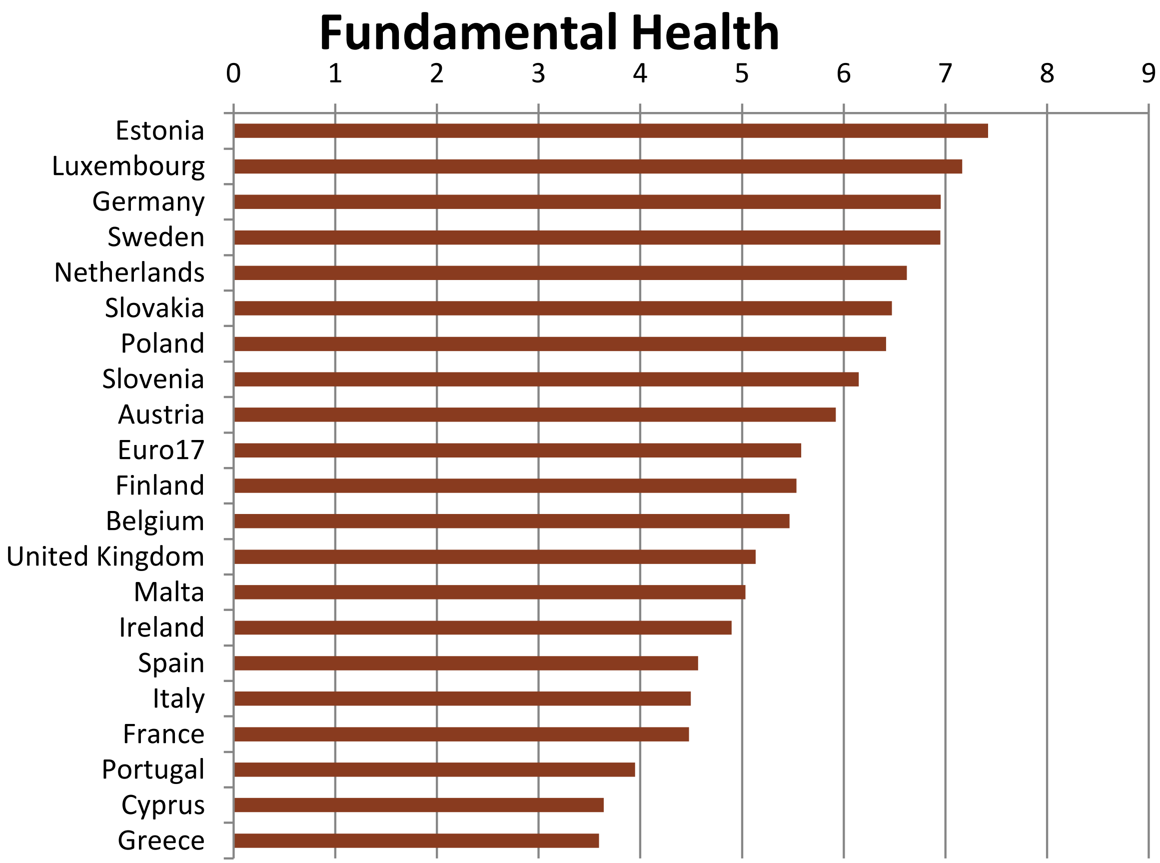
- Broad array of indicators and long-term trends
- Focus: growth potential, competitiveness fiscal sustainability, resilience
- Includes data on demographics and education that go beyond mere economics
- Backward looking data
- Describes the recent situation (=starting level)

Ranking 2: Adjustment Indicator

- Limited number of key measures of adjustment
- Focus: exports, labour costs, fiscal adjustment, structural reforms
- Includes 2012 projections beyond backward-looking hard data
- Describes the pace of change

Overall Health Ranking 2012

Germany near top, Greece bottom



Scores on a scale of 10 (best) to 0 (worst). Source: Berenberg calculations

- Small Estonia and Luxembourg top the list.
- Competitive Germany, Sweden and the Netherlands with very solid results
- Greece and Cyprus come last by a significant margin.
- Ireland, Spain and Portugal feature in the bottom half.
- But so do Italy and France.
- UK slightly below Euro17 average for fundamental health.

Private Bankers founded 1590
BERENBERG BANK
Joh. Berenberg, Gossler & Co. KG

Overall Health Ranking

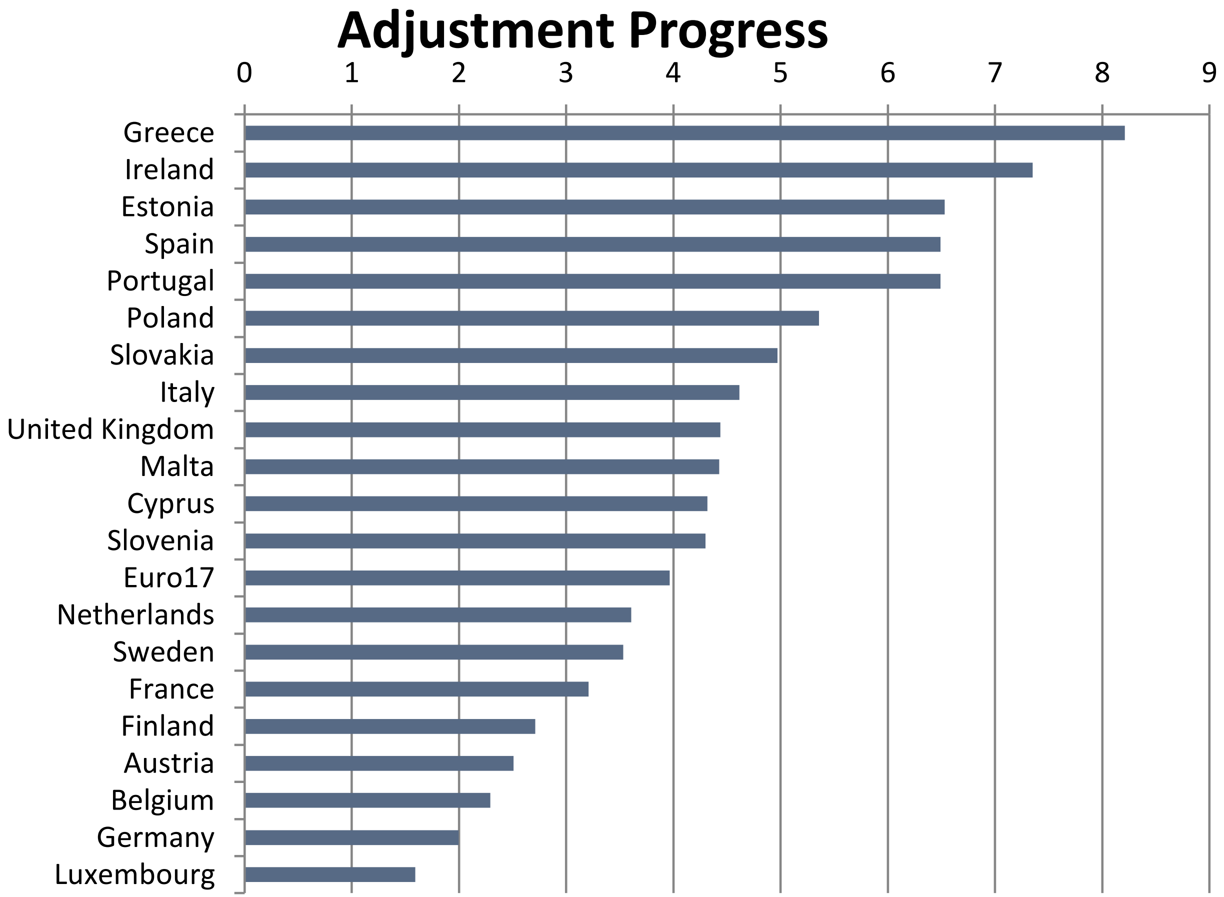
Ranking Overall Health												
Rank		Country	Total Score		Growth		Competitiveness		Fiscal sustainability		Resilience	
2012	2011		2012	*Change*	2012	*Change*	2012	*Change*	2012	*Change*	2012	*Change*
1	1	Estonia	7.4	*0.1*	6.5	*0.9*	6.6	*0.2*	9.2	*0.0*	7.4	*-0.9*
2	2	Luxembourg	7.2	*-0.1*	6.8	*-0.2*	6.8	*0.4*	9.5	*0.3*	5.5	*-1.0*
3	3	Germany	7.0	*0.1*	6.3	*-0.4*	7.9	*0.0*	6.9	*0.8*	6.8	*0.0*
4	4	Netherlands	6.6	*-0.2*	7.3	*-0.1*	8.0	*-0.2*	5.2	*-0.6*	6.0	*0.2*
5	6	Slovakia	6.5	*0.2*	5.6	*0.4*	6.9	*0.2*	6.3	*-0.4*	7.2	*0.4*
6	5	Slovenia	6.1	*-0.4*	6.0	*-0.2*	5.6	*-1.0*	5.6	*0.0*	7.3	*-0.4*
7	8	Austria	5.9	*0.3*	6.0	*-0.1*	5.8	*0.5*	6.1	*1.1*	5.8	*-0.3*
		Euro17	5.6	*0.1*	5.0	*0.0*	6.1	*0.0*	5.6	*0.1*	5.6	*0.3*
8	7	Finland	5.5	*-0.7*	5.9	*-0.3*	4.3	*-0.2*	6.4	*-0.7*	5.5	*-1.7*
9	9	Belgium	5.5	*-0.1*	5.4	*-0.1*	6.6	*0.0*	4.8	*-0.2*	5.0	*-0.2*
10	11	Malta	5.0	*0.4*	4.1	*-0.1*	6.8	*0.4*	6.0	*0.6*	3.2	*0.8*
11	10	Ireland	4.9	*0.2*	5.5	*0.7*	7.6	*0.7*	3.8	*0.3*	2.7	*-1.0*
12	12	Spain	4.6	*0.1*	3.9	*0.5*	4.7	*0.9*	4.4	*-1.4*	5.3	*0.2*
13	14	Italy	4.5	*0.1*	3.3	*0.1*	3.9	*-0.2*	5.3	*0.5*	5.4	*0.1*
14	13	France	4.5	*0.0*	4.7	*0.0*	4.0	*0.3*	3.9	*-0.2*	5.3	*0.0*
15	15	Portugal	3.9	*0.1*	3.6	*0.4*	5.1	*0.3*	3.7	*-0.1*	3.4	*-0.2*
16	16	Cyprus	3.6	*-0.2*	3.9	*0.1*	2.7	*0.3*	5.6	*-0.6*	2.4	*-0.4*
17	17	Greece	3.6	*0.6*	4.0	*0.0*	3.7	*1.0*	2.8	*0.6*	4.0	*1.0*
(4)		Sweden	7.0		7.2		6.3		7.4		6.9	
(7)		Poland	6.4		5.9		6.9		6.1		6.7	
(12)		United Kingdom	5.1		5.4		6.5		3.8		4.9	

- Long-term fundamentals change only gradually.
- After one year of Monti, Italy has moved up slightly.
- France has not improved ist fundamentals.
- Britain has one major weakness: the sorry state of its public finances.

