21 November 2013 | 48 pages

Developed Markets
Western Europe

European Rates Weekly

Eurozone's Three Pillar Strategy

- **Equilibrium in the euro area?** When a currency area experiences the kind of shocks that the euro area has and the need to deleverage becomes a pressing issue, most ready-made recipes would call for the painful solution of a positive inflation shock and/or debt restructuring. There is also a third way: "regulate" the location of wealth away from the private sphere and towards the public sector.
- **Gilts, linkers and the Autumn Statement:** The financing need for 2013/14 is likely to be revised lower. However, gilt issuance may be left broadly unchanged with Treasury bill sales being reduced instead. We also look at longer-term issuance trends, swap spreads and the outlook for UK break-evens.
- **EUR Vol - Contingent long gamma via Bund futures options:** Gamma/Vega neutral Bund futures options position via long strangle vs. short straddle allows volatility investors to own a contingent long gamma exposure to profit from sudden emergence of risk events without paying time decay.
- **Hold on to Belgium:** We extend our target on the 5yr spread between Belgium and France. This is based on recent developments including Belgium cancelling its November OLO auction and Fitch's decision to revise its AA rating to "stable".
- **Euro inflation:** Current break-even valuations look attractive vs inflation swaps in our view. We recommend buying BTPei18 break-even vs HICPxT swaps. In a separate trade, we recommend selling BTANi16 break-even vs OATi17.
- **Green shoots in € green bonds:** The development of green bonds would provide euro SSA investors with another opportunity to diversify. Although the euro market is still relatively small, recent trends may point to further issuance going forward. This week saw issuance from NRW Bank.
- **Covered Bonds:** With ING Belgium, the covered bond market not only has a new entrant within the Belgian covered bond segment. ING is also the third group which issues EUR benchmark covered bonds under three different jurisdictions.
- **Technical outlook:** Bunds seem poised to break the upward channel and form a double top. These are bearish signals and can potentially see Bunds sell-off to 138.7. Gilts have entered a downward channel on a weekly chart.
- **EGBI:** We expect index changes to be most supportive for France, followed by Italy and Germany.
- **Relative value trades:** We highlight a number of relative value opportunities in the 5-10yr sector of the French, Dutch, Austrian, Belgian and Gilt yield curves.
- **Supply:** Within Europe, next week's bond supply comes from Italy (around €8bn), the Netherlands (€2-3bn) and Germany (€4bn). The UK DMO will issue £2.5bn of conventional gilt 3.25% 2044 next Thursday.

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Figure 1. Strategy Summary Table

Europe	View	Strategies
Direction	Bunds are likely to lack direction for many quarters to come. Our duration scorecard for the week ahead is bearish.	Trade the range.
Money Market	We continue to favour lower-for-longer strategies and hold on to ERZ3 1x2 call spread. The short-sterling red-pack looks cheap relative to Eurodollars.	Hold long ERZ3 1x2 call spread
Yield Curve	EUR 10s30s has fallen back to 65bp, but we doubt the flattening will persist and continue to like receiving EUR 5y5y vs 15y15y. We expect BTP 2s10s to steepen further given the prospect of new elections before 2015 and next year's increase in issuance. In the UK, we continue to like 2s10s steepeners. An examination of seasonals suggests long-end forwards should not be held beyond November.	UKT 2s10s steepeners Receive EUR 5y5yF vs 15y15yF (or receive EUR 5s15s30s) Sell 10yr OATs vs 5yr and 30yr BTP 2s10s steepener
Cross-market	Over the longer-term, we still expect Bunds to outperform given diverging growth/inflation fundamentals between Europe and the USA. We continue to like 10yr gilt-Bund wideners given the ECB rate cut, low euro area inflation and strong UK data. Gilt-USTs are likely to remain highly correlated, but seasonals suggest being long gilts in December.	Sell 10yr gilts vs Bunds Sell EUR 2y cross-ccy basis Long Bunds vs UST (add on corrections)
EMU Spreads	We expect the front-end of Spain (and Italy) to be supported to year-end due to the absence of event risk, the high level of carry and the potential for market expectations of a new LTRO in 2014 to increase. Separately, we think OLO spreads to OATs can tighten further going into year-end. We expect Irish spreads to remain low in Q4.	Sell France vs Belgium and Germany Continue to hold 5yr Belgium vs France Express France-Germany widening positions in the 5yr point
Swap Spreads	Over the medium-term we expect Bund spreads to gradually widen across the curve due to a reduction in 2014 issuance by Germany, the prospect of new elections in Italy next year and US debt ceiling concerns. In the UK, we find the new 5yr gilt attractive on an asset-swap basis, especially relative to the old 5yr.	Buy Jul19 gilt vs Jul18 gilt in an asset-swap box
Inflation	Euro break-evens remain under pressure, but cautious longs vs inflation swaps look attractive, in our view. UK break-evens have recovered in the last week, helped by £0.8bn coupon payments, but we remain wary of establishing longs ahead of the Autumn Statement on 5 December.	Buy OATi17 vs BTANi16 on a break-even inflation basis Buy BTPei18 vs 5yr HICPxT Take profits on buy Boblei18 vs OATei18 break-evens Take profits on Boblei18 break-even vs inflation swap
Volatility	We expect the forward EUR 2s10s curve to move up to spot based on our expectation that Bund yields will be stable over the next year and more LTROs will pin the front-end. The current level of EUR 2y2y & 5y5y implied skews are too steep when compared to previous levels of implied volatility for a range of underlying rates. We prefer short EUR collar positions hedged with USD longs, instead of outright shorts.	Long 2yr EUR single look CMS 2s10s ATMF cap EUR 2y 10s30s conditional bear-steepener Short EUR 5y5y 100bp wide collar vs USD 5y5y 100bp wide collar
SSA	Supply pressures are likely to wane and have less of an impact on the secondary market in Q4. Many supranationals are near or have met their 2013 funding targets.	Seek out any remaining primary market opportunities going into year-end Trade the range in core agencies vs governments
For a list of outstanding trade strategies please see the Tradesheet section of this report		

Source: Citi Research Futures trading involves substantial risk of loss.

Duration Scorecard

Figure 2. Bund Weekly Cheat Sheet: 22nd-28th November

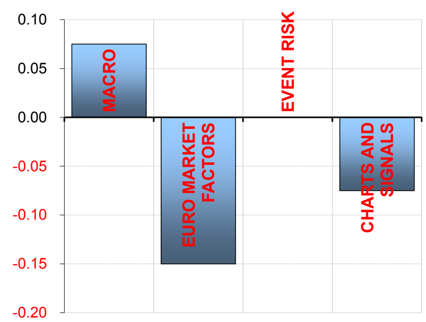
Bund Directional Scorecard (1wk horizon)

RECOMMENDATION	Short	RXZ3 (EOD Thurs) = 140.97
Conviction level	8%	CTD yield = 1.52% 10day del vol = 4.23%

	SIGNAL STRENGTH (+/-2)		
MACRO	**0.1**		**Weight = 38%**
ECB	1	Monetary policy to be accommodative for as long as needed	7.5%
Fed, BoE and BOJ	1	Citi doesn't expect tapering to occur before March	7.5%
Inflation	0	Citi expects subdued Nov print at 0.8% YoY	5.0%
Growth related data	-1	Economic data continues to point to nascent recovery	7.5%
Citi surprise	1	Citi Economic Surprise Index in negative territory	5.0%
Middle East / Oil	-1	Brent off its recent lows	5.0%
EURO MARKET FACTORS	**-0.2**		**Weight = 33%**
Supply	-1	10yr Bund supply next week. No core cash flows	7.5%
Risk appetite	0	GRAMI indicates lowest level of risk aversion in 5 years	7.5%
Flow	-1	Net demand for core negative	2.5%
Equity	-1	Eurostoxx50 close to 5 year high	5.0%
Sovereign credit	-1	Peripheral spreads remain relatively tight	5.0%
FX	1	EUR close to 2 month lows	5.0%
EVENT RISK	0.0		**Weight = 13%**
Politics	0	No political event likely to impact the market in near-term	5.0%
3yr LTRO	0	We expect a new 2yr LTRO in 1H14	5.0%
Stability mechanisms	0	Nothing on the agenda in the near-term	2.5%
CHARTS AND SIGNALS	**-0.1**		**Weight = 18%**
Technicals	-1	Potential double top and break out of upward channel	5.0%
T-Note	0	Neutral	5.0%
CFTC	-1	Positioning slightly short	2.5%
ARTS	0	Neutral	5.0%

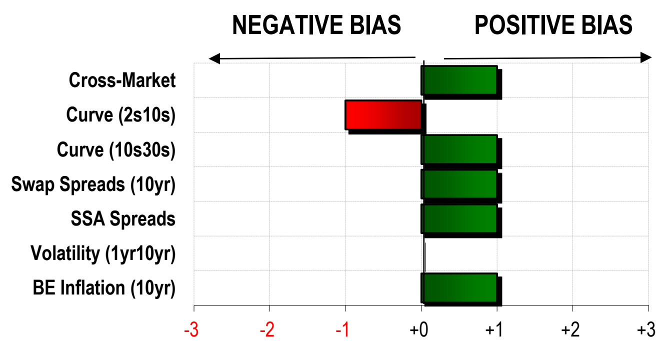
Source: Citi Research Futures trading involves substantial risk of loss

Figure 3. Contribution to Bund Signals



Source: Citi Research

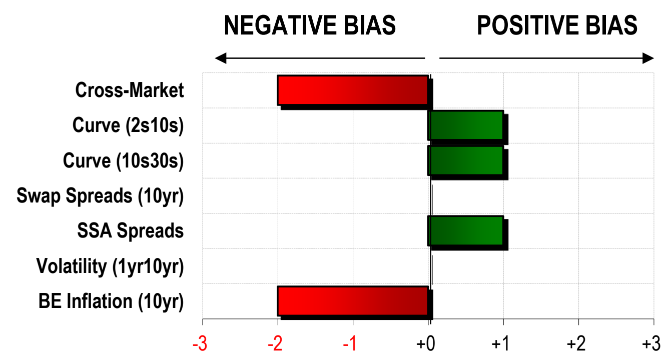
Figure 4. EURO AREA (Near-term Bias)



Source: Citi Research

POSITIVE bias = bullish vs UST, flatter curve, wider swap spreads, tighter SSA spreads, higher implied vol, wider BE inflation

Figure 5. UK (Near-term Bias)



Source: Citi Research

POSITIVE bias = bullish vs Bunds, flatter curve, wider swap spreads, tighter SSA spreads, higher implied vol, wider BE inflation

Tradesheet

New Trades

Please see p19 for details

1. Buy OATi17 break-even vs BTANi16

Buy OATi17 break-even at 115bp

Sell BTANi16 break-even at 117.4bp

Open -2.4bp. Current -2.4bp. Target 8bp. Stop -7bp.

Please see p19 for details

2. Buy BTPei18 break-even vs 5yr HICPxT

Buy BTPei18 break-even at 73bp

Sell 5yr HICPxT swap at 133bp

Open -60bp. Current -60bp. Target -43bp. Stop -69bp.

Please see *UK Rates Strategy* for details

3. Buy gilt Jul19 vs Jul18 on asset-swap

Buy gilt Jul19 YYS at -3bp

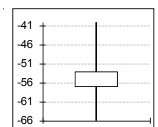
Sell gilt Jul18 YYS at -9bp

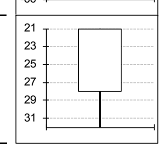
Open 6bp. Current 6bp. Target 1bp. Stop 9bp.

Record of Our Closed Trades

Figure 6. Record of our Closed Trades

Region	Trade	Levels		Rationale
Europe	**Buy Boblei18 break-even vs 5yr HICPxT swap**	Open	-57bp	
		Current	-53bp	Taking Profit.
Inflation	Buy Boblei18 break-even at 98bp	**P&L**	**4bp**	Euro Rates Strategy, 21 November 2013.
	Sell 5yr HICPxT swap at 155bp	Target	-40bp	
		Stop	-66bp	*The Morning Call, 16 July 2013*
EUR	**Long Boblei18 break-even vs OATei18**	Open	28bp	
		Current	21bp	Hit Target.
Inlfation	Buy Boblei18 break-even at 100bp	**P&L**	**7bp**	The Morning Call, 20 November 2013.
	Sell OATei18 break-even at 128bp	Target	21bp	
		Stop	32bp	*The Morning Call, 29 October 2013.*



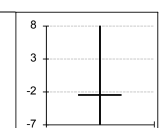


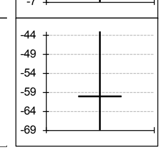
Source: Citi Research

Record of Our Open Trades

Figure 7. Record of our Open Trades

Region	Trade	Levels		Rationale + Publication Date
EUR	**Buy OATi17 break-even vs BTANi16**	Open	-2.4bp	
		Current	-2bp	Relative value looks attractive
Inlfation	Buy OATi17 break-even at 115bp	**P&L**	**0bp**	
	Sell BTANi16 break-even at 117.4bp	Target	8bp	
		Stop	-7bp	*European Rates Weekly, 21 November 2013*
EUR	**Buy BTPei18 break-even vs 5yr HICPxT**	Open	-60bp	
		Current	-60bp	Attractive valuation vs inflation swap and lack of supply
Inlfation	Buy BTPei18 break-even at 73bp	**P&L**	**0bp**	into year-end
	Sell 5yr HICPxT swap at 133bp	Target	-43bp	
		Stop	-69bp	*European Rates Weekly, 21 November 2013*

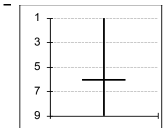




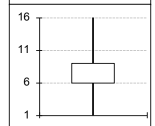
Source: Citi Research

Figure 8. Record of our Open Trades (Continued)

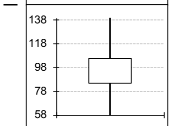
UK	**Buy gilt Jul19 vs Jul18 on asset-swap**	Open	6bp	
		Current	6bp	Relative value and behaviour of the last benchmark roll suggest new 5yr should richen vs old
Swap Spread	Buy gilt Jul19 YYS at -3bp	**P&L**	**0bp**	
	Sell gilt Jul18 YYS at -9bp	Target	1bp	
		Stop	9bp	
				UK Rates Strategy, 19 November 2013



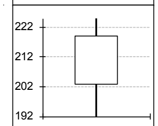
EUR	**Sell France vs Belgium and Germany**	Open	6bp	
		Current	9bp	Attractive entry level, possible auction concession and non-supportive cash flow profile for OATs into year-end
Cross Market	Sell BTAN 1.75% Feb17 at 0.51%	**P&L**	**3bp**	
	Buy OLO 4% Mar17 at 0.66%	Target	16bp	
	Buy Bobl 0.5% Apr17 at 0.30%	Stop	1bp	*Euro Rates Strategy, 8 November 2013.*



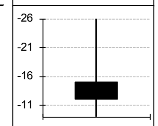
EUR / UK	**Sell UKT Sep23 vs DBR Aug23**	Open	85bp	Entry levels are attractive for medium-term gilt-Bund wideners
		Current	106bp	
Cross Market	Sell UKT 2.25% Sep23 at 2.60%	**P&L**	**21bp**	
	Buy DBR 2% Aug23 at 1.75%	Target	140bp	*European Rates Weekly, 24 October 2013.*
		Stop	58bp	*Revised Stop: UK Rates Strategy, 11 November 2013*
		Revised Stop	85bp	



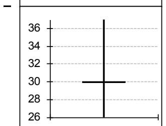
UK	**Sell UKT Sep23 vs Jan16**	Open	203bp	
		Current	219bp	Bear steepening is likely to resume as UK activity data continues to improve
Curve	Sell UKT 2.25% Sep23 at 2.60%	**P&L**	**16bp**	
	Buy UKT 2% Jan16 at 0.57%	Target	225bp	
		Stop	192bp	*European Rates Weekly, 24 October 2013.*



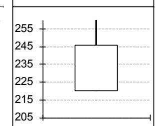
UK	**Buy UKT Sep19 vs Sep17 and Sep22**	Open	-15bp	
		Current	-12bp	Attractive RV with positive carry
Curve	Buy UKT 3.75% Sep19 at 1.72%	**P&L**	**-3bp**	
	Sell UKT 1% Sep17 at 1.15%	Target	-26bp	
	Sell UKT 1.75% Sep22 at 2.44%	Stop	-9bp	*European Rates Weekly, 24 October 2013.*
		Total carry (3mths)	+1.7bp	



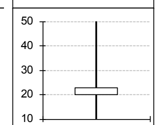
UK	**Sell UKT Sep23 vs Sep21 and Mar25**	Open	30bp	
		Current	30bp	Attractive RV with positive carry
Curve	Sell UKT 2.25% Sep23 at 2.60%	**P&L**	**0bp**	
	Buy UKT 3.75% Sep21 at 2.18%	Target	37bp	
	Buy 5% Mar25 at 2.72%	Stop	26bp	*European Rates Weekly, 24 October 2013.*
		Total carry (3mths)	+1.3bp	



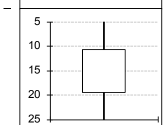
EUR	**BTP 2s10s steepener**	Open	220bp	Redemptions to support 2s in 2014. Political uncertainty & long-end issuance to weigh on 10s.
		Current	246bp	
Curve	Buy BTP 3.75% Apr16 at 1.98%	**P&L**	**26bp**	
	Sell BTP 4.5% May23 at 4.18%	Revised Target	260bp	*European Rates Weekly, 10 October 2013.*
		Revised Stop	240bp	*Revised Levels: The Morning Call, 14 November2013*



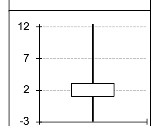
UK	**Sell 30yr gilt swap spreads vs 10yr**	Open	20bp	
		Current	23bp	Fiscal risks, supply pressures and the absence of QE to put steepening pressure on the gilt curve.
Swap spread	Sell gilt 3.25% Jan44 ASW at 20bp	**P&L**	**3bp**	
	Buy gilt 1.75% Sep22 ASW at 0bp	Target	50bp	
		Stop	10bp	*UK Rates Strategy, 30 July 2013*



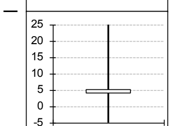
Europe	**Buy 5yr Belgium vs France**	Open	19.5bp	Tactical long supported by upcoming cash flows.
		Current	11bp	
Cross Market	Buy OLO 4% Mar18 at 1.15%	**P&L**	**9bp**	
	Sell OAT 4% Apr18 at 0.95%	Revised Target	5bp	*Euro Rates Strategy, 24 July 2013*
		Revised Stop	14bp	*Revised: European Rates Weekly, 21 November 2013*



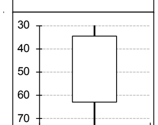
Europe	**Buy ERZ3 1x2 call spread**	Open	1c	
		Current	3c	Dec Euribor has cheapened 30/35c since May ECB rate cut. However, a cut to the deposit rate would be required for a signifcant rally.
Money Market	Buy ERZ3 99.750/.875 1x2 call spread at 1c	**P&L**	**2c**	
		Target	12.5c	
		Stop	-3c	*Euribor, 24 June 2013*



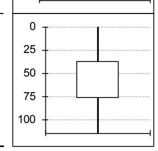
Europe	**Receive EUR 10y2y vs 12y3y**	Open	4bp	Cheapness of the sector due to legacy ASW positions. The trade offers a positive roll-down for relatively low volatility
		Current	5bp	
Curve	Receive EUR 10y2y at 3.1%	**P&L**	**1bp**	
	Pay EUR 12y3y at 3.14%	Target	25bp	
		Stop	-5bp	*The Morning Call, 23 January 2013*



Europe	**Sell EUR 1y3yF ATMF straddle and buy ATMF-25 receiver**	Open	63bp	Fwd levels in front-end EUR swaps are too high when additional policy measures by the ECB are likely to be undertaken
		Current	35bp	
Volatility	Sell EUR 1y3yF ATMF (=1.36%) straddle for 98bp	**P&L**	**28bp**	
	Buy EUR 1y3yF ATMF-25 receiver for 35bp	Target	30bp	
		Stop	73bp	*IIRS 9 August 2012*



UK	**Sell GBP 2y2y ATMF straddle**	Open	76bp	
		Current	37bp	The fundamental backdrop in the UK supports selling GBP 2y2y vol
Volatility	Sell GBP 2y2y ATMF (1.04%) straddle at 76bps	**P&L**	**39bp**	
		Target	0bp	
		Stop	114bp	*IIRS 12 July 2012*



Source: Citi Research   Futures trading involves substantial risk of loss

EGB: Eurozone's Three Pillar Strategy

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Is there a grand strategy at official Eurozone level? What could be the long-term battle plan to prevent markets from rocking (again) the stability of the Union? What are the conditions that would allow such a strategy to work?

