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Economics Research

Europe's 'red line'

A 'red line' has segmented Euro financial markets

A 'red line' has descended across Europe, marking the segmentation of Euro financial markets into a safe northern 'core' and a potentially unstable southern periphery.

Peripheral countries face tightening financial conditions

At present, this 'red line' runs along the Pyrenees and the Alps. Countries to the south of the line – notably Spain and Italy – face elevated sovereign yields. Households, companies and banks are starved of credit and / or are only able to borrow at very high rates: the resulting tight financing conditions serve to exacerbate the deflationary pressures on countries already mired in recession.

Policies aim at either bridging or breaking the 'red line'

The policy response to this situation can take two forms: (1) bridging the 'red line' by offering official vehicles (Eurosystem intermediation, troika programmes) so as to channel financing to countries where private investors are no longer willing to venture; and (2) breaking the 'red line' by making the fundamental economic changes required to establish credibly that default and/or Euro exit are unnecessary and unthinkable.

New initiatives contain elements of both approaches

The European authorities' new policy initiatives have elements of both responses: the ECB's new sovereign debt purchase scheme offers a bridging device to maintain financing to the periphery, while the associated EFSF / ESM conditionality is designed to support fundamental reforms aimed at breaking the 'red line'.

Italy stands to benefit; we expect to see more initiatives for Spain

In countries where some market access has been retained and problems are largely of a liquidity nature (e.g., Italy) this may prove sufficient. But where the fundamental challenges are greater (e.g., Spain), more aggressive bridging measures – such as further credit easing measures – would be beneficial and are likely at some stage so as to maintain the economic and political feasibility of the necessary but painful fundamental adjustment.

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Europe's 'red line': Policies to address segmented financial markets

From Biarritz on the Atlantic to Trieste on the Adriatic, a 'red line' has descended across Europe. Below that line lie all the capitals of the ancient states of Southern Europe: Rome, Madrid, Lisbon and Athens. All these famous cities and the populations around them are subject, in one form or another, not only to credit rationing, but to a very high and – in some cases increasing – measure of dependence on the ECB and official financing.[1]

Churchillian rhetoric is not the usual style of the *European Economics Analyst*. But the segmentation of Euro financial markets that created this 'red line' has reached a level that in our view justifies the rhetorical flourish.

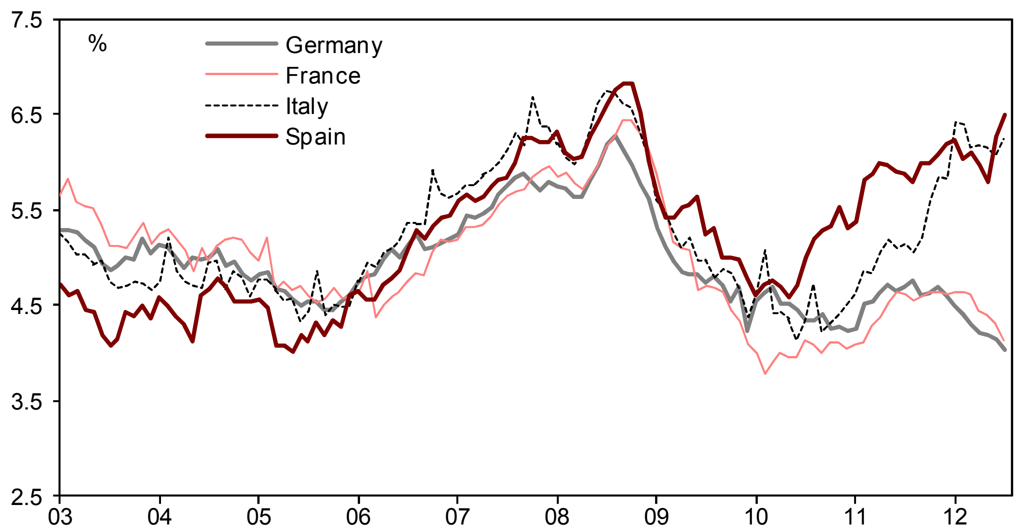
Data on bank lending rates published by the ECB last Monday confirm the dramatically different financing conditions facing households and companies in countries across the Euro area: the ECB's monetary easing is not being transmitted to the periphery, which remains mired in recession. And the ECB is set to embark on a new round of sovereign debt purchases and other measures that explicitly set out to address this problem, through a combination of measures that, on the one hand, form a bridge (largely the Eurosystem balance sheet) over it and, on the other hand, seek to break through it (in the form of fundamental consolidation and reform efforts).

Symptoms of the 'red line'

Transmission of the ECB's monetary policy is impaired by the segmentation of Euro area financial markets. This is apparent from the evolution of bank lending rates. While German companies are able to borrow at rates approaching 3%, their Spanish and Italian peers are borrowing at much higher rates, above 6%. And while German and French companies have benefited from the decline in official and market rates over the past nine months, banks have not passed this easing on to companies in the periphery (see Exhibit 1).

Underlying these rate developments is a renewed Balkanisation of European banking markets. With banks reverting to a more national orientation – in both the direction of their lending and the funding of their balance sheets – it is unsurprising that interest rates demonstrate a divergence across countries. And diverging financing conditions add to the divergence of economic performance and demand for credit across Euro area countries.