Scores on a scale of 10 (best) to 0 (worst); ranks 1-17 for Euro17, as in 2011; ranks 1-20 for Sweden, Poland, UK. Change gives change in scores over the 2011 Euro Plus Monitor. Source: Berenberg calculations

Adjustment Ranking 2012

Estonia leads, Greece changing, France lags behind



Scores on a scale of 10 (best) to 0 (worst). Source: Berenberg calculations

- All four economies disparagingly labelled „PIGS“ are among the top 5 in our adjustment ranking.
- Germany and Austria have little need to adjust.
- But France needs to do much better.

Private Bankers founded 1590
BERENBERG BANK
Joh. Berenberg, Gossler & Co. KG

Adjustment Ranking

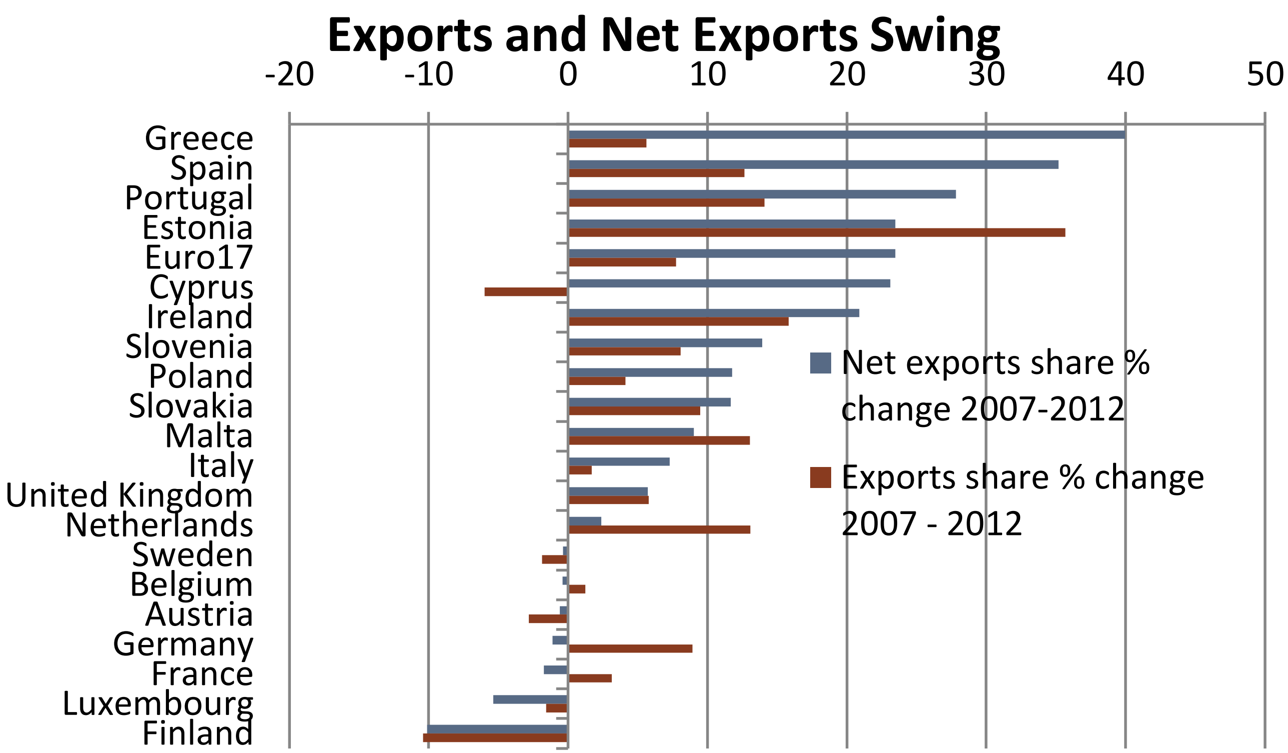
Ranking Adjustment												
Rank		Country	Total Score		External adj.		Fiscal adj.		Labour Cost Adj.		Reform drive	
2012	2011		2012	*Change*	2012	*Change*	2012	*Change*	2012	*Change*	2012	*Change*
1	2	Greece	8.2	*1.6*	6.6	*0.2*	8.6	*0.3*	7.7	*2.5*	10.0	-
2	3	Ireland	7.4	*0.9*	8.8	*1.7*	4.5	*0.1*	8.4	*0.5*	7.7	-
3	1	Estonia	6.5	*-1.9*	8.9	*-1.0*	2.4	*-3.2*	8.3	*-1.4*	n.a.	-
4	5	Spain	6.5	*0.8*	7.1	*0.6*	4.2	*-3.3*	5.7	*2.5*	9.0	-
5	7	Portugal	6.5	*1.6*	6.7	*1.6*	6.5	*0.2*	5.7	*2.6*	7.0	-
6	6	Slovakia	5.0	*-0.1*	6.2	*1.2*	4.5	*-1.2*	6.4	*2.0*	2.8	-
7	12	Italy	4.6	*1.3*	3.8	*1.5*	7.2	*2.5*	2.9	*0.0*	4.7	-
8	4	Malta	4.4	*-2.0*	6.4	*-1.5*	2.1	*-2.3*	4.8	*-2.2*	n.a.	-
9	13	Cyprus	4.3	*1.4*	5.5	*1.4*	4.1	*0.7*	3.4	*2.1*	n.a.	-
10	11	Slovenia	4.3	*0.7*	5.8	*1.2*	4.4	*0.8*	2.7	*0.1*	n.a.	-
		Euro17	4.0	*0.7*	4.1	*1.1*	4.3	*-0.2*	2.6	*0.4*	4.9	-
11	8	Netherlands	3.6	*-0.4*	4.8	*1.6*	2.8	*-2.3*	2.5	*-1.3*	4.3	-
12	15	France	3.2	*0.7*	2.9	*0.5*	4.3	*0.4*	2.0	*0.8*	3.6	-
13	10	Finland	2.7	*-1.1*	1.0	*0.5*	0.2	*-3.3*	3.6	*-4.0*	6.1	-
14	17	Austria	2.5	*0.4*	2.6	*-0.5*	0.9	*-0.7*	1.8	*0.2*	4.7	-
15	14	Belgium	2.3	*-0.3*	3.0	*0.2*	2.0	*0.4*	1.8	*-1.5*	2.3	-
16	16	Germany	2.0	*-0.2*	3.4	*1.8*	3.6	*-0.1*	1.0	*-0.2*	0.0	-
17	9	Luxembourg	1.6	*-2.4*	1.1	*-2.1*	0.2	*-1.7*	3.7	*-3.1*	1.3	-
(6)		Poland	5.4		4.5		8.3		1.8		6.9	
(9)		United Kingdom	4.4		3.8		4.5		2.6		6.9	
(14)		Sweden	3.5		2.9		3.7		1.7		5.8	

- All four bailout economies have moved up in our adjustment ranking since 2011.
- No trace of moral hazard.
- UK does better than Euro17 average.

Scores from 10 (best) to 0 (worst); ranks 1-17 for Euro17, as in 2011; ranks 1-20 for Sweden, Poland, UK; change: change in scores over 2011 Euro Plus Monitor. Source: Berenberg calculations

