30 October 2014 │ 36 pages

Developed Markets
Western Europe

European Rates Weekly

Hedging periphery risks

- **Updating the yield outlook:** European yields are likely to remain depressed for longer than we previously thought. For 10yr Bunds, we now forecast 1.25% at end-2015 (vs 1.50% previously). Periphery yields are likely to be the real winner with spreads set to tighten markedly in 2015 (see below on how to hedge). In the UK, we now forecast 2.95% for 10yr gilts around end-2015 (vs 3.25% previously).

- **EGB demand:** European banks have increased their holdings of domestic government bonds, continuing the trend of recent years and the ECB's "stealth QE" strategy. This source of demand (together with ECB buying) is likely to be important in 2015, especially if foreign investors are deterred by negative deposit rates.

- **Swaption vol as a hedge for peripheral bonds**: The flight-to-quality environment which besieged markets in mid-October owed to a sudden correction of risky assets which in turn was caused by a poisonous cocktail of crowded positions and poor liquidity. We argue that long swaption implied volatility position on 30y swap is a good hedge against the scenario of significant underperformance of EUR peripheral sovereign or credit bond portfolios.

- **UK:** Lower-for-longer is perhaps even more applicable in the long-end than the front-end. We show that 10yr gilt yields tend to *fall* during a hiking cycle. We also examine the potentially self-reinforcing relationship between gilt yields, pension fund deficits and demand for gilts. In this context, we update our yield forecasts.

- **Municipality bonds – new opportunities?** German cities have become active in issuing joint city/municipality bonds. While ultimately being German risk, such bonds offer a spread pick-up of up to 60bp over Bunds. The market is small for now, but is likely to grow over the longer term.

- **Spanish covered bond law update:** The Spanish ministry of Economy last week published a public hearing on potential improvements of the regulatory framework for covered bonds. While most proposals can only be welcomed, the risk for current OC levels to drop has to be monitored.

- **EMU RV:** We highlight four relative value trade opportunities on the Italian, Spanish, German and Belgian yield curves. All have been screened for directionality to ensure mean reverting potential and offer positive carry.

- **Supply:** EGB supply comes from Austria (€1.1bn), Germany (€4bn), France (estimated €6.5bn) and Spain (estimated €3bn) next week. There is no UST supply until 10th November. The UK DMO will issue £0.8bn of the 0.5% Index-linked Treasury Gilt 2050 next Tuesday.

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European Rates Strategy Yield Outlook

Core Europe: We have adjusted the outlook for Bunds, while still expecting yields to dip into ECB's seemingly-unavoidable QE announcement. Compared to our last forecasts, we are cutting the trough in Bund yields to 0.65% from 0.75% (Dec-14). From there, we pencil in a very mild rise in yields, mainly reflecting rising uncertainty about the effectiveness of non-standard monetary policy in the context of ongoing deleveraging, soft growth and weak Eurozone inflation. At end-2015, we expect Bund yields to trade around 1.25% (previously 1.50%), i.e. slightly above current forwards. We expect the yield curve to trade in a very directional fashion as the front-end will be anchored by the ECB's forward guidance.

EMU Periphery: The 10yr Bono-BTP spread has widened recently but, in light of ongoing economic divergence, we would not fade this trend. We expect this spread to average -40bp in Q4 (from -35bp previously). EMU spreads have reflected various drivers recently, from spillover effects from the outer periphery, positioning and supply. Taking this, and our broader ECB QE view into account, we look for Q4 10yr Bono-Bund spreads of 100bp and 10yr BTP-Bund spreads of 140bp.

UK: Our updated gilt yield forecasts reflect the new policy rate profile. Citi now expects the hiking cycle to start a little later; around May 2015, rather than February. However, our profile is still earlier/faster than market pricing which implies a first rate hike in Q4 2015 and only +100bp by end-2016 (vs the Citi forecast of +200bp). We therefore remain bearish on the very front-end and view the recent rally as an overshoot. Long-end yields are also likely to rise ahead of a hiking cycle, but our forecasts have been revised around 30bp lower. This is to reflect broader international trends such as slowing growth prospects, global disinflation, a savings glut chasing yield and lower term premia. Consequently, we continue to expect the gilt curve to flatten sharply over the coming quarters.

Figure 1. Interest Rate and Bond Market Forecasts as of 29 October 2014

		Quarterly Average (Unless Specified)					
	Current	4Q 14F	1Q 15F	2Q 15F	3Q 15F	4Q 15F	1Q 16F
Euro Area							
Policy Rate End Quarter	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Overnight Rate (EONIA)	0.01	0.00	0.00	0.00	0.00	0.00	0.00
3-Month (EURIBOR)	0.06	0.05	0.05	0.05	0.05	0.05	0.05
2 Year Schatz Yield	-0.05	-0.05	0.00	0.00	0.05	0.05	0.05
5 Year Bobl Yield	0.16	0.15	0.20	0.35	0.50	0.50	0.60
10 Year Bund Yield	0.88	0.65	1.00	1.00	1.25	1.25	1.50
30 Year Bund Yield	1.78	1.60	1.90	1.90	2.15	2.15	2.40
2-10 Year Bund Curve, bp	93	70	100	100	120	120	145
10 Year BTP-Bund Spread, bp	159	140	100	100	100	100	100
10 Year Bono-Bund Spread, bp	128	100	65	65	65	65	65
2 Year BTP-Schatz Spread, bp	59	50	25	25	25	25	25
2 Year Bono Schatz Spread, bp	55	45	15	15	15	15	15
10 Year OAT-Bund Spread, bp	44	35	25	25	25	25	25
10 Year Swap Spread (Swap Less Govt.), bp	23	25	20	20	20	20	20
10 Year Breakeven Inflation, bp	112	105	120	120	125	130	130
5y5y Implied Vol, bp	66	64	68	68	68	68	68
UK							
Policy Rate End Quarter	0.50	0.50	0.50	0.75	1.00	1.25	1.50
3-Month Libor	0.56	0.55	0.55	1.00	1.25	1.55	1.80
2 Year Treasury Yield	0.66	0.75	1.05	1.55	1.75	2.00	2.20
5 Year Treasury Yield	1.52	1.60	1.85	2.30	2.40	2.50	2.65
10 Year Treasury Yield	2.23	2.25	2.50	2.85	2.90	2.95	3.00
30 Year Treasury Yield	2.96	3.00	3.15	3.30	3.30	3.35	3.35
2-10 Year Treasury Curve, bp	157	150	145	130	115	95	80
10 Year Swap Spread (Swap Less Govt.), bp	7	10	15	20	20	25	25
10 Year Breakeven Inflation, bp	279	285	305	315	320	325	325

Source: Citi Research

ECB: Negative Rates and EGB Demand

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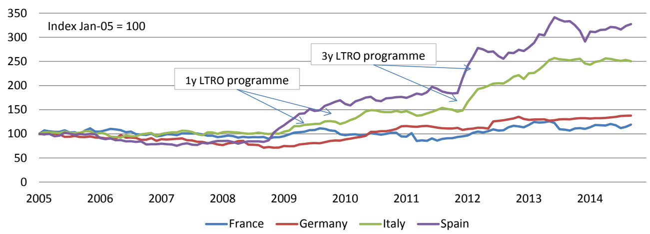
Banks' demand for EGBs will continue to play a key role in 2015 in the context of negative deposit rates and the risk of portfolio outflows out of the Eurozone.

European banks have increased their holdings of domestic government bonds by EUR 65bn (+5%) between Q4 2013[1] and Q3 2014, with a significant contribution by French (+14bn) and Spanish banks (+32bn). Interestingly, Italian banks are lagging in this particular statistic with an increase of BTPs by "only" EUR 8bn. This behavior explains part of Spain's 2.15% excess return over Italy (total return is 10.4% ytd).

More generally, the concentration of domestic EGBs in banking books has increased markedly during the crisis and this is not exclusively a non-core phenomenon[2], but can also be observed in the core of the euro area: French banks have raised their domestic EGB share to 69% from 45% and German banks to 70% form 58% (Figure 2). In absolute terms, Spanish banks hold a staggering 42% of our Spain EGB index.

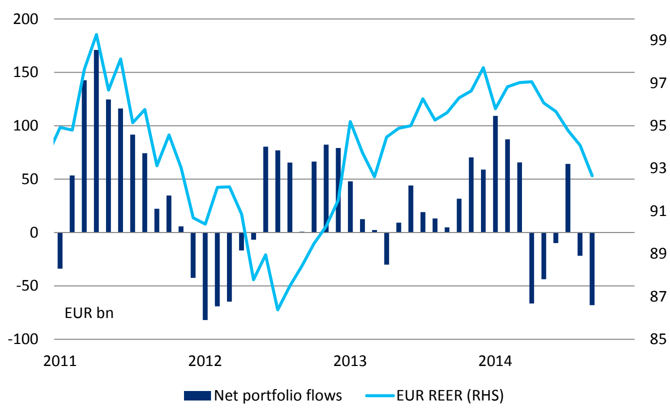
Figure 2. Banks continued to buy EGBs…



MFI holdings of domestic EGBs (EUR bn)												
	A	B	FIN	F	D	HEL	IRE	I	NL	P	ES	Total
Dec-11	19	62	4	153	201	45	13	245	32	23	193	988
Dec-12	24	65	3	183	244	19	20	352	44	31	243	1227
Dec-13	26	59	4	178	247	13	20	404	47	31	261	1289
Sep-14	**31**	**56**	**4**	**192**	**257**	**10**	**20**	**412**	**51**	**27**	**293**	**1354**
% of total EGB holdings	*66%*	*65%*	*25%*	*69%*	*70%*	*98%*	*36%*	*98%*	*47%*	*78%*	*91%*	*78%*
EGBI	*203*	*331*	*81*	*1278*	*1035*		*103*	*1253*	*331*	*103*	*693*	*5410*
%	*15%*	*17%*	*4%*	*15%*	*25%*		*20%*	*33%*	*15%*	*27%*	*42%*	*25%*

Source: ECB, Citi Research

Figure 3. ...while negative yields scare foreign investors



Source: ECB, Citi Research

Trends in banks' demand for EGBs have been a key component of ECB's "stealth QE" strategy, with banks incrementing their domestic holdings by EUR 239bn (+24%) in 2012 on the back of the 3y LTRO program. This stable source of demand has gained in importance after ECB's unprecedented decision to set a negative deposit rate at it Jun-14 meeting. Net portfolio flows into the Eurozone have cumulated to EUR 56bn in the 1st half of this year, dropping each of Q3 thereafter for a net Q3 balance of -68bn. The average portfolio inflow is EUR 5bn during the 3y LTRO window (Figure 3).

It's too early to conclude that foreign capital is leaving Eurozone's financial markets as a reaction to the negative deposit rate. We need to see a significant decline in official EUR reserves[3] in addition to a further deterioration in net portfolio flows before coming to this conclusion. In that context, a stable demand from domestic banks (eventually including the ECB) will continue to play a key role for price and spread patterns in 2015.

1 The number for 2013 is EUR 62bn (+5.1%).

2 Italian banks have increased their domestic EGB holdings from 90% to 97%.

3 EUR reserves have increased by USD 5bn in the 1st half of 2014, due to a large 55bn outflow in Q2.

Swaption Vol as a Hedge For Peripheral Bonds

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We argue below that swaption implied volatility on 30y swap is a good hedge against the scenario of significant underperformance of EUR peripheral sovereign or credit bond portfolios. We run a simple backtest of a vol hedging strategy in the case of a stylized Greek sovereign bond portfolio.

The perfect storm in October

The flight-to-quality environment which besieged markets in mid October owed to a sudden correction of risky assets, which in turn was caused by as poisonous cocktail of crowded positions and poor liquidity.

However the arguments between the Eurogroup and the Greek government as well as the non-negligible risk of snap elections could see Syriza significantly strengthening its presence in parliament and in the formation of a new government with anti-European views. It is a fact that Syriza has softened its tone over the past few months but with the complicity of other episodes of liquidity drought, clusters of volatility in the bond market could re-surface if, for instance, uncertainty regarding the Presidential elections increases.

Behaviour of EUR swaption vol in risk-off markets

Figure 4 shows changes in swaption implied volatilities from early June 2011 to mid September 2011. As we all know too well this period unleashed great pain onto the peripheral bond market. Even before the EU summit in late July which announced a first PSI draft (which in turn triggered Moody's and S&P downgrades of Greece a few days later), tension was high: Moody downgraded Portugal to junk status in early June, already citing potential consequences of an on-going debates related to private sector involvement in the case of Greece. After the summit, a fragile market was also hit by the information that the ECB had written a letter to the Italian Prime Minister Berlusconi in early August asking to reign in fiscal excesses, etc. The bottom line is that as shown in the chart, over the period, 30y vol outperformed on the surface.

We observed the same dynamics during the 'perfect storm': Figure 5 shows changes in swaption implied volatilities from 30 September to 16 October this year, a significantly shorter horizon, compared to that contemplated above. Nevertheless, like in the aforementioned risk-off market episode, 30y implied vol outperformed over the period.

Figure 4. Jun-11/Sep-11 vol changes: historically, 30y vol tends to outperform ...