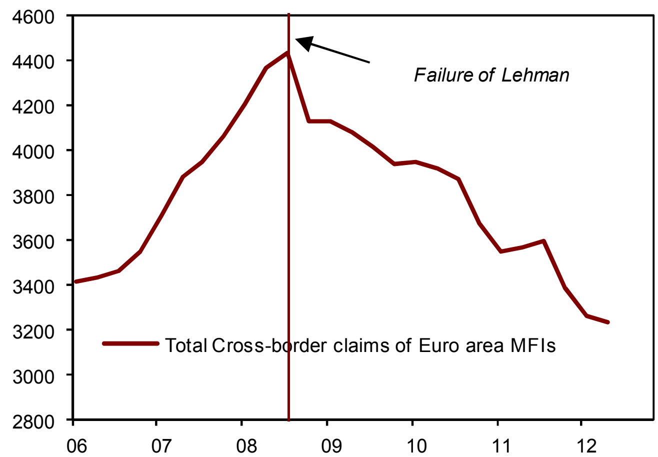
Exhibit 1: Bank lending rates to companies have diverged
% pa, interest rates on business loans up to EUR1mn with maturity between 1 and 5 years



Source: ECB, GS Global ECS Research

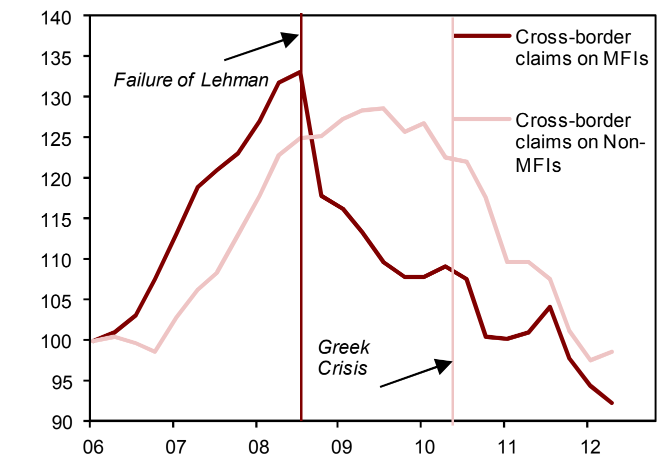
[1] A paraphrase of Winston Churchill's famous Iron Curtain speech, delivered in Fulton, MO in 1946.

Exhibit 2: Cross-border bank claims have fallen significantly since Lehman's collapse …
EUR bn



Source: ECB, GS Global ECS Research

Exhibit 3: … first with regard to interbank lending, but since May 2010 also with regard to government and private sector
EUR bn



Source: ECB, GS Global ECS Research

Cross-border bank claims within the Euro area have been in decline since the failure of Lehman Brothers in September 2008 (Exhibit 2). In the first phase of the financial crisis through early 2010, this decline was concentrated in interbank lending. With the onset of the European sovereign crisis in May 2010, it became generalised, encompassing bank claims on governments and the private sector (Exhibit 3).

In a previous note, we explored the geographical composition of this contraction of cross-border lending within the Euro area using the heat maps shown in Exhibits 4 and 5.[2] These charts show the claims of banks in the row country on residents of the column country as a percentage of the row country's GDP. 'Hot' colours (red) indicate a large exposure (and thus a deeper level of integration), whereas 'cold' colours (grey) represent small exposures. In comparing the degree of exposure before Lehman's failure with that observed today, we draw two main conclusions:

- Unsurprisingly, financial integration has diminished over the period (the chart has turned from predominantly red to predominantly grey).
- In particular, the programme countries (Greece, Ireland and Portugal shown in these charts) have been frozen out of the Euro area banking market.

Banks' withdrawal from cross-border activity is symptomatic of a wider fragmentation of Euro financial markets. The segmentation of sovereign markets is apparent in the wide spreads on government bonds yields (Exhibit 6), which stem from the withdrawal of foreign holders of peripheral debt from the market (Exhibit 7).

[2] See: 'Segmentation of Euro interbank markets is significant,' *European Economics Daily*, August 7, 2012.

Exhibit 4: Pre-Lehman, Euro interbank markets were highly integrated

Cross-border bank claims as a percentage of lending country's GDP, 2008Q1

	Ger	Ned	Fra	Ita	Spa	Por	Ire	Gre
Ger		30.0%	42.9%	44.4%	51.9%	8.3%	37.8%	7.4%
Ned	153.4%		138.3%	109.8%	90.8%	13.0%	32.1%	15.3%
Fra	67.3%	36.6%		114.2%	44.8%	7.3%	18.6%	16.6%
Ita	112.8%	8.4%	14.7%		9.0%	2.7%	7.7%	2.6%
Spa	23.4%	25.6%	26.4%	18.1%		33.4%	8.8%	0.6%
Por	32.2%	11.3%	16.5%	13.6%	78.2%		8.9%	18.1%
Ire	138.1%	48.7%	69.1%	121.9%	85.3%	13.2%		22.8%
Gre	3.0%	1.5%	3.0%	0.8%	0.2%	0.2%	0.5%	