External adjustment

Periphery is rebalancing

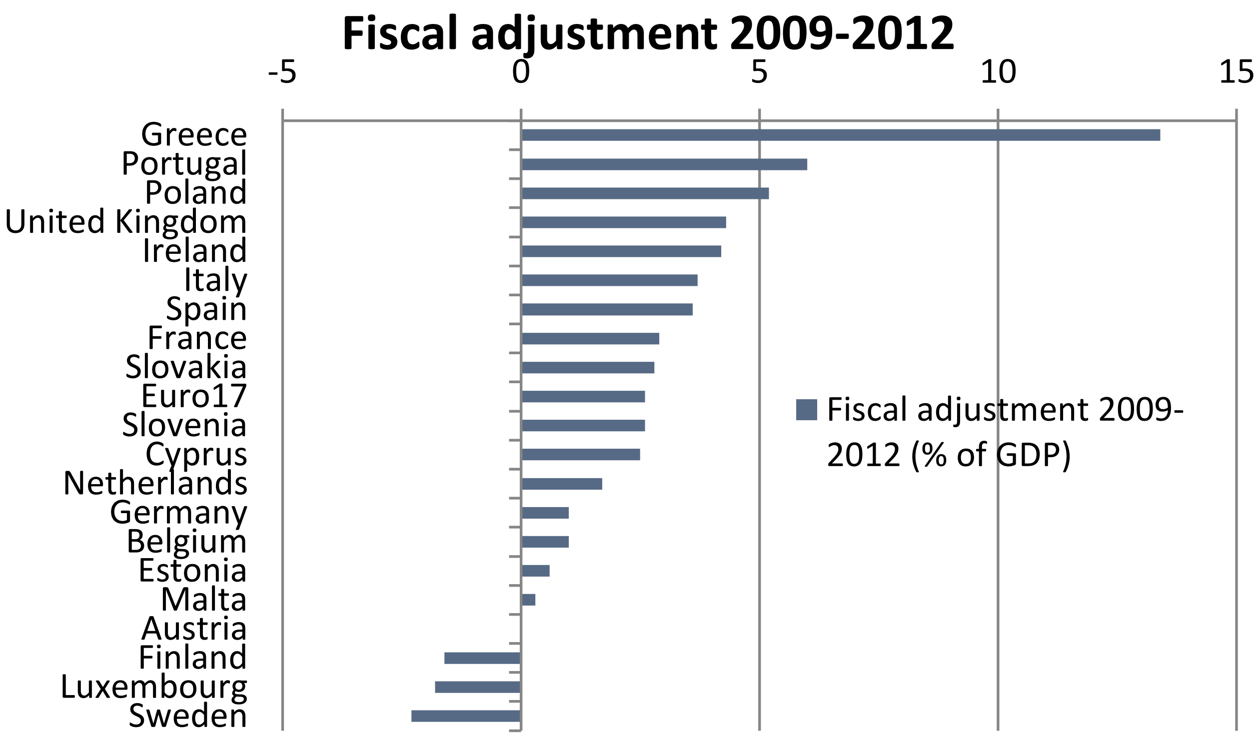


- Two aspects of external adjustment:
  (1) swing in net exports
  (2) rise in exports.
- Greece has the strongest swing in net exports (relative to its starting situation).
- Spain, Portugal and Ireland also look good on this count.
- Germany has no need for further export gains.
- The Eurozone is rebalancing.

Change in export share in GDP 2H 2007 to 1H 2012; relative to starting level, in %
Change in net export share in GDP 2H 2007 H2 to 1H 2012, relative to 2H 2007 share of exports in GDP, in %
Source: Eurostat, Berenberg Calculations

Fiscal adjustment

Greece with huge effort

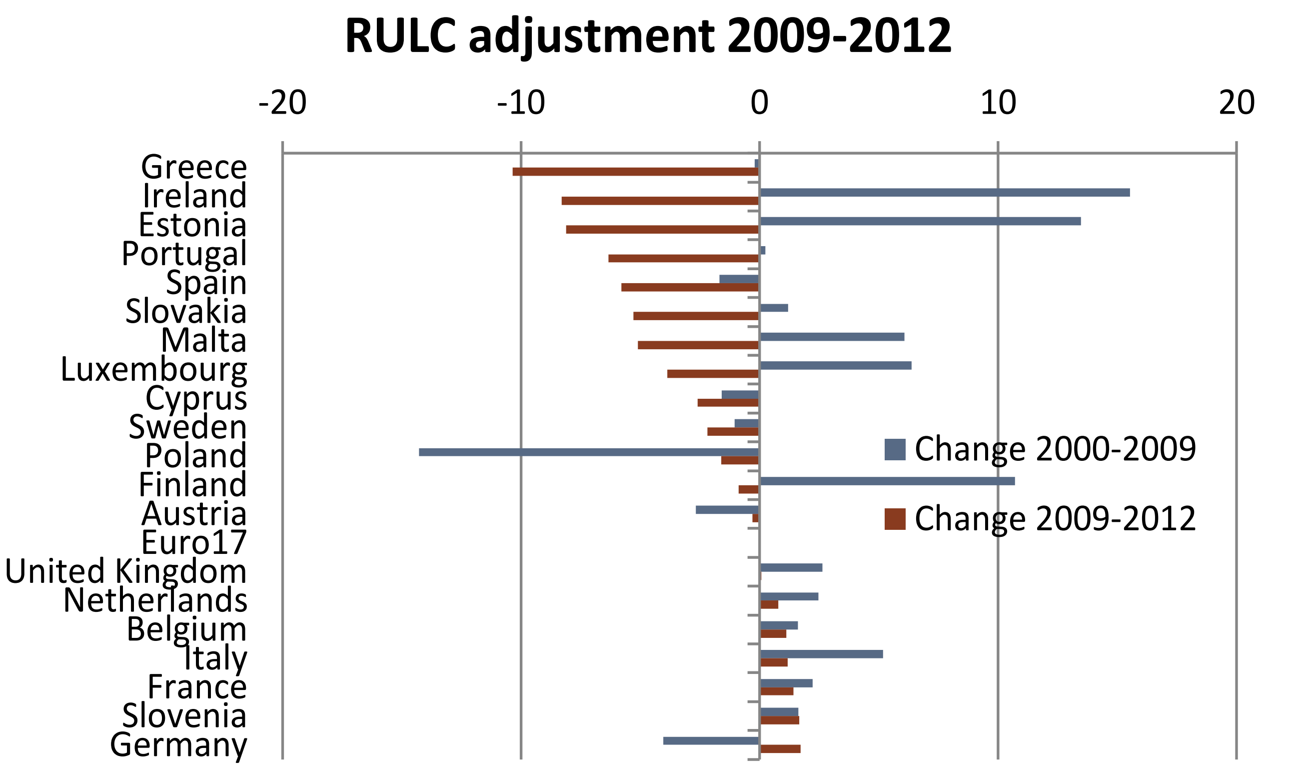


- Countries on the Euro-periphery are tightening their belts.
- While Germany has no further need for austerity.
- Finland, Luxembourg and Sweden have relaxed the fiscal reins.

Cumulative change in underlying primary fiscal balance 2009-2012, in % of annual GDP
Source: EU Commission, European Economy, Statistical Annex, spring 2012

Labour cost adjustment

The great convergence

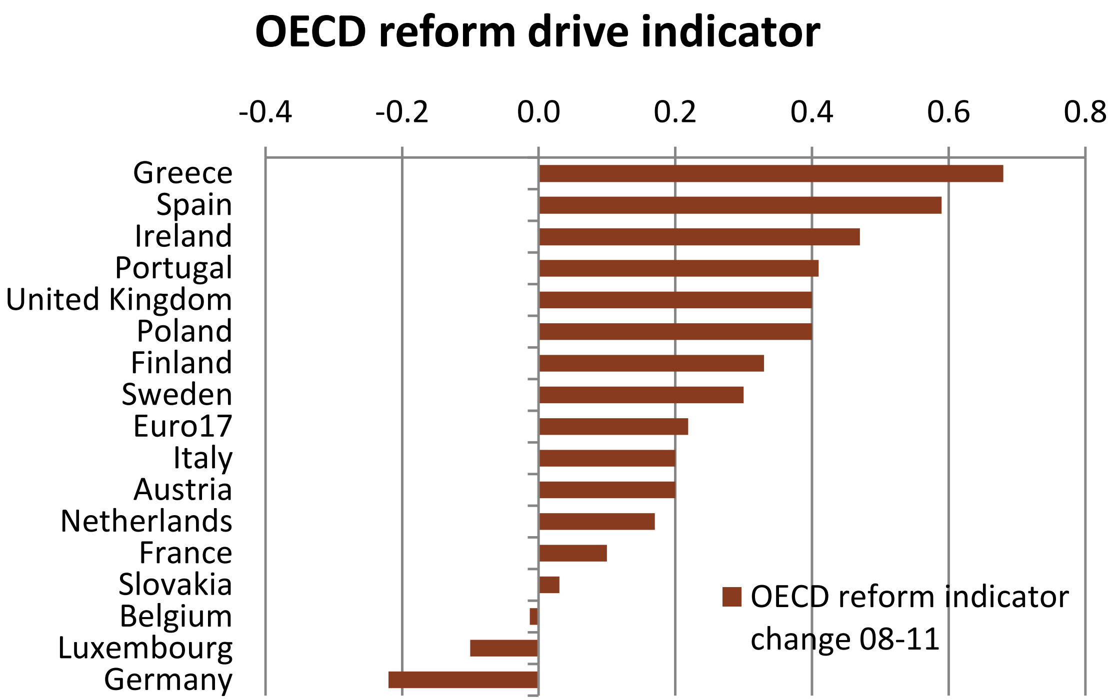


- Turnaround at the euro periphery…
- …where real unit labour costs are falling sharply.
- Turnaround in Germany as well…
- …where labour costs are now rising at an above-average pace.

Cumulative deviation of change in real unit labour cost from Eurozone average; 2000-2009 vs. 2009-2012
Source: Eurostat, Berenberg Calculations

Reform drive

Crisis countries more responsive to OECD reform proposals



Change in overall responsiveness to Going for Growth recommendations across OECD countries from 2008-09 to 2010-11.
Source: OECD 2012

- Who is implementing pro-growth structural reforms?
- The OECD regularly makes detailed reform proposals.
- Once a year, the OECD checks whether countries are becoming more or less responsive to reform proposals.
- The bailout countries have become very responsive…
- …while Germany has started to slowly undo some of its previous reforms.