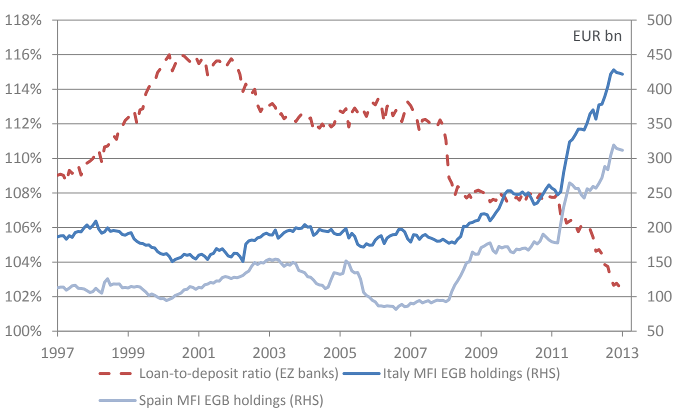
Inflation and restructuring are not the only solution

When a currency area experiences the kind of shocks that the Eurozone has and the need to deleverage becomes a pressing issue, most ready-made recipes would call for the obvious painful solution of a positive inflation shock and/or debt restructuring. There is also a third way, though. Why not "regulating" the location of wealth away from the private sphere and towards the public sector?

Vested interest in regulation: More lending to the public sector

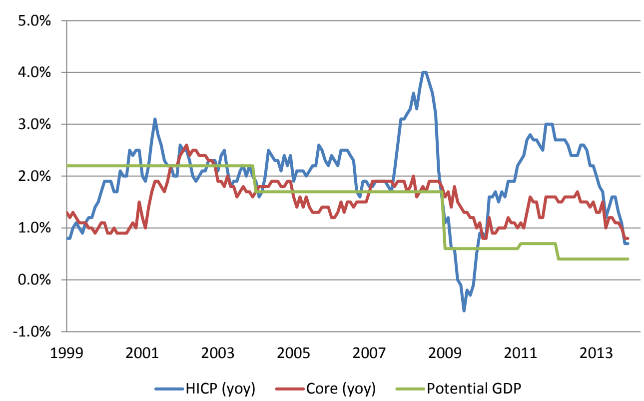
We already see tentative efforts to enable the transfer of privately owned funds from the realm of free decision making to the biased reality of regulated investments. Allowing pools of assets to efficiently warehouse government bond risk under Basel and Solvency regulation is a way to increase lending to the public sector. Unfortunately, this strategy has its drawback: In a world of limited resources, increasing the allocation to one sector also means draining resources from other sectors (Figure 9). This is particularly the case in the Eurozone, where the central bank has so far abstained from expanding monetary resources via QE.

Figure 9. Trade-off between private and public sector



Source: ECB, Citi Research

Figure 10. Low potential growth implying low/negative inflation risk



Source: European Commission, Citi Research

Self-financing schemes are an option not-to-default

This grand strategy resembles Japan and BOJ's efforts to passively manage the balance sheets of megabanks by allowing a huge long-term carry trade on the JGB curve. The consequences in terms of economic growth, inflation, debt dynamics and income redistribution are obvious. Nevertheless, such an expensive[1] trade-off between the private and the public sectors bears the benefits of minimizing the need for sovereign debt restructuring. In its strictest form, when all debt is held in domestic portfolios, the system may become circular and self-financing. In that sense, regulation has to be seen as an option not-to-default in the hands of Eurozone officials and the premium is the running cost of anemic growth and potentially negative inflation (Figure 10).

Long-run equilibrium conditions for the Eurozone

In order for this to become a viable, stable, self-financing scheme we believe three conditions must be met. Each of them is in itself a necessary condition:

Economic stability

1) Economic stability: The ability of households/firms to absorb another negative shock is reduced in comparison to the pre-crisis period. Another recession and the associated rise in unemployment rates would stress household savings and increase overall malaise. Similarly, a protracted

[1] Expensive in terms of economic and social losses.

period of negative inflation would (all else equal) threaten the sustainability of sovereign debt. At the moment, the consensus does not forecast another recession and very few analysts would assign a meaningful probability to deflation in the Eurozone[2]. That is not to say that the probability of deflation has not increased.

Political stability

2) Political stability: The ability of radical, anti-European political parties to collect votes has improved during the crisis. This is not only the case for peripheral member countries (e.g. Syriza in Greece and M5S in Italy), but also for the hard core of the Eurozone (e.g. True Finns in Finland and FPOe in Austria). The recent alliance between the French National Front of Marine Le Pen and Geert Wilders' Party for Freedom is yet another signal that there is a growing portion of the electorate that may dissent with Brussels' central administration and its grand strategy. Headline risk is particularly high during area-wide elections, the next European Parliament elections will be held between 22 and 25 May 2014.

Funding stability

3) Funding stability: The ECB plays a prominent role in this pillar by providing cheap funding to banks. In Otmar Issing's world, liquidity is supposed to be distributed outside the banking sector in order to control the economy. In Mario Draghi's world, liquidity is supposed to fund existing bank portfolios at very attractive levels in order to prevent asset price volatility and fears of a funding bottleneck having a negative impact on sovereign funding. It is not correct to say that ECB liquidity funds non-core EGBs[3], but EGBs definitely profit from a stable funding environment. As was the case in Japan, the carry trade on banks' balance sheets is king.

Non-resident holdings? ECB has dealt with them in past

Each one of these conditions must be satisfied at all times in order to keep the Eurozone in a self-financing equilibrium – assuming we already are in one. The share of non-resident holdings of EGBs complicates matters as it increases the sensitivity of EGBs prices to external factors (e.g. credit ratings). However, the ECB has been able to absorb selling flows coming from outside the Eurozone in the past and we would expect them to be ready should such a market environment materialize again.

Trade Ideas for the Very Long Run

Here we want to focus on very long-term scenarios and we propose two trade ideas with a maturity of at least 5 years.

Rec EUR 5y5y, pay 20y5y

Trade #1: Receive EUR 5y5y, pay EUR 20y5y @-12bp. The strategy has a positive rolldown of 34bp in year 1 and another 41bp in year two. The terminal spread, i.e. spot 5y vs 15y5y is worth around 217bp. The strategy picks roughly the point of intersection of the 5y-fwd and the 20y-fwd swap curve (Figure 11). From a macro perspective it is yet another version of long-end, positive carry steepener, which is really the position we want in a scenario of long-term near stagnation with the risk of short episodes of deflation.

Buy BTP May-17

Trade #2: Generalized duration extension on the peripheral curves. This is particularly the case in case of additional liquidity/funding measures. As we've noted in the past, investors are likely to extend well beyond the maturity of a theoretical

[2] Consensus Forecasts reports GDP growth of 1.3-1.5% between 2015 and 2023, while HICP is expected to drift towards 2% (from 1.4% in 2014) in the long run.

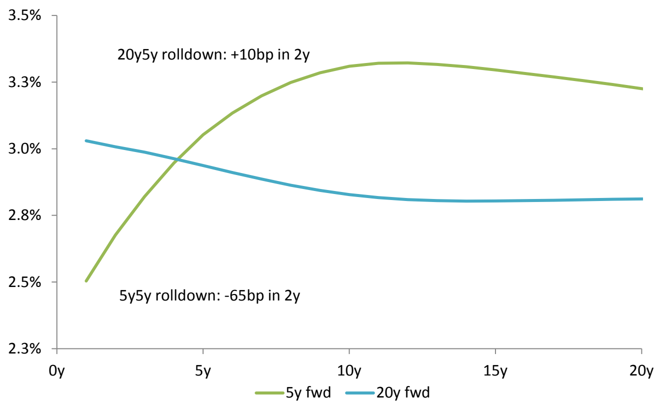
[3] In fact government bonds constitute only 27% of collateral used by counterparties to the Bank of Italy (http://www.bancaditalia.it/pubblicazioni/stabilita-finanziaria/rapporto-stabilita-finanziaria/2013/rsf_2013_6/en_stabfin_6_2013/Financial-Stability-Report-6.pdf).

new LTRO (Figure 12). This extension is even more likely if coupled with a stable macroeconomic and political environment. For example, buying BTP May-17 @147 generates an ASW-rolldown of 45bp over the course of 12 months.

Rec EUR 1y1y, pay USD 1y1y

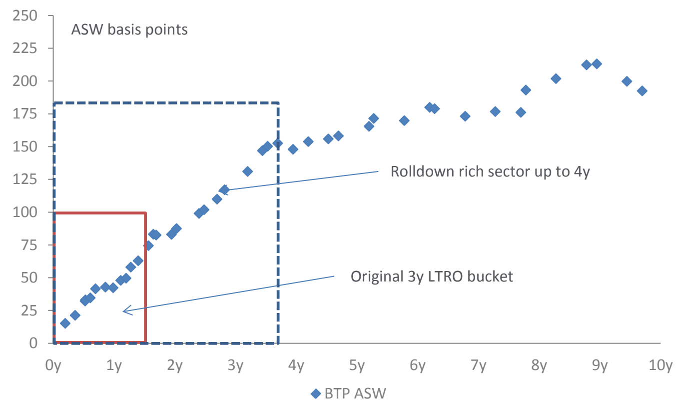
Trade #3: Receive EUR 1y1y, pay USD 1y1y @8bp. The position has an embedded option on a faster-than-expected recovery in the US associated with a shortening of forward-guidance. The option comes at the cost of a slightly negative rolldown. In terms of the EUR leg, we believe the risk of a large sell-off a la June is limited for now given that current positioning is only a fraction of what it was in June. The idea is to roll this trade for the entire duration of FED's hiking cycle. For reference, EUR/USD 4y1y spreads are quoted close to 120bp.

Figure 11. Rollling down those forward curves…



Source: Citi Research

Figure 12. …as well as on those peripheral curves



Source: Citi Research

Gilts, linkers & the Autumn Statement

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The Autumn Statement is now just two weeks away. For the gilt market the initial focus will be on any changes to the DMO's issuance remit. This will largely depend on the degree to which the OBR change their fiscal deficit forecast. However, a lower financing need for FY2013/14 may not lower gilt issuance, in our view. Instead, we expect the bulk of any reduction to be met by lower Treasury bill sales. The other major focus, especially for index-linked gilts, will be on any changes to green taxes aimed at reducing household energy bills. The near-term inflation profile could be reduced significantly if such changes are implemented.

The October data overstates the CGNCR undershoot

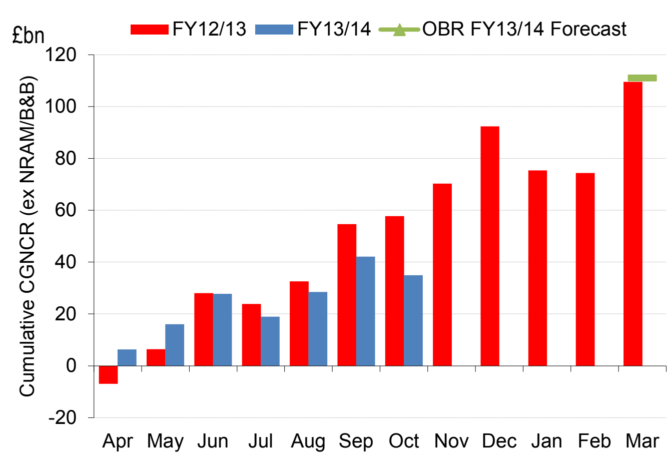
The deficit looks set to undershoot the OBR's Budget forecast…

Today's public finances release for October showed the year-to-date CGNCR (excluding NRAM/B&B) as £35bn. This includes the impact of Royal Mail privatisation which reduced the CGNCR by £2bn in October. At the Budget in March, the OBR's forecast for the full year CGNCR in 2013/14 (excluding NRAM/B&B) was £111bn compared with an outturn for 2012/13 of £109.5bn. As it stands, the cumulative deficit in 2013/14 (after seven months) is £23bn below the deficit at the same stage in 2012/13 (Figure 13). The undershoot vs last year has increased by £10bn in October alone.

…but the current undershoot in the CGNCR vs last year should not be extrapolated. The gap is likely to close in the final months of the fiscal year.

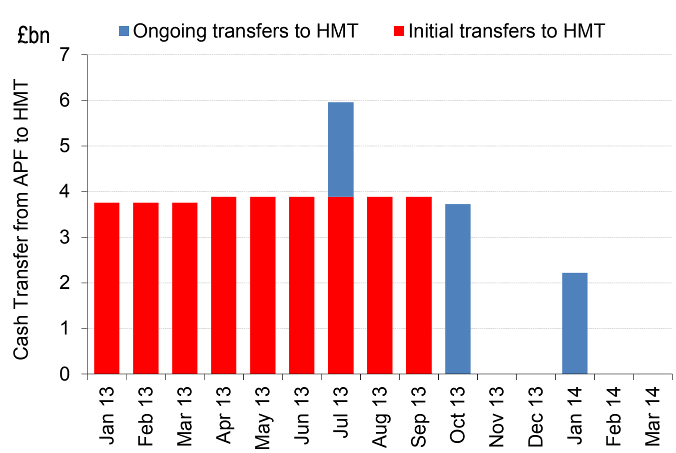
At first glance, this looks like a very large undershoot for the CGNCR vs the OBR's forecast. However, there are mitigating factors such as erratic spending patterns and the front-loading of APF cash transfers. Since January 2013, the expected APF cash balance as of 31 March 2013 (£35bn) has been transferred in nine monthly installments. The transfer in October – the tenth month – was the second of the quarterly cash transfers made for cash accumulated since 1 April 2013. The transfers between the APF and HMT are shown in Figure 14. Importantly, there is only one remaining transfer left in FY2013-14, in January worth £2.2bn, whereas in the January-March period in FY2012-13 the transfers totaled £11bn. The implications are clear – the current undershoot in the CGNCR vs last year of £23bn should not be extrapolated and the gap is likely to close in the final months of the fiscal year. By way of comparison, the year-to-date underlying deficit is £5.8bn below this time last year.

Figure 13. Cumulative CGNCR – this fiscal year vs last



Source: Citi Research, ONS.

Figure 14. Monthly APF coupon transfers to the Treasury



Source: Citi Research, Bank of England.

The OBR are likely to lower their CGNCR forecast by around £15bn.

The picture painted by the October data overstates the likely undershoot in the CGNCR. Nevertheless, as the underlying deficit shows, a large undershoot is still likely. The OBR are likely to lower their CGNCR forecast at the Autumn Statement, perhaps by around £15bn.

The funding need will likely be lower in FY2013/14…

Other changes to the financing requirement are likely to be quite minor

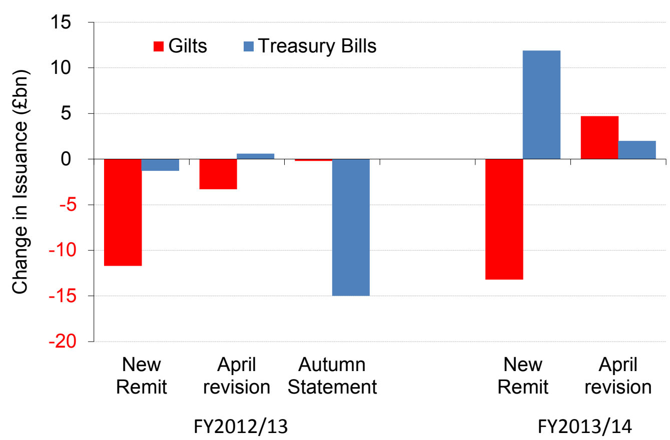
Besides from a likely downward revision in the CGNCR forecast, the other changes that might impact the net financing requirement are likely to be relatively minor. There may be a small offset in the form of a revision to the net contribution from NS&I to £2bn. The latest data (to September) shows an inflow of £2.4bn so far this year compared with an assumption of zero in the current remit. As for the outturn for FY2012/13, the latest ONS data suggests that the CGNCR (excluding NRAM/B&B) is unchanged from that used in the latest remit.

…but that might not mean much lower gilt issuance

Reducing the planned sales of Treasury bills may be preferred to lowering gilt issuance

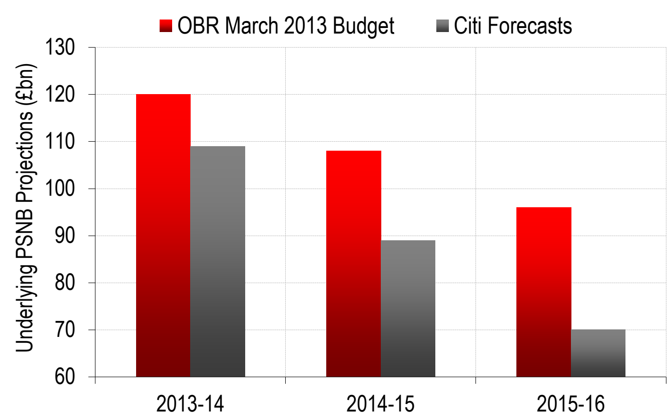
While the financing requirement may well be lower for FY2013/14, it doesn't necessarily follow that gilt issuance will be significantly reduced. Planned sales of Treasury bills may be cut instead. There is a precedent from last year's Autumn Statement when bill sales were reduced by £15bn (and gilt sales by £0.2bn) following the 'windfall' from the APF coupon transfer. As the Treasury put it in the 'Debt and reserves management report for 2013-14', *"changes to the Treasury bill stock offer an efficient way to accommodate in-year changes to the financing requirement (particularly towards the end of the financial year)"*.

Figure 15. Recent changes to planned gilt and Treasury bill issuance



Source: Citi Research, DMO.

Figure 16. Deficit forecasts are likely to be revised lower



Source: Citi Research, OBR.

Treasury bill sales provide flexibility for in-year changes in financing needs

As Figure 16 illustrates, the reduction in planned Treasury bill sales at last year's Autumn Statement was largely reversed by a planned increase in the FY2013/14 remit. This provides a cushion for in-year changes towards the end of this financial year. The chart also shows that, for the last couple of years, there has been a preference to make significant changes in the level of gilt issuance at the very beginning of the fiscal year.

There are clear benefits of continuity in the gilt issuance programme

In the likely event of a lower funding need at this year's Autumn Statement, we believe that reducing planned Treasury bill sales will again be the preferred option. There are clear benefits of continuity in the gilt issuance programme, not least it enhances transparency, promotes stability and avoids temporary 'supply shocks'.

We expect gilt issuance in FY2013-14 to be broadly unchanged

At the time of the Autumn Statement, there is likely to be around £43bn of gilts left to issue according to the current remit. Our base case is that gilt issuance is left broadly unchanged, but a small downward adjustment, perhaps by £5bn, is possible.

Gross issuance likely to fall very slowly in future years

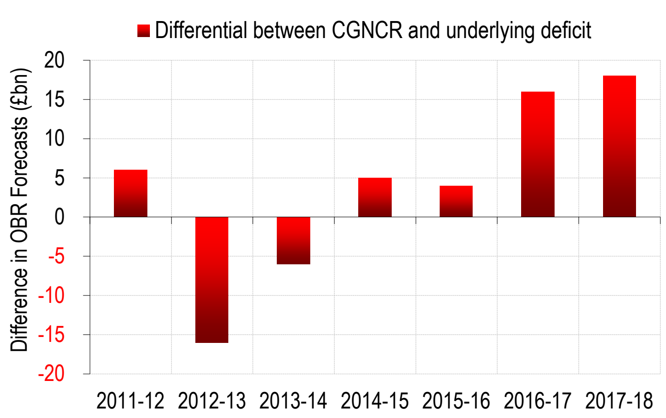
Improving fiscal trends improves the outlook for net issuance…

The strengthening recovery and improving fiscal trends point to lower net gilt issuance in the years ahead. At the Autumn Statement, the OBR are likely to reduce their deficit forecasts for future fiscal years. Figure 16 compares Citi forecasts for the underlying deficit with those of the OBR at the Budget. The cumulative difference over the three fiscal years shown is £56bn. The likely downward revision in the deficit forecasts points to lower net issuance from FY2014-15.