Source: BIS, GS Global ECS Research

Exhibit 5: With the financial crisis, segmentation has emerged

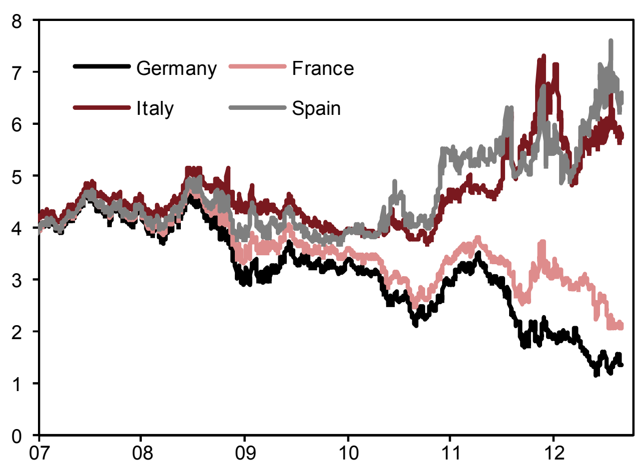
cross-border bank claims as a percentage of lending country's GDP, 2012Q1

	Ger	Ned	Fra	Ita	Spa	Por	Ire	Gre
Ger		27.2%	32.7%	22.0%	23.0%	4.5%	15.4%	1.0%
Ned	129.9%		48.8%	25.2%	47.8%	3.4%	10.0%	2.0%
Fra	48.7%	27.4%		73.5%	25.4%	4.5%	5.4%	8.8%
Ita	69.2%	5.5%	9.8%		7.0%	0.8%	4.0%	0.5%
Spa	23.4%	7.2%	16.2%	13.5%		31.1%	3.2%	0.4%
Por	6.9%	24.5%	19.4%	7.6%	55.3%		11.2%	18.9%
Ire	7.0%	5.3%	12.2%	2.7%	11.0%	1.1%		0.4%
Gre	5.4%	6.3%	4.0%	0.8%	0.5%	0.1%	0.9%	

Source: BIS, GS Global ECS Research

Exhibit 6: Sovereign spreads have widened significantly ...

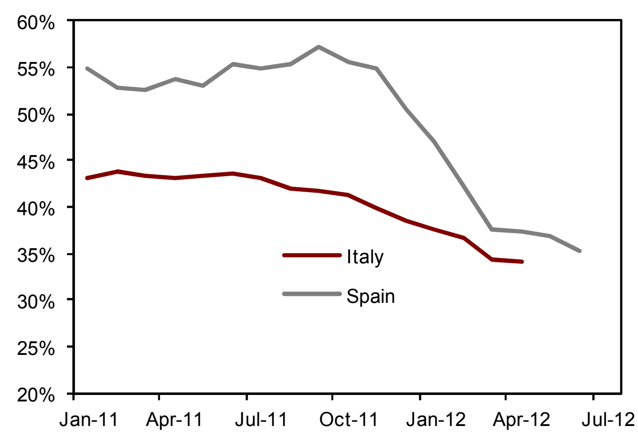
% pa, 10-year bond yields



Source: Datastream, GS Global ECS Research

Exhibit 7: ... as foreign holders have withdrawn from the market

Share of sovereign debt held by foreign residents



Source: Spanish Treasury, Banca d'Italia, GS Global ECS Research

Be it in corporate borrowing from banks or sovereign borrowing from markets, financing conditions vary significantly across Euro area countries. The ECB's monetary policy stance therefore has a different impact in different parts of the Euro area, complicating the design and implementation of monetary policy decisions. In his July comments in London, ECB President Draghi declared such a situation unacceptable: "*if we want to get out of this crisis, we have to repair this financial fragmentation*".

Causes of the ‘red line’

In using the term ‘red line’, we draw on the economics literature on adverse selection and credit rationing.[3] The starting point of such analysis is the existence of informational asymmetries that hinder the functioning of credit markets.

Consider a sovereign with a fundamentally sound fiscal position that faces a market sceptical of its solvency, perhaps because of a lack of appreciation of the fiscal consolidation and structural reforms being implemented by the authorities. Borrowing rates will rise in that country, as a credit risk premium becomes embedded in government yields. But that rise in yields, by its nature, increases sovereign funding costs and may validate concerns about fiscal sustainability. And as the sovereign market is so central to the functioning of national financial systems – particularly the banking sector – these sovereign concerns will immediately spill over into private-sector financing (albeit not necessarily symmetrically across all firms and banks).

Indeed, to the extent that the fiscal position is seen to become unsustainable and/or the adverse impact on growth of high interest rates raises a question-mark over future participation in the Euro area, the country may become subject to a ‘convertibility risk’ premium (to employ Mr. Draghi’s label) associated with the threat of Euro break-up or exit. And the emergence of such an additional risk premium would only drive sovereign yields higher, exacerbating the financing problems and further validating the concerns about credit and convertibility risk.