	1y	2y	3y	4y	5y	6y	7y	8y	9y	10y	12y	15y	20y	25y	30y
1m	37	35	39	40	42	44	46	47	48	51	53	56	61	65	70
2m	30	29	34	37	41	43	45	46	48	49	51	52	55	58	61
3m	23	23	29	33	34	37	40	42	44	46	47	48	51	55	57
6m	15	14	19	21	24	26	29	31	32	34	35	35	37	40	42
9m	5	10	13	16	18	20	21	23	25	26	27	27	29	30	31
1y	1	6	10	12	14	15	17	19	21	22	23	23	24	25	25
2y	0	4	6	7	7	8	9	10	11	12	12	13	13	12	11
3y	4	4	5	5	5	5	6	6	7	7	7	8	7	6	4
4y	5	4	4	4	4	4	4	4	4	4	4	4	3	2	0
5y	4	3	3	3	3	3	2	2	2	2	2	2	2	0	-2
6y	3	2	1	1	1	2	2	1	1	2	2	2	1	-1	-2
7y	1	1	1	0	0	1	1	1	1	1	1	1	0	-1	-2
8y	1	0	0	0	0	1	1	1	1	1	1	0	0	-1	-2
9y	0	0	0	1	0	1	1	1	1	1	1	0	0	-1	-2
10y	0	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	-2
15y	0	-1	-1	0	0	0	0	0	0	0	0	0	-1	-1	-1
20y	0	-1	0	0	0	0	1	1	1	1	1	0	0	0	-1
25y	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0
30y	0	0	0	1	1	1	1	2	2	2	2	2	1	1	1

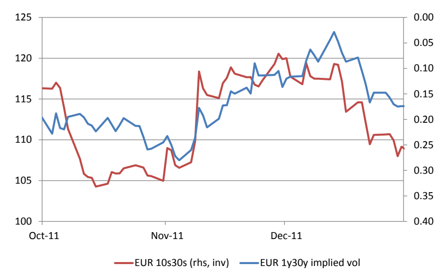
Source: Citi Research

Figure 5. ... in most risk-off market episodes (October 2014 'Perfect Storm')

	1y	2y	3y	4y	5y	6y	7y	8y	9y	10y	12y	15y	20y	25y	30y
1m	7	5	5	7	8	10	11	12	13	14	15	16	18	20	22
2m	5	5	6	6	7	8	9	10	11	12	13	14	16	17	18
3m	4	4	4	5	6	7	7	8	10	9	10	11	12	13	15
6m	4	4	3	2	2	2	3	4	4	5	5	6	7	8	9
9m	4	3	2	1	0	1	1	1	2	2	3	3	4	5	6
1y	3	3	2	1	-1	-1	0	0	0	1	1	2	2	3	4
2y	1	1	0	-1	-1	-1	-1	-1	-1	0	0	0	0	0	1
3y	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0
4y	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0
5y	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0
6y	-2	-1	-1	-2	-2	-1	-2	-1	-1	-1	-1	-1	-1	0	0
7y	-3	-2	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0
8y	-2	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0
9y	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0
10y	-2	-2	-1	-2	-1	-1	-1	-1	-1	-1	-1	0	0	0	1
15y	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	1	1	2
20y	-1	-1	-1	-1	-1	-1	0	0	0	0	1	1	1	2	2
25y	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	1	1	2
30y	-1	0	-1	-1	-1	0	0	0	0	0	0	0	1	1	1

Source: Citi Research

Figure 6. ... with the long-end of the curve being the link between vol and risky assets



Source: Citi Research

This simple finding should not come as surprising. The relationship between risk-off/wider spreads and 30y vol is via the long-end of the curve: in Figure 6 we look at yet another period, the last quarter of 2011, which also saw flare-ups in the markets. We recall some of the events that took place during this period: Spain and Italy were hit by a sequence of downgrades, in October the Italian lower house rejected the budget law which eventually led Berlusconi to resign in mid November, Papandreu's referendum in Greece on a package of measures was announced and called off a few days apart in early November, etc. As it can be readily seen, 30y vol surged with the long-end flattening: More in general, in a risk-off regime (flare-up of Sovereign debt crisis, geopolitical risks, etc.), a correction in equities/credit exerts bull flattening pressures on the long-end of the curve: the main drivers are well known: a) PF receiving long-end as their assets drop and their liabilities increase in value, b) CVA desks receiving long-end as they need to hedge the expected exposure of rate-lock transactions with Sovereign treasuries (currently less relevant) and c) last but not least HFs who front-run PFs and CVA desks.

Putting the pieces together

In sum, historically a short position in peripheral sovereign/credit bonds appears to have behaved pretty much like a long vol position, with the relationship looking the tightest with 30y vol at times of market stress. The symmetrical argument is then that a EGB periphery or credit portfolio should be hedged with a 30y swaption straddle position.

Backtest of a simple strategy

To fix ideas we have run a backtest to a EUR 30y swaption based replicating strategy: from early November 2011 until late October this year we have sold EUR 150mn 3m30y ATMF straddle at 10 days interval, unwinding each opened position after 15 days from having initiated it. We have not carried out any delta hedging. The correlation of the cumulative PnL of this strategy with the cumulative PnL from a EUR 100mn long position on 30y GGB over the same period is 0.88. At least as interesting, the Sharpe Ratio over the period is higher for the swaption strategy: 3.20 vs. 2.45. One final remark: the correlation between the daily PnL of the two strategies after having filtered out moves between –EUR 7,000 and EUR 7,000 is around 0.49.

UK - Lower-for-longer in the long-end

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The UK outlook has shifted to one of "lower-for-longer than previously thought" (MPC member Cunliffe, 28 October). This has been reflected in market pricing, rhetoric from policymakers and, indeed, our own newly revised yield forecasts (see page 3). However, while the rally in the front-end is partly justified by recent macro developments, we still believe that it has overshot. Further out, we have revised our 10yr gilt yield forecasts lower by around 30bp. We now expect 10yr gilt yields to average 2.95% in Q4 2015. This is above the forwards, but below survey-based expectations.

Re-assessing the policy outlook

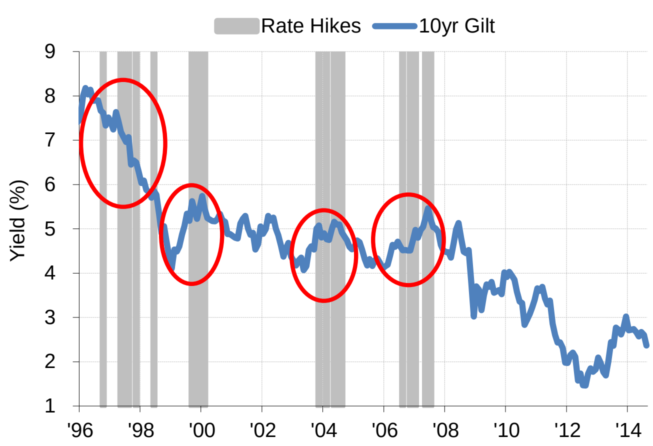
Our economics team has pushed back their forecast for the first rate hike to May 2015 (from February). However, our policy rate profile is still earlier/faster than market pricing. The market implies a first rate hike in late 2015 and only +100bp by end-2016 vs the Citi forecast of +200bp. We therefore remain bearish on the very front-end over the medium-term and view the recent rally as an overshoot.

However, this may not be the best time for fresh shorts: some MPC members have recently sounded more dovish (Haldane, Cunliffe); carry is negative; and the recent pain felt by holding short positions means that a decisive pick-up in the data, particularly wage growth, is probably needed before investors are comfortable to re-position for a hiking cycle. The Inflation Report on 12 November is the next major market-moving event for the front-end and will dictate the price action into year-end.

Long-end yields may not rise *during* a hiking cycle

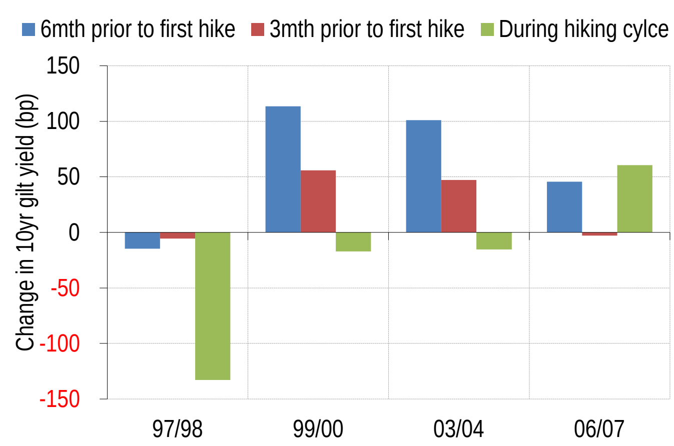
The lower-for-longer outlook extends to the long-end. Our 10yr gilt yield forecasts point to a trading range of around 2.5%-3% for 10yr gilts in 2015. Admittedly, this means that we are still forecasting a moderately bearish outlook vs the current level (2.21%), even though this has consistently proven to be the wrong view in 2014.

Figure 7. 10yr gilts yields vs hiking cycles



Source: Citi Research, Bloomberg.

Figure 8. Changes in 10yr gilt yields before and during hiking cycles



Source: Citi Research, Bloomberg.

It is hard, however, to not forecast higher 10yr gilt yields in the context of an approaching hiking cycle (and an anticipated rise in Treasury yields). This is especially true as we view the recent rally as an overshoot. Our base case is that 10yr yields move around 60bp higher over the next 6 months ahead of a first rate hike in May. This would put 10yr gilt yields back into the 2.5%-3% range that held from mid-2013 to mid-2014. However, once the hiking cycle is underway, we expect long-end yields to stabilize. There is historical support for such an outlook:

- In the last four MPC hiking cycles (97/98, 99/00, 03/04 and 06/07), 10yr gilt yields have risen by an average of 61bp over the 6 months prior to the first hike (Figure 8). The max was 113bp ahead of 99/00. The min was -15bp ahead of 97/98 when gilt yields were being driven lower by the introduction of the Minimum Funding Requirement, low issuance and the Asian and Russian crises.
- But during the cycles themselves, 10yr gilt yields on average *fell* by 26bp. The max fall was 113bp ahead of 97/08 due to the non-policy drivers detailed above. At the other end of the spectrum, 10yr yields rose by 60bp during the 06/07 cycle which was not well priced by the market ahead of time (the initial hikes were thought to be a fine-tuning exercise rather than the start of a 'full' cycle).

A lower-for-longer outlook at the long-end, albeit at slightly higher yields levels than at present, is also supported by all the other structural factors cited by policy makers. For example, in the opening remarks to the August Inflation Report, Governor Carney suggested that the global *"imbalance between saving and investment which drove global long-term interest rates down before the crisis appears no smaller now than it was then."* Add in increasing evidence of global disinflationary trends (note that Citi has cut its global inflation forecast for 2015 by 0.3%points), lower term premia and strong domestic sponsorship for long-dated gilts (see below) and it looks even more likely that long-end yields will remain at historically depressed levels, even in a hiking cycle.

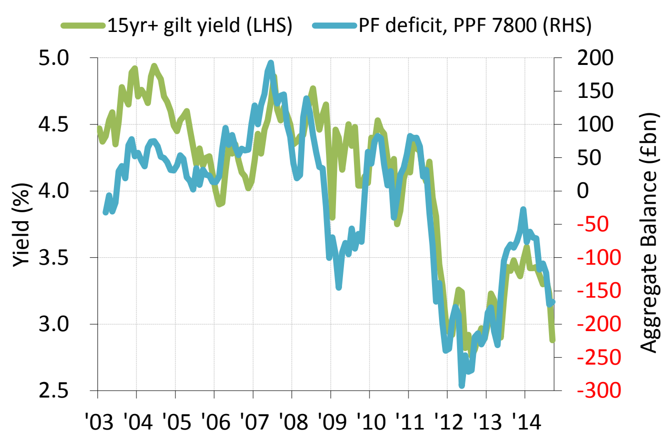
The self-reinforcing LDI stop-in

In our base case, 30yr gilt yields are likely to be particularly immune from a policy-driven bear market, rising to 3.35% by end-2015 vs 2.95% currently. A significant factor here is the strong structural support for this part of the curve from LDI.

As Figure 9 shows, the aggregate pension fund deficit (using the Pension Protection Fund PPF 7800 index for defined benefit schemes) is highly correlated with long-dated gilt yields (owing to the way the liabilities are discounted). The correlation has been particularly strong since 2011 given the large moves in gilts yields.

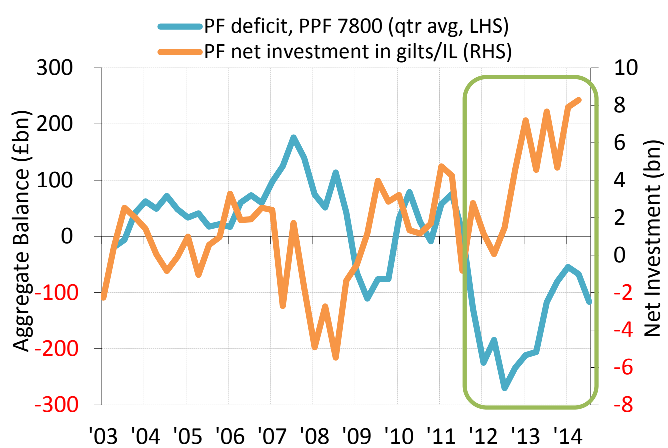
Figure 10 shows the relationship between the aggregate pension fund deficit and net investment in gilts (according to the MQ5 release by the ONS). It is notable that ever since schemes were plunged into deficit in 2011, pension funds have been adding to their gilts/linkers holdings, particularly since QE ended in early 2013.

Figure 9. Correlation between gilt yields and pension deficits



Source: Citi Research. Pension Protection Fund, FTSE Actuaries.

Figure 10. Pension deficits vs domestic demand for gilts



Source: Citi Research. Pension Protection Fund, ONS.

Significant net buying of gilts/linkers by pension funds over the last couple of years has been maintained despite variations in the scale of pension fund deficits. The level of quarterly net investment was similar at the beginning of 2013 (when the aggregate deficit exceeded £200bn) to the end of 2013 (when the aggregate deficit had fallen to just £28bn following the taper tantrum). A possible explanation is that schemes are encouraged to buy gilts when deficits have been significantly reduced in order to de-risk, but they also buy gilts when deficits are growing as there is increasing pressure from the regulator to do so.

On this latter point, the Pension Regulator has argued that schemes should consider hedging more in order to be better prepared for the prospect that long-end yields remain at low levels for a prolonged period (Annual defined benefit funding statement, June 2014). This regulatory pressure may also help to explain why pension fund demand for gilts has remained strong more recently despite the aggregate deficit worsening again (to -£167bn in September according to the PPF 7800 series).

The overriding message is that as long as pension funds are in deficit – and regardless of quarterly variations in the size of the deficit - they are likely to be significant buyers of gilts/linkers. This may cap any rise in long-end gilt yields. Somewhat paradoxically, then, this may act to prevent schemes from moving into surplus which is only likely to happen if there is a sharp rise in gilt yields. In this context, it can become self-reinforcing. This is especially true as there are probably still only around 40% of liabilities which are hedged (judging by the 2014 KPMG LDI survey and PPF data).

The combination of the broader lower-for-longer outlook and ongoing hedging (buying of gilts/linkers) by pension funds looks set to keep 30yr gilt yields at historically depressed levels for many years to come.

Conclusion – flattening beyond the forwards

For those focused on longer-term investment horizons, flatteners still offer the best risk-reward in our view. We believe the front-end will come under pressure from an earlier-than-priced start to the hiking cycle and a faster pace. Meanwhile, the long-end is likely to remain 'lower-for-longer' due to global trends and strong domestic demand. We believe that 2s10s can flatten by around 25bp more than the forwards by end-2015 and 10s30s by around 20bp more than the forwards.

Opportunities in Sub-Sovereign Markets

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Commonly Issued Municipality Bonds – new safe-havens?