…but gross issuance is likely to fall very slowly thanks to rising redemptions and less one-off factors reducing the CGNCR

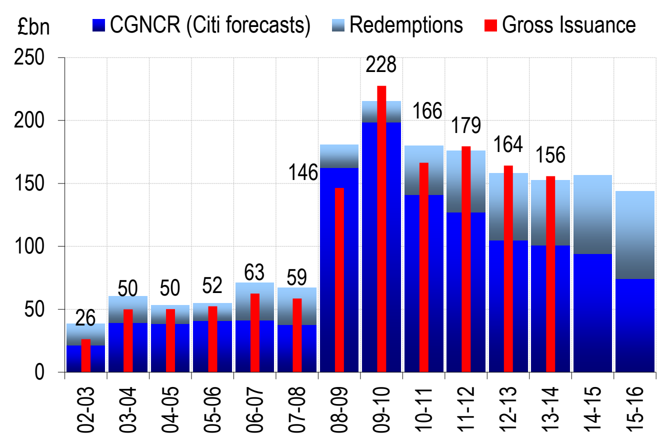
However, for gross issuance there are two mitigating factors – redemptions and the probable end of one-off factors impacting the CGNCR – which will limit the decline. A heavy issuance programme in 'Short' gilts over recent years means that redemptions are rising over the next couple of years. For example, redemptions are £11bn higher in FY2014/15 than this year and a further £7.5bn higher the year after. The rise in redemptions will slow the likely fall in gross issuance. Moreover, the CGNCR has been reduced in recent years by one-off factors such as the Royal Mail Pension Plan transfer and subsequent sale of shares and APF coupon transfers (which reduce the CGNCR in 2013-14 by £32bn). This has had the effect of lowering the CGNCR relative to the deficit, as illustrated by Figure 17. Such factors are unlikely to be as prevalent in FY2014-15 onwards.

Figure 17. OBR's forecasts for the CGNCR vs the deficit



Source: Citi Research, OBR.

Figure 18. Higher redemptions may prevent gross issuance from falling



Source: Citi Research, DMO.

Our preliminary forecast for gross issuance in FY2014-15 is £145bn

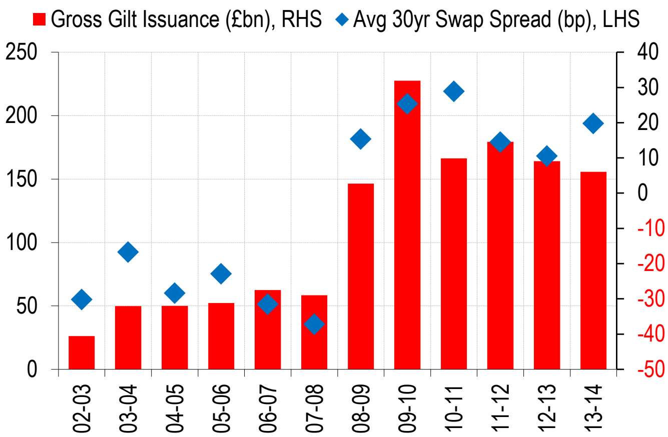
Figure 18 shows our forecasts for the CGNCR together with the redemption profile. Together, these are the primary drivers of gross issuance. As the chart implies, the fall in gross issuance may only be very small over the next couple of years. For FY2014-15, our preliminary forecast for gross gilt issuance is £145bn compared with £156bn in the current fiscal year. Our forecast assumes that there will be a contribution to funding in FY2014-15 from an increase in net Treasury bill sales (reversing the reduction we expect for FY2013-14). Without that assumption, the gross issuance forecast for 2014-15 would be very similar to this year's issuance.

Future issuance and swap spreads

The issuance outlook suggests 30yr swap spreads are likely to remain range-bound

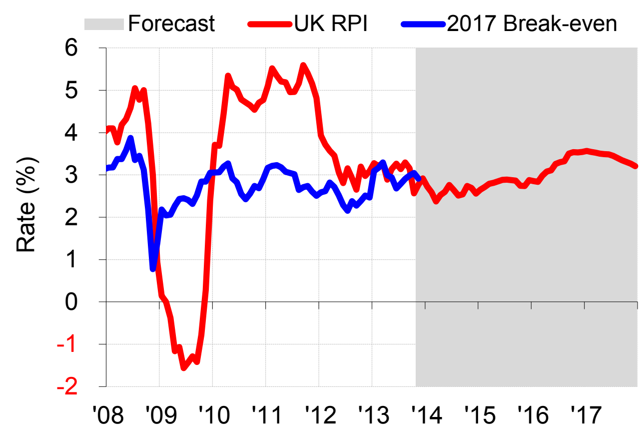
The analysis above suggests that, while the fiscal outlook is undoubtedly improving, this may take a while to feed through to lower gross issuance. This also suggests that 30yr swaps spreads are likely to remain relatively range-bound for the foreseeable future (Figure 19), especially with policy rates likely to be on hold until 2015. For now, swap spread views are more likely to be dictated by tactical considerations, in our view, rather than bigger picture trends.

Figure 19. Gross gilt issuance vs average 30yr swap spreads



Source: Citi Research, Bloomberg, DMO.

Figure 20. Front-end break-evens vs the RPI outlook



Source: Citi Research, Bloomberg, ONS.

Green taxes and the outlook for break-evens

The Autumn Statement is a major risk event for UK break-evens

The Autumn Statement could also be important for the near-term outlook for UK break-even inflation spreads. Front-end break-evens have managed to bounce in the last few days, helped by this week's £0.8bn coupon payments, but are still a little cheap to our current RPI profile. For example, the 2017 break-even inflation rate is currently around 2.9% compared with our RPI forecast over this period of 3%. However, the current RPI profile does not include the impact of any measures aimed at reducing household energy bills. The "cost of living" debate has become a huge political issue and the government may well respond in the Autumn Statement by rolling back 'green taxes'. This could significantly reduce the medium-term outlook for CPI/RPI. In the very least, this risk suggests a cautious approach to UK break-evens prior to the Autumn Statement. Looking further ahead, the outlook for RPI, and therefore front-end break-evens, will depend heavily of the likely pace of policy rate normalisation (given the mortgage interest payments component). This limits the downside and should provide an anchor for UK break-evens over the longer-term.

Strategy summary – wait to establish break-even longs

The market impact of issuance changes is likely to be quite limited

Our base case is that gilt issuance for the current fiscal year is left broadly unchanged. The Autumn Statement may not, therefore, produce any near-term impetus for gilts emanating from the issuance remit. Furthermore, the gross issuance trend for future fiscal years isn't improving quickly enough to drive a structural re-pricing of long-dated swap spreads.

We would be buyers of 2017 break-evens on any dips to 2.75%-2.80%

The market impact from the Autumn Statement may actually be felt more in the index-linked gilt market. There is a significant chance that 'green taxes' are rolled back in order to reduce household energy bills. Prior to the Autumn Statement, we would rather sell any rally which takes break-evens to around 2.95%-3.0% (IL gilt 2017). However, given the longer-term anchors, if there is a correction lower, we would look to enter break-evens longs around the 2.75%-2.80% area.

Euro Volatility Strategy

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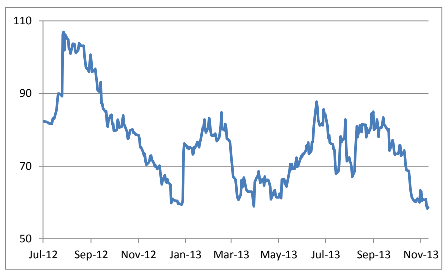
Contingent Long Gamma via Bund Futures Options[4]

Currently gamma implied volatility is trading in the lower region of its historical range. As such, it is not very attractive to sell. Indeed, as shown in Figure 21 which plots the evolution of yield normal implied volatility of three month expiry Bund futures, Bund options look historically cheap.

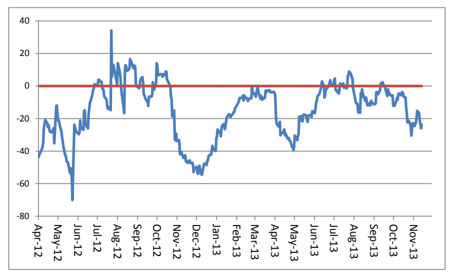
On the other hand, as tempting as it might be given relatively low implied/realized ratios for Bund options[5], *from a pure volatility (delta hedged) standpoint* long Bund futures option positions are also likely to yield a negative PnL, given that the underlying is not delivering. Note, in fact, that realized volatility is a backward looking indicator; at present, if measured against current implied volatility it flags relatively cheap options to buy. If however implied volatility is measured against *future* realized volatility over the life of the option, results over the past year suggest that on average a (delta hedged) long volatility exposure has bled theta over the past twelve months (Figure 22). We briefly present the intuition behind this concept in the appendix.

Figure 21. Evolution of three month expiry Bund futures normal yield implied volatility (bp, fitted)



Source: Citi Research

Figure 22. Difference between 63d Bund futures first difference yield annual future realized vol and three month expiry Bund futures yield normal implied vol (bp)



Source: Citi Research

Investors wishing to hold a "contingent" long gamma position to profit from sudden emergence of risk events without paying time decay should consider the following January[6] Bund futures RXH4 option trade (position must be dynamically delta hedged):

Long	143	Call	x1.15
Long	141	Put	x1.15
Short	142	Call	x1
Short	142	Put	x1

Investors receive 67 ticks for entering the trade (ref: RXH4 141.80). The position is roughly gamma/vega flat at inception.

Reasonably assuming that implied and realized vol remain low in the current rate trading range and pick-up if the market breaks out of the range, the position allows to monetize such scenario without having payed time decay. In other words, if rates break out of the current range, the position benefits from originally cheap wings

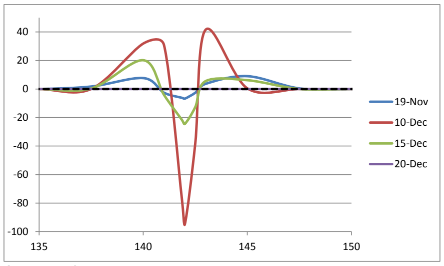
[4] Futures trading involves substantial risk of loss

[5] Currently Bund futures option impl/rls ratio stands around 0.90% for three month expiry, assuming 63d window. It is actually higher for shorter windows, e.g. around 112% for 21d.

[6] Expiry date is 20 December 2013.

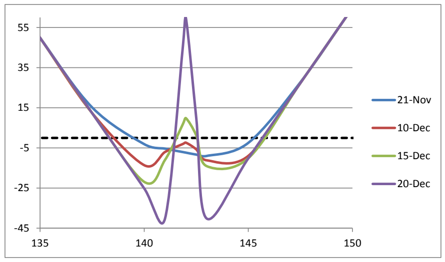
becoming long gamma and long vega at a time when implied and realized vol is expected to spike (Figure 23).

Figure 23. Gamma scenarios



Source: Citi Research

Figure 24. PnL scenarios



Source: Citi Research

From a terminal unhedged standpoint, the position has limited downside and generates a positive PnL if March Bund futures fixes between 141.34 and 142.67, below 138.81 and above 145.21 (Figure 24).

More detailed risk analysis available upon request.

Appendix

To gain basic intuition, assume first a geometric Brownian motion for the underlying F (a normal process would yield similar conclusions). Then, it is easy to show that the PnL stemming from a continuously delta-hedged long option position over a time interval dt is:

$$dPnL = \frac{1}{2}\Gamma F(t)^2\left(\text{rls vol}^2 - \text{impl vol}^2\right)dt$$

where rls vol is future (as opposed to backward looking) realized volatility and impl vol is is the current implied volatility at which the long option exposure has been purchased.

The profit over a longer time interval [0;T] will then be:

$$PnL = \frac{1}{2}\int_0^T \Gamma F(t)^2(\text{rls vol}(t)^2 - \text{impl vol}^2)dt$$

Therefore the sign of PnL comes from “excess volatility” only, given that gamma (Γ) is a positive quantity and F is squared. In contrast, the magnitude of the PnL is path-dependent as it is also hinges on ΓF^2. In particular, this term goes to zero as the option moves significantly out of or into the money, in which case the PnL of a delta hedged option would not be sensitive to excess volatility.

EGB: Belgian bonds – where do we stand?

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Belgium's government bond market has benefited from various positive factors recently – not least the surprised cancellation of the November auction and Fitch's move to revise its AA rating outlook from "negative" to "stable". Belgium's spread to France has narrowed across the curve and we would not fade this move. We continue to like long OLO vs OAT positions and recommend tightening the stop on our recommendation within the 5yr sector and extending the target going into year end.

Extend target on long Belgium vs France trade idea

We first recommended going long 5yr Belgium vs France in late July with the view that the observed spread widening had probably gone too far taking into account both the fundamental outlook and upcoming supply dynamics (Euro Rates Strategy - Belgium – bond market overview and strategy recommendations). Since then, spreads have compressed and Belgian bonds have rallied. New developments suggest to us that this trend may have further to run.

Long OLO 4% Mar18 vs OAT 4% Apr18. New target 5bp; new stop 16bp

Cancelled auction on the Fortis sale – no more supply in 2013

This week, Belgium canceled the OLO auction scheduled for 25th November. The Treasury department stated this decision was related to the sale of Belgium's stake in BNP Paribas Fortis, the proceeds of which amounted to €3.25bn. The market consequence of this is that there is no more OLO supply at all in 2013. The next scheduled supply by Belgium is now not until late January 2014. Although not huge, France has around €6bn of net supply left in 2013 with the next and final auction on 5th December.

Fitch puts Belgium back on Stable Outlook

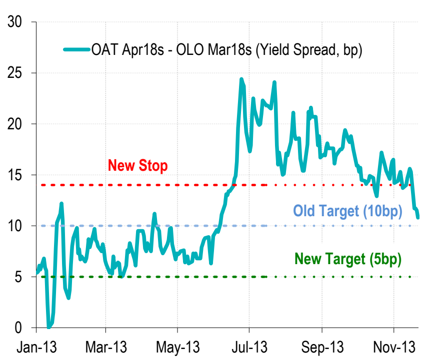
Belgium is rated:
AA Stable by Fitch
Aa3 Neg by Moody's
AA Neg by S&P

Recently, Fitch affirmed Belgium's AA rating and revised its outlook to "stable" (19th November). Fitch sees debt to GDP peaking next year amid an environment of modest economic recovery. Citi expects 2014 YoY GDP growth of around 0.5%. This follows Fitch's move to put Spain's BBB rating back on "stable" outlook earlier in November. Separately note that given S&P's recent move to downgrade France to AA, Belgium and France now share the same rating by S&P.

Medium term driver – federal election next year

Belgium's last election was in June 2010. A lengthy government building period followed, resulting, some 18-months later, in a 6-party coalition government which managed to implement a reform agenda. We would regard the run-up to the next Belgium federal election, expected in May 2014, to be more of a market driver in the medium term. What will be key is how any electoral outcome fits with ongoing support for fiscal consolidation and growth enhancing policies. However, in our view, while this is potentially a driver in Q1 and Q2 in 2014, Belgium politics do not appear to be an immediate driver regarding relative performance to other sovereigns. The overwhelming driver among EMU spreads remains accommodative ECB policy and the hunt for yield.

Figure 25. 5yr Belgium vs France



Source: Citi Research, Bloomberg

Conclusion – Belgium likely to tighten further to France

Assessing the various factors, we believe there is scope for Belgium to tighten further vs France going into year end. There is no more supply and the fundamental outlook has improved throughout the course of the year. Given the dominant theme of spread compression, we are therefore extending our spread target from 10bp to 5bp in the 5yr sector and revise the stop to 14bp (Figure 25).

Euro inflation: cautious long in break-evens

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Following the sell-off in euro break-evens, we find current valuations attractive vs inflation swaps. We close our long recommendation in Boblei18 break-even vs HICPxT swaps and replace it with a new trade buying BTPei18 break-even vs HICPxT swaps. In a separate trade, we recommend selling BTANi16 break-even vs OATi17.

Downside in break-evens looks limited from here

Deflation fears remain in the spotlight

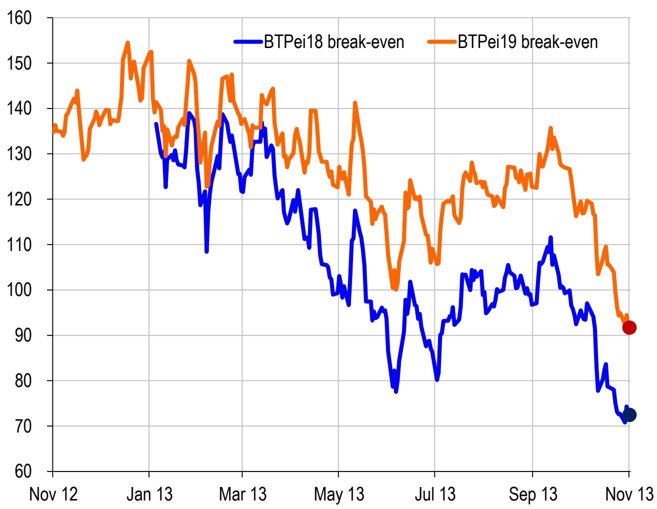
Deflation fears remain in the spotlight and are evoking responses from ECB board members. Following the last ECB meeting, President Draghi referred to the prospect of a "prolonged period of low inflation" and today he admitted that the rate cut took place "amid broad-based disinflation" and repeated that "inflation is likely to return to near 2% very gradually". ECB chief economist Praet acknowledged these fears earlier this week by saying that "zero inflation can push a central bank very quickly into unconventional measures, which can be difficult to implement". Meanwhile, our economics team has significantly lowered their inflation forecasts (see One Shock Away from Deflation).

Support likely from real yield buyers or interest in break-evens vs inflation swaps

With this fundamental backdrop, it is not surprising that euro break-evens have tightened to their lowest level in a year (Figure 26). However, they now look broadly in line with our inflation outlook and we expect further downside to be limited from here. At these levels, inflation-linked bonds may begin to find support from real yield buyers or from interest in break-evens vs HICPxT swaps. A lack of supply into year-end may also help break-evens to stabilise. Furthermore, if negative deposit rates indeed materialise (not our base case in the near-term – see Sovereign Debt Update), it should be supportive for short-dated break-evens.

Given these factors, we like cautious longs in euro break-evens vs inflation swaps. A key near-term risk to this view is the November HICP flash estimate (released next Friday). Our economists expect HICP to have bottomed at 0.7% in October and to come in slightly higher at 0.8% for November, but a downside surprise would put renewed pressure on break-evens.

Figure 26. 5yr BTPei break-evens



Source: Citi Research

Figure 27. Boblei18 break-even vs inflation swap

Source: Citi Research

BTPei18 best placed for cautious longs

BTPei18 break-even looks attractive for cautious longs vs inflation swaps

The sell-off in short-dated linkers since the October flash inflation release has varied according to when the bond was first issued. This makes sense as the deflation floor on newer issues becomes more valuable as break-evens fall. As discussed in our last European Rates Weekly, the market seems to be pricing in the emerging risk that part of the inflation accrued over the life of the bond might be wiped away in case HICPxT turns negative. This has made newer bonds, with less accrued inflation, relatively rich on the curve. Given that this possibility is unlikely to diminish in the near future, we expect this distortion in the curve to persist.

Without any consideration for deflation protection, BTPei19 looks like the best bond for long positions based on RV analysis. BTPei19 looks attractive in the BTPei18-19-21 fly and vs inflation swaps, OATei18 and Boblei18 at current levels. However, to protect (at least on a relative basis) from renewed weakness in break-evens, we prefer to express cautious break-even longs (vs inflation swaps) in BTPei18 (see European Rates Weekly for more discussion on the deflation floor). With this in mind, we close our existing long position in Boblei18 break-even vs 5yr HICPxT swap (Figure 27) and replace it with BTPei18 break-even vs 5yr HICPxT swap (Figure 28).