Such a situation can lead to the emergence of a backward-sloping demand curve for government debt. In a well-functioning market, one would expect lower bond prices (and thus higher bond yields) to stimulate greater demand for sovereign debt. But once higher bond yields become interpreted as a signal of greater risk and declining fiscal solvency, lower prices (and higher yields) may lead to a decline in demand for those bonds: holders may choose to shed debt as they worry about losses on default.

In these circumstances, the government can be trapped in a high interest rate / high default risk equilibrium, even though another, more desirable low interest rate / low default risk equilibrium exists. This is a plausible characterisation of what we have seen in the Italian and Spanish sovereign debt markets periodically over the past year.

Going further, a backward-sloping demand curve can result in situations where demand and supply curves simply do not meet. For a given supply of sovereign bonds, the yield required to generate sufficient demand to meet supply generates concerns among potential purchasers about solvency. But offering a credit risk premium only deters purchasers further. And so on, ad infinitum. In these circumstances, the market seizes up completely. The sovereign is shut out of markets – and either has to default or resort to official financing. This is a plausible characterisation of what we have seen in the programme countries.

Policy measures to address the ‘red line’

One approach to addressing the ‘red-lining’ problem would be to prevent lenders from discriminating between borrowers simply on account of their residence through legal action.[4] Adopting such a direct approach does not appear feasible in Europe. In the current environment, dictating that banks lend to German and Spanish companies on the same terms is a recipe to halt credit expansion in Germany, rather than revive it in Spain. And anyway, in the crucial case of sovereign debt, the connection between borrowers and their country of residence is intrinsic.

Option 1: Bridging the ‘red line’

Rather than direct legal efforts to enforce non-discrimination, attempts to overcome Europe’s ‘red line’ have thus far rested on offering alternative vehicles for cross-border intermediation where private markets have seized up. The ECB has played a central role in this regard.

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[3] See: J.E. Stiglitz and A.M. Weiss (1981). “Credit rationing in markets with imperfect information,” *American Economic Review* 71(3), pp. 393-410.

[4] This approach has been adopted in the US. The term ‘red-lining’ was originally used to characterise segmentation of residential mortgage markets. Residents of some city neighbourhoods were denied mortgages simply on account of the location of their property, rather than on the basis of their individual credit characteristics. With many US cities segregated on racial lines through the 1960s, these lending policies were identified as discriminatory and rendered illegal via the Fair Housing Act (1968). The subsequent Community Reinvestment Act (1977) operationalised this ambition by forcing lenders to assess loan applicants on the basis of their individual cases, not their neighbourhoods. But the success of such policies remains controversial.

As we have argued on several previous occasions, the main function of the ECB's various non-standard policy measures has been to substitute for private markets that have seized up, thereby ensuring that the flow of financing to the real economy can continue. The ECB can be viewed as providing a bridge, with central bank intermediation across its own balance sheet substituting for the private intermediation impeded by the 'red line'.

Examples of this approach are legion, including:

- The intermediation of the Euro money market through the ECB's fixed rate / full allotment monetary policy operations following the failure of Lehman.
- The replacement of the term unsecured bank funding market with financing via the ECB's 3-year LTRO operations earlier this year, as the European banking system threatened to collapse.

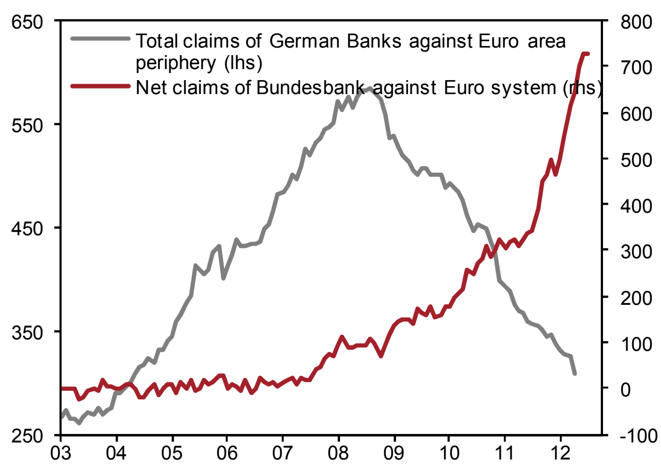
Exhibit 8 illustrates one important aspect of this behaviour. As German banks have reduced their exposure to the periphery, their private financing has been replaced by a build-up of TARGET 2 balances on the Eurosystem balance sheet (which de facto constitutes a form of official financing via the ECB).[5]

The mechanics of this process are worth dwelling on for a moment. Over the past four years, German banks have progressively reduced their exposure to the periphery by failing to roll over their holdings of peripheral debt. This has created a financing shortfall in the periphery, which has been filled by peripheral banks making recourse to ECB operations, notably the 3-year LTROs. Financing from the ECB has therefore replaced financing from the German banking sector.

By its nature, financing from the ECB is money creating: the ECB has injected liquidity into peripheral banks, which has then been used to pay off German banks as the bonds they held matured and were not rolled over. Given their reluctance to lend to the periphery, German banks have simply accumulated this liquidity. Liquidity in one Euro area country (here in the periphery) that accumulates in another Euro area country (here Germany) is, by definition, the process that creates TARGET 2 (im)balances.