Private Bankers founded 1590
BERENBERG BANK
Joh. Berenberg, Gossler & Co. KG

Spain: the pain is not in vain

Balancing the external account

Real net exports, GDP definition. Source: Eurostat

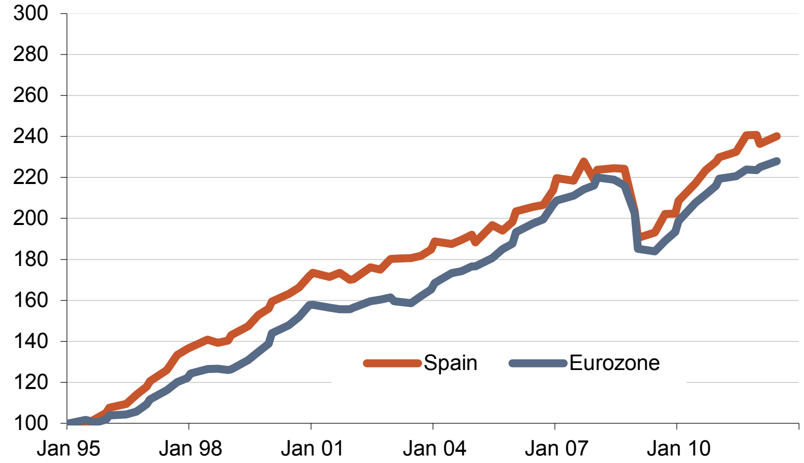
- After the Spanish real estate boom turned to bust almost five years ago…
- …Spain‘s vast external deficit vanished fast.
- As the new austerity takes its toll, we expect a significant export surplus in 2012.

The Spanish turnaround

Exports or imports?

- Is Spain competitive?
- The proof is in the trade data, not labour costs.
- Spanish exports have risen slightly faster than those of the Eurozone.

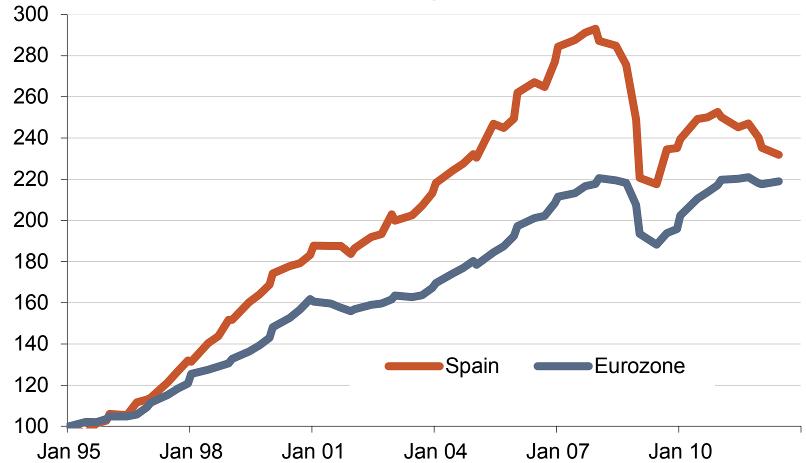
Real exports of goods and services



Goods and services; volume index; 1Q95=100. Source: Eurostat

- Spain had an import problem, not an export problem.
- Spain imported far too much while it enjoyed a party fuelled by a real estate boom.
- Spain has corrected the problem the hard way, through collective belt-tightening.
- Spain does not need to leave the Eurozone to regain competitiveness. It has to restrain consumption and fix its labour market. On 10 February, Spain announced a major labour market reform (less dismissal protection).

Real imports of goods and services



Goods and services; volume index; 1Q95=100. Source: Eurostat.

The Irish solution

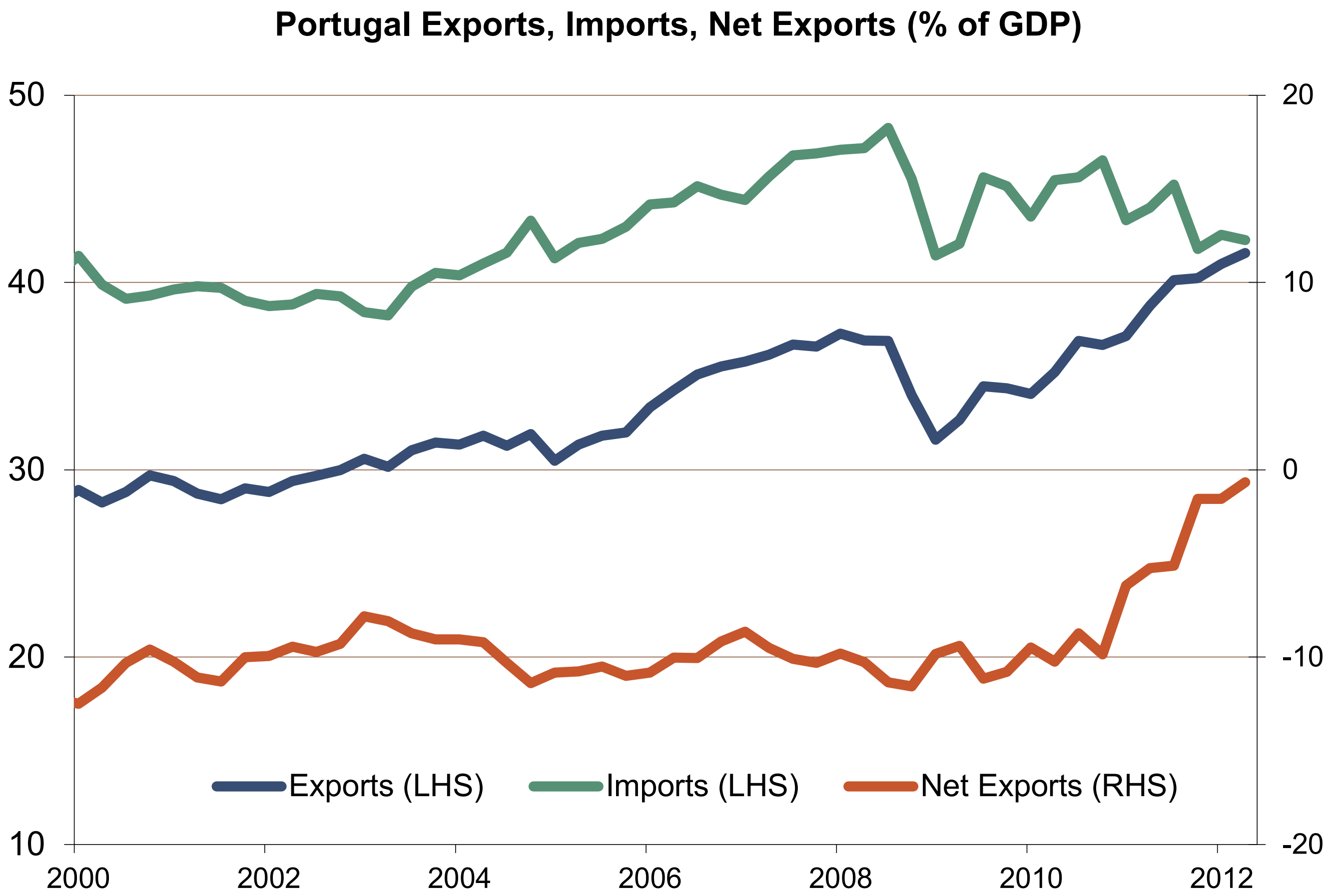
Strong exports

In % of GDP. Source: CSO

- Irish exports are rising nicely.
- Ireland is our top candidate for the first turnaround at the Euro periphery,
- If Ireland wants to, it could probably return to bond markets in late 2012.
- But is there a moral hazard?

Portuguese progress

Strong exports, more subdued imports



In % of GDP. Source: Eurostat

- Portuguese exports are rising as well.
- With import demand contracting modestly…
- …the external deficit has almost vanished.

Three Stages of Adjustment

Stage 1: Pain (Greece, Spain)

- Serious labour market and other structural reforms
- Fiscal squeeze
- External balance starts to improve through drop in imports
- Still-weak result for Overall Health, strong result on Adjustment Indicator

Stage 2: Turnaround (Ireland, to be followed by Portugal and Italy 2013?)

- Fiscal squeeze continues; labour market reforms start to show results
- Private sector responds to structural reforms by investing more
- Significant gains in employment and tax revenues
- External balance shifts further as exports take off
- Stronger result for Overall Health, still-strong result on Adjustment Indicator

Stage 3: Enjoying the Success (Germany, to be followed by Estonia)

- No need for further adjustment
- Room for more private and public consumption
- Strong reading on Overall Health Indicator, weak result on Adjustment Indicator

The blueprint: the German turnaround

Private Bankers founded 1590
BERENBERG BANK
Joh. Berenberg, Gossler & Co. KG

Strong increase in employment since 2006

Core employment: subject to social security contributions. Source: Bundesagentur; Bundesbank