New kid on the block – common municipality bonds: German cities have become active in issuing joint city/municipality bonds. While eventually being German risk, such bonds offer a spread pick-up up to 60bp over Bund. The market is small in size, but is expected to grow in the longer term. While municipal bonds were issued in the 1990's (e.g. City of Hannover in 1996 or City of Leipzig in 1999) and have already been used by several larger German cities to fund themselves directly on capital markets, 2013 brought a new scheme of municipality bonds to the market: Commonly issued municipality bonds ("Gemeinsame Kommunalanleihen"). At current stage, two of such bonds are outstanding: 1) NRWGK was issued in February 2014. All municipalities that joined in issuing this bond are located in the federal state of Northrhine-Westphalia (NRW). 2) NRGWRG was placed to the market in May 2013. The 10yr bond was commonly issued by the Cities of Nuremberg and Wuerzburg, located in Bavaria.

NRWGK liability structure: The €400mn 5yr bond which was placed at mid-swap +35bp comprises six cities whereas the relative share in the bond's liability is split between 28% and 6%. The issuers are the cities of Dortmund (20%), Essen (28%), Herne (8%), Remscheid (18%), Solingen (6%) and Wuppertal (20%). Each participating city is only liable for its partial financial obligation of the bond. At the same time, the issuers are not liable for the default of one of the other issuers. Hence, the bond repayment does not rely on any kind of cross-support mechanism among the cities involved in the bond issuance. Yet, the legal framework governing German's municipality financing is quite clear on support structures for such bodies.

Guarantee structure for German municipalities: While the lack of a common liability structure of the issuers might be seen as a weakness, one has to be aware of the support mechanisms for municipalities governed by law. Basically, municipalities in NRW cannot go insolvent. This is stipulated by the German insolvency statute as well as the municipal code of NRW. Firstly, §12 of the German Insolvency Statute says that "*Insolvency proceedings may not be opened for the assets owned by 1. the Federation or a Land; 2. a legal person under public law under the supervision of a Land if the law of the Land exempts such legal person from insolvency proceedings.*" Secondly, §128 of the municipal code of NRW says that insolvency procedures on a municipality's assets is not allowed. This eventually means that over-indebted municipalities will be supported by the federal state. In the case of NRW, the over-indebted municipalities receive consolidation support (€5.8bn) within a specific program that has been established in 2011. In return, such municipal bodies need to reach budgetary equilibria in 2016 and budget equilibria in 2021 without consolidation support.

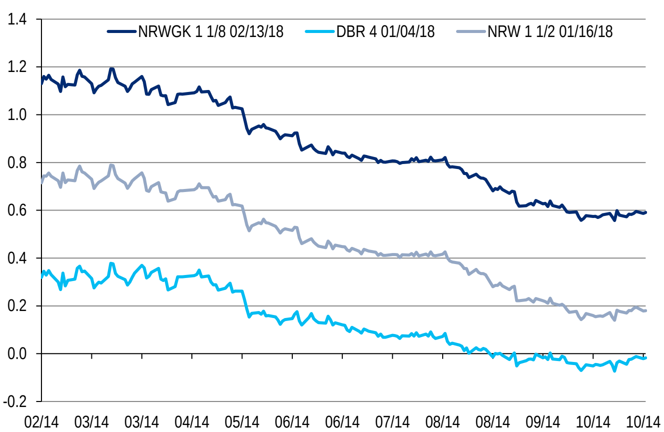
Guarantee structure for German federal states: In our primer on *German Laender*, we already presented in detail the support and guarantee structure among the Laender as well as the central government of Germany. The idea of the "state solidarity principle" plays an important role in understanding the relationship between the central government and the Laender. State finances are framed by constitution, an equalization system on the Laender level on the one hand and a stability council, which has been introduced in 2010, on the other hand. One of the most important principles is the general principle of allegiance to the federal government (Bundestreue). Furthermore, the rising debt burden over recent years has seen the introduction of a "debt brake" (Schuldenbremse). This was written into the constitution and will be effective as of 2016 for the German sovereign. These various credit protections – together with §12 of the insolvency state – puts default risk of German Laender in line with the central government in our opinion.

Issuance drivers: Apparently, one main driver for the cities to issue this bond has been the attractive market opportunity to fund directly in capital markets at very low levels. At the same time, a commonly issued bond provides synergy effects. On the one hand, a higher volume can be reached which improves liquidity but also lowers funding levels for smaller cities being involved in such issuances. Moreover, a new funding channel helps to diversify and reschedule liquidity. One should note that direct funding via banks has decreased substantially during the last years as regulatory changes decreased the attractiveness of public sector financing for banks while some of the biggest banks active in this business have been resolved or wound down. This development is also seen in the substantial decrease of public sector pfandbrief issuance for nearly ten years.

Investment drivers: Given the guarantee structure, such bonds' risk weight is 0%, in line with other German Laender debt. In our understanding, this would make such bonds also eligible as Level 1 asset for the liquidity buffer of European banks (LCR). Moreover, the higher issuance volume of this bond should be supportive for secondary market liquidity. At the same time, insurance companies are allowed to buy such bonds into their cover funds. Yet, one main obstacle persists: NRWGK doesn't have any external rating. This can be a limitation for many investors in our opinion.

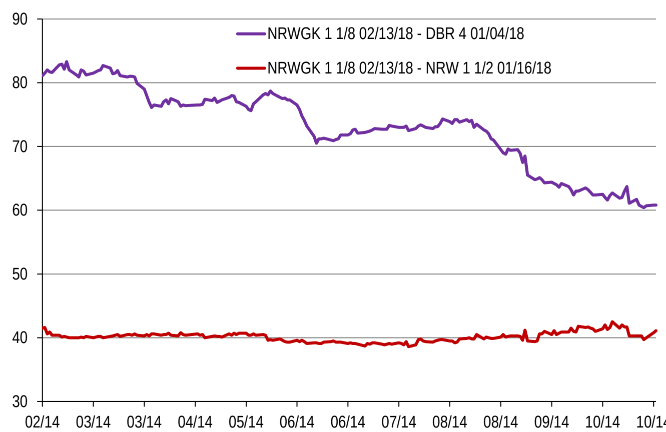
Spread performance: NRWGK provides investors an attractive yield pick-up if compared to NRW but also if compared to Bunds. This can probably be attributed to the lack of an external rating as well as the relative lower liquidity in this bond. Yet, we think this bond offers a very attractive pick-up given the support and guarantee mechanisms in place for German municipalities.

Figure 11. Yield development: NRWGK versus NRW and Bund, 4yr, %



Source: Bloomberg, Citi Research

Figure 12. Yield spread development: NRWGK vs NRW and Bund, bp



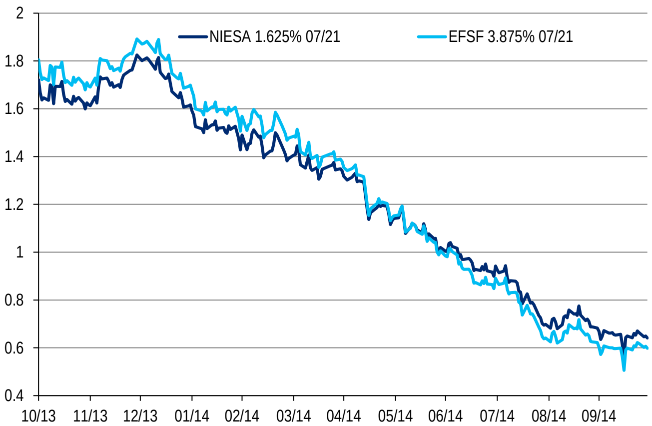
Source: Bloomberg, Citi Research

Is there more to come? We certainly think so. The first two commonly issued bonds probably won't be the last ones. NRWGK's issue in May 2013 is called "NRW City Bond No 1" while we were told by the city of Essen that follow-up deals are planned and Essen would again like to be involved. Obviously, the participants in these follow-up deals could differ and will probably do so as the composition of the involved municipalities is a function of funding and investment needs. For investors which can forego external credit assessments via ratings, this should be good news as it broadens the investment possibility within the high credit quality spectrum.

Other opportunities in German Laender: During the summer months, German Laender generally underperformed other SSA markets and spreads didn't come back to levels recorded earlier this year. This might have also been driven by

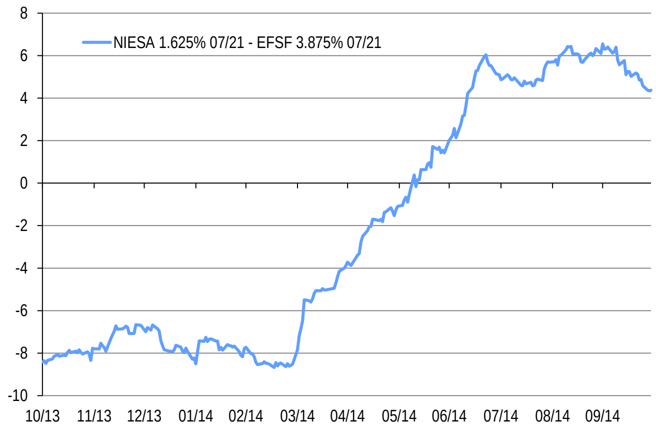
uncertainty on the treatment of sub-sovereign bonds within the LCR. Yet, after the delegated act on LCR has been published earlier this month, it has become clear that *German Laender are defined as Level 1 assets within the LCR*. As an example, Figure 14 depicts the relative underperformance of Laender versus supranationals, here exemplified by EFSF in the 7yr area. Although we wouldn't expect spreads to trade back to 2013 levels, we would still see current relative valuations as an attractive opportunity to step up in quality.

Figure 13. Yield development: NIESA and EFSF, 7yr, %



Source: Bloomberg, Citi Research

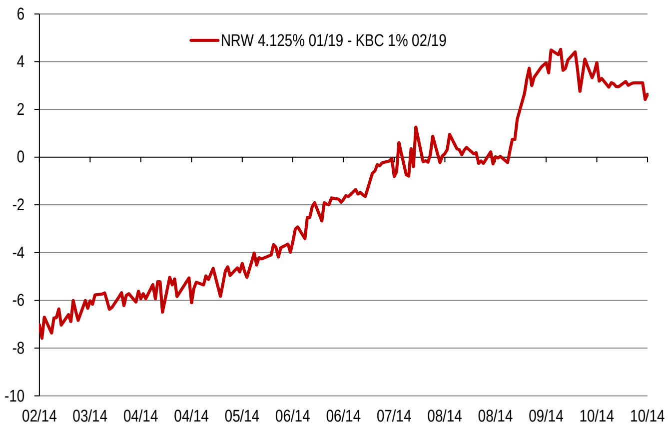
Figure 14. Yield spread development: EFSF versus NIESA, 7yr, bp



Source: Bloomberg, Citi Research

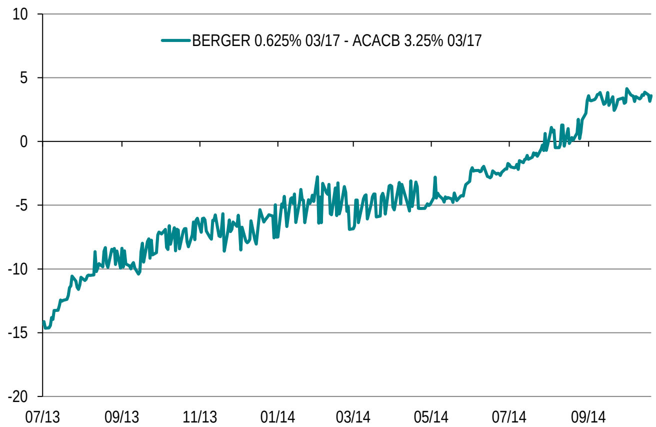
Cross-asset opportunities: Apart from the relatively cheapness versus main supras, German Laender have also been trading relatively weak if compared to covered bonds, particularly since the announcement of the covered bond purchase program. In this case, German Laender provide cross-asset opportunities if compared to other covered bond segments, particularly euro-area segments which are eligible for CBPP3 purchases in the front-end of the curve. As an example, ACACB covered bonds are now trading richer than BERGER in the 3yr area. This pattern can still be found in the 5yr area when looking at Belgian covered bonds and NRW. Although the aforementioned covered bonds are better rated, the regulatory treatment should clearly make German Laender debt better off than covered bonds. As we think that liquidity in covered bond markets will deteriorate in the near-term due to CBPP3, we would rather prefer German Laender at cheaper levels.

Figure 15. Yield spread development: NRW and KBC, 5yr, bp



Source: Bloomberg, Citi Research

Figure 16. Yield spread development: BERGER and ACACB, 3yr, bp



Source: Bloomberg, Citi Research

Spanish Covered Bond Law Update

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High OC Levels at Risk?

The Spanish ministry of Economy last week published a public hearing on potential improvements of the regulatory framework for covered bonds[4]. This mostly follows the harmonization theme conducted by EBA last summer.

The ministry found seven themes that might have to be amended in their opinion:

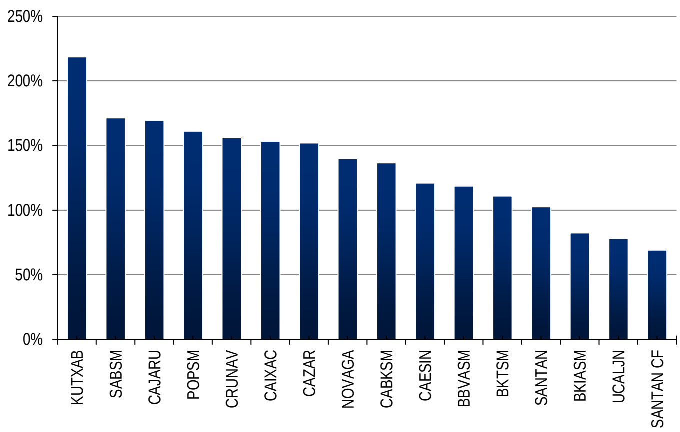
- Reducing asset encumbrance by limiting the asset transfer to the cover pool by a) eliminating ineligible assets from the pool or b) introducing a maximum OC level.
- Segregation of the cover pool portfolio including substitute assets to a separate financial vehicle (e.g. SPV like in the UK or SCF/SFH in France) which would lead to better asset segregation and therefore reduce commingling risk. Although a special accounting register already ensures the split of the collateral from other balance sheet items, this should be more in line with the standards in other European frameworks. This could also include the introduction of a separate insolvency administrator for the covered bond program post issuer default, similar to Germany's "Sachwalter". At current stage, the insolvency administrator of the bank is also responsible for the covered bond program post issuer default. This is perceived to increase commingling risk.
- Updating the value of the loans included in the cover pool, e.g. by indexing. At current stage, loans don't have to be updated by law. Yet, some issuers started to update valuations on a voluntary basis. Periodic updates of the cover pool assets might eventually have a negative impact on the potential issuance volume given the housing price developments in Spain and the effects on loan-to-value ratios. At the same time, new loan production has been relatively low while principal amortization has a converse effect on LTVs. For valuation updates, the Spanish ministry proposes the use of an index (INE's Índice de Precios de Vivienda or the ministry of infrastructure Índice General de Precios de Vivienda).
- Review of eligible assets: this review mainly comes from cover asset requirements stipulated under Art. 129 CRR. Hence, an LTV limit of 80% for residential assets should apply. Moreover, loans past due have to be excluded. However, it is proposed to also clearly state that loans in arrears of 90 days or more should be excluded from the cover pool. For public sector covered bonds, debt issued by public bodies should be discussed to become an eligible asset.
- Reduction of refinancing risk via liquidity buffers, the use of derivatives and a higher share of substitute assets (up to 15%, like in other European laws).
- Transparency requirements should be updated in order to increase harmonization with other European segments.
- Introduction of a cover pool monitor, i.e. an external and independent agent confirming provided information, similar to many other European frameworks. This asset pool monitor should verify the selection process of the assets to be included in the cover pool as well as the compliance with issuance limits but also regularly report on the compliance with legal requirements by the issuer, on the quality of accountability, on the volume of errors detected and on the deficiencies in the information systems. Additionally, it should verify the correct updating of the collateral of the mortgage loans in the case of public sector covered bonds.