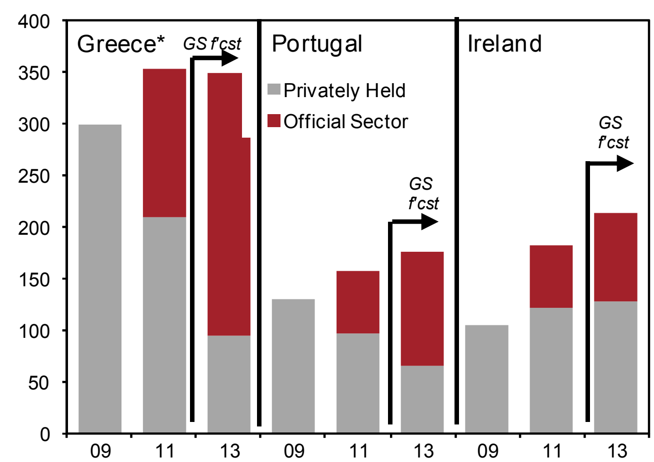
But the ECB has not been the sole bridging mechanism. For countries in programmes, the external financial support coming from the troika (of EFSF, IMF and ECB) has also filled this function. Exhibit 9 illustrates how the official sector has substituted for the private sector as a holder of peripheral country debt: in other words, the private sector has 'red-lined' the programme countries and the troika has bridged that 'red line' by providing financing from official sources.

Exhibit 8: TARGET 2 balances have substituted for German bank financing of the periphery
EUR bn



Source: Bundesbank, GS Global ECS Research

Exhibit 9: Official sector holdings have substituted for private-sector holdings of peripheral public debt
EUR bn, * including PSI & second Greek package



Source: IMF, GS Global ECS Research

5 The need to show the two series using different scales reflects the substitution of TARGET 2 balances for other German private financing of the periphery, beyond that offered by the banks, e.g., German pension funds and insurance companies' holdings of sovereign and bank debt, as well as the TARGET 2 flows associated with countries outside the periphery (e.g., France).

Option 2: Breaking the 'red line'

By their nature, the bridging mechanisms described above do not resolve the situation: they manage around the 'red line' rather than break through it. A different set of policy measures is required if a more lasting resolution is to be found.

If a country is trapped in the high interest rate / high default risk equilibrium described above – even though another, more desirable low interest rate / low default risk equilibrium exists – well-designed interventions by the central bank can shift the market to the latter, more desirable situation. Ensuring a functioning and liquid market in which to roll over outstanding debt at reasonable rates will prevent the emergence of the destructive self-fulfilling prophecy: i.e., higher yields triggering concerns about sustainability and thus default risk that validates the high yields. If the central bank is credible, only limited intervention may be required. The key feature of a successful intervention is to coordinate private expectations around the more desirable outcome.

The prospective new framework for ECB sovereign debt purchases has been characterised in this way. For countries that have retained some market access, such measures may prove sufficient to reactivate the private market and encourage them to breach the 'red line' they have established. Certainly, Mr. Draghi's rhetoric has indicated that he is prepared to do *"whatever it takes"* to eliminate the 'convertibility risk' associated with Euro break-up or exit. Credible implementation of this ambition would help to re-attract sceptical northern European investors into peripheral markets.

But for those countries where markets have seized up and a dependence on official financial support has emerged, more fundamental adjustments are needed to reassure foreign investors and break through the 'red line'. In order to restart the private market, the underlying economic fundamentals need to be adjusted: there is no alternative to making the fiscal consolidation, structural reforms and institutional changes that build stability and make the promise of repayment credible. And since these fundamental measures take time, in the shorter term the reliance on official financing will continue.

In this sense, bridging and breaching the 'red line' are complements rather than substitutes: the former buys time for the latter to become effective. But, as we have seen in the past, the danger exists that the mechanisms created to buy time weaken the incentives to undertake the necessary fundamental measures. Mr. Draghi is attempting to manage this difficult trade-off by insisting on EFSF / ESM conditionality – which would impose the required fiscal consolidation and structural reform – as a precondition for ECB purchases of sovereign debt. But, by its nature, the introduction of conditionality limits the scope for central bank intervention: for conditionality to be meaningful, there must be some states of the world in which interventions are suspended. And, in turn, that means that the ECB cannot commit to the genuinely unlimited intervention that some desire.

The way ahead

In our view, the 'red-lining' of the periphery is unlikely to disappear any time soon. Looking forward, it is therefore likely to pose ongoing problems for the transmission of monetary policy and the financing of the countries afflicted. In response, we expect the European authorities to continue to implement a combination of policy measures, some aimed at bridging and others aimed at breaching the 'red line'. The ECB's new sovereign debt purchase scheme is oriented towards the former, while the associated EFSF / ESM conditionality is designed to support the latter.