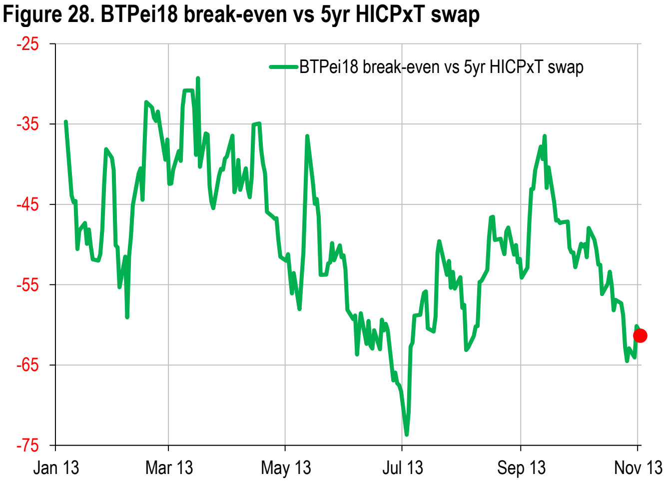
Closed trade: Buy Boblei18 break-even vs 5yr HICPxT swap

Open -57bp. Close -53bp. PnL +4bp

New trade: Buy BTPei18 break-even vs 5yr HICPxT swap

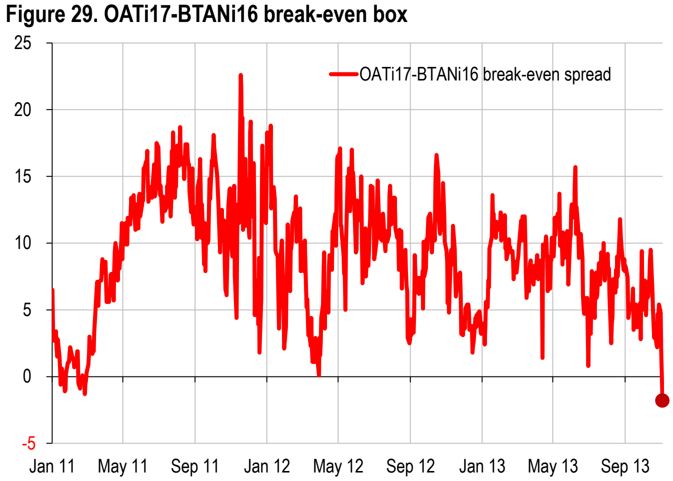
Open -60bp. Target -43bp. Stop -69bp

Figure 28. BTPei18 break-even vs 5yr HICPxT swap



Source: Citi Research

Figure 29. OATi17-BTANi16 break-even box



Source: Citi Research

French inflation – tactical short in BTANi16 vs OATi17

BTANi16 break-even richest vs OATi17 since issuance

The euro break-even curve has bear-steepened during the recent sell-off. However, this doesn't seem to be the case for the very front-end of the OATi curve where BTANi16 has richened vs OATi17. This is even more surprising given that BTANi16 was reopened today. The OATi17-BTANi16 break-even spread has turned negative at -2.4bps which is the lowest level since BTANi16 was first issued in January 2011. This spread last went negative in early 2011, but only for brief intervals. We recommend fading the richness of BTANi16 vs OATi17 (Figure 29).

New trade: Sell BTANi16 vs OATi17 on a break-even basis

Open -2.4bps. Target 8bps. Stop -7bps

SSA: Green Shoots in € Green Bonds

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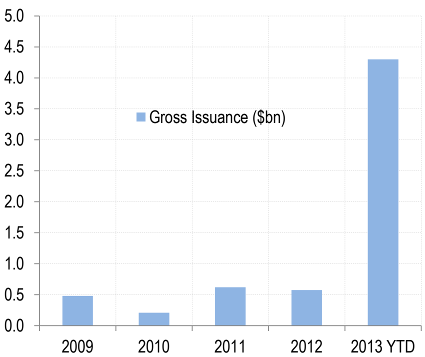
Green bonds have been around for some time – EIB was the first supra to issue a "green bond" back in 2007. However, two market developments have brought this segment into focus recently. First is the surge in USD issuance this year (YTD USD issuance by SSAs is now around $4.3bn) but second is the growing attention EUR supply is attracting. This year, EIB issued its first fixed rate green bond under its "Climate Awareness" programme and has since increased its size to €1.15bn. We look at primary and secondary market developments and in general, we believe this heightened attention in green bonds is a positive for the sector.

What are green bonds & why the growing market interest?

Put simply, green bonds are bonds whose proceeds are channeled into an environmental cause typically associated with climate change projects, renewable energy and sustainability. Such mandates often naturally fit within the public policy objectives of many SSAs.

What's attracting attention is the sharp increase in issuance, the vast majority of which remains in USD. As our US strategists note, the total amount outstanding of such bonds is relatively small at $5.9bn with key issuers including IBRD, IFC, EBRD and AFDB. Issuance has typically been under $1bn a year, but in 2013, gross USD issuance has surged to around $4.3bn to date (Figure 30). For further details on the USD market, please see Citi's recent *USD Supranational and non-US Agency Notes - Going Green*.

Figure 30. USD Gross Green Bond Supply ($bn)



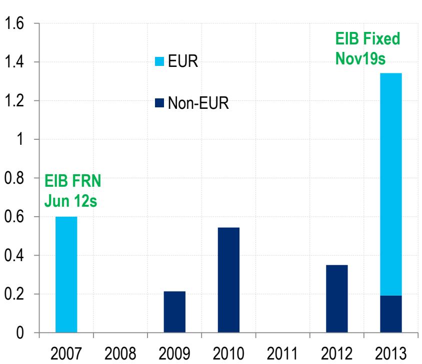
Source: Citi Research

Small, but growing number of EUR issuers…

Within the euro space specifically, EIB is the leading issuer under its Climate Awareness programme and serves as a sector proxy. In July 2013, EIB issued €0.65bn in a fixed rate Climate Awareness Bond (EIB 1.375% Nov19s) and it has since increased the amount outstanding to €1.15bn (Figure 31). Such issuance enables investors to contribute to projects associated with climate change whilst benefitting from the high credit quality and expertise of EIB. Specifically for EIB:

- Eligible projects include renewable energy (such as wind and solar power) and energy efficiency (such as building insulation)
- Use of proceeds are reported in financial statements
- Bonds are pari passu with other EIB bonds; investors in such green bonds aren't exposed to the specific project risk.

Figure 31. EIB CAB* Issuance (€bn)



Source: Citi Research, EIB, *Climate Awareness Bond

Figure 32. EUR Benchmark Green Bond Issuance this year

Date	Auction	Issuer	Coupon	Maturity	Amount	Outstanding	Bond info
11-Jul-13	new issue	EIB	1.375%	15-Nov-19	0.65	0.65	Climate Awareness Bond
03-Sep-13	tap	EIB	1.375%	15-Nov-19	0.25	0.9	Climate Awareness Bond
24-Oct-13	tap	EIB	1.375%	15-Nov-19	0.25	1.15	Climate Awareness Bond
21-Nov-13	new issue	NRWBK	0.75%	28-Nov-17	0.25	0.25	Sustainability Bond

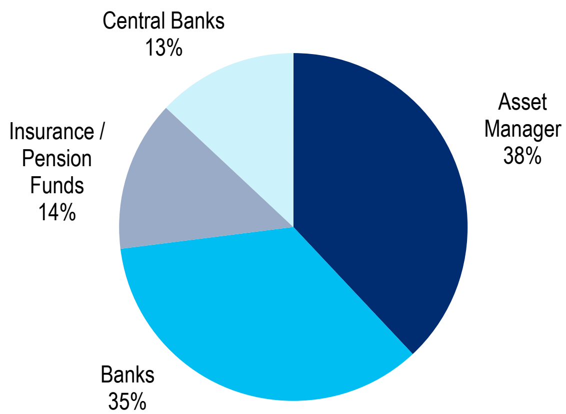
Source: Citi Research, Bloomberg, EIB, NRWBK

Although, EIB has been issuing green bonds since 2007, the euro denominated market is still in its early stages and relatively small (Figure 31). However, there have been signs of "green shoots" in 2013 with more and more issuers signaling interest. Note that Rentenbank issued a small €50mn placement (1.455% Aug20s) in August as a "renewable energy bond" and this week NRW Bank (the state owned German development bank) has issued €250mn in a sustainability bond (NRWBK 0.75% Nov17s). Total euro benchmark issuance is therefore around €1.4bn YTD for 2013. Furthermore, there is also nascent interest in green bond issuance from the wider corporate sector (so far, mostly in USD).

Demand and secondary market performance

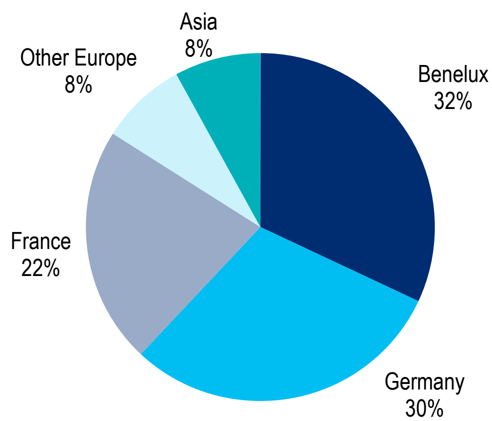
The EIB euro green bond has a generally diversified demand structure, attracting interest from a broad array of real money investors, many of which had a specific focus on socially responsible investment (SRI). EIB Nov19s, issued in July, was also the largest climate-themed bond to be sold in the euro market.

Figure 33. EIB Climate Awareness Bond, Demand by Investor (%)



Source: Citi Research, EIB

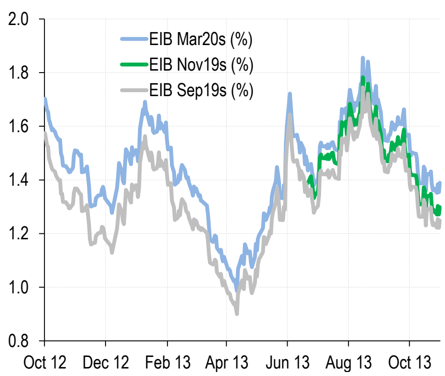
Figure 34. EIB Climate Awareness Bond, Demand by Region (%)



Source: Citi Research, EIB

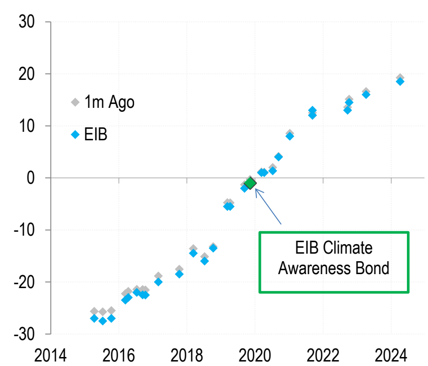
In terms of secondary market behaviour, EIB's Climate Awareness Bond has generally performed as well as other euro EIB bonds; and note it is parri passu. The small initial size ("mini-benchmark approach") may account for liquidity premia in the primary market but in general, the bond has rallied in line with the broader bull steepening sector tone. Relative to swaps, the bond has rallied from around 4bp in July to -1bp at the time of writing which is roughly in line with peers. The yield history of where 6yr EIB is trading is shown in Figure 35 and EIB's € ASW curve is shown in Figure 36.

Figure 35. 6yr EIB bonds (Yield, %)



Source: Citi Research

Figure 36. EIB AW Curve (bp)



Source: Citi Research

Conclusion – a growing euro SSA segment

The development of green bonds would provide euro SSA investors with another opportunity to diversify among high quality assets. Although the euro market is still relatively small, this year's trends and the interest shown by investors may point to further issuance going forward. In general, like our US colleagues, we believe that the additional focus green bonds have received is likely to be a positive for the sector.

Covered Bond Strategy

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With ING Belgium, the covered bond market not only has a new entrant within the Belgian covered bond segment. ING is also the third group which issues EUR benchmark covered bonds under three different jurisdictions.

ING Belgium – a new entrant in the Belgium market

Third Belgian issuer ahead

At the beginning of this month, ING Belgium has become the third entity in Belgium that has received an issuing license by the National Bank of Belgium. This week, ING Belgium received Aaa/AAA ratings for its covered bond programme by Moody's and Fitch. We think that issuance should be expected at the beginning of next month. With this deal, the youngest European covered bond segment will grow by one more issuer. Moreover ING Group would be the third banking group that issues EUR benchmark covered bonds under three different covered bond frameworks.

The cover pool

Figure 37. Cover Pool Information

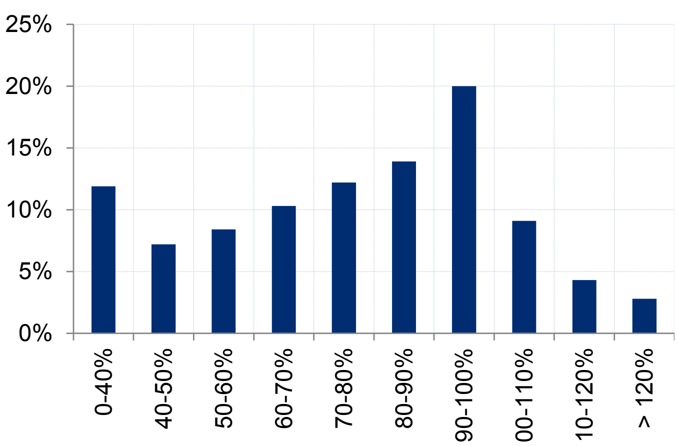
Rating Key Figures		*Cover Pool Key Figures*	
Issuer Rating	A2/A+/A+	Average loan balance	119,032
Covered bond rating	Aaa/–/AAA	Number of borrowers	21,138
Collateral Score	9.2%	Concentration of 20 biggest borrowers	0.5%
Market Risk	18.2%	WA Current LTV*	76.3%
Cover Pool Losses	24.3%	WA Indexe LTV	68.8%
Timely Payment Indicator	Probable	WA Seasoning (months)	39
TPI Leeway	1	WA Remaining Term (months)	221

Source: Moody's, Citi Research; *Including pari passu loans (advances secured by the same all-sums mortgage)

100% residential mortgage loans as collateral

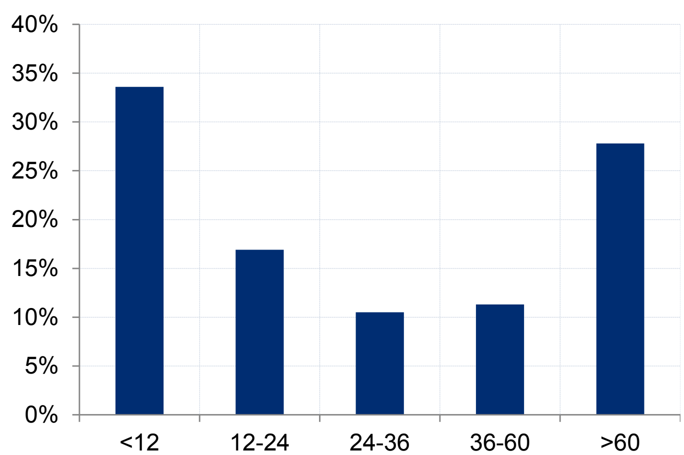
INGB's cover pool exclusively consists of residential mortgage loans secured by domestic properties whereas 46% are characterized as mortgage mandates (more on that below). The pool's total volume is €2.516bn. Assuming €1bn in issuance, OC levels would be 150%. Cover pool key figures look very similar to KBC's covered bond program which is also rated by Moody's. The collateral score is below the European average (10.8%) which means that the cover pool quality is above average. Moreover, as the issuer is rated better than KBC and CCBGBB, the covered bonds still have one (two) notch(es) leeway in case of an issuer downgrade by Moody's (Fitch). KBC (CCCBGBB is not rated by Moody's) doesn't provide further leeway for the Aaa notes.

Figure 38. Balance per LTV band, %



Source: Moody's, Citi Research

Figure 39. Seasoning in months, %

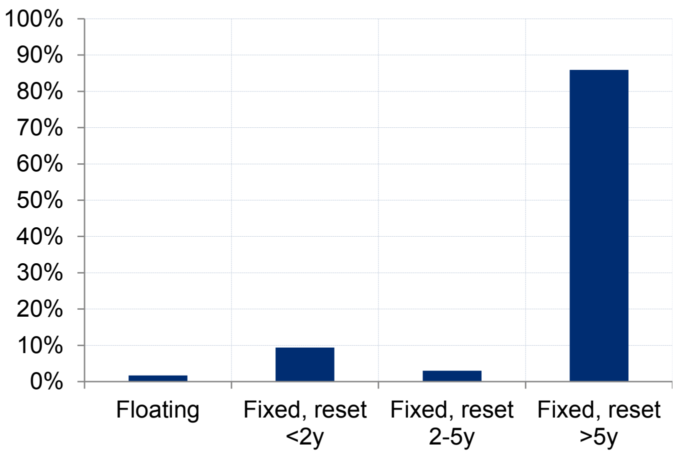


Source: Moody's, Citi Research

Very granular cover pool

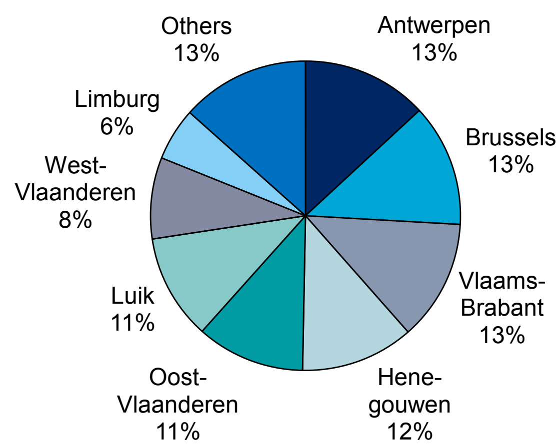
What is most striking is the extremely low concentration of borrowings. Hence, the cover pool granularity is very high which is positive in our view. Moreover, there is very low geographical concentration which is a further positive factor. Although it might be seen as a positive that 86.6% of all assets pay fixed-for-life interest the backflip is that covered bonds should be expected to have an average shorter term. This might translate negatively if interest rates rise in the future as asset-liability mismatch would increase. One factor which should decrease refinancing risk is the use of a soft-bullet option, granting the issuer a 12-month lengthening period for the covered bonds. Swaps are not used by INGB although this should not be a problem even in case of issuer default if sufficient OC is held. Fitch also considers this as a problem which is one reason why AAA breakeven OC of 43% is rather high. A further reason for this is the expected high maturity mismatch given the assets WA life of 10.3 years. As a positive, Fitch sees the high level of liquidity protection by soft bullet options on the one hand but also by a pre-funded reserve covering three months of interest on the other hand.

Figure 40. Cover pool distribution by interest rate type, %



Source: Moody's, Citi Research

Figure 41. Cover pool distribution by region, %



Source: Moody's, Citi Research

The covered bond law

Issuance cap for covered bonds

In the following, we summarize some key characteristics. The Belgian covered bond law has several similarities to the German and the French law (e.g. 180-day liquidity buffer). Generally, the law is shaped accordingly to assure UCITS and CRD compliance. A big difference, however, is that there is a cap on issuance of covered bonds: only 8% of the bank's assets can be used as collateral for covered bond issuance. Moreover, legal OC requirements are higher than in the neighbors' segments. Belgian covered bond issuers always have to hold 5% legal OC even under stress scenarios, e.g. 2% shift in interest rates. In general, the cover pool may consist of different asset classes but one asset class has to dominate by 85% (nominal). Eligible assets are

- Residential mortgage loans & senior RMBS (80% LTV) from EAA countries,
- Commercial mortgage loans & senior CMBS (60% LTV) from EAA countries,
- Claims on public sector entities and senior public sector ABS from OECD countries (however, non-EU exposure may get zero valuation under specific circumstances)
- Claims on financial institutions (up to 15%) and hedging instruments.

Set-off and commingling risk are minimized

One main strength of the Belgian covered bond law is the asset segregation by registration within a special estate, thereby reducing clawback, set-off and commingling risk. Also – as it can be found in Germany – there is a cover pool monitor put in place while going concern. In case of a default, however, a cover pool administrator will be appointed by NBB who is a separated person from the bank's insolvency administrator and who has specific rights, e.g. the ability to sell all or parts of the cover pools independently of the liabilities. Loans which are in arrears for more than 30 days, the value is reduced by 50% within the specific calculations. Loans which are in default (delinquencies of more than 90 days) are not given any value.