[4] http://www.tesoro.es/doc/SP/legislacion/normativa/ConsultasPublicas/Sleg7023.pdf

Overdue legal reform: Most of these changes are overdue in our opinion, particularly transparency requirements and valuation updates. Hence, generally we see this attempt positively. It remains to be seen how and when these changes apply and how it would eventually affect OC numbers in the case of cédulas. At current stage, cédula bondholders have recourse on the bank's total mortgage portfolio (cédulas hipotecarias) or the bank's total public sector loan portfolio (cédulas territoriales). This eventually puts senior bondholders to relatively strong subordination, particularly if compared to other European markets.

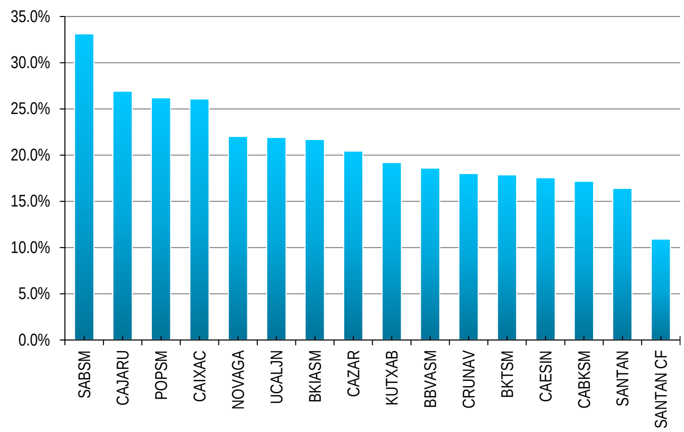
What happens to current OC? Apart from that, it is not clear yet if the changes to the covered bond law would affect all outstanding covered bonds or only newly issued bonds for which a pool of earmarked assets would be reserved. It should be added that given the lack of new issuance, average duration of Spanish covered bonds stands at 4.38. However, we wouldn't be too critical on the potential risk of lower over-collateralization in the case of cédulas. The high OC numbers currently provide a risk-buffer for uncertainties like the lack of updated valuations and transparency. It serves as the main risk mitigating factor against the background of the relative weaknesses of the legal framework under which cédulas are issued. If the amendments eventually led to a stronger framework, the need of extremely high total OC levels should become more dispensable than at current stage.

Figure 17. Total OC ratios of main Spanish covered bond issuers, %



Source: Moody's, Citi Research

Figure 18. Collateral Score of main Spanish covered bond issuers,%



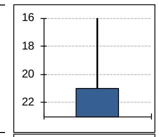
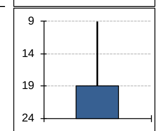
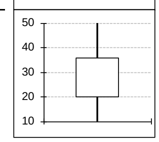
Source: Moody's, Citi Research

OC levels don't coincide with credit quality: Current OC levels generally are just a snapshot which investors shouldn't rely too much on in our opinion. Yet, OC levels are generally quite stable if issuers are not extremely active on the primary market – observable in the Spanish covered bond segment. A further observation is that OC levels do not strongly coincide negatively with cover pool credit quality which one could assume. We can rather observe a positive correlation between these figures (R^2 of 0.24). Yet, OC levels are important – particularly in Spain – for covered bond ratings. As already mentioned, the high OC levels are the main risk mitigating factor in the case of Spanish covered bonds and this is modelled into Moody's covered bond ratings. However, it should be stated that at current stage it's only two mortgage programs – POPSM and SABSM – which have to maintain a higher OC than the legal minimum to hold the current covered bond rating (34.5% and 40.5%, respectively). Hence, even from a rating perspective, lower OC levels due to an updated covered bond framework would not necessarily have negative repercussions if the minimum legal OC ratio was maintained. From a spread perspective, one should note that OC ratios don't affect relative pricing.

Tradesheet

Record of Our Closed Trades

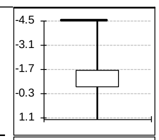
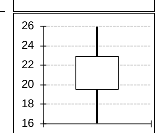
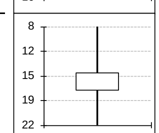
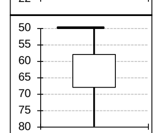
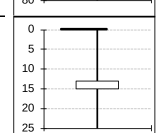
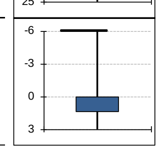
Figure 19. Record of our Closed Trades

Region	Trade	Levels		Rationale	
UK	Buy 30yr gilt swap spreads	Open	21bp		
		Current	23bp	Hit Stop 30th October 2014	
Swap Spreads	Buy UKT 3.25% Jan44 YYS at 21bp	P&L	-2bp		
		Target	16bp		
		Stop	23bp	*UK Rates Strategy, 11th September*	
EUR	Buy OATei27 and OATei30 vs OATi29	Open	19bp		
		Current	24bp	Hit Stop 24th October 2014	
Inflation	Buy OATei27 real yield at 0.20%	P&L	-5bp		
	Sell OATi29 real yield at 0.20%	Target	9bp		
	Buy OATei30 real yield at 0.39%	Stop	24bp	*The Morning Call, 16th October 2014*	
UK	Sell 30yr gilt swap spreads vs 10yr	Open	20bp		
		Current	36bp	Closed legacy trade on 30th October 2014	
Swap spread	Sell gilt 3.25% Jan44 ASW at 20bp	P&L	16bp		
	Buy gilt 1.75% Sep22 ASW at 0bp	Target	50bp		
		Stop	10bp	*UK Rates Strategy, 30 July 2013*	

Source: Citi Research

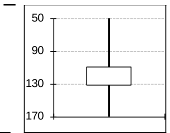
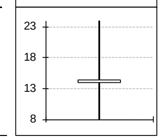
Record of Our Open Trades

Figure 20. Record of our Open Trades

Region	Trade	Levels		Rationale + Publication Date	
UK	Buy gilt 3.5% 2068 vs gilt 3.25% 2044	Open	-0.7bp	Signs of concession in the 50yr vs 30yr sector encourages extension trades and expect the 50yr sector to outperform post syndication.	
		Current	-2bp		
Curve	Buy UKT 3.5% Jul68 @ 2.923%	P&L	1bp		
	Sell UKT 3.25% Jan44 @ 2.930%	Target	-4.5bp		
		Stop	1.2bp	*European Rates Weekly, 23rd October 2014*	
EUR	Buy OATei22 break-even vs Bundei23	Open	19.5bp	Fade the richness of Bundei23 break-even ahead of the auction. OATei22 break-evens look cheap on various metrics.	
		Current	22.9bp		
Inflation	Buy OATei22 break-even at 108bp	P&L	3bp		
	Sell Bundei23 break-even at 89bp	Target	26bp		
		Stop	16bp	*European Rates Weekly, 9th October 2014*	
EUR	Buy Bundei30 break-evens vs OATei30	Open	17bp		
		Current	15bp	Seasonal-adjustment suggests Bundei30 break-evens are around 10bps too cheap vs OATei30	
Inflation	Buy Bundei30 break-even at 147bp	P&L	2bp		
	Sell OATei30 break-even at 164bp	Target	8bp		
		Stop	22bp	*The Morning Call, 9th September 2014*	
EUR	BTP 5s7s flattener	Open	68bp	5s7s look steep. Ongoing yield grab and the likelihood of further ECB support should be supportive.	
		Current	58bp		
Curve	Sell BTP 4.25% Sep19 @ 1.32%	P&L	10bp		
	Buy BTP 3.75% Aug21s @ 1.96%	Target	50bp		
		Stop	80bp	*Italy vs Spain: Macro, Markets & More, 6th August 2014*	
EUR	Buy CCTeu Jun17 z-spread vs BTP Jun17	Open	15bp		
		Current	13bp	Fade the cheapness of CCTeu	
Basis	Buy CCTeu Jun17 z-spread at 57bps	P&L	2bp		
	Sell BTP 4.75% Jun17 z-spread at 42bps	Target	0bp		
		Stop	25bp	*Italy vs Spain: Macro, Markets & More, 6th August 2014*	
EUR	Buy KfW 0.375% Apr17s vs OLO 4% Mar17	Open	0bp		
		Current	1bp	Move up in quality at a flat spread	
SSA	Buy KfW 0.375% Apr17s @ 0.13%	P&L	-1bp		
	Sell OLO 4% Mar17 @ 0.13%	Target	-6bp		
		Stop	3bp	*European Rates Weekly, 24th July 2014*	

Source: Citi Research

Figure 21. Record of our Open Trades (continued)

UK	Pay GBP 1y1y vs 3y1y	Open	132bp		
		Current	109bp	The very front-end is still lagging in the sell-off.	
Swap Curve	Pay GBP 1y1y at 1.47%	P&L	23bp		
	Receive GBP 3y1y at 2.79%	Target	50bp		
		Stop	170bp	*Euro Rates Weekly, 24 April 2014*	
EUR	Buy 30yr Netherlands vs Austria	Open	14bp	Close to historically tight levels. Uncertainty surrounding the Austria banking sector	
		Current	14bp		
Cross Market	Buy DSL Jan42 at 2.67%	P&L	0bp	should weigh on Austrian bonds	
	Sell RAGB Jun44 at 2.81%	Target	24bp		
		Stop	8bp	*European Rates Weekly, 12 February 2014*	

Source: Citi Research

Figure 22. Strategy Summary Table

Europe	View	Strategies
Direction	We have lowered our Q4 target for 10yr Bunds to 0.65% .	Long Bunds
Money Market	The Eonia curve is by no means pricing in a meaningful probability of a balance sheet expansion (and hence of QE).	1y/1y1y EUR steepeners
Yield Curve	In EUR swaps, carry trade positioning and negative convexity risk from A/L-portfolios make the long-end of the curve still quite sensitive to further reshaping. The 30s50s curve in the UK looks too steep relative to 10s30s.	30s50s gilt flatteners Receive EUR 20y10y vs 30y10y Pay GBP 1y1y vs 3y1y
Cross-market	The recent sharp narrowing in the 10yr gilt-Bund spread should be faded, in our view.	Long 10yr Bunds vs UST Short 10yr gilts vs Bunds
EMU Spreads	Near-term supports for Spain suggest it's too early to fade recent performance. In general, we expect flatter spread curves in a scenario of full blown QE.	BTP 5s7s flatteners given the strong outperformance of 5s
Swap Spreads	The 30s50s gilt swap spread box is at the cheap-end of its trading range with supply looming.	Long Bund ASW Buy gilt 2068 vs 2044 swap spread box
Inflation	Any extended rally in euro break-evens should be sold, in our view. In the UK, we like 10yr break-evens vs RPI.	Hit stop on OATei27 and OATei30 real yield vs OATi29 Sell Bunderi23 vs OATei22 break-evens Buy 30yr IL gilt break-evens
Volatility	One way to trade the Japanification of the EUR curve is to position for further structural EUR/USD widening in intermediate and long vega space.	EUR/USD 15y10y implied vol spread widener
SSA	SSAs have been remarkably resilient despite the weakness in OATs.	Long 3yr KfW and 4yr EIB vs OLOs

For a list of outstanding trade strategies please see the Tradesheet section of this report

Source: Citi Research

Duration Scorecard

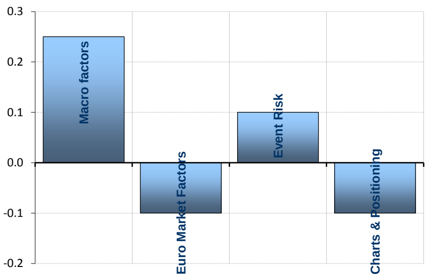
Figure 23. Bund Weekly Cheat Sheet: 31st October– 6th November

Bund Directional Scorecard (1w horizon)

Recommendation	**Buy**	RXZ4 (EOD Thurs) = 150.86	
Conviction level	**Medium**	CTD yield = 0.68% 10day del vol = 2.95%	
	Signal Strength (+/-2)		
Macro factors	**0.3**	**Weight =**	**38%**
ECB	1	ECB likely to add further stimulus, but not in Nov	10.0%
Fed, BoE and BOJ	0	Fed a little more hawkish	5.0%
Inflation	2	Inflation risks are still to the downside	5.0%
Economic releases	0	Lack of market moving data releases	7.5%
Citi surprise	1	Citi Economic Surprise Index remains negative	5.0%
AQR & Stress Test	0	Well flagged and not as bad as expected	5.0%
Euro Market Factors	**-0.1**	**Weight =**	**28%**
Supply	-1	Net supply is quite large next week	7.5%
Risk appetite	2	Risk aversion remains elevated	2.5%
Flow	-1	Net selling last week	2.5%
Equity	-1	Equities trying to bounce	5.0%
Sovereign credit	0	Volatile market lacking strong directionality	5.0%
FX	0	EUR has stabilised for now	5.0%
Event Risk	**0.1**	**Weight =**	**13%**
Politics	1	Geopolitical concerns are persisting	5.0%
LTRO	0	TLTRO take-up likely to be better in December	2.5%
QE	1	Citi expects the ECB to embark upon QE in 4Q14 or 1Q15	5.0%
Charts & Positioning	**-0.1**	**Weight =**	**23%**
Technicals	0	Mixed	7.5%
T-Note	-1	Yields moving higher	5.0%
CFTC	-1	Positioning slightly short	5.0%
ARTS	0	Neutral	5.0%

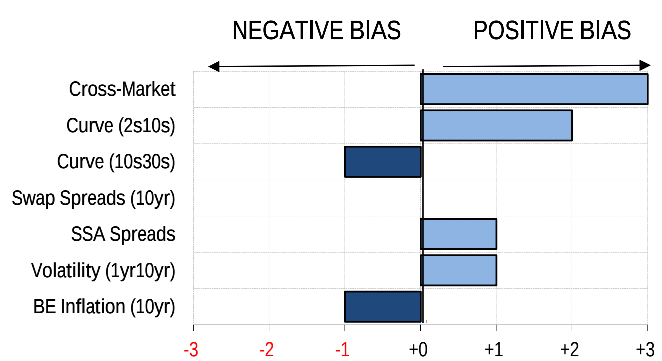
Source: Citi Research Note: Futures trading involves a substantial risk of loss.