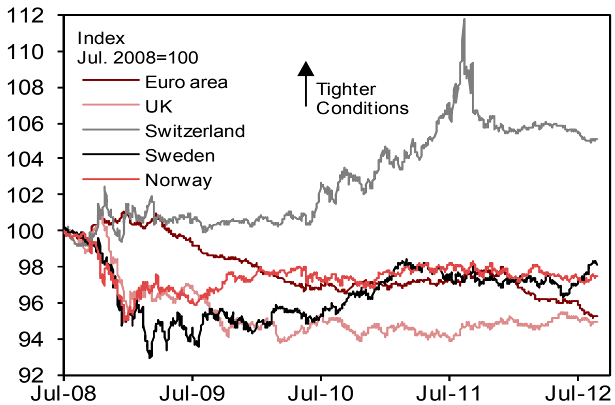
In some cases, where market dysfunctionality stems largely from liquidity concerns, the ECB's approach may be sufficient. While more fundamental political and economic challenges remain, a case can be made that Italy falls into this camp: certainly that is the line taken by the Italian authorities.

But where the economic challenges are more profound – in the lengthening list of smaller programme countries, as well as in Spain – we foresee the need for more aggressive bridging actions. These may be required to ensure the economic and political feasibility of the painful adjustment programmes required to re-establish stability and sustainability. It is in this light that further ECB non-standard measures may be developed over the coming months, such as targeted changes to collateral eligibility and/or haircuts or the outright purchase of private-sector assets, to ensure that easier financing conditions reach the real economy rather than simply ease the pressure on sovereigns.

Huw Pill

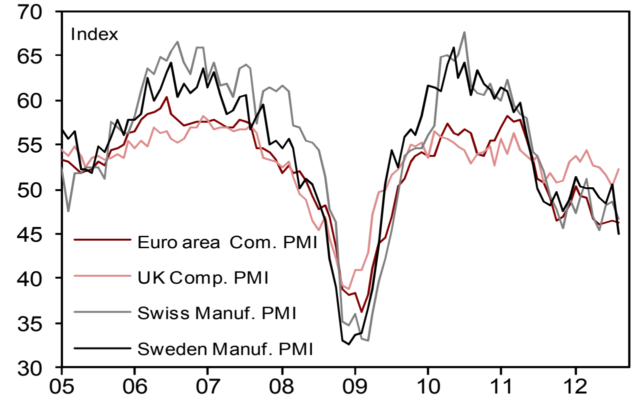
Key European Indicators

European financial conditions are easy, with the exception of Switzerland, but tightening in Sweden
European financial conditions



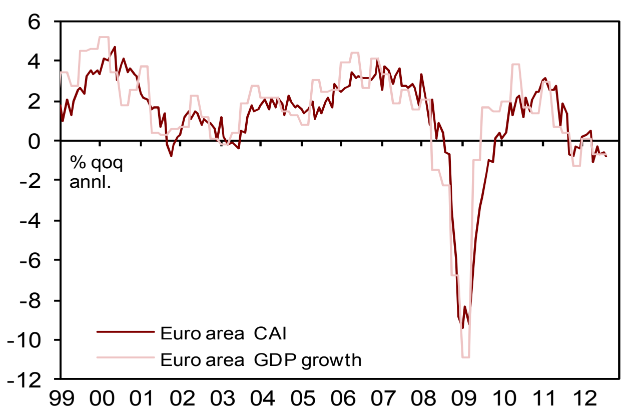
Source: Goldman Sachs Global ECS Research.

Business sentiment remains depressed across Europe
European business sentiment



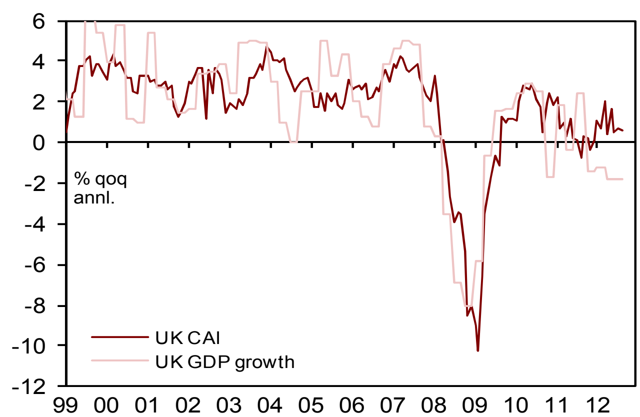
Source: Markit, SVME, Swedbank,Goldman Sachs Global ECS Research.

Our Euro area Current Activity Indicator points to a contraction of around 0.8%qoq annualised...
Euro area GDP and Current Activity Indicator



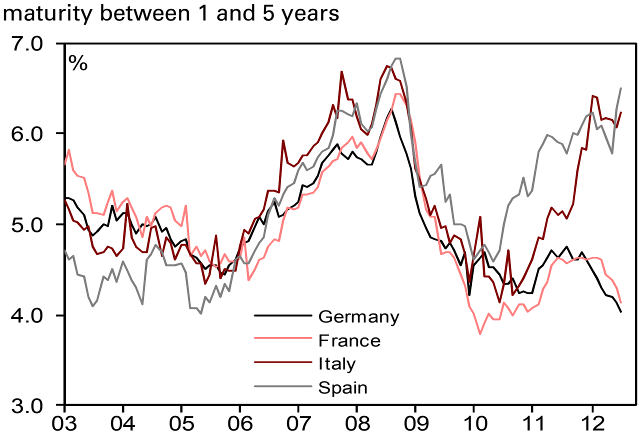
Source: Goldman Sachs Global ECS Research.