Potential threat of all-sum mortgages has been solved by the covered bond law

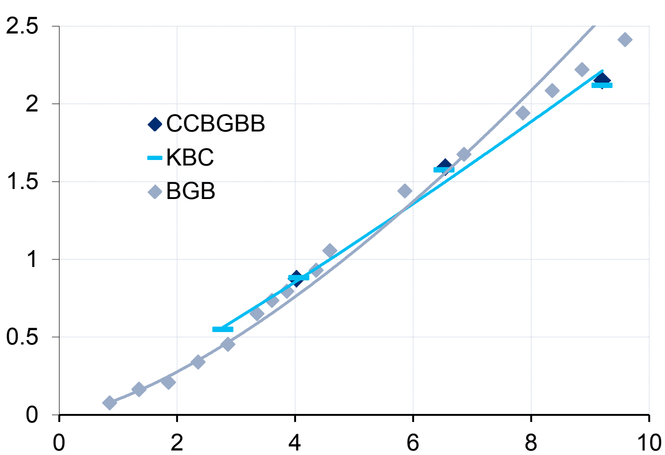
One specific characteristic of these covered bonds relates to Belgium's mortgage market. Covered bonds can not only be backed by mortgage loans but also by mortgage mandates or so-called all-sum mortgages. In case of all-sums mortgages, the mortgage is used to secure all kind of loans the borrower owes. Hence, the mortgage can be used for residential debt and e.g. a student loan at the same time. In general, none of the claims have a senior state. Hence all loans rank pari passu. In order to assure that covered bondholders do not suffer any clawback risk, the covered bond law clearly states that other loans will rank subordinated to the loans in the cover pool.

Mortgage mandates can be part of Belgian cover pools

A mortgage mandate is a very unique tool in the Belgian mortgage market. The following is the explanation given by S&P: "*In Belgium, when taking out a mortgage, the borrower must pay a registration fee based on a percentage of the mortgage loan. To reduce this fee, it is market practice for the lender to grant a mortgage loan partly secured by a mortgage inscription on the property and by a mortgage mandate. The registration fee is only payable on the mortgage inscription. A mandate is not a security for the loan. A mortgage mandate is solely the irrevocable option of the lender (or a third-party assignee) to unilaterally create a mortgage. Only when the mortgage mandate has been converted into a mortgage is the portion of the original loan represented by the mortgage mandate supported by a security interest on the relevant property.*"[7] The main risk is that mandates on a mortgage may already be in place which rank more senior than the mandate in the cover pool.

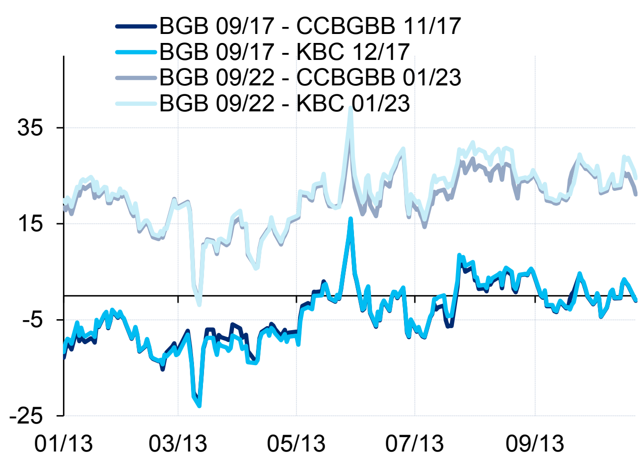
The secondary market – covereds trading inside the sovereign

Figure 42. Belgian covered and government bond yield universe, %



Source: Citi Research

Figure 43. Different steepness in OLO and covered bond curve, ASW, bp



Source: Citi Research

[7] S&P, „Belfius Bank, Belgian Mortgage Pandbrieven Covered Bond Program", 9.11.2012

Covered bonds trade on similar levels with OLOs

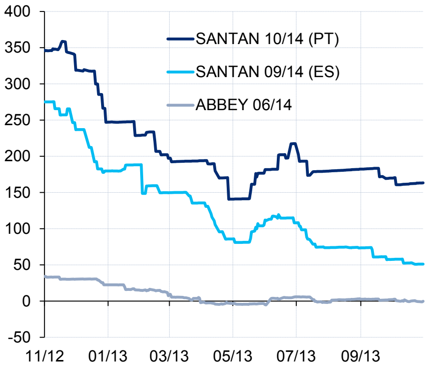
Belgian covered bonds are trading flat to OLOs in the belly of the curve while OLOs trade cheaper in the longer end given the different steepness of both curves. This pattern is similar but more distinct compared to the French market where the spreads to OAT are still a bit higher. Within the Belgian covered bond universe, there is no clear differentiation between the bonds outstanding from the already existing programs. In case of INGB, we would argue for slightly lower ASW levels given the higher credit quality of the issuer. Compared to other covered bond segments, Belgian covered bonds have reached levels between UK and Australian covered bonds on an index level.

Covered bond funding channels of pan-European banks

ING Group will be the third group which issues benchmark covered bonds under three different frameworks

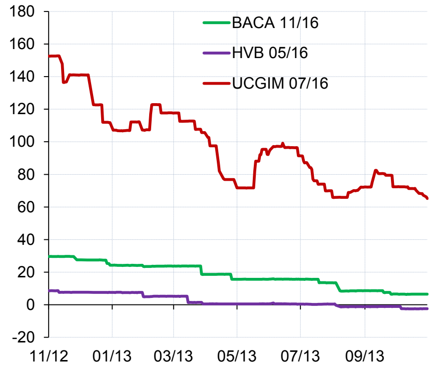
With ING Group the covered bond market will have the third banking group that issues EUR benchmark covered bonds across three different jurisdictions. Santander Group is active in Spain, Portugal and the UK while Unicredit Group issues benchmark covered bonds in Italy, Austria and Germany. ING has already been active in the Netherlands and Germany. All examples impressively show that the main price factor for covered bonds is the jurisdiction and to a lesser extent the credit and/or cover pool quality.

Figure 44. Santander Group EUR benchmark covered bonds, ASW-Spread, bp



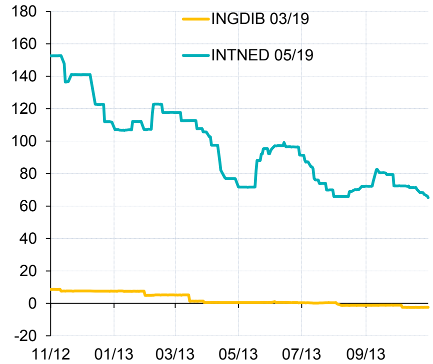
Source: Citi Research

Figure 45. Unicredit Group EUR benchmark covered bonds, ASW-Spread, bp



Source: Citi Research

Figure 46. ING Group EUR benchmark covered bonds, ASW-Spread, bp



Source: Citi Research

Conclusion

Although the market is shrinking, opportunities become bigger

With INGB, the third Belgian covered bond issuer will probably enter the market. Although the benchmark covered bond market will shrink in general in 2014, banks see the clear benefit of secured funding which is why we expect further new issuers in the upcoming months. BNP Paribas Fortis would be a further potential issuer from Belgium. However, it will become increasingly interesting if pan-European banking groups will continue to follow the current strategy and operate with several funding platforms in different countries given the difference in funding levels. We think that this might become a more interesting topic when the supervision of such entities are transferred to the ECB.

Technical update: Bunds and gilts

Bunds: weekly close below 141.47 will be very bearish

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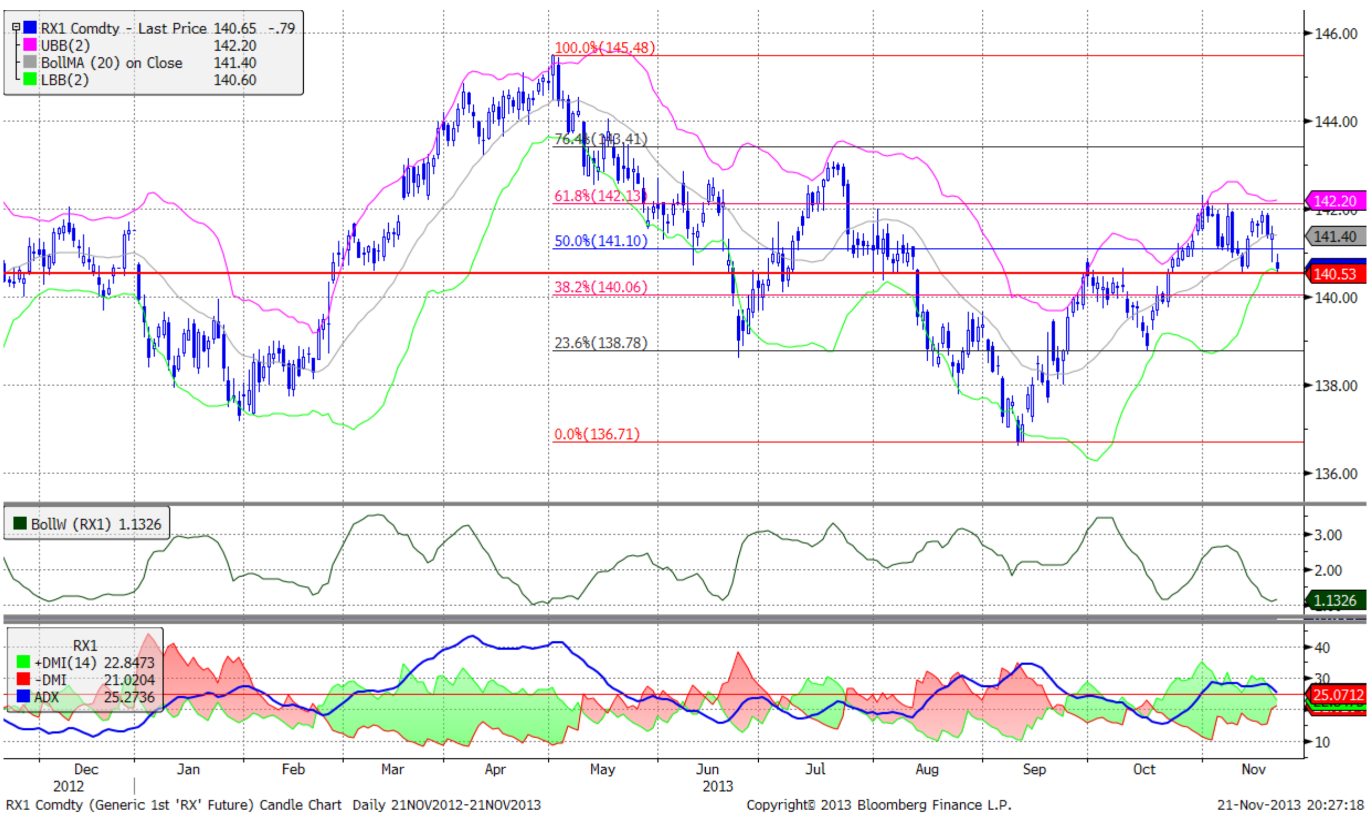
With today's sell-off, Bunds are trying to break out of upward channel that has been in place for over two months on a weekly chart (Figure 48). If Bunds close below 141.47 tomorrow, that would break the downward channel on the weekly chart and complete the formation of a double top on a daily chart (Figure 47). This combination would be a significant bearish signal, with the latter giving a target of 138.70. Furthermore, a close below 141 will form a bearish engulfing pattern on the weekly chart which would indicate a reversal in the rally. Any downward move from here will also start a widening of the Bollinger Band which would also be bearish. The ADX confirms this weakening in the upward momentum. The -DMI is closing the gap with +DMI and a crossover would be a sell signal.

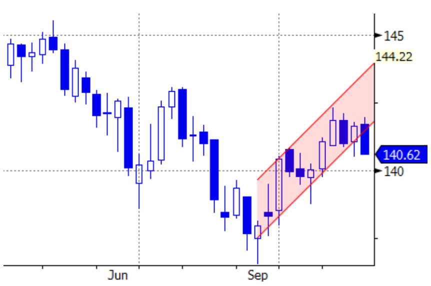
On the other hand, a close above 141.47 tomorrow will keep the upward channel intact and confirm a continuation of the uptrend.

Figure 47. 10yr continuous Bund futures with Fibonacci levels, 20day Bollinger Bands and 14day ADX (daily chart)



Source: Bloomberg

Figure 48. Uptrend in Bunds (weekly chart)



Source: Bloomberg

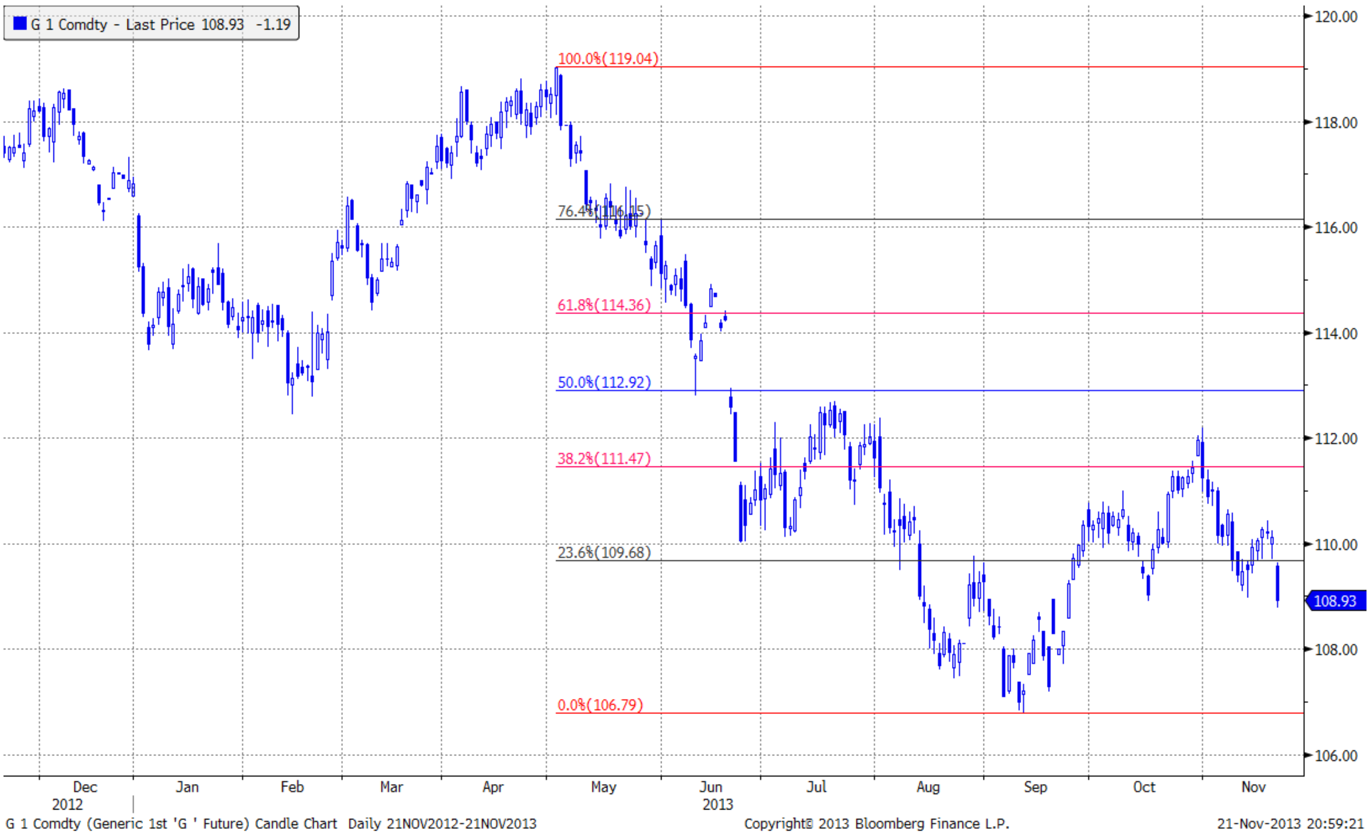
Support: If the bearish patterns are confirmed, the first support will be around 138.8, which is the target of the double top and is the 23.6% Fibonacci retracement of the May-September sell-off. This has also acted as a support in the past.

Resistance: We see the first resistance in the 142.1 region which was tested twice during the recent rally and coincides with 61.8% Fibonacci retracement of May-September sell-off (on a roll-adjusted basis). The next resistance will be in the 143.1 region which was the highest level reached in the June-July pull-back.

Gilts: bearish bias

Gilts have broken through the 109.7 support today with a gap-down opening. This was a strong support and a sustained break would be bearish (Figure 49). On a longer horizon, gilts have entered into a downward channel on a weekly chart.

Figure 49. 10yr continuous gilt futures with Fibonacci levels, slow stochastic (10,3,3) and 20day Bollinger Bands



Source: Bloomberg

Support: The first key support is in the 107.7-107.9 region, which is the lowest weekly close of the year.

Resistance: Any upward move will fill the gap formed today around 109.7 level. We see the first key resistance around the 111.5 area, which is the 38.2% retracement of May-September sell-off and could not be broken in October. The next strong resistance is in the 112.7-112.9 region, which is also the 50% retracement level.

End-November EGBI Projection

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This is a summary of EGBI projections published earlier this week. Click *here* for the full note.

We expect the effective duration of the EGBI to increase by 0.05 at the end of November. At the EGBI level, the changes should be supportive for the 5yr and 10yr sectors, and put flattening pressure on 2s10s part of the curve

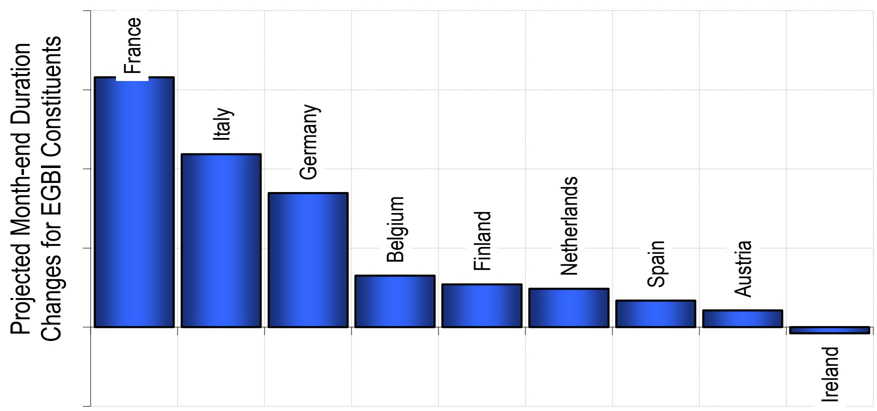
Projected changes supportive for France, Italy and Germany

Projected changes supportive for France, Italy and Germany

Spain to extend by its largest amount in a year (unweighted terms)

- Within the EGBI, we expect France to extend the most at the end of November, followed by Italy and Germany (Figure 50).
- At a country level, we expect the Spanish index to extend by its largest amount in a year. However the impact is muted in weighted terms because of the fall in its weight in the index.

Figure 50. Weighted duration change at the end of November



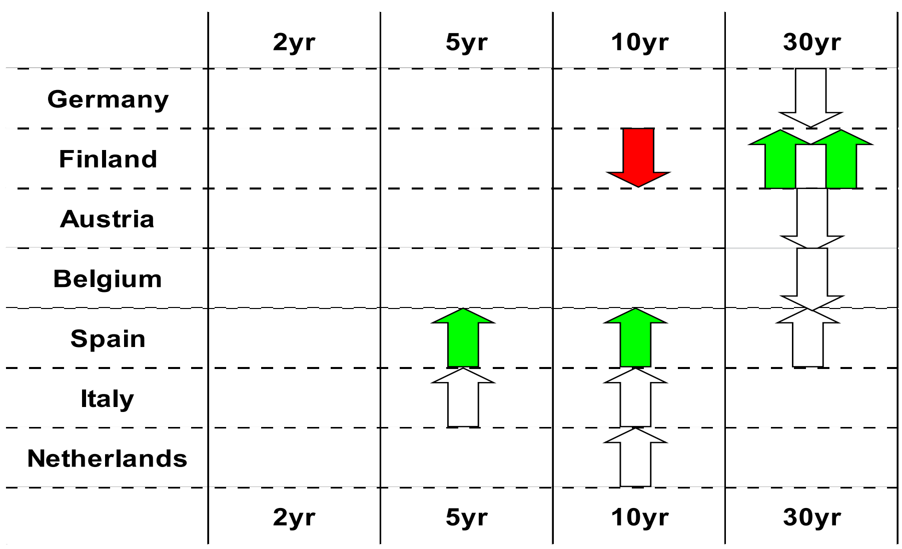
Source: Citi Research

Support on individual curves

Support for 30yr Finland and 5-10yr Spain

- On individual curves, we expect index changes to be supportive for the long end of Finland and belly of the Spanish curve (Figure 51).