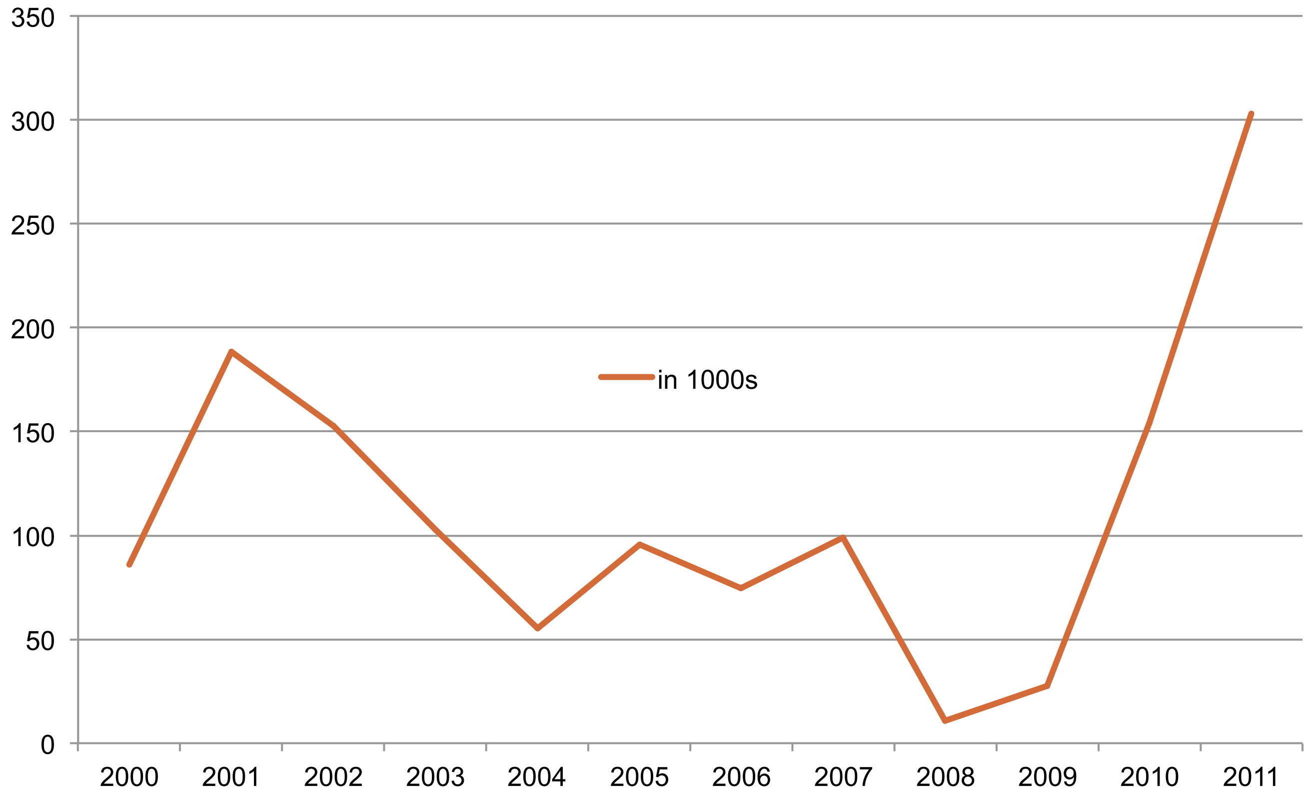
- Almost a miracle: after four decades of rising unemployment, Germany turned its labour market around with the reforms of 2004.
- Since early 2006, core employment has risen by 2.9 million (+11.2%).
- More employment = more taxpayers = balanced budget
- The gain is now stalling temporarily as the economy stagnates.

400 YEARS – EXPERIENCE BUILDS THE FUTURE

Germany is attracting immigrants

Rebalancing in action

Net migration of foreigners into Germany



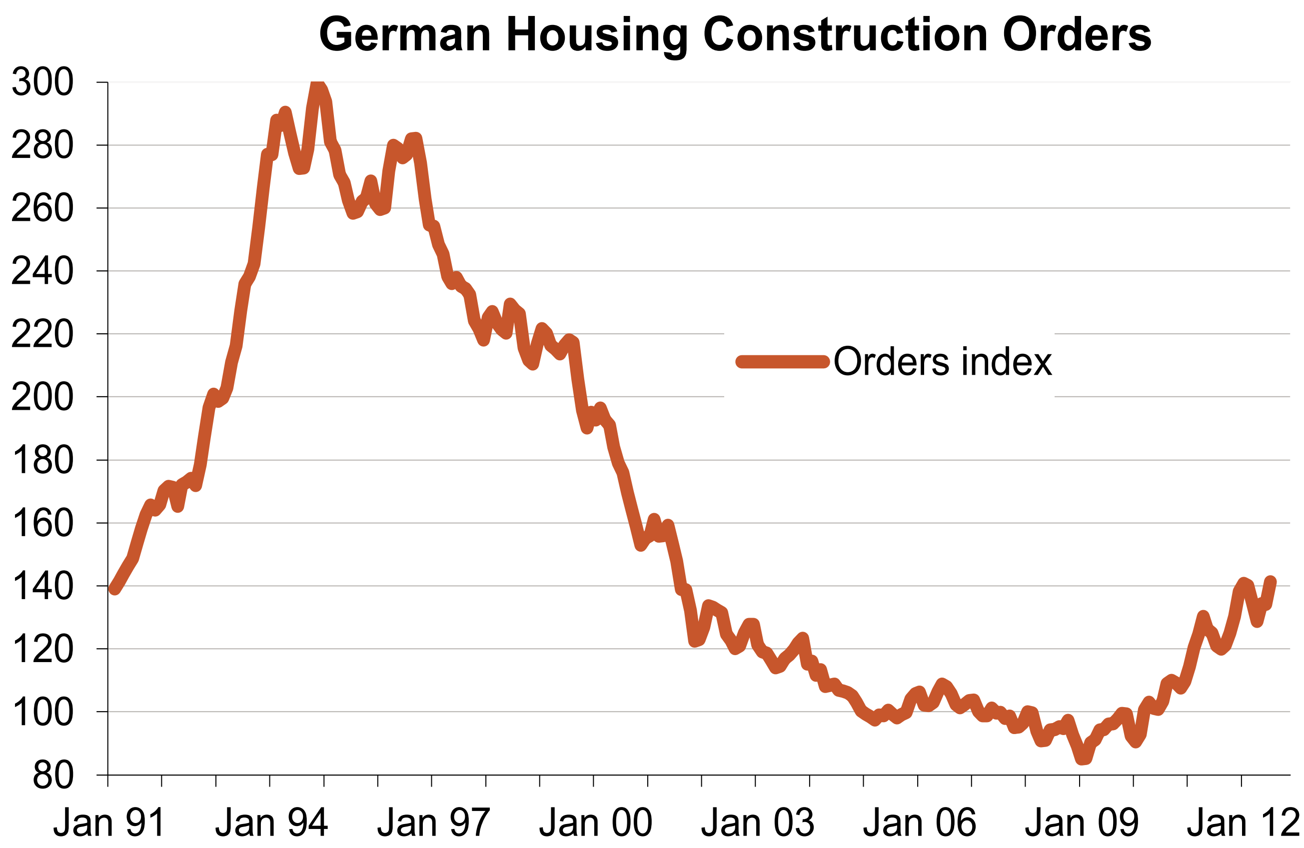
Source: Destatis

- The strong German economy is attracting immigrants.
- Since the start of the Euro crisis, Spaniards and Greeks have started to move to Germany…
- …while the number of people coming from Poland and other east- or central European countries is no longer rising

Private Bankers founded 1590
BERENBERG BANK
Joh. Berenberg, Gossler & Co. KG

Germans are building houses again

Strong rebound after 15 years of misery

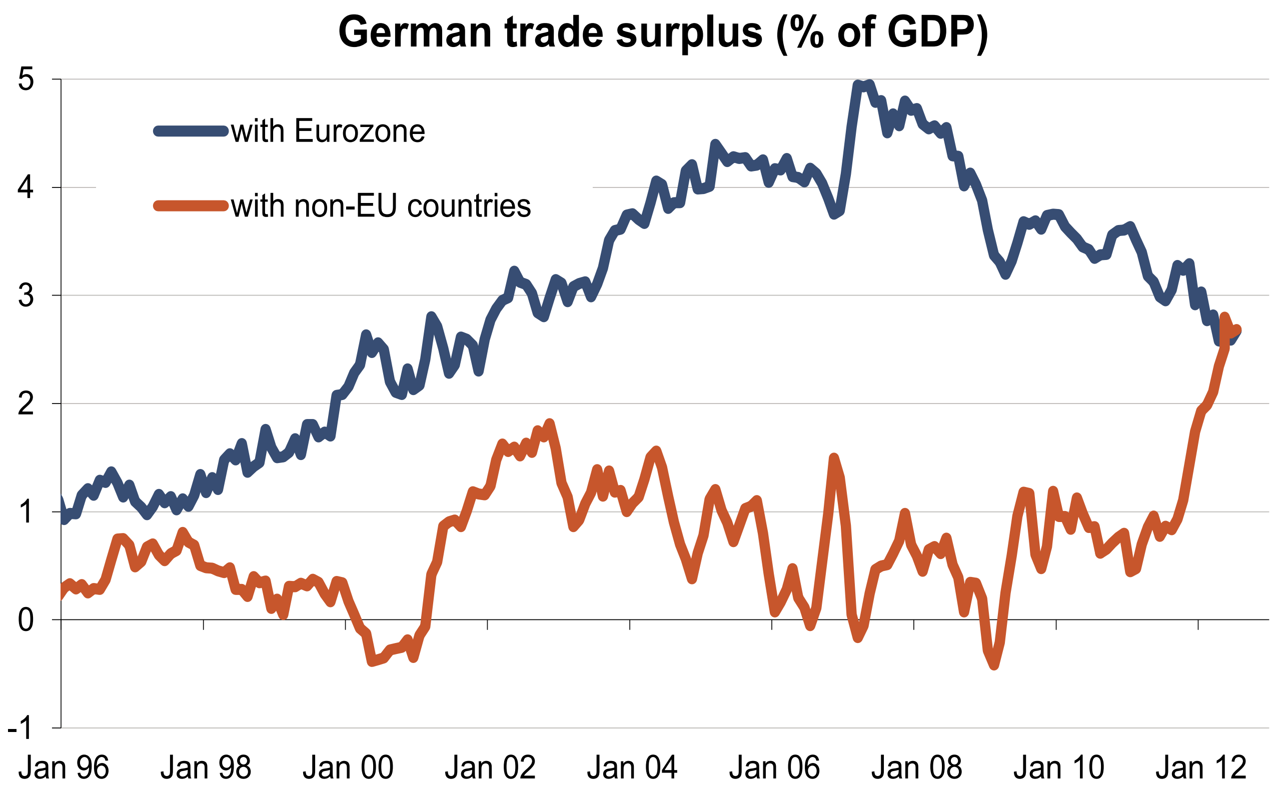


- Germany had its boom-bust in the 1990s in the wake of the unification euphoria.
- After 15 years of misery, Germans are now building houses again.