Figure 24. Contribution to Bund Signals



Source: Citi Research

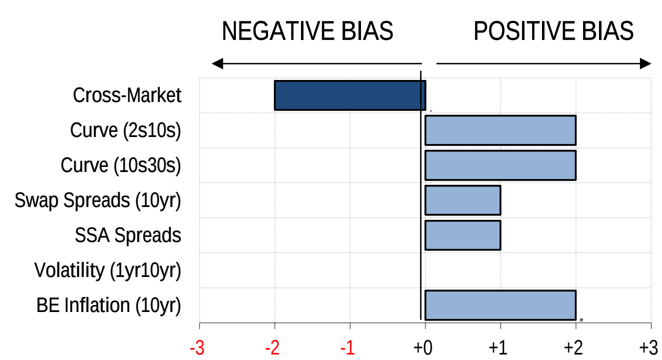
Figure 25. EURO AREA (Near-term Bias)



Source: Citi Research

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

Figure 26. 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

Relative Value Trades

We highlight four relative value trade opportunities on the Italian, Spanish, German and Belgian yield curves.

Italy: take advantage of cheapness of Aug16s

- Buy 3.75% Aug16 vs 2.75% Dec15 and 4.75% May17 (3m carry: 3bp)-Figure 27

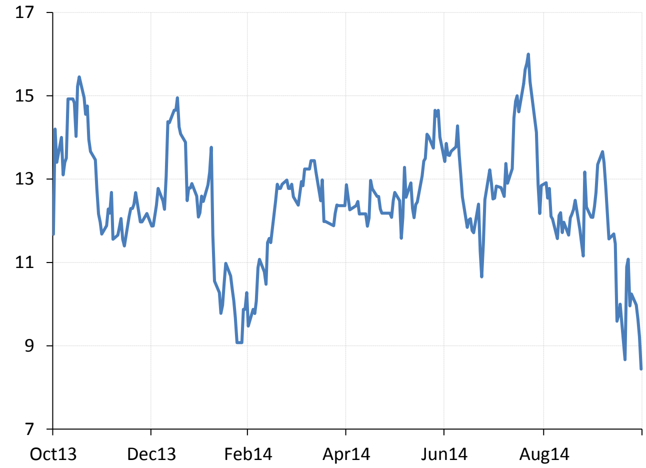
Spain: fade the richness of Jan23s

- Sell 5.4% Jan23 vs 5.85% Jan22 and 4.4% Oct23 (3m carry: 0.1bp) - Figure 28

Figure 27. Italy: 2.75% Dec15, 3.75% Aug16, 4.75% May17 microfly (bp)

Source: Citi Research

Figure 28. Spain: 5.85% Jan22, 5.4% Jan23, 4.4% Oct23 microfly (bp)



Source: Citi Research

Germany: take advantage of cheapness of Oct16s

- Buy 1.25% Oct16 vs 0% Dec15 and 0.5% Apr17 (3m carry: 2.7bp) - Figure 29

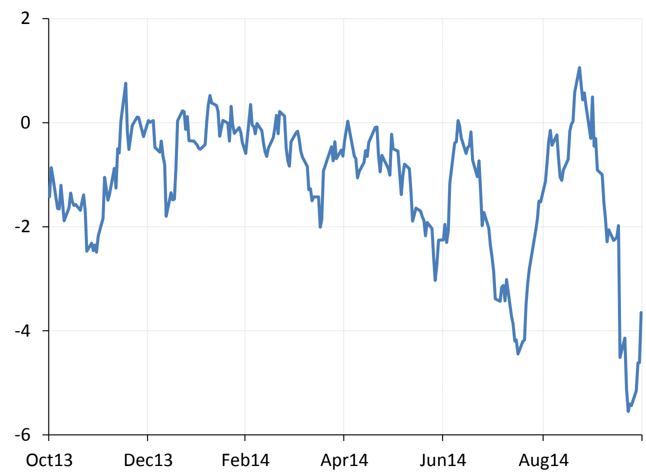
Belgium: fade the richness of Sep21s

- Sell 4.25% Sep21 vs 3.75% Sep20 and 4.25% Sep22 (3m carry: 0.1bp)- Figure 30

Figure 29. Germany: 0% Dec15, 1.25% Oct16, 0.5% Apr17 microfly (bp)

Source: Citi Research

Figure 30. Belgium: 3.75% Sep20, 4.25% Sep21, 4.25% Sep22 microfly (bp)



Source: Citi Research

Euro Relative Value Screen – All Maturities

Figure 31. Coupon adjusted spread (CAS) to fitted curve and swap curve by country (6m history) - all bonds on each curve

GERMANY

	Versus Govt Curve (CAS) Rank		ZScore	Issued	Size (€bn)	Versus Swap Curve (CAS) Rank		ZScore	Issued	Size (€bn)
Richest	1	4.75 Jul34	-2.46	Jan03	20	1	4.75 Jul34	-2.19	Jan03	20
	2	0.50 Apr19	-1.99	May14	16	2	6.25 Jan30	-2.15	Jan00	9
	3	6.25 Jan30	-1.98	Jan00	9	3	5.50 Jan31	-2.07	Oct00	17
	4	1.00 Oct18	-1.80	Sep13	17	4	4.00 Jan37	-1.92	Jan05	23
	5	5.50 Jan31	-1.72	Oct00	17	5	2.50 Jul44	-1.57	Apr12	16
	5	4.00 Jan18	1.90	Nov07	20	5	0.75 Feb17	1.10	Jan12	16
	4	3.00 Jul20	1.95	Apr10	22	4	4.00 Jan18	1.13	Nov07	20
	3	4.25 Jul39	2.20	Jan07	14	3	4.25 Jul17	1.14	May07	19
	2	1.50 Sep22	2.28	Sep12	18	2	0.50 Oct17	1.28	Sep12	16
Cheapest	1	0.50 Oct17	2.46	Sep12	16	1	3.75 Jan17	1.33	Nov06	20

FRANCE

	Rank		ZScore	Issued	Size (€bn)	Rank		ZScore	Issued	Size (€bn)
Richest	1	4.00 Apr55	-2.31	Apr04	15	1	4.25 Oct18	-0.90	Oct07	28
	2	3.50 Apr26	-1.95	Apr10	30	2	1.00 May18	-0.88	May12	23
	3	2.25 May24	-1.04	Nov13	28	3	1.00 May19	-0.84	Jan14	23
	4	5.75 Oct32	-0.78	Oct00	26	4	4.00 Apr18	-0.78	Apr07	28
	5	4.00 Apr18	-0.76	Apr07	28	5	3.50 Apr26	-0.78	Apr10	30
	5	2.25 Oct22	0.98	Oct11	25	5	1.75 Feb17	-0.25	Feb11	20
	4	4.50 Apr41	1.05	Apr09	24	4	2.75 Oct27	-0.21	Oct11	32
	3	1.75 Feb17	1.06	Feb11	20	3	3.25 May45	0.02	May12	12
	2	1.00 Nov18	1.08	Nov12	22	2	4.50 Apr41	0.07	Apr09	24
Cheapest	1	4.00 Oct38	1.56	Oct05	24	1	4.00 Oct38	0.24	Oct05	24

ITALY

	Rank		ZScore	Issued	Size (€bn)	Rank		ZScore	Issued	Size (€bn)
Richest	1	4.25 Mar20	-3.04	Sep09	24	1	4.25 Mar20	-0.02	Sep09	24
	2	3.50 Nov17	-2.88	Nov12	17	2	4.50 Feb20	0.04	Mar04	23
	3	4.50 Feb20	-2.70	Mar04	23	3	3.75 Mar21	0.06	Sep10	24
	4	5.25 Aug17	-2.29	Feb02	24	4	4.00 Sep20	0.10	Mar10	25
	5	4.00 Sep20	-2.27	Mar10	25	5	4.50 May23	0.16	Mar13	18
	5	3.75 Sep24	1.42	Mar14	20	5	4.00 Feb37	1.33	Aug05	26
	4	5.50 Nov22	1.78	May12	21	4	4.75 Sep44	1.40	Mar13	15
	3	4.50 Mar26	1.84	Sep10	21	3	1.50 Aug19	1.42	Jul14	14
	2	4.50 Mar24	1.91	Aug13	23	2	5.00 Sep40	1.43	Sep09	21
Cheapest	1	5.00 Mar25	1.97	Jul09	22	1	2.15 Dec21	1.50	Jun14	13

N'LANDS

	Rank		ZScore	Issued	Size (€bn)	Rank		ZScore	Issued	Size (€bn)
Richest	1	2.50 Jan33	-2.86	Mar12	10	1	2.50 Jan33	-1.79	Mar12	10
	2	2.75 Jan47	-1.84	Feb14	4	2	4.00 Jan37	-1.75	Apr05	14
	3	2.25 Jul22	-1.48	Feb12	15	3	3.75 Jan42	-1.35	May10	15
	4	4.00 Jan37	-1.36	Apr05	14	4	2.75 Jan47	-1.26	Feb14	4
	5	1.75 Jul23	-0.45	Mar13	16	5	1.25 Jan19	-1.20	Jun13	15
	5	4.00 Jul19	0.78	Feb09	14	5	2.00 Jul24	-0.79	Mar14	13
	4	3.25 Jul21	1.22	Mar11	16	4	1.25 Jan18	-0.71	Jul12	15
	3	2.50 Jan17	1.28	Jun11	16	3	4.50 Jul17	-0.28	Jul07	15
	2	2.00 Jul24	1.66	Mar14	13	2	0.50 Apr17	-0.20	Jan14	15
Cheapest	1	3.75 Jan42	2.47	May10	15	1	2.50 Jan17	0.19	Jun11	16

SPAIN

	Rank		ZScore	Issued	Size (€bn)	Rank		ZScore	Issued	Size (€bn)
Richest	1	5.40 Jan23	-2.76	Jan13	17	1	4.80 Jan24	-1.21	Sep08	15
	2	0.50 Oct17	-1.67	Sep14	4	2	4.40 Oct23	-1.21	May13	18
	3	5.85 Jan22 (FBB)	-1.61	Nov11	20	3	5.40 Jan23	-1.19	Jan13	17
	4	5.75 Jul32	-1.38	Jan01	16	4	4.65 Jul25	-1.16	Feb10	14
	5	5.50 Jul17	-1.34	Mar02	20	5	3.80 Apr24	-1.14	Jan14	21
	5	4.30 Oct19	1.36	Jun09	21	5	5.50 Jul17	0.18	Mar02	20
	4	1.40 Jan20	1.37	Jul14	7	4	2.10 Apr17	0.25	Nov13	21
	3	4.85 Oct20	1.50	Jul10	18	3	3.80 Jan17	0.32	Oct06	21
	2	5.15 Oct28	1.59	Jul13	12	2	4.25 Oct16	0.43	Sep11	21
Cheapest	1	4.00 Apr20	1.72	Jan10	22	1	0.50 Oct17	1.46	Sep14	4

BELGIUM

	Rank		ZScore	Issued	Size (€bn)	Rank		ZScore	Issued	Size (€bn)
Richest	1	5.00 Mar35	-1.20	May04	19	1	5.00 Mar35	-1.20	May04	19
	2	3.00 Sep19	-1.20	Apr12	11	2	4.00 Mar32	-1.19	Mar12	8
	3	4.25 Sep21	-0.97	Jan11	15	3	2.60 Jun24	-1.19	Jan14	15
	4	3.50 Jun17	-0.91	Mar11	13	4	4.50 Mar26	-1.16	Jun11	9
	5	2.60 Jun24	-0.89	Jan14	15	5	4.25 Sep21	-1.15	Jan11	15
	5	3.75 Sep20	1.13	Jan10	18	5	4.00 Mar17	-0.79	Jan07	11
	4	4.25 Sep22	1.30	Jan12	15	4	4.25 Mar41	-0.79	Apr10	14
	3	2.25 Jun23	1.40	Jan13	14	3	5.50 Sep17	-0.78	Jun02	8
	2	4.00 Mar22	1.86	May06	14	2	3.75 Jun45	-0.76	Sep13	5
Cheapest	1	3.75 Jun45	2.00	Sep13	5	1	3.50 Jun17	-0.73	Mar11	13

Source: Citi Research

Euro Relative Value Screen – Sub-12yr

Figure 32. Coupon adjusted spread (CAS) to fitted curve and swap curve by country (6m history) - bonds with a maximum maturity of 12yrs

Versus Govt Curve (CAS) | Versus Swap Curve (CAS)

GERMANY

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	0.50 Apr19	-1.99	May14	16	Richest	1	0.50 Apr19	-1.40	May14	16
	2	1.00 Oct18	-1.80	Sep13	17		2	1.50 May24	-1.20	May14	18
	3	1.00 Feb19	-1.31	Jan14	16		3	1.50 May23	-1.11	May13	18
	4	1.50 May23	-1.29	May13	18		4	2.00 Aug23	-1.11	Sep13	18
	5	2.00 Aug23	-1.28	Sep13	18		5	1.00 Oct18	-1.01	Sep13	17
	5	3.25 Jan20	1.78	Nov09	22		5	0.75 Feb17	1.10	Jan12	16
	4	4.00 Jan18	1.90	Nov07	20		4	4.00 Jan18	1.13	Nov07	20
	3	3.00 Jul20	1.95	Apr10	22		3	4.25 Jul17	1.14	May07	19
	2	1.50 Sep22	2.28	Sep12	18		2	0.50 Oct17	1.28	Sep12	16
Cheapest	1	0.50 Oct17	2.46	Sep12	16	Cheapest	1	3.75 Jan17	1.33	Nov06	20