Figure 51. Summary of price pressures on individual domestic curves



Source: Citi Research

Relative value trades

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We highlight a number of relative value opportunities in the 5-10yr sector of the French, Dutch, Austrian, Belgian and Gilt yield curves.

France: 7s8s flattener, fade the richness of Jul17s

Switch into Oct21s

- Switch from 3.5% Apr20 to 3.25% Oct21 for 41bp (3m carry: +0.2bp) - Figure 52

Sell Jul17s vs surrounding issues

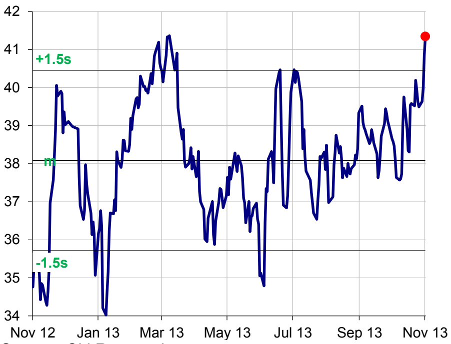
- Sell 1% Jul17 vs 5% Oct16 and 1% Nov18 (3m carry: +0.2bp) - Figure 53

Netherlands: fade the richness of Jul18s

Sell Jul18s vs surrounding issues

- Sell 4% Jul18 vs 4.5% Jul17 and 4% Jul19 (3m carry: +0.6bp) - Figure 54

Figure 52. France: 3.25% Oct21 – 3.5% Apr20 yield spread (bp)



Source: Citi Research

Figure 53. France: 5% Oct16, 1% Jul17, 1% Nov18 microfly (bp)

Source: Citi Research

Figure 54. Netherlands: 4.5% Jul17, 4% Jul18, 4% Jul19 microfly (bp)

Source: Citi Research

Austria: 6s7s flattener

Switch into Jul20s

- Switch from 1.95% Jun19 to 3.9% Jul20 for 30bp (3m carry: +0.1bp) - Figure 55

Belgium: fade the richness of Jun17

Sell Jun17s vs surrounding issues

- Sell 3.5% Jun17 vs 4% Mar17 and 4% Mar18 (3m carry: -0.2bp) - Figure 56

UK: take advantage of cheapness of Sep19s

Buy Sep19s vs surrounding issues

- Buy 3.75% Sep19 vs 5% Mar18 and 3.75% Sep21 (3m carry: +1.7bp) - Figure 57

Figure 55. Austria: 3.9% Jul20 – 1.95% Jun19 yield spread (bp)

Source: Citi Research

Figure 56. Belgium: 4% Mar17, 3.5% Jun17, 4% Mar18 microfly (bp)

Source: Citi Research

Figure 57. UK: 5% Mar18, 3.75% Sep19, 3.75% Sep21 microfly (bp)

Source: Citi Research

Relative value tables

Regular readers will be familiar with the Relative Value Appendix showing individual bonds from the major EMU/UK markets in the context of their 6-month trading range relative to our fitted curve. We have expanded this approach and summarized the results below.

For example, Figure 58 shows the five cheapest and richest bonds in Germany relative to a fitted yield curve (shown on the left half of the page) and to the euro swap curve (right half of page). The table identifies benchmarks and CTDs and also gives the amount outstanding and initial issue date.

Figure 58. Yield Spread and CAS to Fitted Relative Value Curve (6m History)

GERMANY

Versus Govt Curve (CAS)

	Rank		ZScore	Issued	Size (€bn)
Richest	1	**2.00 Aug23 (10y)**	**-2.49**	Sep13	14
	2	**1.00 Oct18 (5y)**	**-2.15**	Sep13	13
	3	**2.50 Jul44 (30y)**	**-2.14**	Apr12	16
	4	**3.25 Jan20**	**-1.75**	Nov09	22
	5	**3.75 Jan19**	-1.46	Nov08	24
	5	**1.25 Oct16**	**1.27**	Sep11	16
	4	**2.50 Jan21**	1.38	Nov10	19
	3	**3.75 Jan17**	1.41	Nov06	20
	2	**2.25 Sep21**	**1.91**	Aug11	16
Cheapest	1	**2.00 Jan22**	**2.07**	Nov11	20

Versus Swap Curve (CAS)

	Rank		ZScore	Issued	Size (€bn)
Richest	1	**1.50 Sep22**	1.52	Sep12	18
	2	**1.50 Feb23**	1.60	Jan13	18
	3	**1.75 Jul22 (RX)**	1.74	Apr12	24
	4	**1.50 May23**	1.78	May13	18
	5	**3.25 Jul21**	1.96	Apr11	19
	5	**1.00 Oct18 (5y)**	**3.44**	Sep13	13
	4	**4.25 Jul39 (UB)**	**3.47**	Jan07	14
	3	**4.75 Jul40**	**3.61**	Jul08	16
	2	**3.25 Jul42**	**3.94**	Jul10	15
Cheapest	1	**2.50 Jul44 (30y)**	**4.18**	Apr12	16

Source: Citi Research

Figure 59 (overleaf) looks at bonds of all maturities. For investors with maturity restrictions we have also provided another set of summary tables (Figure 60 and Figure 61) which looks at bonds shorter than 12 years and longer than 8 years, and uses the same criteria as Figure 59 to highlight the richest and cheapest bonds in these narrower maturity spectrums.

These summary tables should help facilitate efficient screening of bonds and, among other things, provide a selection of starting points when considering switches.

EMU relative value table – all maturities

Figure 59. Coupon Adjusted Spread to Fitted Curve and Swap Curve by Country (6m History); All bonds on each curve

GERMANY

	Versus Govt Curve (CAS)						Versus Swap Curve (CAS)				
	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	2.00 Aug23 (10y)	-2.49	Sep13	14	Richest	1	1.50 Sep22	1.52	Sep12	18
	2	1.00 Oct18 (5y)	-2.15	Sep13	13		2	1.50 Feb23	1.60	Jan13	18
	3	2.50 Jul44 (30y)	-2.14	Apr12	16		3	1.75 Jul22 (RX)	1.74	Apr12	24
	4	3.25 Jan20	-1.75	Nov09	22		4	1.50 May23	1.78	May13	18
	5	3.75 Jan19	-1.46	Nov08	24		5	3.25 Jul21	1.96	Apr11	19
	5	1.25 Oct16	1.27	Sep11	16		5	1.00 Oct18 (5y)	3.44	Sep13	13
	4	2.50 Jan21	1.38	Nov10	19		4	4.25 Jul39 (UB)	3.47	Jan07	14
	3	3.75 Jan17	1.41	Nov06	20		3	4.75 Jul40	3.61	Jul08	16
	2	2.25 Sep21	1.91	Aug11	16		2	3.25 Jul42	3.94	Jul10	15
Cheapest	1	2.00 Jan22	2.07	Nov11	20	Cheapest	1	2.50 Jul44 (30y)	4.18	Apr12	16

FRANCE

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	1.75 Feb17	-1.59	Feb11	20	Richest	1	4.75 Apr35	-1.10	Apr03	21
	2	4.25 Oct17	-1.53	Oct06	28		2	4.00 Oct38	-1.08	Oct05	24
	3	3.75 Apr17	-1.50	Apr06	35		3	4.50 Apr41	-1.00	Apr09	24
	4	1.00 Jul17	-1.47	Jul11	18		4	5.75 Oct32	-0.97	Oct00	25
	5	3.00 Apr22	-1.23	Feb12	33		5	3.25 May45 (30y)	-0.82	May12	9
	5	0.25 Nov15 (2y)	0.82	Nov12	21		5	1.00 Nov18 (5y)	0.54	Nov12	17
	4	2.25 Feb16	1.00	Feb10	29		4	0.25 Nov15 (2y)	1.17	Nov12	21
	3	3.25 May45 (30y)	1.01	May12	9		3	2.25 Feb16	1.21	Feb10	29
	2	3.25 Apr16	1.20	Apr05	29		2	3.25 Apr16	1.24	Apr05	29
Cheapest	1	3.75 Oct19	1.56	Oct08	32	Cheapest	1	2.25 May24	2.05	Nov13	4

ITALY

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	3.50 Dec18 (5y)	-1.88	Sep13	11	Richest	1	4.75 Sep16	-2.00	Sep11	16
	2	4.75 Sep16	-1.71	Sep11	16		2	3.75 Aug16	-2.00	Feb06	27
	3	4.75 Sep28	-1.40	Jan13	14		3	3.75 Apr16 (BTS)	-1.99	Apr11	16
	4	5.00 Aug34	-1.28	Aug03	21		4	2.25 May16	-1.98	Apr13	15
	5	5.50 Sep22	-1.16	Mar12	20		5	2.75 Dec15	-1.95	Dec12	16
	5	5.25 Aug17	1.91	Feb02	24		5	4.50 Mar24	-1.32	Aug13	14
	4	3.75 Aug21	2.05	Feb06	28		4	3.75 Mar21	-1.30	Sep10	24
	3	4.75 Sep21	2.10	Mar11	25		3	5.00 Mar25	-1.27	Mar09	22
	2	5.00 Mar25	2.57	Mar09	22		2	3.75 Aug21	-1.08	Feb06	28
Cheapest	1	5.00 Mar22	2.62	Sep11	18	Cheapest	1	3.75 May21	-0.75	Oct13	5

N'LANDS

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	2.50 Jan33	-1.61	Mar12	10	Richest	1	2.50 Jan33	0.52	Mar12	10
	2	1.25 Jan19 (5y)	-1.17	Jun13	8		2	3.75 Jan42 (30y)	0.57	May10	14
	3	1.25 Jan18	-1.06	Jul12	15		3	1.25 Jan18	0.60	Jul12	15
	4	1.75 Jul23 (10y)	-0.55	Mar13	16		4	1.75 Jul23 (10y)	0.63	Mar13	16
	5	3.50 Jul20	-0.33	Feb10	15		5	4.00 Jan37	0.65	Apr05	13
	5	0.00 Apr16	1.14	Jan13	13		5	4.50 Jul17	1.17	Jul07	15
	4	2.25 Jul22	1.25	Feb12	15		4	3.25 Jul21	1.18	Mar11	16
	3	3.75 Jan23	1.46	Jan06	11		3	2.25 Jul22	1.18	Feb12	15
	2	3.25 Jul21	1.49	Mar11	16		2	3.75 Jan23	1.23	Jan06	11
Cheapest	1	3.75 Jan42 (30y)	1.88	May10	14	Cheapest	1	0.00 Apr16	1.37	Jan13	13

SPAIN

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	4.10 Jul18	-2.21	Feb08	19	Richest	1	4.30 Oct19	-1.67	Jun09	19
	2	4.30 Oct19	-2.17	Jun09	19		2	4.10 Jul18	-1.66	Feb08	19
	3	3.75 Oct18 (5y)	-2.15	Jul13	15		3	5.15 Oct44	-1.64	Oct13	4
	4	5.90 Jul26	-1.93	Mar11	10		4	4.60 Jul19	-1.61	Feb09	18
	5	4.70 Jul41 (30y)	-1.67	Sep09	12		5	4.50 Jan18	-1.61	Nov12	19
	5	4.20 Jan37	1.97	Jan05	16		5	4.80 Jan24	-1.16	Sep08	15
	4	3.30 Jul16	2.07	Apr13	17		4	4.90 Jul40	-1.14	Jun07	13
	3	3.15 Jan16	2.18	Sep05	21		3	4.70 Jul41 (30y)	-1.13	Sep09	12
	2	3.25 Apr16	2.80	Nov10	21		2	5.15 Oct28	-1.12	Jul13	5
Cheapest	1	5.50 Apr21	3.75	Jan11	24	Cheapest	1	4.40 Oct23 (10y)	-1.12	May13	17

BELGIUM

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	4.00 Mar19	-1.52	Jan09	11	Richest	1	4.25 Mar41	-1.54	Apr10	12
	2	4.25 Mar41	-1.42	Apr10	12		2	4.00 Mar32	-1.49	Mar12	8
	3	3.75 Sep20	-1.15	Jan10	18		3	5.00 Mar35	-1.48	May04	18
	4	4.25 Sep21	-1.09	Jan11	15		4	3.75 Sep20	-1.38	Jan10	18
	5	3.50 Jun17	-0.99	Mar11	13		5	4.25 Sep21	-1.36	Jan11	15
	5	4.00 Mar18	0.76	Jan08	12		5	3.00 Sep19	-1.05	Apr12	9
	4	2.75 Mar16	1.13	Mar10	10		4	4.00 Mar17	-1.04	Jan07	11
	3	5.00 Mar35	1.37	May04	18		3	5.50 Sep17	-1.01	Jun02	8
	2	3.00 Sep19	1.58	Apr12	9		2	4.00 Mar18	-0.98	Jan08	12
Cheapest	1	4.00 Mar17	1.61	Jan07	11	Cheapest	1	2.75 Mar16	-0.76	Mar10	10

Source: Citi Research

EMU relative value table – max 12yr maturity

Figure 60. Coupon Adjusted Spread to Fitted Curve and Swap Curve by Country (6m History); Bonds with a Maximum Maturity of 12yrs

Versus Govt Curve (CAS)

Country		Rank	Bond	ZScore	Issued	Size (€bn)
GERMANY	Richest	1	2.00 Aug23 (10y)	-2.49	Sep13	14
		2	1.00 Oct18 (5y)	-2.15	Sep13	13
		3	3.25 Jan20	-1.75	Nov09	22
		4	3.75 Jan19	-1.46	Nov08	24
		5	1.50 May23	-1.35	May13	18
		5	1.25 Oct16	1.27	Sep11	16
		4	2.50 Jan21	1.38	Nov10	19
		3	3.75 Jan17	1.41	Nov06	20
		2	2.25 Sep21	1.91	Aug11	16
	Cheapest	1	2.00 Jan22	2.07	Nov11	20
FRANCE	Richest	1	1.75 Feb17	-1.59	Feb11	20
		2	4.25 Oct17	-1.53	Oct06	28
		3	3.75 Apr17	-1.50	Apr06	35
		4	1.00 Jul17	-1.47	Jul11	18
		5	3.00 Apr22	-1.23	Feb12	33
		5	1.00 Nov18 (5y)	0.75	Nov12	17
		4	0.25 Nov15 (2y)	0.82	Nov12	21
		3	2.25 Feb16	1.00	Feb10	29
		2	3.25 Apr16	1.20	Apr05	29
	Cheapest	1	3.75 Oct19	1.56	Oct08	32
ITALY	Richest	1	3.50 Dec18 (5y)	-1.88	Sep13	11
		2	4.75 Sep16	-1.71	Sep11	16
		3	5.50 Sep22	-1.16	Mar12	20
		4	5.50 Nov22 (IK)	-1.14	May12	21
		5	4.50 May23 (10y)	-0.55	Mar13	18
		5	5.25 Aug17	1.91	Feb02	24
		4	3.75 Aug21	2.05	Feb06	28
		3	4.75 Sep21	2.10	Mar11	25
		2	5.00 Mar25	2.57	Mar09	22
	Cheapest	1	5.00 Mar22	2.62	Sep11	18
N'LANDS	Richest	1	1.25 Jan19 (5y)	-1.17	Jun13	8
		2	1.25 Jan18	-1.06	Jul12	15
		3	1.75 Jul23 (10y)	-0.55	Mar13	16
		4	3.50 Jul20	-0.33	Feb10	15
		5	2.50 Jan17	0.13	Jun11	16
		5	4.00 Jul19	1.06	Feb09	14
		4	0.00 Apr16	1.14	Jan13	13
		3	2.25 Jul22	1.25	Feb12	15
		2	3.75 Jan23	1.46	Jan06	11
	Cheapest	1	3.25 Jul21	1.49	Mar11	16
SPAIN	Richest	1	4.10 Jul18	-2.21	Feb08	19
		2	4.30 Oct19	-2.17	Jun09	19
		3	3.75 Oct18 (5y)	-2.15	Jul13	15
		4	4.00 Apr20	-1.32	Jan10	20
		5	4.85 Oct20	-1.23	Jul10	18
		5	5.40 Jan23	1.53	Jan13	17
		4	3.30 Jul16	2.07	Apr13	17
		3	3.15 Jan16	2.17	Sep05	21
		2	3.25 Apr16	2.79	Nov10	21
	Cheapest	1	5.50 Apr21	3.76	Jan11	24
BELGIUM	Richest	1	4.00 Mar19	-1.50	Jan09	11
		2	3.75 Sep20	-1.13	Jan10	18
		3	4.25 Sep21	-1.07	Jan11	15
		4	3.50 Jun17	-0.96	Mar11	13
		5	1.25 Jun18 (5y)	-0.53	Feb13	12
		5	5.50 Sep17	0.49	Jun02	8
		4	4.00 Mar18	0.77	Jan08	12
		3	2.75 Mar16	1.13	Mar10	10
		2	3.00 Sep19	1.61	Apr12	9
	Cheapest	1	4.00 Mar17	1.64	Jan07	11

Versus Swap Curve (CAS)

Country		Rank	Bond	ZScore	Issued	Size (€bn)
GERMANY	Richest	1	1.50 Sep22	1.52	Sep12	18
		2	1.50 Feb23	1.60	Jan13	18
		3	1.75 Jul22 (RX)	1.74	Apr12	24
		4	1.50 May23	1.78	May13	18
		5	3.25 Jul21	1.96	Apr11	19
		5	3.75 Jan17	3.11	Nov06	20
		4	1.25 Oct16	3.18	Sep11	16
		3	0.25 Apr18	3.26	Apr13	17
		2	0.75 Feb17	3.30	Jan12	16
	Cheapest	1	1.00 Oct18 (5y)	3.44	Sep13	13
FRANCE	Richest	1	3.00 Apr22	-0.73	Feb12	33
		2	3.75 Apr21	-0.63	Apr05	34
		3	3.25 Oct21	-0.62	Oct10	35
		4	2.25 Oct22	-0.58	Oct11	24
		5	2.50 Oct20	-0.45	Oct09	33
		5	1.00 Nov18 (5y)	0.54	Nov12	17
		4	0.25 Nov15 (2y)	1.17	Nov12	21
		3	2.25 Feb16	1.21	Feb10	29
		2	3.25 Apr16	1.24	Apr05	29
	Cheapest	1	2.25 May24	2.05	Nov13	4
ITALY	Richest	1	4.75 Sep16	-2.00	Sep11	16
		2	3.75 Aug16	-2.00	Feb06	27
		3	3.75 Apr16 (BTS)	-1.99	Apr11	16
		4	2.25 May16	-1.98	Apr13	15
		5	2.75 Dec15	-1.95	Dec12	16
		5	4.50 Mar24	-1.32	Aug13	14
		4	3.75 Mar21	-1.30	Sep10	24
		3	5.00 Mar25	-1.27	Mar09	22
		2	3.75 Aug21	-1.08	Feb06	28
	Cheapest	1	3.75 May21	-0.75	Oct13	5
N'LANDS	Richest	1	1.25 Jan18	0.60	Jul12	15
		2	1.75 Jul23 (10y)	0.63	Mar13	16
		3	1.25 Jan19 (5y)	0.65	Jun13	8
		4	3.50 Jul20	0.92	Feb10	15
		5	2.50 Jan17	0.96	Jun11	16
		5	4.50 Jul17	1.17	Jul07	15
		4	3.25 Jul21	1.18	Mar11	16
		3	2.25 Jul22	1.18	Feb12	15
		2	3.75 Jan23	1.23	Jan06	11
	Cheapest	1	0.00 Apr16	1.37	Jan13	13
SPAIN	Richest	1	4.30 Oct19	-1.67	Jun09	19
		2	4.10 Jul18	-1.66	Feb08	19
		3	4.60 Jul19	-1.61	Feb09	18
		4	4.50 Jan18	-1.61	Nov12	19
		5	3.15 Jan16	-1.53	Sep05	21
		5	5.50 Apr21	-1.19	Jan11	24
		4	4.65 Jul25	-1.17	Feb10	14
		3	5.40 Jan23	-1.16	Jan13	17
		2	4.80 Jan24	-1.16	Sep08	15
	Cheapest	1	4.40 Oct23 (10y)	-1.11	May13	17
BELGIUM	Richest	1	3.75 Sep20	-1.38	Jan10	18
		2	4.25 Sep21	-1.36	Jan11	15
		3	3.50 Jun17	-1.36	Mar11	13
		4	4.00 Mar22	-1.32	May06	14
		5	4.00 Mar19	-1.28	Jan09	11
		5	3.00 Sep19	-1.04	Apr12	9
		4	4.00 Mar17	-1.04	Jan07	11
		3	5.50 Sep17	-1.01	Jun02	8
		2	4.00 Mar18	-0.98	Jan08	12
	Cheapest	1	2.75 Mar16	-0.76	Mar10	10