New orders for residential construction, volume, index level, 2005 = 100
Source: Bundesbank

Germany supports its friends

German trade surplus with Eurozone shrinking



German balance of trade in goods with other euro members, in % of German GDP, rolling 12-month average.
Source: Bundesbank

- Until 2008, domestic demand was weak in Germany but strong in the Euro periphery.
- Germany thus had a surging trade surplus with other Euro members.
- But this has changed. More domestic demand in Germany…
- …and austerity in the periphery shows up in a decline in the German surplus.
- A stronger Germany offers the periphery the chance to raise their exports.

France versus Spain

Private Bankers founded 1590
BERENBERG BANK
Joh. Berenberg, Gossler & Co. KG

Who is competitive – and who is not?

Real net exports, GDP definition. Source: Eurostat

- While Spanish exports have risen strongly in the last 10 years…
- …France has lagged far behind.

France: falling behind

France is the only major economy in our sample of 20 countries …

...with serious fundamental health problems without doing anything about it.

Strong points

- High fertility rate
- High household savings rate

Weak points

- "Leviathan award" for the most bloated public sector
- Serious lack of competitiveness
- Rigid labour market
- Low trend growth rate

France is not utilising its potential. It is gradually heading towards a major crisis – if it does not change tack. **But a crisis is not yet imminent. France can still avert it.**

If France reforms its labour market and utilises its human potential, it could eventually replace Germany as the top economy in Europe over time.

The lessons of 2012

- **Austerity** is a necessary and potent medicine…
- …but an **overdose** can kill the patient
- **Optimum austerity:** No country should be required to reduce its underlying primary fiscal deficit by more than 2% of GDP per year (unless it had relaxed policy by more than 1% of GDP in the previous year)
- Fiscal shortfalls caused by **recession** ought to be tolerated as long as the overall direction of policy stays on course
- A major risk: could **Spain** fall into a Greek-style downward spiral?
- **Pro-growth structural reforms** matter more than austerity
- **Debt restructuring** is dangerous
- Only the **ECB** can erect a reliable firewall against contagion risks

UK: a place with a twist

UK: overall scores close to Eurozone average

- Slightly below average for fundamental health (score of 5.1 vs 5.6 average)
- Slightly above average for adjustment efforts (score of 4.4 vs 4.0 average)

Strong points: excellent microeconomics, good demographics

- Very deregulated labour, product and services markets
- One of the highest fertility rates
- Eager to implement structural reforms

Weak points: a lack of prudence

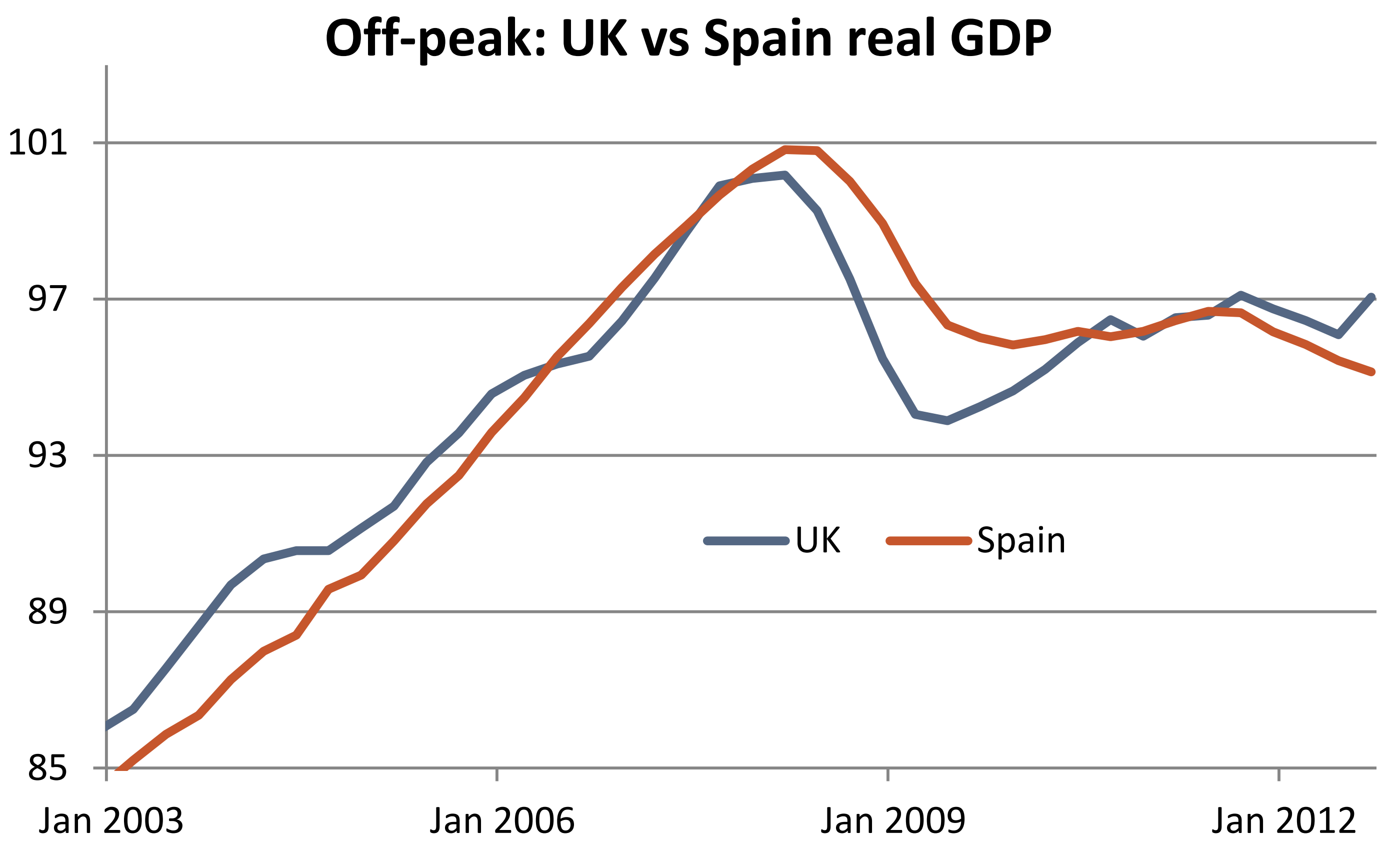
- Worst score for fiscal sustainability after Greece and Portugal
- Low personal savings rate
- High share of consumption in GDP

Excellent micro- but dismal macroeconomics = If Britain had lived by the rules of the euro since 1999, it would be much better off today.

In the same league: Britain and Spain…

Private Bankers founded 1590
BERENBERG BANK
Joh. Berenberg, Gossler & Co. KG

…both rhyme with pain



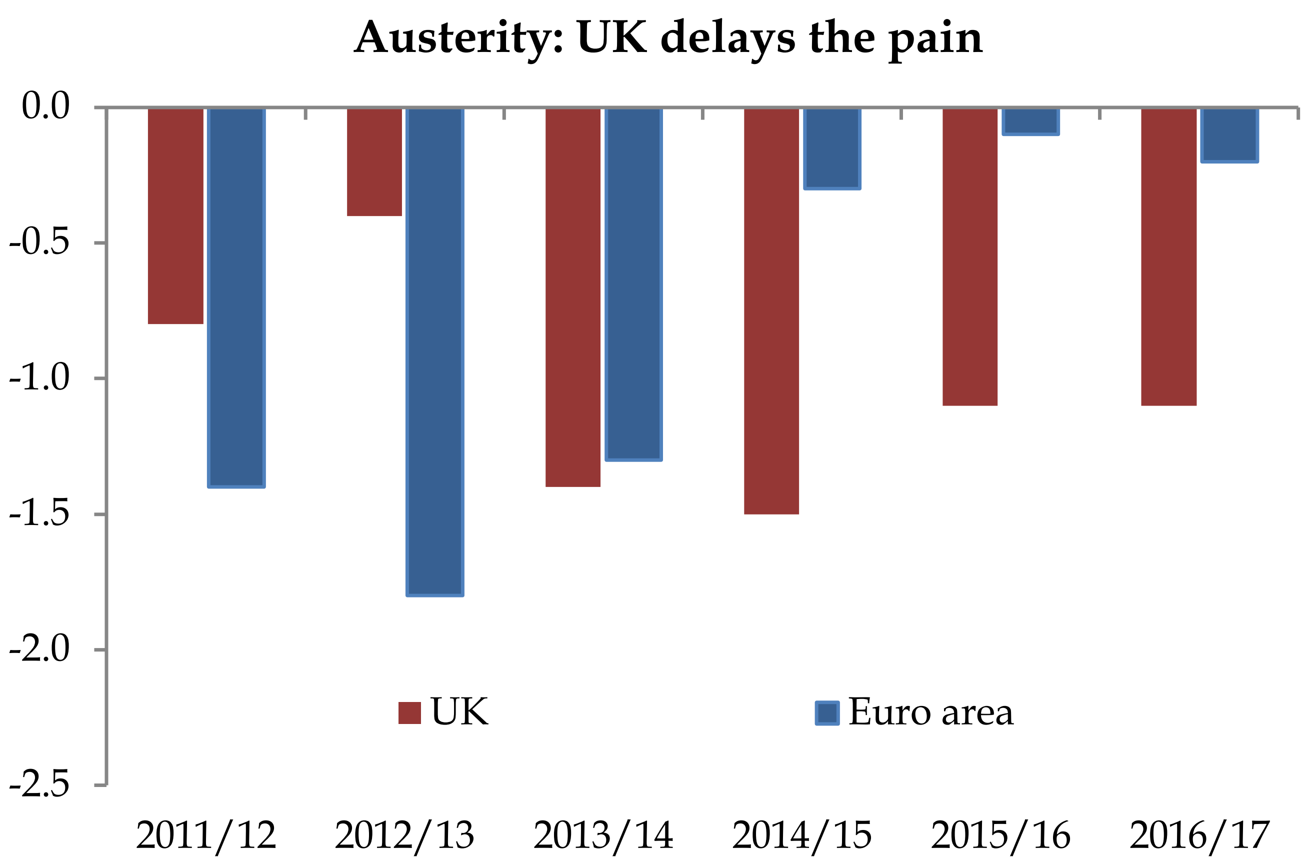
Real GDP, 2H 2007 = 100. Source: Eurostat; ONS

- Spain and Britain looked very similar until mid-2012.
- Both had a real estate bubble that went bust, both have similar fiscal gaps.
- Both succumbed to renewed recession in early 2012.
- Near-term, Britain is outperforming Spain by a wide margin…
- …as Spain is tightening its fiscal policy dramatically…
- …while Britain has granted itself a one-year reprieve.

