

European Rates Weekly

Assessing Near-Term Drivers

- **Where next for Bunds?** In our view, ECB's QE will most likely pull Bund yields a bit lower. We have adjusted our Q4 target from 0.75% to 0.65%. More interesting is the Bund trajectory in the aftermath of QE. Inflation premia may increase, but the prospects of substantially higher inflation prints should remain low, thus providing limited domestic fuel to any bearish correction.
- **Near-term drivers still favour Spain vs Italy:** Next week brings sizeable coupon and redemption payments for the Spanish market (totaling €27.8bn) which should keep Bonos supported in our view. Looking further ahead, the country-level split in PMI data are available in early November which are likely to continue to point to better growth prospects for Spain vs Italy.
- **UK – extend into super-longs:** Amidst all the volatility, the DMO plan to re-open the 2068 gilt next week. Outright yield levels, and forwards, have richened ahead of the syndication, but the 50yr sector looks good value vs 30s. In particular, the 30s50s swap spread box is at the cheap-end of a well-defined trading range.
- **EUR volatility:** Weak rate of economic activity, ultra-low level of inflation and structural issues in the governance of the Eurozone argue for subdued realized rate vol in the medium term. A relatively safe strategy to play this scenario is by means of swaption flies, in our view. We show a simple choice methodology which ranks flies via payout ratios and rolldown.
- **Want to be long 5yr Germany? KfW offers nearly double the yield:** it is possible nearly to double the yield on offer for exposure to 5yr German credit quality by considering KfW (~ 0.28%) over Bobls (~ 0.16%). Hence although spreads are tight, they are increasingly a large share of the overall yield and we think assessing spreads proportionally can provide further insights when investing in SSAs.
- **CBPP3 market divergence:** CBPP3 has been a main reason for low volatility in covered bond markets during the last few weeks. Yet, the program led to market divergences: non-euro area covered bonds underperformed the euro aggregate covered bond index while issuers from these countries dominated the primary market since CBPP3 announcement.
- **Supply:** EGB supply comes from Italy (estimated €11.2bn) and Germany (€4bn) next week. The US Treasury will issue around \$108bn across the 2yr, 5yr and 7yr conventional bonds and 2yr FRNs. The UK DMO will issue an estimated £4bn of the 3.5% Treasury Gilt 2068 via syndication next Tuesday.

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Bund: Where Now?

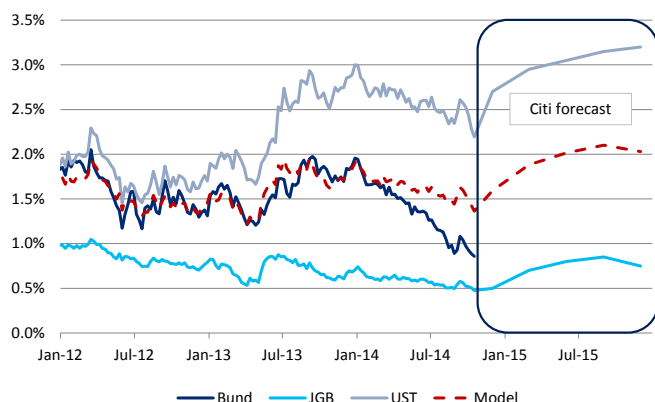
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Where will Bunds go in the immediate aftermath of a likely ECB QE? This is the million-dollar question. Can we have a typical re-pricing of inflation expectations in the Eurozone? Or is a flat Bund profile more likely? Can we stay below an already flat forward curve¹?

Bund yields have continued to drop also in October and we've hit new lows at 0.55% on the Dec-14 CTD just few days ago (Aug-24s @0.71%). Aside from the much discussed near-term re-pricing of global growth and the long-term Japan-style scenario for the Eurozone², we think that significant changes in Eurozone's rates markets have been and still are at play.