...and our UK Current Activity Indicator is consistent with growth of around 0.6%qoq annualised
UK GDP and Current Activit Indicator



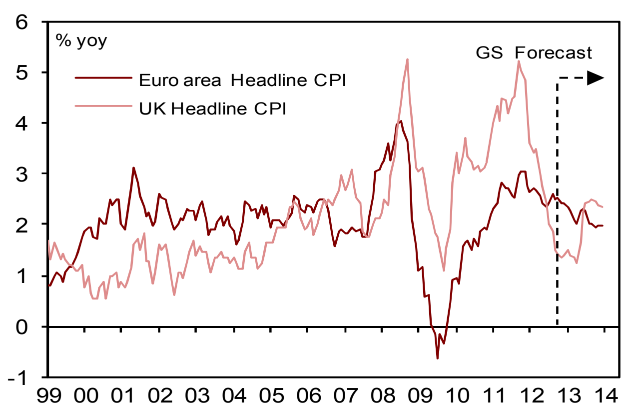
Source: Goldman Sachs Global ECS Research.

Bank lending rates to companies have diverged
% pa, interest rates on business loans up to EUR1mn with maturity between 1 and 5 years



Source: Goldman Sachs Global ECS Research.

Rates of inflation in the Euro area and the UK have converged; we expect them to ease further
Inflation forecasts



Source: Eurostat, ONS, Goldman Sachs Global ECS Research.

Main Economic Forecasts

Main Economic Forecasts

	GDP (Annual % change)			Consumer Prices (Annual % change)			Current Account (% of GDP)			Budget Balance (% of GDP)		
	2011	2012(f)	2013(f)	2011	2012(f)	2013(f)	2011 (f)	2012(f)	2013(f)	2011(f)	2012(f)	2013(f)
Euro area	1.5	-0.5	0.2	2.7	2.5	2.1	-0.3	-0.1	-0.1	-4.1	-4.0	-3.2
Germany	3.1	1.0	1.2	2.5	2.1	2.0	5.7	4.3	3.9	-1.0	-1.0	-0.7
France	1.7	0.2	0.6	2.3	2.2	1.8	-2.2	-2.0	-1.8	-5.2	-4.8	-4.0
Italy	0.5	-2.2	-0.7	2.9	3.5	2.7	-3.2	-1.5	-1.4	-3.9	-3.2	-2.2
Spain	0.7	-1.2	-1.4	3.1	2.2	2.1	-3.5	-3.1	-2.5	-8.9	-6.7	-5.9
UK	0.8	0.1	1.9	4.5	2.7	2.0	-1.9	-2.7	-2.4	-8.5	-6.3	-6.6
Switzerland	2.1	1.2	1.2	0.2	0.4	0.7	16.0	14.7	14.5	-0.3	-0.2	-0.1
Sweden	4.0	2.0	2.0	2.6	1.7	2.5	7.0	7.1	6.3	0.3	0.7	1.0
Denmark	0.8	-0.2	1.1	2.7	2.2	1.6	5.7	5.6	4.1	-3.5	-4.6	-4.3
Norway*	2.5	3.7	2.7	1.3	1.0	1.3	14.5	16.7	16.2	-	-	-
Poland	4.3	2.8	2.4	4.3	4.0	3.0	-4.3	-4.6	-4.0	-5.1	-3.3	-2.9
Czech Republic	1.7	-0.2	1.7	1.9	3.3	1.7	-2.7	-2.2	-2.6	-3.1	-3.0	-2.9
Hungary	1.7	-1.0	1.2	3.9	5.7	4.1	1.4	1.7	1.0	1.5	-3.0	-3.0

*Mainland GDP growth.

Source: GS Global ECS Research.

**Mainland GDP growth*

Source: Goldman Sachs Global ECS Research.

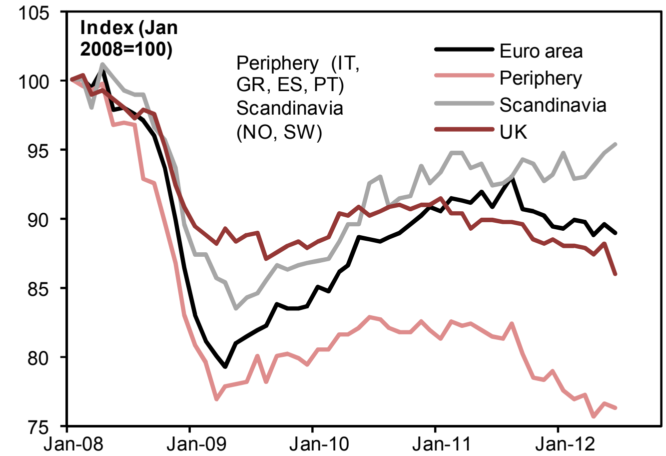
European Calendar

Focus for the Week Ahead

Industrial production data for July are expected to underline the stagnation in Europe at this juncture. Data are due for France, Sweden, Italy and the aggregate Euro area, following tomorrow's release of figures for Germany, Norway and the UK. IP has fallen since the beginning of 2012 for Euro area countries and the UK. In the Euro area periphery, declines have been even more pronounced. A notable exception to this trend is Scandinavia, which in June saw its highest industrial production print since 2008.