FRANCE

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.50 Apr26	-1.95	Apr10	30	Richest	1	4.25 Oct18	-0.90	Oct07	28
	2	2.25 May24	-1.04	Nov13	28		2	1.00 May18	-0.88	May12	23
	3	4.00 Apr18	-0.76	Apr07	28		3	1.00 May19	-0.84	Jan14	23
	4	4.25 Oct23 (OAT)	-0.70	Oct06	33		4	4.00 Apr18	-0.78	Apr07	28
	5	1.75 Nov24	-0.58	Jun14	19		5	3.50 Apr26	-0.78	Apr10	30
	5	3.75 Apr17	0.93	Apr06	37		5	1.75 Nov24	-0.37	Jun14	19
	4	3.25 Oct21	0.95	Oct10	36		4	3.75 Apr17	-0.37	Apr06	37
	3	2.25 Oct22	0.98	Oct11	25		3	0.50 Nov19	-0.37	Jun14	16
	2	1.75 Feb17	1.06	Feb11	20		2	3.75 Apr21	-0.35	Apr05	36
Cheapest	1	1.00 Nov18	1.08	Nov12	22	Cheapest	1	1.75 Feb17	-0.25	Feb11	20

ITALY

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.25 Mar20	-3.04	Sep09	24	Richest	1	4.25 Mar20	-0.02	Sep09	24
	2	3.50 Nov17	-2.88	Nov12	17		2	4.50 Feb20	0.04	Mar04	23
	3	4.50 Feb20	-2.70	Mar04	23		3	3.75 Mar21	0.06	Sep10	24
	4	5.25 Aug17	-2.29	Feb02	24		4	4.00 Sep20	0.10	Mar10	25
	5	4.00 Sep20	-2.27	Mar10	25		5	4.50 May23	0.16	Mar13	18
	5	3.75 Sep24	1.42	Mar14	20		5	4.00 Feb17	0.88	Aug06	25
	4	5.50 Nov22	1.78	May12	21		4	2.75 Nov16	0.91	Sep13	12
	3	4.50 Mar26	1.84	Sep10	21		3	2.50 Dec24	1.28	Sep14	7
	2	4.50 Mar24	1.91	Aug13	23		2	1.50 Aug19	1.42	Jul14	14
Cheapest	1	5.00 Mar25	1.97	Jul09	22	Cheapest	1	2.15 Dec21	1.50	Jun14	13

N'LANDS

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.25 Jul22	-1.47	Feb12	15	Richest	1	1.25 Jan19	-1.20	Jun13	15
	2	1.75 Jul23	-0.44	Mar13	16		2	3.50 Jul20	-1.17	Feb10	15
	3	1.25 Jan19	-0.39	Jun13	15		3	2.25 Jul22	-1.16	Feb12	15
	4	1.25 Jan18	-0.27	Jul12	15		4	4.00 Jul19	-1.16	Feb09	14
	5	0.25 Jan20	-0.26	Sep14	5		5	1.75 Jul23	-0.98	Mar13	16
	5	3.50 Jul20	0.75	Feb10	15		5	2.00 Jul24	-0.79	Mar14	13
	4	4.00 Jul19	0.78	Feb09	14		4	1.25 Jan18	-0.71	Jul12	15
	3	3.25 Jul21	1.22	Mar11	16		3	4.50 Jul17	-0.28	Jul07	15
	2	2.50 Jan17	1.28	Jun11	16		2	0.50 Apr17	-0.20	Jan14	15
Cheapest	1	2.00 Jul24	1.67	Mar14	13	Cheapest	1	2.50 Jan17	0.19	Jun11	16

SPAIN

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	5.40 Jan23	-2.76	Jan13	17	Richest	1	4.80 Jan24	-1.21	Sep08	15
	2	0.50 Oct17	-1.65	Sep14	4		2	4.40 Oct23	-1.21	May13	18
	3	5.85 Jan22 (FBB)	-1.61	Nov11	20		3	5.40 Jan23	-1.19	Jan13	17
	4	5.50 Jul17	-1.32	Mar02	20		4	4.65 Jul25	-1.16	Feb10	14
	5	4.40 Oct23	-1.17	May13	18		5	3.80 Apr24	-1.14	Jan14	21
	5	3.80 Apr24	1.21	Jan14	21		5	5.50 Jul17	0.18	Mar02	20
	4	4.30 Oct19	1.36	Jun09	21		4	2.10 Apr17	0.25	Nov13	21
	3	1.40 Jan20	1.37	Jul14	7		3	3.80 Jan17	0.32	Oct06	21
	2	4.85 Oct20	1.50	Jul10	18		2	4.25 Oct16	0.43	Sep11	21
Cheapest	1	4.00 Apr20	1.72	Jan10	22	Cheapest	1	0.50 Oct17	1.46	Sep14	4

BELGIUM

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.00 Sep19	-1.21	Apr12	11	Richest	1	2.60 Jun24	-1.19	Jan14	15
	2	4.25 Sep21	-0.97	Jan11	15		2	4.50 Mar26	-1.16	Jun11	9
	3	2.60 Jun24	-0.93	Jan14	15		3	4.25 Sep21	-1.15	Jan11	15
	4	3.50 Jun17	-0.91	Mar11	13		4	2.25 Jun23	-1.12	Jan13	14
	5	4.00 Mar17	-0.80	Jan07	11		5	3.00 Sep19	-1.05	Apr12	11
	5	1.25 Jun18	0.96	Feb13	12		5	4.00 Mar19	-0.91	Jan09	11
	4	3.75 Sep20	1.13	Jan10	18		4	1.25 Jun18	-0.81	Feb13	12
	3	4.25 Sep22	1.25	Jan12	15		3	4.00 Mar17	-0.79	Jan07	11
	2	2.25 Jun23	1.36	Jan13	14		2	5.50 Sep17	-0.78	Jun02	8
Cheapest	1	4.00 Mar22	1.84	May06	14	Cheapest	1	3.50 Jun17	-0.73	Mar11	13

Source: Citi Research

Euro Relative Value Screen – 8yr+

Figure 33. Coupon adjusted spread (CAS) to fitted curve and swap curve by country (6m history) - bonds with a minimum maturity of 8yrs

Versus Govt Curve (CAS) | Versus Swap Curve (CAS)

GERMANY

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.75 Jul34	-2.46	Jan03	20	Richest	1	4.75 Jul34	-2.19	Jan03	20
	2	6.25 Jan30	-1.98	Jan00	9		2	6.25 Jan30	-2.15	Jan00	9
	3	5.50 Jan31	-1.72	Oct00	17		3	5.50 Jan31	-2.07	Oct00	17
	4	4.00 Jan37	-1.63	Jan05	23		4	4.00 Jan37	-1.92	Jan05	23
	5	1.50 May23	-1.29	May13	18		5	2.50 Jul44	-1.57	Apr12	16
	5	1.00 Aug24	0.33	Sep14	14		5	1.50 May23	-1.11	May13	18
	4	1.75 Feb24	1.01	Jan14	18		4	2.00 Aug23	-1.11	Sep13	18
	3	3.25 Jul42	1.58	Jul10	15		3	1.50 Feb23	-0.98	Jan13	18
	2	4.75 Jul40	1.81	Jul08	16		2	1.75 Feb24	-0.95	Jan14	18
Cheapest	1	4.25 Jul39	2.20	Jan07	14	Cheapest	1	1.00 Aug24	-0.42	Sep14	14

FRANCE

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.00 Apr55	-2.31	Apr04	15	Richest	1	3.50 Apr26	-0.78	Apr10	30
	2	3.50 Apr26	-1.95	Apr10	30		2	2.25 May24	-0.66	Nov13	28
	3	2.25 May24	-1.04	Nov13	28		3	4.25 Oct23 (OAT)	-0.64	Oct06	33
	4	5.75 Oct32	-0.78	Oct00	26		4	1.75 May23	-0.64	May12	27
	5	4.25 Oct23 (OAT)	-0.70	Oct06	33		5	4.00 Apr55	-0.48	Apr04	15
	5	2.50 May30	-0.44	May14	15		5	2.50 May30	-0.29	May14	15
	4	3.25 May45	0.83	May12	12		4	2.75 Oct27	-0.21	Oct11	32
	3	2.75 Oct27	0.84	Oct11	32		3	3.25 May45	0.02	May12	12
	2	4.50 Apr41	1.05	Apr09	24		2	4.50 Apr41	0.07	Apr09	24
Cheapest	1	4.00 Oct38	1.56	Oct05	24	Cheapest	1	4.00 Oct38	0.24	Oct05	24

ITALY

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.50 Dec24	-0.70	Sep14	7	Richest	1	4.50 May23	0.16	Mar13	18
	2	5.75 Feb33	-0.69	Feb02	15		2	4.75 Aug23 (IK)	0.28	Apr08	25
	3	5.00 Aug39	-0.67	Aug07	19		3	3.75 Sep24	0.31	Mar14	20
	4	5.00 Aug34	-0.52	Aug03	22		4	5.50 Nov22	0.31	May12	21
	5	3.50 Mar30	-0.18	May14	11		5	4.50 Mar24	0.32	Aug13	23
	5	3.75 Sep24	1.42	Mar14	20		5	2.50 Dec24	1.28	Sep14	7
	4	5.50 Nov22	1.78	May12	21		4	5.00 Aug39	1.31	Aug07	19
	3	4.50 Mar26	1.85	Sep10	21		3	4.00 Feb37	1.33	Aug05	26
	2	4.50 Mar24	1.90	Aug13	23		2	4.75 Sep44	1.40	Mar13	15
Cheapest	1	5.00 Mar25	2.00	Jul09	22	Cheapest	1	5.00 Sep40	1.43	Sep09	21

N'LANDS

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.50 Jan33	-2.88	Mar12	10	Richest	1	2.50 Jan33	-1.79	Mar12	10
	2	2.75 Jan47	-1.95	Feb14	4		2	4.00 Jan37	-1.75	Apr05	14
	3	4.00 Jan37	-1.37	Apr05	14		3	3.75 Jan42	-1.35	May10	15
	3	3.75 Jan23	0.38	Jan06	11		3	1.75 Jul23	-0.98	Mar13	16
	2	2.00 Jul24	1.67	Mar14	13		2	3.75 Jan23	-0.96	Jan06	11
Cheapest	1	3.75 Jan42	2.46	May10	15	Cheapest	1	2.00 Jul24	-0.79	Mar14	13

SPAIN

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	5.40 Jan23	-2.76	Jan13	17	Richest	1	4.80 Jan24	-1.21	Sep08	15
	2	5.75 Jul32	-1.39	Jan01	16		2	4.40 Oct23	-1.21	May13	18
	3	4.40 Oct23	-1.18	May13	18		3	5.40 Jan23	-1.19	Jan13	17
	4	4.90 Jul40	-0.68	Jun07	13		4	4.65 Jul25	-1.16	Feb10	14
	5	4.80 Jan24	-0.64	Sep08	15		5	3.80 Apr24	-1.14	Jan14	21
	5	5.90 Jul26	0.18	Mar11	14		5	4.90 Jul40	-0.43	Jun07	13
	4	5.15 Oct44	0.42	Oct13	6		4	5.15 Oct44	-0.41	Oct13	6
	3	2.75 Oct24	0.93	Jun14	18		3	4.70 Jul41	-0.38	Sep09	12
	2	3.80 Apr24	1.20	Jan14	21		2	4.20 Jan37	-0.28	Jan05	16
Cheapest	1	5.15 Oct28	1.55	Jul13	12	Cheapest	1	4.00 Oct64	0.00	Sep14	1

BELGIUM

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	5.00 Mar35	-1.24	May04	19	Richest	1	5.00 Mar35	-1.20	May04	19
	2	2.60 Jun24	-1.00	Jan14	15		2	4.00 Mar32	-1.19	Mar12	8
	3	3.00 Jun34	0.04	Mar14	6		3	2.60 Jun24	-1.19	Jan14	15
	4	4.00 Mar32	0.11	Mar12	8		4	4.50 Mar26	-1.16	Jun11	9
	4	3.75 Jun45	0.12	Sep13	5		4	2.25 Jun23	-1.12	Jan13	14
	3	4.25 Mar41	0.57	Apr10	14		3	3.00 Jun34	-1.09	Mar14	6
	2	4.50 Mar26	0.62	Jun11	9		2	4.25 Mar41	-0.79	Apr10	14
Cheapest	1	2.25 Jun23	1.26	Jan13	14	Cheapest	1	3.75 Jun45	-0.76	Sep13	5

Source: Citi Research

UK Relative Value Screen

Figure 34. Coupon adjusted spread (CAS) to fitted curve and swap curve by maturity (6m history)

ALL

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.75 Sep21	-2.26	Mar11	28
	2	4.25 Sep39	-2.07	Mar09	20
	3	3.75 Sep19	-1.90	Jul09	28
	4	3.75 Sep20	-1.72	Jun10	24
	5	4.25 Dec55	-1.65	May05	24
	5	4.25 Dec27	0.99	Sep06	31
	4	4.25 Jun32	1.20	May00	35
	3	4.25 Dec40	1.22	Jun10	25
	2	1.25 Jul18	1.88	Feb13	34
Cheapest	1	2.00 Jan16	2.92	Nov10	32

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	1.00 Sep17	-2.07	Mar12	32
	2	5.00 Mar18	-1.75	May07	35
	3	1.75 Jan17	-1.71	Aug11	29
	4	3.75 Sep19	-1.63	Jul09	28
	5	1.25 Jul18	-1.61	Feb13	34
	5	4.25 Dec55	2.77	May05	24
	4	3.50 Jul68	2.80	Jun13	14
	3	4.25 Dec46	3.01	May06	21
	2	4.25 Dec49	3.03	Sep08	20
Cheapest	1	3.75 Jul52	3.11	Sep11	22

2yr - 7yr

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.75 Sep21	-2.43	Mar11	28
	2	3.75 Sep19	-2.00	Jul09	28
	3	3.75 Sep20	-1.84	Jun10	24
	4	4.75 Mar20	-1.67	Mar05	33
	5	1.00 Sep17	-1.62	Mar12	32
	5	1.75 Jul19 (5y)	-0.83	Nov13	30
	4	2.00 Jul20	-0.68	Sep14	0
	3	2.00 Jul20	-0.57	Sep14	9
	2	5.00 Mar18	0.09	May07	35
Cheapest	1	1.25 Jul18	1.55	Feb13	34

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	1.00 Sep17	-2.07	Mar12	32
	2	5.00 Mar18	-1.75	May07	35
	3	1.75 Jan17	-1.71	Aug11	29
	4	3.75 Sep19	-1.63	Jul09	28
	5	1.25 Jul18	-1.61	Feb13	34
	5	4.75 Mar20	-1.29	Mar05	33
	4	1.75 Jul19 (5y)	-1.25	Nov13	30
	3	3.75 Sep21	-0.94	Mar11	28
	2	2.00 Jul20	-0.26	Sep14	9
Cheapest	1	2.00 Jul20	1.00	Sep14	0

7yr - 15yr

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	5.00 Mar25 (G)	-1.74	Sep01	35
	2	1.75 Sep22	-1.58	Jun12	29
	3	4.00 Mar22	-1.41	Feb09	38
	4				
	5				
	5				
	4				
	3	2.25 Sep23	-0.03	Jun13	27
	2	2.75 Sep24 (10y)	0.48	Mar14	20
Cheapest	1	4.25 Dec27	0.80	Sep06	31