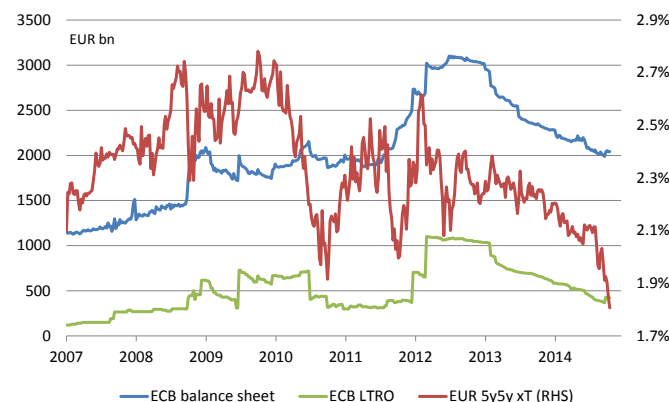
In the past, Bund yields have always reflected trends in UST yields as well as some degree of international "singularities" like Japan. During the course of 2014, however, we've observed a tendency for Bunds to converge towards JGBs in terms of levels and diverge from USTs in terms of sensitivity. Figure 1 shows how Bund yields are decoupling from a linear combination of UST and JGB yields in 2014.

Figure 1. Something's wrong in the state of Europe...



Source: Citi Research

Figure 2. ...ECB's reducing stimulus as inflation expectations collapse



Source: ECB, Citi Research

We attribute part of Bund yields' lost international anchor to a particularly challenging environment for policymakers in the Eurozone. For years, monetary transmission has been impaired in the periphery and optically the sharp decline in inflation expectations does not fit the picture of a decreasing central bank balance sheet very well (Figure 2). On the other hand, the ECB had to delegate the decision on the duration and the size of its own balance sheet to MFIs by changing tender procedure in order to keep the banking sector liquid.

This is one of the reasons for Mr Draghi's ABS and CB purchase programs, i.e. bypassing the banking sector and expanding the balance sheet with "7.1 items" rather than with LTROs. Unfortunately, the success of both programs in terms of growing the ECB's pool of assets back to 2012 levels will depend on several factors like market liquidity, government guarantees and capital requirement regulation. The uncertainty about the effectiveness as well as the implementation (and to some extent the legality) of these monetary policy instruments is – in our view – one of the factors impacting current market valuation in the space of riskless and risky assets.

Expectations of fully-fledged government bonds QE are in the market precisely because of these uncertainties: To some extent the OMT was successful, because Mr Draghi gave investors a sound pretext to buy 10y BTPs at 6% (financed with the

¹ The Bund yield forward to the end of 2015 is at 1.05%.

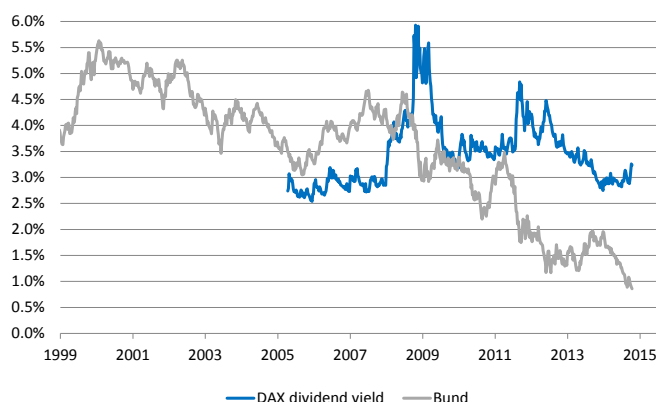
² "Low-for-Longer: Not Even at Half-Time" (30 May-14)

ECB at 1%) in 2012. The situation is different now, with 10y BTPs at 2.50% vs ECB's refi rate at 0%, i.e. the carry has been halved, while the European economic situation has not really improved and there are signs of global growth slowing down.