Source: Citi Research

EMU relative value table – min 8yr maturity

Figure 61. Coupon Adjusted Spread to Fitted Curve and Swap Curve by Country (6m History); Bonds with a Minimum Maturity of 8yrs

GERMANY

	Versus Govt Curve (CAS) Rank	Bond	ZScore	Issued	Size (€bn)		Versus Swap Curve (CAS) Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.00 Aug23 (10y)	-2.49	Sep13	14	Richest	1	1.50 Sep22	1.52	Sep12	18
	2	2.50 Jul44 (30y)	-2.14	Apr12	16		2	1.50 Feb23	1.60	Jan13	18
	3	4.00 Jan37	-1.36	Jan05	23		3	1.75 Jul22 (RX)	1.74	Apr12	24
	4	1.50 May23	-1.35	May13	18		4	1.50 May23	1.78	May13	18
	5	1.50 Feb23	-0.84	Jan13	18		5	2.00 Jan22	1.98	Nov11	20
	5	5.50 Jan31	0.69	Oct00	17		5	4.00 Jan37	3.11	Jan05	23
	4	1.75 Jul22 (RX)	0.79	Apr12	24		4	4.25 Jul39 (UB)	3.47	Jan07	14
	3	4.75 Jul40	0.85	Jul08	16		3	4.75 Jul40	3.61	Jul08	16
	2	6.25 Jan30	1.13	Jan00	9		2	3.25 Jul42	3.94	Jul10	15
Cheapest	1	2.00 Jan22	2.07	Nov11	20	Cheapest	1	2.50 Jul44 (30y)	4.18	Apr12	16

FRANCE

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.00 Apr22	-1.23	Feb12	33	Richest	1	4.75 Apr35	-1.10	Apr03	21
	2	4.75 Apr35	-1.20	Apr03	21		2	4.00 Oct38	-1.08	Oct05	24
	3	4.00 Apr55	-1.13	Apr04	15		3	4.50 Apr41	-1.00	Apr09	24
	4	5.75 Oct32	-0.99	Oct00	25		4	5.75 Oct32	-0.97	Oct00	25
	5	4.00 Oct38	-0.99	Oct05	24		5	3.25 May45 (30y)	-0.82	May12	9
	5	3.50 Apr26	-0.31	Apr10	30		5	2.25 Oct22	-0.58	Oct11	24
	4	4.25 Oct23 (OAT)	-0.26	Oct06	33		4	3.50 Apr26	-0.42	Apr10	30
	3	2.25 May24	0.08	Nov13	4		3	4.25 Oct23 (OAT)	-0.39	Oct06	33
	2	1.75 May23 (10y)	0.48	May12	26		2	1.75 May23 (10y)	-0.29	May12	26
Cheapest	1	3.25 May45 (30y)	1.01	May12	9	Cheapest	1	2.25 May24	2.05	Nov13	4

ITALY

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.75 Sep28	-1.32	Jan13	14	Richest	1	5.00 Aug34	-1.67	Aug03	21
	2	5.00 Aug34	-1.26	Aug03	21		2	5.75 Feb33	-1.59	Feb02	15
	3	5.50 Sep22	-1.10	Mar12	20		3	5.50 Sep22	-1.54	Mar12	20
	4	5.50 Nov22 (IK)	-1.09	May12	21		4	5.50 Nov22 (IK)	-1.53	May12	21
	5	5.75 Feb33	-0.77	Feb02	15		5	4.75 Sep28	-1.53	Jan13	14
	5	4.00 Feb37	0.76	Aug05	25		5	5.00 Aug39	-1.33	Aug07	19
	4	5.00 Aug39	0.99	Aug07	19		4	5.00 Sep40	-1.32	Sep09	21
	3	5.00 Sep40	1.19	Sep09	21		3	4.00 Feb37	-1.32	Aug05	25
	2	5.00 Mar25	2.61	Mar09	22		2	4.50 Mar24	-1.31	Aug13	14
Cheapest	1	5.00 Mar22	2.68	Sep11	18	Cheapest	1	5.00 Mar25	-1.27	Mar09	22

N'LANDS

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.50 Jan33	-1.88	Mar12	10	Richest	1	2.50 Jan33	0.51	Mar12	10
	2	1.75 Jul23 (10y)	-0.64	Mar13	16		2	3.75 Jan42 (30y)	0.56	May10	14
	3	4.00 Jan37	-0.08	Apr05	13		3	1.75 Jul23 (10y)	0.61	Mar13	16
	3	2.25 Jul22	1.18	Feb12	15		3	4.00 Jan37	0.63	Apr05	13
	2	3.75 Jan23	1.45	Jan06	11		2	2.25 Jul22	1.17	Feb12	15
Cheapest	1	3.75 Jan42 (30y)	1.48	May10	14	Cheapest	1	3.75 Jan23	1.22	Jan06	11

SPAIN

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	5.90 Jul26	-1.93	Mar11	10	Richest	1	5.15 Oct44	-1.64	Oct13	4
	2	4.70 Jul41 (30y)	-1.67	Sep09	12		2	5.90 Jul26	-1.31	Mar11	10
	3	4.80 Jan24	-0.93	Sep08	15		3	5.85 Jan22 (FBB)	-1.25	Nov11	19
	4	5.15 Oct44	-0.69	Oct13	4		4	5.75 Jul32	-1.20	Jan01	15
	5	4.65 Jul25	-0.56	Feb10	14		5	4.65 Jul25	-1.17	Feb10	14
	5	4.90 Jul40	1.11	Jun07	13		5	4.80 Jan24	-1.16	Sep08	15
	4	4.40 Oct23 (10y)	1.19	May13	17		4	4.90 Jul40	-1.14	Jun07	13
	3	5.75 Jul32	1.20	Jan01	15		3	4.70 Jul41 (30y)	-1.13	Sep09	12
	2	5.40 Jan23	1.52	Jan13	17		2	5.15 Oct28	-1.12	Jul13	5
Cheapest	1	4.20 Jan37	1.98	Jan05	16	Cheapest	1	4.40 Oct23 (10y)	-1.12	May13	17

BELGIUM

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.25 Mar41	-1.76	Apr10	12	Richest	1	4.25 Mar41	-1.54	Apr10	12
	2	4.00 Mar32	-1.01	Mar12	8		2	4.00 Mar32	-1.49	Mar12	8
	3	4.00 Mar22	-0.36	May06	14		3	5.00 Mar35	-1.48	May04	18
	4	3.75 Jun45 (30y)	-0.29	Sep13	4		4	4.50 Mar26	-1.34	Jun11	8
	4	2.25 Jun23 (10y)	-0.14	Jan13	14		4	3.75 Jun45 (30y)	-1.34	Sep13	4
	3	4.50 Mar26	-0.10	Jun11	8		3	4.00 Mar22	-1.32	May06	14
	2	4.25 Sep22	0.04	Jan12	15		2	4.25 Sep22	-1.23	Jan12	15
Cheapest	1	5.00 Mar35	1.32	May04	18	Cheapest	1	2.25 Jun23 (10y)	-1.22	Jan13	14

Source: Citi Research

UK relative value table

Figure 62. Coupon Adjusted Spread to Fitted Curve and Swap Curve by Country (6m History)

ALL

Versus Govt Curve (CAS)

	Rank		ZScore	Issued	Size (€bn)
Richest	1	2.25 Mar14	-2.54	Mar09	35
	2	1.00 Sep17	-1.62	Mar12	31
	3	4.25 Dec55	-1.54	May05	23
	4	4.25 Jun32	-1.26	May00	35
	5	2.25 Sep23 (10y)	-1.08	Jun13	20
	5	1.75 Sep22	1.48	Jun12	28
	4	3.75 Sep19	1.61	Jul09	28
	3	5.00 Mar25 (G)	1.79	Sep01	33
	2	4.75 Sep15 (2y-WB)	1.80	Sep03	38
Cheapest	1	2.75 Jan15	2.06	Nov09	29

Versus Swap Curve (CAS)

	Rank		ZScore	Issued	Size (€bn)
Richest	1	2.25 Mar14	0.71	Mar09	35
	2	5.00 Sep14	1.96	Jul02	41
	3	4.00 Sep16	2.34	Mar06	35
	4	2.75 Jan15	2.44	Nov09	29
	5	1.00 Sep17	2.51	Mar12	31
	5	3.75 Sep19	3.78	Jul09	28
	4	4.25 Sep39	3.79	Mar09	19
	3	1.25 Jul18 (5y)	3.80	Feb13	34
	2	4.75 Dec38	3.87	Apr04	25
Cheapest	1	4.50 Mar19	3.90	Sep08	35

2yr - 7yr

Versus Govt Curve (CAS)

	Rank		ZScore	Issued	Size (€bn)
Richest	1	1.00 Sep17	-1.62	Mar12	31
	2	3.75 Sep20	-0.76	Jun10	24
	3	4.00 Sep16	-0.64	Mar06	35
	4	5.00 Mar18 (WX)	0.02	May07	34
	5	1.25 Jul18 (5y)	0.04	Feb13	34
	5	4.75 Mar20	0.24	Mar05	33
	4	2.00 Jan16	0.57	Nov10	32
	3	1.75 Jan17	0.98	Aug11	27
	2	4.50 Mar19	1.37	Sep08	35
Cheapest	1	3.75 Sep19	1.61	Jul09	28

Versus Swap Curve (CAS)

	Rank		ZScore	Issued	Size (€bn)
Richest	1	4.00 Sep16	2.34	Mar06	35
	2	1.00 Sep17	2.51	Mar12	31
	3	2.00 Jan16	2.97	Nov10	32
	4	1.75 Jan17	3.01	Aug11	27
	5	3.75 Sep20	3.23	Jun10	24
	5	4.75 Mar20	3.50	Mar05	33
	4	5.00 Mar18 (WX)	3.53	May07	34
	3	3.75 Sep19	3.78	Jul09	28
	2	1.25 Jul18 (5y)	3.80	Feb13	34
Cheapest	1	4.50 Mar19	3.90	Sep08	35

7yr - 15yr

Versus Govt Curve (CAS)

	Rank		ZScore	Issued	Size (€bn)
Richest	1	2.25 Sep23 (10y)	-1.09	Jun13	20
	2	3.75 Sep21	-0.72	Mar11	28
	3	4.00 Mar22	-0.43	Feb09	37
	4				
	5				
	5				
	4				
	3	4.25 Dec27	1.09	Sep06	29
	2	1.75 Sep22	1.48	Jun12	28
Cheapest	1	5.00 Mar25 (G)	1.79	Sep01	33

Versus Swap Curve (CAS)

	Rank		ZScore	Issued	Size (€bn)
Richest	1	5.00 Mar25 (G)	2.61	Sep01	33
	2	4.00 Mar22	2.74	Feb09	37
	3	2.25 Sep23 (10y)	2.77	Jun13	20
	4				
	5				
	5				
	4				
	3	3.75 Sep21	2.83	Mar11	28
	2	4.25 Dec27	3.00	Sep06	29
Cheapest	1	1.75 Sep22	3.17	Jun12	28

>15yr

Versus Govt Curve (CAS)

	Rank		ZScore	Issued	Size (€bn)
Richest	1	4.25 Dec55	-1.55	May05	23
	2	4.25 Jun32	-1.27	May00	35
	3	4.00 Jan60	-0.71	Oct09	19
	4	4.25 Dec40	-0.69	Jun10	24
	5	4.25 Dec49	-0.59	Sep08	19
	5	3.25 Jan44 (30y)	0.01	Oct12	19
	4	4.75 Dec38	0.64	Apr04	25
	3	4.25 Sep39	0.76	Mar09	19
	2	4.25 Dec46	0.85	May06	21
Cheapest	1	3.75 Jul52	1.41	Sep11	20

Versus Swap Curve (CAS)

	Rank		ZScore	Issued	Size (€bn)
Richest	1	4.75 Dec30	2.85	Oct07	29
	2	3.50 Jul68	3.00	Jun13	10
	3	4.25 Dec49	3.05	Sep08	19
	4	4.25 Jun32	3.15	May00	35
	5	4.25 Dec55	3.18	May05	23
	5	4.25 Mar36	3.60	Feb03	26
	4	4.50 Dec42	3.67	Jun07	26
	3	4.25 Dec40	3.70	Jun10	24
	2	4.25 Sep39	3.79	Mar09	19
Cheapest	1	4.75 Dec38	3.87	Apr04	25

Source: Citi Research

4 Week Auction Calendar: US, EMU-10, UK

Mohit Aggarwal

This is an excerpt from our latest *Weekly Supply Monitor* that was published earlier today. For further details (such as a breakdown of upcoming coupon payments, redemptions and our longer term supply forecasts) please see the original note.

Figure 63. Provisional Auction Calendar for the Next Four Weeks, Gross Issuance (Billions), DV01 (USD Millions)

Date	Country	Nominal Size	Issue Details	DV01	Approx. Number 10yr Futures		
		(Local Ccy, bn)		$million/bp	TYZ3 (UST)	G Z3 (Gilt)	RXZ3 (Bund)
25 Nov (Mon)	US	32.0	2-Year		82k		
25 Nov (Mon)	US	2.75 - 3.5	Outright Treasury Coupon Purchases: 15/2/2021 - 15/11/2023		-30k		
26 Nov (Tue)	Italy	4.0	New CTZ Dec15 (estimated issue and size)				7k
26 Nov (Tue)	Italy	0.8	BTPei (estimated size)				6k
26 Nov (Tue)	Netherlands	2.5	DSL 0% Apr16 reopening (issue confirmed, size €2-3bn)				4k
26 Nov (Tue)	US	35.0	5-Year		215k		
26 Nov (Tue)	US	1.25 - 1.75	Outright Treasury Coupon Purchases : 15/2/2036 - 15/11/2043		-33k		
27 Nov (Wed)	Germany	4.0	Bund 2% Aug23 reopening (issue and size confirmed)				33k
27 Nov (Wed)	US	29.0	7-Year		245k		
28 Nov (Thu)	Italy	3.0	BTP 10yr (estimated tenor and size) - 5yr will not be offered due to the exchange transaction that took place on 18 Nov				24k
28 Nov (Thu)	UK	2.5	3¼% Treasury Gilt 2044 (issue and size confirmed)			46k	
			Weekly $DV01 of Issuance	**55.9**			
			Total Number of Futures Contracts		**479k**	**46k**	**75k**

Date	Country	Nominal Size	Issue Details	DV01	Approx. Number 10yr Futures		
		(Local Ccy, bn)		$million/bp	TYZ3 (UST)	G Z3 (Gilt)	RXZ3 (Bund)
03 Dec (Tue)	UK	1.0	Mini tender: 5% Treasury Stock 2025 (issue confirmed, estimated size)			11k	
04 Dec (Wed)	Germany	4.0	Bobl 167-Oct18 reopening (issue and size confirmed)				17k
05 Dec (Thu)	Spain	3.0	Bono 2yr and 5yr (estimated tenors and size)				10k
05 Dec (Thu)	France	6.0	OAT 5yr, 10yr and 15yr (estimate tenors and size)				53k
			Weekly $DV01 of Issuance	**13.8**			
			Total Number of Futures Contracts		**0k**	**11k**	**80k**

Date	Country	Nominal Size	Issue Details	DV01	Approx. Number 10yr Futures		
		(Local Ccy, bn)		$million/bp	TYZ3 (UST)	G Z3 (Gilt)	RXZ3 (Bund)
10 Dec (Tue)	Austria	1.3	RAGB 5yr and 10yr (estimated size and tenors)				8k
10 Dec (Tue)	UK	1.3	0¾% Index-linked Treasury Gilt 2047 (issue confirmed, estimated size)			58k	
10 Dec (Tue)	US	30.0	3-Year		77k		
11 Dec (Wed)	Germany	5.0	Schtaz Dec15 reopening (issue and size confirmed)				9k
11 Dec (Wed)	US	21.0	10-Year (re-opening)		239k		
12 Dec (Thu)	Italy	4.5	BTP 3yr and 15yr (estimated tenors and size)				28k
12 Dec (Thu)	Italy	1.0	CCTeu (estimated size)				4k
12 Dec (Thu)	UK	4.7	Re-opening of conventional gilt maturing on 22 July 2019 (issue confirmed, estimated size)			24k	
12 Dec (Thu)	US	13.0	30-year (re-opening)		310k		
			Weekly $DV01 of Issuance	**69.2**			
			Total Number of Futures Contracts		**626k**	**82k**	**49k**

Date	Country	Nominal Size	Issue Details	DV01	Approx. Number 10yr Futures		
		(Local Ccy, bn)		$million/bp	TYZ3 (UST)	G Z3 (Gilt)	RXZ3 (Bund)
16 Dec (Mon)	US	32.0	2-Year		82k		
17 Dec (Tue)	US	35.0	5-Year		215k		
18 Dec (Wed)	US	29.0	7-Year		245k		
19 Dec (Thu)	Spain	3.0	Obligaciones 2yr, 5yr and 10yr (estimated tenors and size)				14k
19 Dec (Thu)	US	16.0	5-Year TIPS (re-opening)		201k		
			Weekly $DV01 of Issuance	**60.2**			
			Total Number of Futures Contracts		**743k**	**0k**	**14k**

The next release of the tentative outright Treasury operation schedule will be at 3 p.m. on November 27, 2013. Therefore we have included Fed buybacks upto November 27 in this calendar.

Source: DMOs, Citi Research

EUR: Coupons & Redemptions (next 3 mths)

Figure 64. EMU-10 Redemptions over the next three months (€bn)

	Redemptions = €133bn										
Redemptions	DEU 39	FRA 22	NLD 16	ITA 34	ESP 14	BEL 0	AUT 1	FIN 0	PRT 0	GRC 0	IRL 7
(Fri) 13-Dec-13	15.0										
(Sun) 15-Dec-13				20.0							
(Sat) 04-Jan-14	24.0										
(Sun) 12-Jan-14		21.7									
(Wed) 15-Jan-14			15.7				1.3				6.8
(Fri) 31-Jan-14				14.5	14.2						

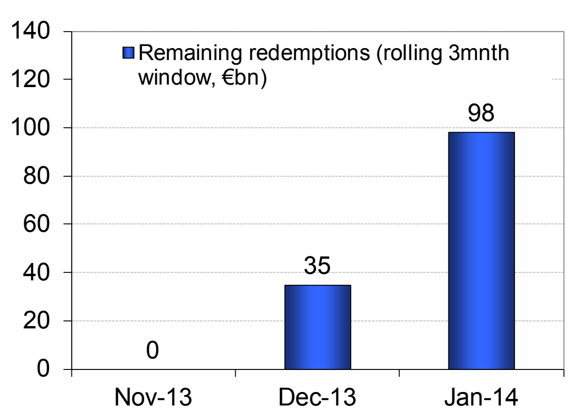
Source: DMOs, Bloomberg, Citi Research

Figure 65. EMU-10 Coupon Payments over the next three months (€bn)

	Coupons = €38bn										
Coupons	DEU 11	FRA 1	NLD 4	ITA 11	ESP 8	BEL 0	AUT 1	FIN 0	PRT 0	GRC 0	IRL 0
(Fri) 22-Nov-13							0.3				
(Mon) 25-Nov-13		0.2									
(Sun) 01-Dec-13				1.4							
(Fri) 13-Dec-13	0.0										
(Sun) 15-Dec-13				0.9							
(Wed) 01-Jan-14				0.4							
(Sat) 04-Jan-14	10.6										
(Sun) 12-Jan-14		0.5									
(Wed) 15-Jan-14		0.5	4.0	0.4			0.6				0.3
(Mon) 20-Jan-14											0.0
(Sun) 26-Jan-14							0.1				
(Fri) 31-Jan-14					8.4						
(Sat) 01-Feb-14				8.4							
(Sat) 15-Feb-14	0.3								0.4		
(Tue) 18-Feb-14											0.2
(Thu) 20-Feb-14							0.3				

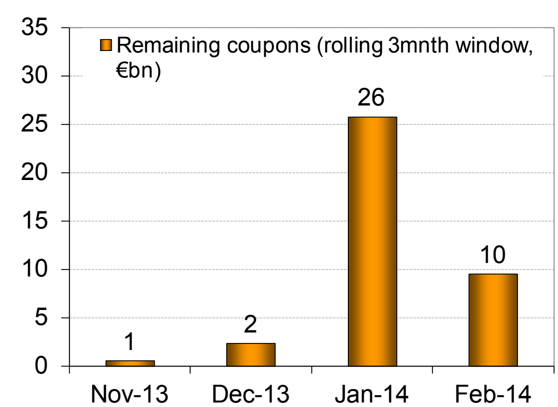
Source: DMOs, Bloomberg, Citi Research

Figure 66. EMU-10 remaining redemptions over the next 3months (€bn)



Source: DMOs, Bloomberg, Citi Research

Figure 67. EMU-10 remaining coupons over the next 3months (€bn)



Source: DMOs, Bloomberg, Citi Research

ESP and ITA Bill Issuance Projections

This page contains our projections for Spanish and Italian bill supply in 2013.