Britain: austerity ahead

Private Bankers founded 1590
BERENBERG BANK
Joh. Berenberg, Gossler & Co. KG

Ths fiscal pain: UK versus Eurozone



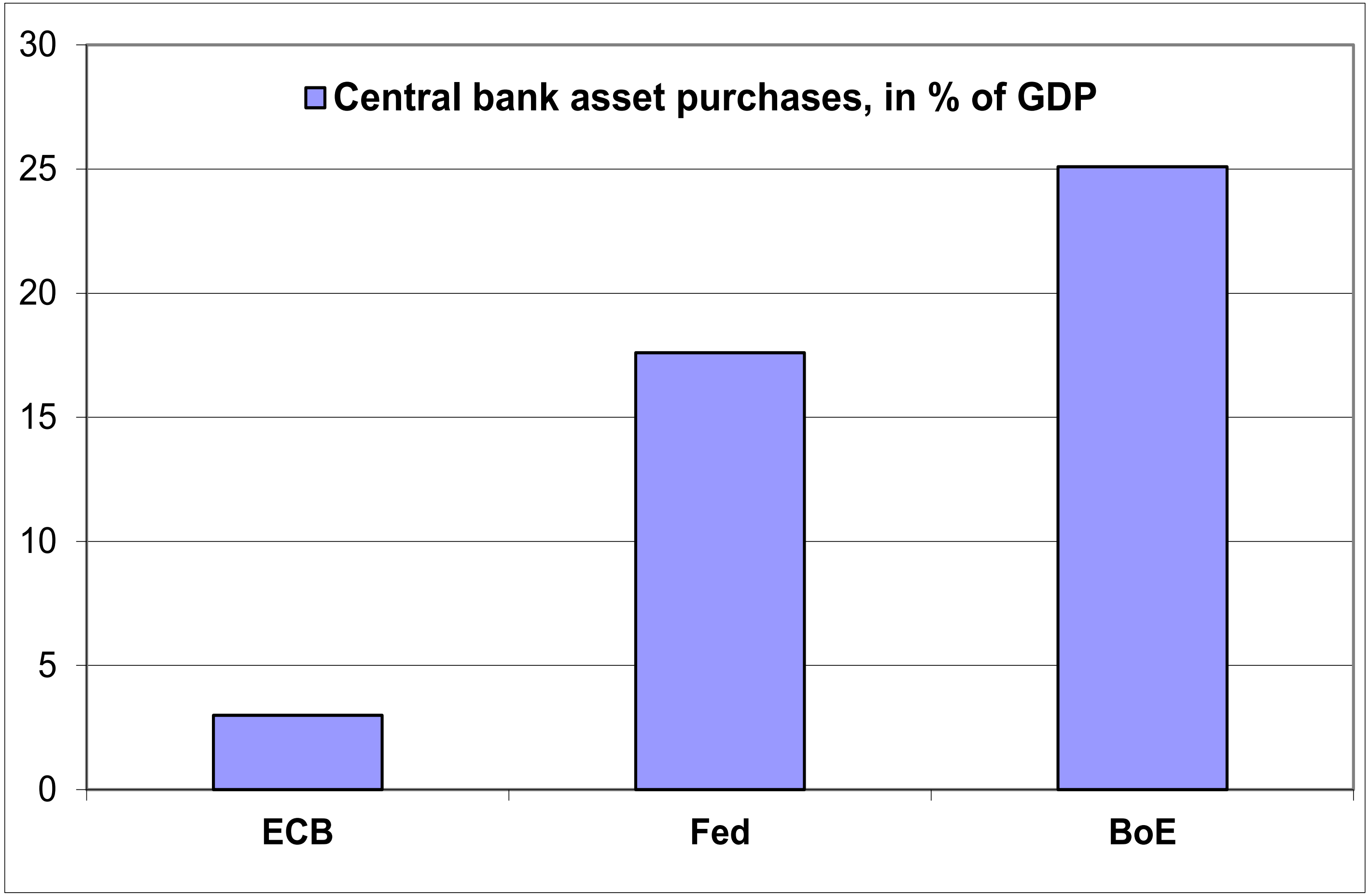
Change in cyclically adjusted primary balance, general government, in % of GDP.
Source: IMF Fiscal Monitor, Update July 2012; Berenberg projections

- Unlike the Eurozone, Britain did not tighten fiscal policy by much in 2012.
- UK spending plans project significantly more fiscal pain for 2013 and beyond.
- But the decline in real disposable income has ended with the fall of inflation from a 5% peak to 2.6% now.
- A modest gain in consumption and exports should support a return from stagnation to mediocre growth.

Private Bankers founded 1590
BERENBERG BANK
Joh. Berenberg, Gossler & Co. KG

Why does the Eurozone have a debt crisis?

Or is it an inadequate panic prevention policy?



Actual and announced asset purchases from early 2009 until August 2012. Source: ECB, BoE, Fed, Eurostat, ONS, BEA.

- The ECB has been much more reluctant than the US Fed and the BoE to buy assets.
- If the ECB had bought assets as freely as the Fed (or the BoE), it would have purchased an additional €1.4trn (or €1.85trn).
- In our view, the ECB has to be the backstop of last resort for solvent sovereigns in a liquidity crisis.
- To control a market panic, a strong signal is required.

Tough love: the Eurozone approach

When the tough get going: the nature of the Eurozone

The Eurozone has lower fiscal deficits and a faster pace of supply-side reforms than the US, the UK and Japan. Why?

The political constitution of the Eurozone is uniquely suited to promote supply-side reforms and sound fiscal policies. In the Eurozone, there are no easy ways to escape market pressures.

- As in a nation, the weak need the solidarity of the strong. But unlike in a nation, the weak do not vote in the elections of the strong. As a result, Germany can impose much tougher conditions on Spain than Texas could impose on Detroit.
- Problems in the Eurozone are not papered over by huge soft internal transfers. Instead, they need to be tackled the hard way, by serious reforms.
- A uniquely independent central bank.
  (1) One central bank - 17 finance ministers: makes cosy breakfasts difficult.
  (2) Bundesbank legacy = the hard-nosed central bankers carry disproportionate clout.

The strong can say "no". Support comes as credit, not in straight transfers. It is highly conditional. Merkel and the ECB were fed up with Berlusconi. Result: enter Monti.

The key risk in the Eurozone: the strong forced excessive austerity on Greece. Is the political glue holding the Eurozone together strong enough?

ECB: always mighty, always late

ECB will not commit suicide

The ECB's summer message

•No solvent Euro member will become illiquid

•No country is too big to be bailed out

•ECB will see to it that ESM cannot run out of money

•Don't fight the central bank

ECB decision: major positives

•Strict ESM conditionality = Countries need to keep themselves solvent

•Strict ESM conditionality = German Bundestag has a veto

•Full Merkel/Schäuble support

•Only Weidmann objected

One problem

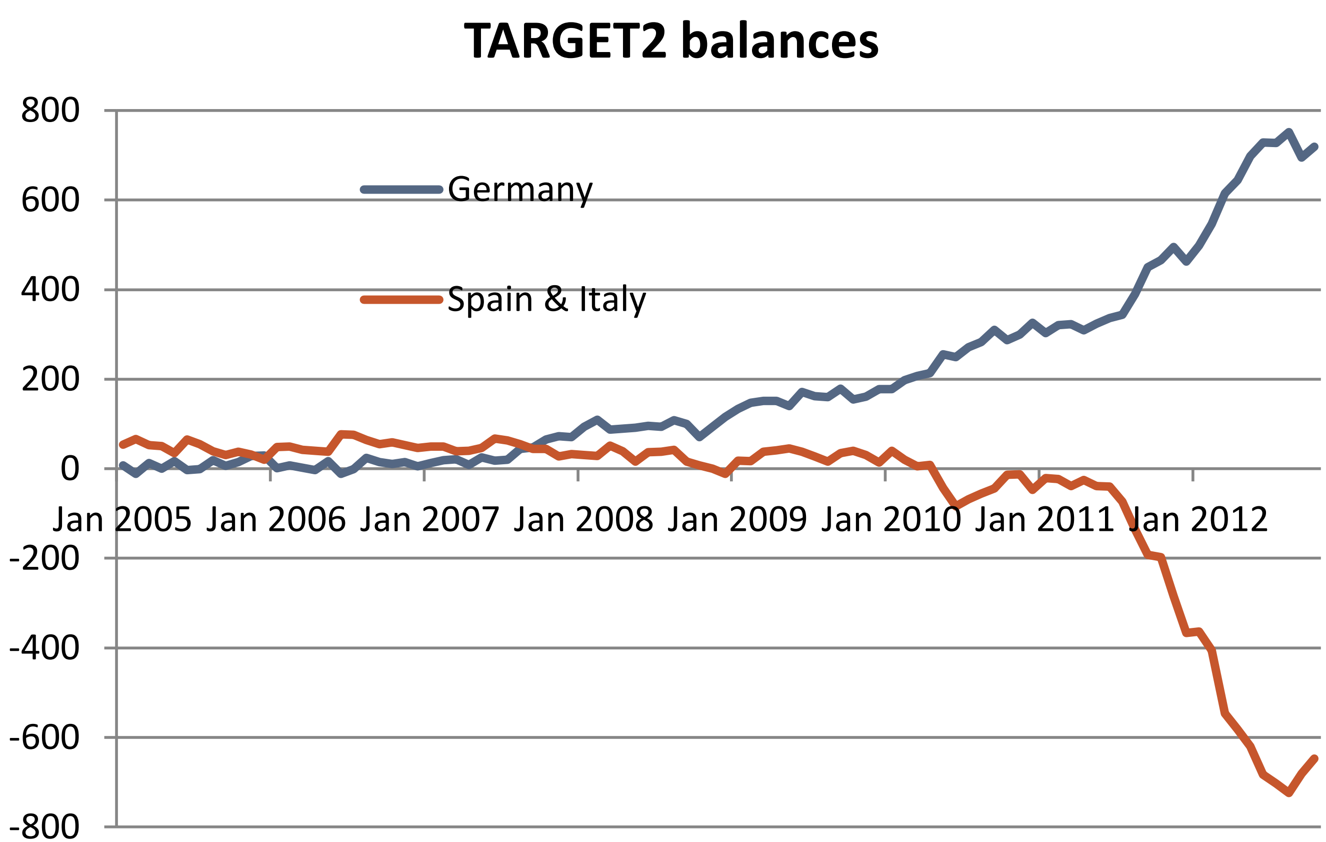
•Focus on short end makes interventions less impressive