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	5.00 Mar25 (G)	-1.21	Sep01	35
	2	2.75 Sep24 (10y)	-1.11	Mar14	20
	3	2.25 Sep23	-0.97	Jun13	27
	4				
	5				
	5				
	4				
	3	1.75 Sep22	-0.93	Jun12	29
	2	4.00 Mar22	-0.84	Feb09	38
Cheapest	1	4.25 Dec27	-0.69	Sep06	31

>15yr

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.50 Jul68	-6.52	Jun13	14
	2	3.50 Jan45	-2.73	Sep14	0
	3	4.25 Sep39	-2.54	Mar09	20
	4	4.25 Dec55	-2.16	May05	24
	5	3.50 Jan45	-1.52	Jun14	10
	5	4.00 Jan60	-0.20	Oct09	21
	4	4.50 Sep34	-0.12	Jun09	28
	3	4.25 Mar36	0.70	Feb03	26
	2	4.25 Jun32	0.84	May00	35
Cheapest	1	4.25 Dec40	0.88	Jun10	25

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.75 Dec30	0.05	Oct07	32
	2	4.25 Jun32	0.81	May00	35
	3	4.50 Sep34	1.58	Jun09	28
	4	3.50 Jan45	1.70	Sep14	0
	5	4.25 Mar36	2.16	Feb03	26
	5	4.25 Dec55	2.77	May05	24
	4	3.50 Jul68	2.80	Jun13	14
	3	4.25 Dec46	3.01	May06	21
	2	4.25 Dec49	3.03	Sep08	20
Cheapest	1	3.75 Jul52	3.11	Sep11	22

Source: Citi Research

4 Week Auction Calendar: Euro, UK and US

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

Figure 35. Auction calendar for the next four weeks (provisional): gross issuance (local currency, billions) and DV01 (USD million/bp)

Date	Country	Nominal Size (Local Ccy, bn)	Issue Details	DV01 $million/bp	Approx. Number 10yr Futures TYZ4 (UST)	G Z4 (Gilt)	RXZ4 (Bund)
04 Nov (Tue)	Austria	1.1	RAGB 0.25% Oct19 and 1.65% Oct24 (issue confirmed, size €1.1bn)				6k
04 Nov (Tue)	UK	0.8	0.5% Index-linked Treasury Gilt 2050 (issue and size confirmed)			37k	
05 Nov (Wed)	Germany	4.0	Bobl Oct19 re-opening (issue and size confirmed)				16k
06 Nov (Thu)	France	6.5	OAT 10yr and 30yr (estimated tenors and size)				76k
06 Nov (Thu)	Spain	3.0	Bono 5yr and 10yr (estimated tenors and size)				19k
			Weekly $DV01 of Issuance	23.7			
			Total Number of Futures Contracts		0k	37k	116k

Date	Country	Nominal Size (Local Ccy, bn)	Issue Details	DV01 $million/bp	Approx. Number 10yr Futures TYZ4 (UST)	G Z4 (Gilt)	RXZ4 (Bund)
10 Nov (Mon)	US	27.0	3-year		85k		
11 Nov (Tue)	Germany	2.0	New 5yr Boblei (estimated tenor and size)				15k
11 Nov (Tue)	Netherlands	2.0	DSL Jan47 re-opening (issue confirmed, size €1-2bn)				39k
12 Nov (Wed)	Germany	5.0	New Schatz Dec16 (issue and size confirmed)				8k
12 Nov (Wed)	US	24.0	10-year		257k		
13 Nov (Thu)	Italy	7.8	BTP Jan18, 2.15% Dec21 and 15yr (estimated tenor and size)				48k
13 Nov (Thu)	UK	3.2	2.75% Treasury Gilt 2024 (issue confirmed, estimated size)			30k	
13 Nov (Thu)	US	16.0	30-year		353k		
			Weekly $DV01 of Issuance	76.9			
			Total Number of Futures Contracts		696k	30k	111k

Date	Country	Nominal Size (Local Ccy, bn)	Issue Details	DV01 $million/bp	Approx. Number 10yr Futures TYZ4 (UST)	G Z4 (Gilt)	RXZ4 (Bund)
20 Nov (Thu)	France	9.0	OAT 2yr and 5yr, index-linked OAT (estimated tenors and size)				33k
20 Nov (Thu)	Spain	2.8	Bono 3yr and 5yr (estimated tenors and size)				8k
20 Nov (Thu)	UK	1.1	0.625% Index-linked Treasury Gilt 2042 (issue confirmed, estimated size)			40k	
20 Nov (Thu)	US	13.0	10-Year TIPS (re-opening)		149k		
			Weekly $DV01 of Issuance	24.3			
			Total Number of Futures Contracts		149k	40k	41k

Date	Country	Nominal Size (Local Ccy, bn)	Issue Details	DV01 $million/bp	Approx. Number 10yr Futures TYZ4 (UST)	G Z4 (Gilt)	RXZ4 (Bund)
24 Nov (Mon)	US	29.0	2-year		91k		
25 Nov (Tue)	Netherlands	2.5	DSL Jul24 re-opening (issue confirmed, size €1.5-2.5bn)				19k
25 Nov (Tue)	Italy	2.5	CTZ Aug16 (estimated issue and size)				4k
25 Nov (Tue)	Italy	1.2	BTPei (estimated size)				9k
25 Nov (Tue)	US	13.0	2-Year FRN (re-opening)		41k		
25 Nov (Tue)	US	35.0	5-year		185k		
26 Nov (Wed)	Germany	4.0	Bund Aug24 re-opening (issue and size confirmed)				30k
26 Nov (Wed)	US	29.0	7-year		219k		
27 Nov (Thu)	Italy	7.5	New BTP Dec19 and Dec24 (estimated issue and size)				38k
27 Nov (Thu)	Italy	1.5	CCTeu Dec20 (estimated size)				6k
			Weekly $DV01 of Issuance	58.9			
			Total Number of Futures Contracts		537k	0k	105k

Source: DMOs, Citi Research

EMU: Coupons & Redemptions (Next 2mths)

Figure 36. EMU-11 Bond redemptions over the next two months (€bn)

	Redemptions = €78bn										
Redemptions	DEU 14	FRA 0	NLD 0	ITA 42	ESP 22	BEL 0	AUT 0	FIN 0	PRT 0	GRC 0	IRL 0
(Fri) 31-Oct-14					21.8						
(Sat) 15-Nov-14				14.5							
(Mon) 01-Dec-14				12.3							
(Fri) 12-Dec-14	14.0										
(Wed) 31-Dec-14				15.0							

Source: DMOs, Bloomberg, Citi Research

This table is on a calendar-date basis

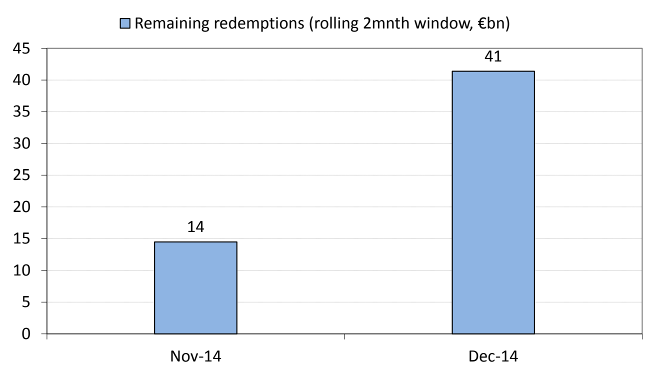
Figure 37. EMU-11 Coupon payments over the next two months (€bn)

	Coupons = €17bn									
Coupons	DEU 0	FRA 1	NLD 0	ITA 9	ESP 7	BEL 0	AUT 0	PRT 0	GRC 0	IRL 0
(Fri) 31-Oct-14					7.0					
(Sat) 01-Nov-14				5.9						
(Sat) 15-Nov-14				1.0						
(Sat) 22-Nov-14							0.3			
(Tue) 25-Nov-14		0.7								
(Sun) 30-Nov-14					0.1					
(Mon) 01-Dec-14				1.4						
(Thu) 11-Dec-14				0.0						
(Mon) 15-Dec-14				0.7						

Source: DMOs, Bloomberg, Citi Research

This table is on a calendar-date basis

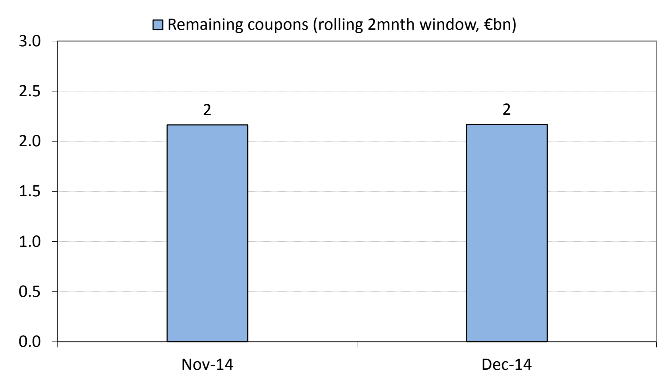
Figure 38. EMU-11 remaining redemptions over the next 2months (€bn)



Source: DMOs, Bloomberg, Citi Research

This chart is on a calendar-date basis

Figure 39. EMU-11 remaining coupons over the next 2months (€bn)



Source: DMOs, Bloomberg, Citi Research

This chart is on a calendar-date basis

ESP and ITA Bill Issuance Projections

This page contains our projections for Spanish and Italian bill supply in 2014.

Auction calendar for the next four weeks

Figure 40. 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 2	12 Nov (Wed)	Italy	12 month (13 November 2015; issue confirmed, estimated size)	7.5
			Total Size in Week 2	7.5
Week 3	18 Nov (Tue)	Spain	6month (16 May 2015) and 12month (new bill) - tenors confirmed, estimated issue and size	5
			Total Size in Week 3	5.0
Week 4	25 Nov (Tue)	Spain	3month (20 Feb 2015) and 9month (21 Aug 2015) - tenors confirmed, estimated issue and size	3.75
	26 Nov (Wed)	Italy	6 month (29 May 2015; issue confirmed, estimated size)	7.5
			Total Size in Week 4	11.3

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

Source: DMOs, Citi Research

This table is on a calendar-date basis

2014 projections for bill supply

Figure 41. 2014 Italy and Spain Bill Supply – Citi Forecast (Euro Billion)

SPAIN	3m	6m	9m	12m	18m	Gross Supply	Redemptions	NCR
Jan	1.0	1.0	2.2	3.1		7	8	-1
Feb	0.9	0.9	2.2	3.6		8	11	-4
Mar	1.3	1.0	2.0	3.5		8	10	-2
Apr	1.1	1.2	2.0	3.7		8	12	-4
May	0.9	1.4	2.9	3.8		9	8	1
Jun	0.9	0.9	3.0	4.6		9	14	-4
Jul	0.6	1.0	2.1	4.1		8	8	
Aug	1.1	1.0	2.4	3.6		8	8	
Sep	1.0	1.3	3.1	4.3		10	7	2
Oct	1.0	1.2	3.3	2.9		8	9	
Nov	1.0	1.0	2.8	4.0		9	8	1
Dec	1.0	1.0	2.8	4.0		9	7	2
Total	11.8	12.9	30.5	45.1		100	110	-9

ITALY	3m*	6m	9m	12m	Flexible BOT	Gross Supply	Redemptions	NCR
Jan		8.1		9.3		17	20	-2
Feb		8.6		8.0		17	19	-3
Mar		8.3		7.6		16	16	-1
Apr		7.7		7.5		15	17	-2
May		7.2		7.2		14	14	
Jun		8.3		7.2		15	16	
Jul		7.2		7.2		14	15	-1
Aug		7.5		7.7		15	17	-2
Sep		7.7		9.1		17	18	-1
Oct		6.5		8.0		15	17	-2
Nov		7.5		7.5		15	14	1
Dec		7.0		7.0		14	14	
Total		91.5		93.1		185	197	-13

*3month bills will 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 Research

This table is on a calendar-date basis

Inflation Forecasts, Carry & Weekly Changes

Figure 42. 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
Sep 14	117.43	0.4	0.3	125.88	-0.4	0.2	257.60	0.2	2.3	238.03	0.1	1.7
Oct 14	117.37	-0.0	0.4	125.79	-0.1	0.3	257.80	0.1	2.3	237.80	-0.1	1.8
Nov 14	117.22	-0.1	0.3	125.76	-0.0	0.3	258.00	0.1	2.3	237.50	-0.1	1.9
Dec 14	117.60	0.3	0.3	126.04	0.2	0.2	258.80	0.3	2.1	237.20	-0.1	1.8
Jan 15	116.35	-1.1	0.4	125.29	-0.6	0.2	257.50	-0.5	1.9	238.30	0.5	1.9
Feb 15	116.78	0.4	0.4	126.07	0.6	0.3	259.00	0.6	1.9	239.30	0.4	1.9

Source: Citi Research, Bloomberg

Shaded = Already released

Figure 43. US TIPS Inflation-linked Carry (based on forecasts above) – One week changes