Auction calendar for the next four weeks

Figure 68. Provisional Bill Auction Calendar for the Next Four Weeks, Gross Issuance (Billions), DV01 (EUR Million/bp)

Week	Date	Country	Issue Details	Total Size (€bn)
Week 1	26 Nov (Tue)	Spain	3month (21 February 2014), 9month (22 August 2014) - tenors confirmed, estimated size	3.6
	27 Nov (Wed)	Italy	6month (30 May 2014; issue confirmed, estimated size)	7.2
			Total Size in Week 1	**10.8**
Week 3	10 Dec (Tue)	Spain	6month (20 June 2014) and 12 month (new bill) - tenors confirmed, estimated size	5.2
	11 Dec (Wed)	Italy	12month (12 December 2014; issue confirmed, estimated size)	7.2
			Total Size in Week 3	**12.3**
Week 4	17 Dec (Tue)	Spain	3month (14 March 2014) and 9 month (19 September 2014) - tenors confirmed, estimated issue	3.6
			Total Size in Week 4	**3.6**

Italy announces issue size 3 business days before the auction
Spain announces issue details 1 business day before the auction

Source: DMOs, Citi Research

2013 projections for bill supply

Figure 69. 2013 Italy and Spain Bill Supply – Citi Forecast (Euro Billion)

SPAIN	3m	6m	9m	12m	18m	Gross Supply	Redemptions	NCR
Jan	1.3	1.8		3.2	2.5	9	5	3
Feb	1.0	2.9	3.7	3.6		11	9	2
Mar	1.8	2.3	2.6	4.0		11	12	-2
Apr	0.9	1.3	2.2	4.6		9	8	1
May	0.9	1.2	2.6	3.3		8	6	2
Jun	1.1	1.1	2.6	4.0		9	10	-1
Jul	0.9	1.9	3.0	2.9		9	5	3
Aug	1.1	1.4	3.1	3.0		9	11	-3
Sep	0.8	1.7	2.8	3.8		9	8	1
Oct	0.7	1.0	2.8	4.5		9	8	1
Nov	1.0	1.4	2.6	3.8		9	11	-2
Dec	1.0	1.4	2.6	3.8		9	9	
Total	**12.4**	**19.4**	**30.5**	**44.4**	**2.5**	**109**	**102**	**7**

ITALY	3m*	6m	9m	12m	Flexible BOT	Gross Supply	Redemptions	NCR
Jan		9.8		9.8		20	21	-2
Feb		10.1		9.7		20	19	
Mar		9.4		7.8		17	19	-2
Apr	3.0	9.2		8.9		21	18	3
May		9.2		7.0	3.0	19	16	4
Jun		9.2		7.0		16	16	
Jul		9.8		7.0	2.5	19	11	9
Aug		9.8		8.6		18	18	
Sep		8.6		9.8	3.0	21	20	2
Oct		8.1		9.8		18	18	-1
Nov		7.2		7.2		14	17	-2
Dec		7.2		7.2		14	25	-11
Total	**3.0**	**107.4**		**99.5**	**8.5**	**218**	**219**	**0**

*3month bills w ill be issued only for specific cash needs. In this case, auctions shall be held on the 12 month BOT auction dates

Source: DMOs, Bloomberg, Citi estimates

Inflation Forecasts, Carry & Weekly Changes

Figure 70. Citi Inflation Forecasts

	EUR HICPxT			France CPIxT			UK RPI			US CPURNSA		
Month	Index Forecast	MoM Change	YoY Change	Index Forecast	MoM Change	YoY Change	Index Forecast	MoM Change	YoY Change	Index Forecast	MoM Change	YoY Change
Oct 13	116.96	-0.1	0.6	125.44	-0.1	0.5	251.90	0.0	2.6	233.55	-0.3	1.0
Nov 13	116.78	-0.2	0.7	125.30	-0.1	0.6	252.50	0.2	2.8	233.25	-0.1	1.3
Dec 13	117.17	0.3	0.7	125.73	0.3	0.6	254.10	0.6	3.0	232.85	-0.2	1.4
Jan 14	115.94	-1.0	0.7	125.57	-0.1	1.0	252.60	-0.6	2.8	234.05	0.5	1.6
Feb 14	116.28	0.3	0.6	125.74	0.1	0.8	254.10	0.6	2.6	234.74	0.3	1.1
Mar 14	117.65	1.2	0.6	126.71	0.8	0.8	254.69	0.2	2.4	236.44	0.7	1.6

Source: Citi Research, Bloomberg *Shaded = Already released*

Figure 71. US TIPS Inflation-linked Carry (based on forecasts above) – One week changes

Bond	RY (%)	Chg (bp)	Carry-adj chg	Carry: RY (bp) 1 Jan	1 Feb	1 Mar	Ref	BE (bp)	Chg (bp)	Carry-adj chg	Carry: BE (bp) 1 Jan	1 Feb	1 Mar	ZC Swap - BE Spread (bp)	Chg (bp)
Repo (%)				*0.08*	*0.08*	*0.08*									
TIPS 1/15	-0.98	-0	-1	-33	-59	-93	US-2.250-01/31/15	113	-2	-1	-34	-60	-95	6	-8
TIPS 4/15	-0.97	1	0	-26	-46	-72	US-2.500-04/30/15	115	-4	-4	-27	-48	-74	-2	-4
TIPS 7/15	-1.35	-4	-4	-25	-44	-67	US-4.250-08/15/15	157	0	0	-26	-45	-69	4	-8
TIPS 1/16	-1.13	1	1	-18	-31	-46	US-2.625-02/29/16	145	-5	-5	-19	-33	-49	9	-3
TIPS 4/16	-1.03	1	1	-15	-26	-39	US-2.000-04/30/16	140	-4	-4	-16	-28	-42	10	-5
TIPS 7/16	-1.30	3	3	-15	-26	-39	US-4.875-08/15/16	175	-7	-7	-17	-29	-43	5	-2
TIPS 1/17	-1.03	5	5	-12	-20	-30	US-3.125-01/31/17	167	-9	-9	-14	-24	-35	9	-1
TIPS 4/17	-0.86	4	4	-10	-17	-25	US-0.875-04/30/17	161	-6	-6	-12	-21	-31	13	-4
TIPS 7/17	-1.00	-6	-6	-10	-17	-25	US-4.750-08/15/17	185	4	4	-13	-22	-32	9	-13
TIPS 1/18	-0.77	6	6	-8	-13	-20	US-3.500-02/15/18	184	-8	-8	-11	-19	-27	9	-2
TIPS 4/18	-0.63	7	7	-7	-12	-17	US-0.625-04/30/18	179	-6	-6	-10	-17	-25	11	-4
TIPS 7/18	-0.75	0	-0	-7	-12	-18	US-4.000-08/15/18	197	0	0	-10	-17	-25	10	-10
TIPS 1/19	-0.47	10	10	-6	-10	-14	US-2.750-02/15/19	193	-8	-8	-9	-15	-22	13	-1
TIPS 7/19	-0.44	9	9	-5	-9	-13	US-3.625-08/15/19	207	-6	-7	-9	-15	-21	11	-2
TIPS 1/20	-0.13	8	7	-4	-7	-10	US-3.625-02/15/20	192	-2	-2	-8	-13	-19	25	-6
TIPS 7/20	-0.09	7	7	-4	-6	-9	US-2.625-08/15/20	209	0	-0	-7	-12	-18	18	-7
TIPS 1/21	0.14	7	7	-3	-5	-8	US-3.625-02/15/21	198	0	-0	-7	-11	-17	28	-7
TIPS 7/21	0.19	7	7	-3	-5	-7	US-2.125-08/15/21	212	0	-0	-6	-11	-16	22	-6
TIPS 1/22	0.41	9	9	-2	-4	-6	US-2.000-02/15/22	204	-1	-2	-6	-10	-14	29	-4
TIPS 7/22	0.44	10	9	-2	-3	-5	US-1.625-08/15/22	215	-1	-1	-6	-10	-14	26	-3
TIPS 1/23	0.59	10	10	-2	-3	-4	US-2.000-02/15/23	210	-2	-2	-5	-9	-13	30	-2
TIPS 7/23	0.61	11	10	-2	-3	-4	US-2.500-08/15/23	217	-2	-2	-5	-9	-13	30	-2
TIPS 1/25	0.77	10	10	-2	-2	-3	US-7.625-02/15/25	209	-1	-1	-5	-9	-13	40	-2
TIPS 1/26	0.89	11	10	-1	-2	-3	US-6.000-02/15/26	216	-1	-1	-5	-8	-12	37	-2
TIPS 1/27	0.98	14	13	-1	-2	-2	US-6.625-02/15/27	217	-4	-4	-5	-8	-11	39	1
TIPS 1/28	1.08	11	11	-1	-1	-2	US-6.125-11/15/27	216	-0	-1	-4	-8	-11	41	-2
TIPS 4/28	1.06	11	11	-1	-1	-2	US-5.500-08/15/28	227	-0	-0	-4	-7	-11	29	-2
TIPS 1/29	1.13	11	11	-1	-1	-2	US-5.250-02/15/29	226	-0	-0	-4	-7	-10	34	-2
TIPS 4/29	1.11	11	11	-1	-1	-2	US-5.250-02/15/29	227	-0	-0	-4	-7	-10	32	-2
TIPS 4/32	1.24	9	9	-1	-1	-1	US-5.375-02/15/31	224	2	1	-4	-7	-9	41	-4
TIPS 2/40	1.54	10	9	0	0	-1	US-4.625-02/15/40	225	0	0	-3	-5	-7	48	-2
TIPS 2/41	1.55	7	7	0	0	-1	US-4.750-02/15/41	225	3	3	-3	-5	-7	49	-5
TIPS 2/42	1.61	11	11	0	0	0	US-3.125-02/15/42	229	-1	-1	-3	-4	-6	45	-1
TIPS 2/43	1.61	11	11	0	0	0	US-3.125-02/15/43	231	-1	-1	-3	-4	-6	43	-1

Source: Citi Research, Bloomberg

Figure 72. EUR Inflation-linked Carry (based on forecasts above) – One week changes

	RY	Chg	Carry-	Carry: RY (bp)				BE	Chg	Carry-	Carry: BE (bp)			ZC Swap - BE	Chg
Bond	(%)	(bp)	adj chg	1 Jan	1 Feb	1 Mar	*Ref*	(bp)	(bp)	adj chg	1 Jan	1 Feb	1 Mar	Spread (bp)	(bp)
Repo (%)				*0.12*	*0.12*	*0.11*									
OATei15	-0.84	11	5	-9	-25	-8	*FFRG 4/15*	99	-12	-6	-9	-26	-9	12	0
BUNDei16	-0.45	6	2	-4	-14	0	*BUND 1/16*	52	-7	-2	-4	-14	0	13	-2
BTANi16	-0.85	-2	0	-10	-18	-8	*FFRG 4/16*	114	4	1	-11	-20	-10	31	-7
BTPei16	1.00	-4	-9	2	-1	15	*BTP 8/16*	59	3	7	-4	62	-2	47	-11
OATi17	-0.62	-1	1	-7	-12	-4	*FFRG 4/17*	115	1	-2	-8	-15	-8	36	-3
BTPei17	1.48	-5	-9	3	2	15	*BTP 8/17*	71	5	8	-4	63	-3	47	-12
BOBLei18	-0.37	5	3	-2	-7	0	*BUND 1/18*	80	-2	0	-3	-8	-2	25	-4
OATei18	-0.25	3	1	-2	-6	1	*FFRG 4/18*	104	-3	-1	-3	-9	-4	32	-4
BTPei18	1.76	-1	-4	3	2	13	*BTP 8/18*	74	2	4	-3	42	-3	53	-8
OATi19	-0.18	0	1	-4	-6	0	*FFRG 4/19*	126	1	-1	-6	-10	-6	39	-5
BTPei19	1.95	2	-1	3	3	12	*BTP 9/19*	93	-2	-1	-3	-8	38	44	-3
BUNDei20	-0.13	6	4	-1	-4	1	*BUND 1/20*	102	-3	-1	-3	-7	-3	28	-3
OATei20	0.10	5	3	-1	-3	2	*FFRG 4/20*	126	-3	-2	-3	-7	-4	26	-2
OATi21	0.25	0	1	-2	-3	1	*FFRG 4/21*	138	2	1	-4	-8	-5	44	-5
BTPei21	2.50	-3	-5	3	3	11	*BTP 9/21*	103	5	6	-3	-7	32	52	-9
OATei22	0.48	7	5	0	-2	3	*FFRG 4/21*	115	-4	-3	-2	-6	-3	52	0
BUNDei23	0.26	7	6	0	-2	2	*BUND 1/22*	114	-1	-0	-2	-5	-3	45	-3
OATi23	0.55	5	5	-1	-2	2	*FFRG 10/23*	173	0	-1	-4	-7	-5	22	-3
BTPei23	2.78	-1	-3	3	3	10	*BTP 8/23*	108	4	5	-2	24	-3	64	-8
OATei24	0.77	7	6	0	-1	3	*FFRG 10/23*	152	-3	-2	-2	-6	-4	29	-1
BTPei26	3.02	-1	-2	2	3	9	*BTP 3/26*	117	2	3	-2	-5	21	72	-5
OATei27	0.95	5	4	0	0	3	*FFRG 4/26*	171	-1	-0	-2	-5	-4	24	-2
OATi29	0.87	3	3	-1	-1	2	*FFRG 4/29*	201	1	-0	-3	-6	-5	18	-3
OATei32	1.09	4	3	0	0	3	*FFRG 10/32*	194	-1	-0	-2	-4	-3	11	-0
BTPei35	3.04	-0	-1	1	2	6	*BTP 8/34*	167	-1	-1	-2	14	-4	40	-0
OATei40	1.19	3	3	0	0	2	*FFRG 4/41*	212	-0	-0	-2	-4	-3	3	-1
BTPei41	3.37	-2	-3	1	2	5	*BTP 9/40*	154	1	1	-2	-4	14	61	-2

Source: Citi Research

Figure 73. UK Gilts Inflation-linked Carry (based on forecasts above) – One week changes

	RY	Chg	Carry-adj	Carry: RY (bp)				BE	Chg	Carry-adj	Carry: BE (bp)			ZC Swap - BE	Chg
Bond	(%)	(bp)	chg	1 Jan	1 Feb	1 Mar	*Ref*	(bp)	(bp)	chg	1 Jan	1 Feb	1 Mar	Spread (bp)	(bp)
Repo (%)				*0.42*	*0.43*	*0.42*									
UKTi Jul16	-1.99	-4	-4	2	4	6	*UKT 9/16*	273	4	4	1	2	2	37	-2
UKTi Nov17	-1.54	-1	-3	-3	-1	12	*UKT 3/18*	290	4	5	-6	-6	5	18	-14
UKTi Nov19	-0.95	-3	-4	-1	1	10	*UKT 9/19*	283	9	9	-4	-4	2	33	-3
UKTi Apr20	-0.82	-3	-3	3	6	8	*UKT 3/20*	282	9	9	0	0	0	29	-3
UKTi Nov22	-0.38	-2	-3	0	2	9	*UKT 3/22*	286	8	9	-3	-4	1	42	-4
UKTi Mar24	-0.10	-2	-3	0	2	8	*UKT 3/25*	305	10	10	-3	-3	0	24	-5
UKTi Jul24	-0.13	-2	-3	3	5	7	*UKT 3/25*	308	10	10	0	-1	-1	29	-5
UKTi Nov27	0.00	-2	-3	0	2	7	*UKT 12/27*	321	9	9	-2	-3	0	30	-5
UKTi Mar29	0.08	-5	-6	0	2	6	*UKT 12/30*	327	10	10	-2	-3	-1	24	-6
UKTi Jul30	0.00	-4	-5	2	4	5	*UKT 6/32*	342	9	9	0	-1	-1	17	-11
UKTi Nov32	0.06	-3	-3	0	2	5	*UKT 6/32*	336	8	8	-2	-3	-1	28	-4
UKTi Mar34	0.10	-4	-4	0	2	5	*UKT 9/34*	339	8	8	-2	-3	-1	25	-4
UKTi Jan35	0.08	-2	-3	2	3	4	*UKT 3/36*	343	7	7	-1	-1	-2	23	-2
UKTi Nov37	0.08	-3	-3	0	1	4	*UKT 12/38*	345	7	7	-2	-3	-1	25	-3
UKTi Mar40	0.09	-2	-3	0	1	4	*UKT 9/39*	346	6	6	-2	-3	-2	23	-1
UKTi Nov42	0.05	-3	-3	0	1	3	*UKT 12/42*	351	7	7	-2	-3	-2	22	-3
UKTi Mar44	0.09	-3	-3	0	1	3	*UKT 1/44*	353	6	6	-2	-2	-2	18	-2
UKTi Nov47	0.06	-4	-4	0	1	3	*UKT 12/46*	353	7	7	-2	-2	-2	20	-3
UKTi Mar50	0.06	-3	-3	0	1	3	*UKT 12/49*	351	6	6	-2	-2	-2	20	-2
UKTi Mar52	0.06	-3	-3	0	1	2	*UKT 7/52*	352	6	6	-1	-2	-2	19	-3
UKTi Nov55	0.02	-3	-3	0	1	3	*UKT 12/55*	353	6	6	-1	-2	-2	20	-3
UKTi Mar62	0.02	-3	-3	0	1	2	*UKT 1/60*	353	7	6	-1	-2	-2	18	-3
UKTi Mar68	0.01	-3	-3	0	1	2	*UKT 7/68*	355	7	7	-1	-2	-2	15	-3

Source: Citi Research

Summary of Recent Publications

Date	Publication	Topic	Page	Region
20-Nov-13	NOTE	Euro SSA Strategy: Green shoots in € green bonds	-	EUR
19-Nov-13	NOTE	European Month-end Index Projections: supportive for France, Italy and Germany	-	EUR
19-Nov-13	NOTE	EUR Vol: Contingent Long Gamma via Bund Futures Options	-	EUR
18-Nov-13	NOTE	European Flow Monitor: Buying of non-core	-	EUR
14-Nov-13	European Weekly	ECB: A critical assessment of QE	8	EUR
		UK Rates – The BoE play catch-up	10	UK
		Update on BTP 2s10s steepener trade	12	EUR
		Fewer EMU downgrades, perhaps an upgrade	13	EUR
		Euro inflation: deflation risks & the floor	16	EUR
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14-Nov-13	NOTE	Weekly Supply Monitor: Euro, UK and US Supply Outlook	-	Global
13-Nov-13	NOTE	Euro Rates Strategy: EUREX & LIFFE Calendar Rolls (Z3/H4): A First Look	-	Global
11-Nov-13	NOTE	European Flow Monitor: Strong demand for Spain across the curve	-	EUR
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7-Nov-13	European Weekly	ECB: Where Do We Stand on Low-4-Longer?	8	EUR
		Bunds: Update on Fair Value	9	EUR
		Trading implications of the gilt seasonals	10	UK
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		EGB Strategy: Bono outlook & Spain's rating	18	EUR
		SSA Strategy: Q4 issuance and redemptions	20	EUR
		Gilt Calendar Roll: G Z3-G H4	24	UK
7-Nov-13	NOTE	UK Rates Strategy: Trading implications of the gilt seasonals	-	UK
7-Nov-13	NOTE	Weekly Supply Monitor: Euro, UK and US Supply Outlook	-	Global
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Notes

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Appendix A-1

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