•But banks can play the yield curve

•ESM can focus on long end

Euro crisis: has the ECB stopped the capital flight

Target2 balances stabilising

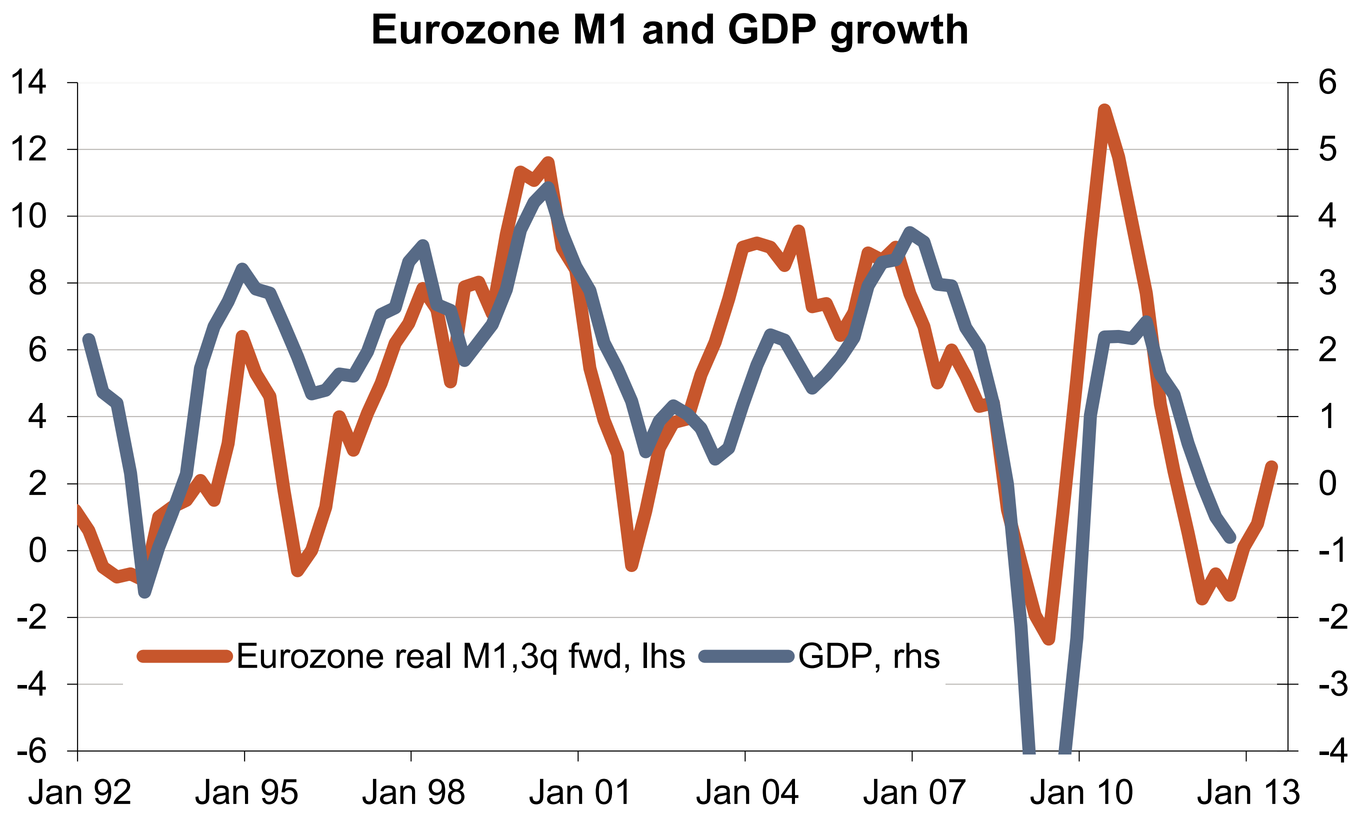


Source: ECB, national central banks

- The imbalances in the Target2 payments system of Euro central banks reflect the fracturing of the interbank…
- ..and capital flight from the periphery to the core.
- Spanish and Italian banks are happy to lend money to German banks, ut not vice versa…
- …forcing the ECB to fill the gap.
- But the ECB may now have turned the tide.

Cyclical outlook: end of the Eurozone recession?

The power of money



- Real M1 money supply tends to herald turning points some 3 quarters ahead.
- M1 growth turned up in spring 2012 and accelerated as the ECB got more aggressive over the summer.
- Real M1 is consistent with our call that the economy will hit bottom soon…
- …and rebound modestly in 2013.

Annual rates of growth in %, real M1 deflated by consumer prices and advanced by 3 quarters, on right-hand scale.; real GDP on left-hand scale.
Source: Eurostat, ECB, Berenberg calculations

Euro crisis outlook

Laying the groundwork for balanced growth

The crisis

- We have to brace ourselves for future waves of crisis.
- But thanks to the ECB safety net, future waves will be less vicious.
- Over time, standard economic fundamentals will start to shape the economic outlook more than the to-fro of crisis management and perceptions of political tail risks.
- But the success of frontloaded austerity depends on export growth. If the world economy fails to regain momentum, the euro crisis could escalate again.

A tentative schedule

- **Ireland** could return to capital markets any time it chooses to do so.
- **Italy** has delivered almost all of the required austerity. Only small fiscal hit for 2013, 0.9% of GDP versus 3% in 2012. Expect return to modest growth in spring 2013.
- **Portugal**: Likely to be in the Irish position by mid-2013.
- **Spain**: severe fiscal hit in late 2012 to keep economy in recession until mid-2013. Turnaround in the autumn of 2013.
- **Greece** needs less austerity and more structural reforms – and a return of confidence in the future of Greece in the euro. The Greek nightmare could then come to and end.

Global outlook 2013: the return of economics

Modest rebound, reduced tail risks

US: more of the same

- Mediocre growth at close to 2%, less subdued consumer spending and business investment to offset modest fiscal tightening of roughly 1% of GDP per year.
- “Fiscal cliff”: a tool to force a last-minute compromise – and a remote tail risk.

China: beyond the soft landing

- Selected stimulus likely to underpin a gradual rebound, led by domestic demand
- End of inventory correction to show up in less subdued import growth

Eurozone: a gradual fading of the crisis

- We never believed that the ECB would commit suicide by letting Italy go bust.
- After the ECB openly admitted that it would support Italy and Spain with full force if need be, markets have come a bit closer to our view.
- The crisis is not over, but less vicious. Expect a return to modest growth in Q2 2013.
- Peak fiscal pain in late 2012, expect a gradual easing of the pain during 2013.

This document has been prepared by Berenberg Bank or one of its affiliates (collectively “Berenberg“). This document does not claim completeness regarding all the information on the stocks, stock markets or developments referred to in it.

On no account should the document be regarded as a substitute for the recipient procuring information for himself/herself or exercising his/her own judgements.

The document has been produced for information purposes for institutional clients or market professionals.
Private customers into whose possession this document comes should discuss possible investment decisions with their customer service officer, as differing views and opinions may exist with regard to the stocks referred to in this document.
This document is not a solicitation or an offer to buy or sell the mentioned stock.

The document may include certain descriptions, statements, estimates and conclusions underlining potential market and company developments. These reflect assumptions which may turn out to be incorrect. Berenberg and/or its employees accept no liability whatsoever for any direct or consequential loss or damages of any kind arising out of the use of this document or any part of its content.

Berenberg may act as market-maker or underwrite issues for any securities mentioned in this document, derivatives thereon or related financial products or perform or seek to perform capital market or underwriting services.

Remarks regarding foreign investors
The preparation of this document is subject to regulation by German law. The distribution of this document in other jurisdictions may be restricted by law, and persons into whose possession this document comes should inform themselves about, and observe, any such restrictions.

United Kingdom
This document is meant exclusively for institutional investors and market professionals but not for private customers. It is not for distribution to or the use of private investors or private customers.

United States of America
This document has been prepared exclusively by Berenberg Bank. Although Berenberg Capital Markets LLC, an affiliate of Berenberg Bank and registered US broker-dealer, distributes this document to certain customers, Berenberg Capital Markets LLC does not provide input into its contents, nor does this document constitute research of Berenberg Capital Markets LLC. In addition, this document is meant exclusively for institutional investors and market professionals, but not for private customers. It is not for distribution to or the use of private investors or private customers.
This document is classified as objective for the purposes of FINRA rules. Please contact Berenberg Capital Markets LLC (+1 617.292.8200), if you require additional information.