Inflation data for various countries and the aggregate Euro area are also due next week. The Euro area 'flash' estimate for August HICP rose from +2.4%yoy to +2.6%yoy. As well as the effect of higher energy prices, this likely reflects price rises ahead of the rise in Spain's VAT in September. The breakdown of core, food and energy components will be released on Friday 14th.

European industrial production exhibits broad-based decline in 2012Q2 with the exception of Norway



Source: Eurostat, National Statistics Offices, Goldman Sachs Global ECS Research.

Economic Releases and Other Events

Country	Time (UK)	Economic Statistic/Indicator	Period	Forecast* mom/qoq	Forecast* yoy	Previous mom/qoq	Previous yoy	EMEA-MAP Relevance
Fri 7th September								
Switzerland	06:45	Unemployment Rate	Aug	—	—	2.9% (sa)	—	4
Germany	07:00	Trade Balance	Jul	—	—	EUR 17.9Bn	—	3
Spain	08:00	Industrial Output	Jul	—	—	—	–6.3% (wda)	5
Norway	09:00	Manufacturing Output	Jul	—	—	+0.8% mom	+4.3%	4
UK	09:30	Industrial Production	Jul	—	—	–2.5% mom	–4.3%	3
UK	09:30	Manufacturing Output	Jul	—	—	–2.9% mom	–4.3%	—
UK	09:30	Producer Prices	Aug	—	—	—	+1.7%	—
UK	09:30	PPI - Ex Food, Drink, Tobacco & Petrol	Aug	—	—	—	+2.0%	—
Germany	11:00	Industrial Production	Jul	—	—	–0.9% mom (sa)	–0.3%	5
Mon 10th September								
France	07:45	Industrial Production	Jul	—	—	flat mom (Jun)	–2.3% (Jun)	5
Sweden	08:30	Industrial Production	Jul	—	—	+0.4% mom	+1.1%	3
Norway	09:00	Consumer Prices (CPI-ATE)	Aug	—	—	flat mom	+1.3%	—
Tues 11th September								
UK	00:01	RICS Housing Market Survey	Aug	—	—	–24	—	—
UK	09:30	Trade Balance	Jul	—	—	–£4.3bn	—	1
UK	09:30	Trade in Goods	Jul	—	—	–£10.1bn	—	—
Wed 12th September								
France	06:30	Harmonised CPI	Aug	—	+2.1%	–0.5% mom	+2.2%	—
Germany	07:00	Harmonised CPI	Aug	—	—	+0.4% mom (Jul)	+1.9% (Jul)	—
Spain	08:00	Harmonised CPI	Aug	—	—	–0.9% mom (Jul)	+2.2% (Jul)	—
Italy	09:00	Industrial Production	Jul	—	—	–1.4% mom (sa)	–8.2% (wda)	5
UK	09:30	Average Weekly Earnings - Headline	Jul	—	—	—	+1.6% 3m/yr	—
UK	09:30	Average Weekly Earnings - exc. Bonus	Jul	—	—	—	+1.8% 3m/yr	—
UK	09:30	ILO Unemployment Rate	Jul	—	—	+8.0%	—	4
Euro area	10:00	Industrial Production	Jul	—	—	–0.6% mom (sa)	–2.2% (wda)	5
Thurs 13th September								
Switzerland	08:15	Producer & Import Prices	Aug	—	—	–0.3% mom	–1.8%	—
Switzerland	08:30	Monetary Policy Meeting	Sep	—	—	+0.0%	—	—
Sweden	08:30	Unemployment Rate	Aug	—	—	7.0% (nsa)	—	3
Sweden	08:30	Consumer Prices - CPIF	Aug	—	—	–0.4% mom	+0.8%	—
Italy	09:00	Harmonised CPI	Aug	—	+3.5%	–1.7% mom (Jul)	+3.6% (Jul)	—
Fri 14th September								
Sweden	08:30	GDP	Q2	—	—	+0.9% qoq (Q1)	+1.5% (Q1)	4
Euro area	10:00	Harmonised CPI	Aug	—	+2.5%	–0.5% mom (Jul)	+2.4% (Jul)	2

*Source: Bloomberg, GS Global ECS Research. Economic data releases are subject to change at short notice in calendar. Complete calendar available via the Portal — https://360.gs.com/gs/portal/events/econevents/. * In the case of the PMIs, the Forecast is simply the Flash estimate where available (Flash PMIs are published by Markit for the Euro area, Germany and France 1-2 weeks before the end of the reference month).*

Disclosure Appendix

Reg AC

We, Huw Pill, Kevin Daly, Dirk Schumacher, Andrew Benito, Lasse Holboell Nielsen, Natacha Valla, Antoine Demongeot and Sebastian Graves, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

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