Bond	RY (%)	Chg (bp)	Carry-adj chg	Carry: RY (bp) 1 Dec	1 Jan	1 Feb	*Reference Conventional*	BE (bp)	Chg (bp)	Carry-adj chg	Carry: BE (bp) 1 Dec	1 Jan	1 Feb	ZC Swap - BE Spread (bp)	Chg (bp)
Repo (%)				*0.10*	*0.10*	*0.10*									
TIPS 1/16	-0.72	-8	-4	0	-16	-38	*US-2.625-02/29/16*	95	9	5	-1	-18	-41	5	-7
TIPS 4/16	-0.65	-6	-2	0	-12	-29	*US-2.000-04/30/16*	97	9	5	-1	-15	-33	2	-5
TIPS 7/16	-0.99	-4	-1	-1	-14	-30	*US-4.875-08/15/16*	141	8	5	-3	-17	-35	12	-1
TIPS 1/17	-0.69	0	2	0	-8	-19	*US-3.125-01/31/17*	129	5	2	-2	-12	-25	17	3
TIPS 4/17	-0.51	2	4	1	-6	-14	*US-0.875-04/30/17*	121	5	2	-1	-10	-21	20	2
TIPS 7/17	-0.69	2	4	0	-7	-15	*US-4.750-08/15/17*	154	3	0	-2	-12	-23	18	4
TIPS 1/18	-0.37	4	6	1	-4	-9	*US-3.500-02/15/18*	144	2	-0	-2	-9	-18	21	4
TIPS 4/18	-0.22	5	7	1	-2	-7	*US-0.625-04/30/18*	137	0	-1	-1	-8	-16	23	4
TIPS 7/18	-0.37	5	7	1	-3	-8	*US-4.000-08/15/18*	159	-0	-2	-2	-9	-17	22	5
TIPS 1/19	-0.15	7	8	1	-2	-6	*US-2.750-02/15/19*	158	-1	-3	-2	-8	-15	18	5
TIPS 4/19	-0.04	7	7	1	-1	-5	*US-1.625-04/30/19*	153	0	-1	-1	-7	-13	20	3
TIPS 7/19	-0.15	6	7	1	-2	-5	*US-3.625-08/15/19*	170	0	-1	-2	-7	-14	20	3
TIPS 1/20	0.05	6	7	1	-1	-3	*US-3.625-02/15/20*	160	-1	-2	-1	-6	-12	27	3
TIPS 7/20	0.05	6	6	1	-1	-3	*US-2.625-08/15/20*	175	0	-1	-2	-6	-12	24	2
TIPS 1/21	0.20	5	6	1	0	-2	*US-3.625-02/15/21*	168	0	-1	-1	-6	-11	29	1
TIPS 7/21	0.19	5	5	1	0	-2	*US-2.125-08/15/21*	179	1	-0	-1	-5	-10	28	0
TIPS 1/22	0.31	4	5	1	0	-1	*US-2.000-02/15/22*	173	-0	-1	-1	-5	-9	32	1
TIPS 7/22	0.29	4	5	1	0	-1	*US-1.625-08/15/22*	181	-0	-1	-1	-5	-9	33	1
TIPS 1/23	0.37	4	4	1	0	-1	*US-2.000-02/15/23*	179	-1	-2	-1	-4	-8	33	1
TIPS 7/23	0.35	3	3	1	0	-1	*US-2.500-08/15/23*	186	-0	-1	-1	-4	-8	34	0
TIPS 1/24	0.42	3	4	1	0	-1	*US-2.750-02/15/24*	183	-1	-2	-1	-4	-8	35	1
TIPS 1/25	0.48	2	3	1	0	-1	*US-7.625-02/15/25*	179	-0	-1	-1	-4	-8	44	1
TIPS 1/26	0.54	2	2	1	0	0	*US-6.000-02/15/26*	185	-0	-1	-1	-4	-7	42	0
TIPS 1/27	0.60	0	1	1	1	0	*US-6.625-02/15/27*	185	1	0	-1	-4	-7	45	-0
TIPS 1/28	0.64	1	1	1	1	0	*US-6.125-11/15/27*	187	0	-1	-1	-4	-7	46	1
TIPS 4/28	0.62	1	1	1	1	0	*US-5.500-08/15/28*	194	0	-1	-1	-4	-6	38	0
TIPS 1/29	0.65	0	0	1	1	0	*US-5.250-02/15/29*	193	0	-0	-1	-3	-6	42	0
TIPS 4/29	0.66	0	1	1	1	0	*US-5.250-02/15/29*	193	0	-0	-1	-3	-6	41	0
TIPS 4/32	0.76	-0	0	1	1	0	*US-5.375-02/15/31*	189	-0	-1	-1	-3	-6	51	1
TIPS 2/40	0.89	-3	-3	1	1	0	*US-4.625-02/15/40*	202	2	1	-1	-2	-4	45	-0
TIPS 2/41	0.90	-3	-2	1	1	0	*US-4.750-02/15/41*	202	1	1	-1	-2	-4	46	0
TIPS 2/42	0.95	-3	-3	1	0	0	*US-3.125-02/15/42*	205	1	1	-1	-2	-4	43	0
TIPS 2/43	0.94	-3	-3	1	0	0	*US-3.125-02/15/43*	208	2	1	-1	-2	-4	41	-0
TIPS 2/44	0.94	-3	-3	1	0	0	*US-3.625-02/15/44*	208	1	1	-1	-2	-4	42	0

Source: Citi Research, Bloomberg

Figure 44. EUR Inflation-linked Carry (based on forecasts above) – One week changes

Bond	RY (%)	Chg (bp)	Carry-adj chg	Carry: RY (bp) 1 Dec	1 Jan	1 Feb	*Reference Conventional*	BE (bp)	Chg (bp)	Carry-adj chg	Carry: BE (bp) 1 Dec	1 Jan	1 Feb	ZC Swap - BE Spread (bp)	Chg (bp)	Beta
Repo (%)				*0.00*	*0.00*	*-0.01*										
BUNDei16	-0.21	3	-0	29	26	16	*BUND 1/16*	15	-2	1	30	27	17	-1	-2	-1.63
BTANi16	-0.62	7	5	-25	-35	-42	*FFRG 4/16*	61	-7	-6	-25	-35	-42	19	3	-0.49
BTPei16	0.14	6	3	24	23	17	*BTP 8/16*	55	-2	-1	21	16	127	21	2	0.82
OATi17	-0.66	-0	-1	-16	-22	-25	*FFRG 4/17*	68	-1	-0	-16	-22	-26	25	-0	0.11
BTPei17	0.24	4	2	16	15	12	*BTP 8/17*	62	-0	1	13	10	102	20	-0	0.84
BOBLei18	-0.53	1	0	11	9	3	*BUND 1/18*	50	-2	-1	11	9	4	14	1	0.42
OATei18	-0.72	-1	-2	10	7	2	*FFRG 4/18*	79	-2	-1	10	7	1	21	0	0.64
BTPei18	0.42	0	-1	12	12	10	*BTP 8/18*	65	3	4	10	7	63	27	-3	0.89
OATi19	-0.63	-1	-2	-9	-12	-14	*FFRG 4/19*	84	-3	-3	-10	-13	-15	29	3	0.60
BTPei19	0.51	-2	-3	10	10	8	*BTP 9/19*	72	4	5	8	5	1	31	-4	0.87
BUNDei20	-0.62	-3	-4	7	5	2	*BUND 1/20*	77	-0	0	7	5	1	16	0	0.68
OATei20	-0.60	-4	-5	7	5	2	*FFRG 4/20*	99	-1	-0	6	4	0	19	-1	0.72
OATi21	-0.47	-6	-6	-6	-8	-9	*FFRG 4/21*	104	0	1	-7	-9	-11	27	-0	0.71
BTPei21	0.91	-4	-5	8	8	8	*BTP 9/21*	91	4	4	5	3	0	30	-3	0.98
OATei22	-0.41	-10	-10	5	4	2	*FFRG 4/21*	97	4	4	4	2	-1	35	-4	0.76
BUNDei23	-0.49	-7	-8	4	3	1	*BUND 1/22*	93	3	3	4	2	0	31	-2	0.76
OATi23	-0.29	-9	-9	-5	-6	-7	*FFRG 10/23*	128	2	2	-6	-8	-10	18	-1	0.68
BTPei23	1.23	-4	-5	7	7	7	*BTP 8/23*	104	2	2	4	2	27	32	-0	1.00
OATei24	-0.15	-9	-9	4	4	2	*FFRG 10/23*	115	2	2	3	1	-1	31	-2	0.72
BTPei24	1.38	-3	-4	6	7	7	*BTP 9/24*	110	0	1	4	2	-1	34	1	0.91
SPGBEI24	0.95	-0	-1	5	6	5	*SPAG 4/24*	111	-2	-2	3	2	-1	33	2	0.84
BTPei26	1.63	-4	-5	5	6	7	*BTP 3/26*	110	1	1	3	1	-1	46	1	0.98
OATei27	0.09	-11	-11	4	3	2	*FFRG 4/26*	132	3	3	3	1	-1	31	-1	0.70
OATi29	0.09	-10	-11	-3	-4	-4	*FFRG 4/29*	157	1	1	-4	-6	-8	23	2	0.65
BUNDei30	-0.14	-8	-8	3	2	1	*BUND 1/30*	138	0	0	2	0	-1	29	3	0.61
OATei30	0.29	-13	-14	3	3	2	*FFRG 5/30*	153	4	4	2	0	-1	23	-2	0.64
OATei32	0.31	-13	-14	3	3	2	*FFRG 5/30*	151	5	5	2	1	-1	30	3	0.64
BTPei35	1.99	-4	-4	3	4	5	*BTP 8/34*	144	-0	-0	1	0	14	42	4	0.81
OATei40	0.51	-14	-14	2	2	2	*FFRG 4/41*	168	3	3	1	0	-1	24	0	0.66
BTPei41	2.33	-2	-3	3	4	4	*BTP 9/40*	143	-2	-2	1	0	-2	50	6	0.92

Source: Citi Research

Figure 45. UK Gilts Inflation-linked Carry (based on forecasts above) – One week changes

Bond	RY (%)	Chg (bp)	Carry-adj chg	Carry: RY (bp) 1 Dec	1 Jan	1 Feb	*Reference Conventional*	BE (bp)	Chg (bp)	Carry-adj chg	Carry: BE (bp) 1 Dec	1 Jan	1 Feb	ZC Swap - BE Spread (bp)	Chg (bp)
Repo (%)				*0.43*	*0.44*	*0.44*									
UKTi Jul16	-1.71	-2	-2	4	9	14	*UKT 9/16*	232	-4	-3	3	7	11	41	-3
UKTi Nov17	-1.46	1	-1	3	0	-3	*UKT 3/18*	256	-4	-3	1	-4	-9	19	-11
UKTi Nov19	-1.08	3	2	2	1	0	*UKT 9/19*	256	-4	-4	1	-3	-6	33	1
UKTi Apr20	-0.97	1	0	3	5	8	*UKT 3/20*	255	-1	-1	1	1	2	28	-3
UKTi Nov22	-0.80	2	1	2	2	1	*UKT 3/22*	266	-2	-2	0	-2	-5	38	0
UKTi Mar24	-0.61	1	0	2	2	1	*UKT 3/25*	282	-2	-2	0	-2	-4	20	-4
UKTi Jul24	-0.61	2	1	2	4	6	*UKT 3/25*	281	-2	-2	0	0	0	33	1
UKTi Nov27	-0.53	1	0	1	1	1	*UKT 12/27*	298	-1	-1	0	-2	-4	32	0
UKTi Mar29	-0.46	2	1	1	1	1	*UKT 12/30*	308	-2	-2	0	-2	-3	21	-2
UKTi Jul30	-0.47	-0	-0	1	3	4	*UKT 6/32*	317	-0	-0	0	0	0	23	-9
UKTi Nov32	-0.48	1	0	1	1	1	*UKT 6/32*	318	-1	-1	0	-2	-3	29	-0
UKTi Mar34	-0.43	1	1	1	1	1	*UKT 9/34*	321	-1	-1	0	-2	-3	24	-1
UKTi Jan35	-0.44	1	1	1	2	3	*UKT 3/36*	328	-1	-1	0	-1	-1	23	-1
UKTi Nov37	-0.43	3	3	1	1	1	*UKT 12/38*	329	-2	-2	0	-2	-3	25	2
UKTi Mar40	-0.42	4	3	1	1	1	*UKT 9/39*	330	-3	-3	0	-2	-3	22	4
UKTi Nov42	-0.44	3	3	1	1	1	*UKT 12/42*	335	-2	-2	0	-2	-3	21	2
UKTi Mar44	-0.39	3	3	1	1	1	*UKT 1/44*	335	-2	-2	0	-2	-3	18	1
UKTi Nov47	-0.41	3	3	1	1	1	*UKT 12/46*	335	-2	-2	0	-2	-3	20	1
UKTi Mar50	-0.40	3	3	1	1	1	*UKT 12/49*	333	-2	-2	0	-1	-2	18	1
UKTi Mar52	-0.39	3	3	0	1	1	*UKT 7/52*	334	-2	-2	0	-1	-2	16	0
UKTi Nov55	-0.42	2	2	0	1	1	*UKT 12/55*	334	-2	-2	0	-1	-2	18	0
UKTi Mar62	-0.41	2	2	0	0	0	*UKT 1/60*	334	-2	-2	0	-1	-2	17	-0
UKTi Mar68	-0.41	2	2	0	0	0	*UKT 7/68*	335	-2	-2	0	-1	-2	16	-0

Source: Citi Research

Summary of Recent Publications

Date	Publication	Topic	Page	Region
27-Oct-14	NOTE	European Flow Monitor: Net buying only in Italy last week	-	EUR
23-Oct-14	European Weekly	Bund: Where Now?	3	EUR
		EGB Strategy: Where next for the periphery	7	EUR
		UK Rates – Extend into super-longs	9	UK
		Targeting Rates with Swaption Flies	11	EUR
		Time to think differently about SSA spreads	13	EUR
		Covered Bond Strategy: CBPP3 and market divergence	15	EUR
23-Oct-14	NOTE	Weekly Supply Monitor: Euro, UK and US Supply Outlook	-	Global
23-Oct-14	NOTE	Covered Bond Strategy: AQR & Stress Test Results	-	EUR
22-Oct-14	NOTE	Euro SSA Strategy: Time To Think Differently About SSA Spreads	-	EUR
21-Oct-14	NOTE	European Interest Rate Strategy: Bund: Where Now?	-	EUR
20-Oct-14	NOTE	European Flow Monitor	-	EUR
17-Oct-14	NOTE	European Rates Strategy: EUR: Forwards and Forward Guidance	-	EUR
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		EGBs: Positioning, fundamentals & supply	5	EUR
		UK Rates – Blame the Fed	10	UK
		EMIR and Pension Funds: More Time is Needed	12	EUR
		Euro inflation: triple whammy	15	EUR
		Euro SSA Strategy: Spanish regions and the Catalonia debate:	16	EUR
		Covered Bond Expansion	18	EUR
17-Oct-14	NOTE	EUR Rates Strategy: EMIR & Pension Funds: More Time is Needed	-	EUR
16-Oct-14	NOTE	Weekly Supply Monitor: Euro, UK and US Supply Outlook	-	Global
16-Oct-14	NOTE	Euro Inflation-linked Index Projection	-	EUR
16-Oct-14	NOTE	EMU Month-end Index Projections	-	EUR
16-Oct-14	NOTE	Euro Covered Bond and SSA Strategy: LCR in Europe – The Different Path	-	EUR
14-Oct-14	NOTE	UK Inflation Strategy: The storm hitting IL gilts: in pictures	-	UK
13-Oct-14	NOTE	S&P revises France's AA outlook to negative: market implications	-	EUR
13-Oct-14	NOTE	European Flow Monitor: Net demand for Italy lowest in a year	-	EUR
10-Oct-14	NOTE	One less AAA in the euro area – Finland downgraded by S&P	-	EUR
9-Oct-14	European Weekly	Carry is king on the EUR curve but it has gotten poorer	3	EUR
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		Euro Inflation: Supply-driven dislocations	9	EUR
		BNG – the sustainability of the rally	11	EUR

Appendix A-1

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