But while some markets are suspended in QE-limbo – for example DAX dividend yields are hovering above 3% with Bunds below 1% (Figure 3), making the German stock market very interesting from a relative cash-flow perspective³ – other markets are not necessarily pricing in a successful implementation of QE.

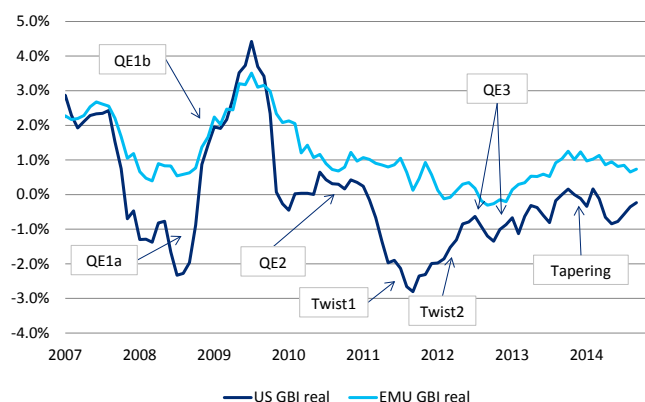
We have already discussed how the Eonia curve is by no means pricing in a meaningful probability of a balance sheet expansion (and hence of QE) in previous research⁴. Also comparing episodes of QE across currencies might help in assessing the success of a potential QE plan by the ECB: The FED successfully managed to improve monetary conditions in the US by lowering real-interest rates across terms (Figure 4 shows the average index yield for US and EMU government bonds deflated by CPI and HICP, respectively).

Figure 3. Bund rally despite unfavorable cross-asset valuation



Source: Citi Research

Figure 4. Real yields are still too high in EMU



Source: Citi Research

Given the already very low level of interest rates and yields in the Eurozone, we either need much higher inflation (almost impossible) or much lower and negative yields across the whole curve (unprecedented) for the ECB to replicate FED's conditions. The alternative scenario – no additional stimulus via QE, despite no improvement in inflation and growth expectations – is very dangerous given the level of market expectations and the likely negative impact on debt sustainability⁵ in the long term.

Higher inflation could come from the FX channel, but the sensitivity of HICP to changes in the Euro REER is too low to expect a meaningful effect in the near term⁶. On the other hand, France and Italy still haven't gone through the painful "internal devaluation" process that is typical of countries that deleverage and/or implement structural reforms. Finally, demand-pull effects are unlikely to materialize as growth stays historically low and negative population dynamics adversely impact both productivity and wage growth (cost-push inflation). In that respect, the stabilization of Citi's inflation surprise indicator (Figure 5) is more likely to signal a convergence of analysts' forecasts towards reality than the other way around.

³ In theory, QE would typically compress risk-premia to zero, thus making all financial assets riskless.

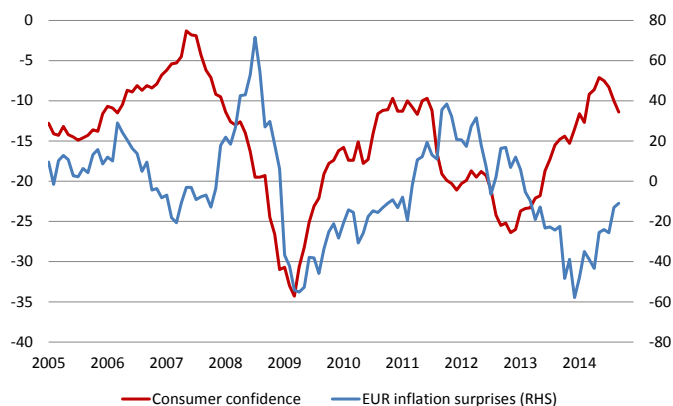
⁴ "EUR: Forwards and Forward Guidance" (17 Oct-14)

⁵ Countries would face higher real-interest expenditures on debt as well as a lower nominal GDP.

⁶ "How Much Will the Weaker Euro Boost Eurozone Growth?" (17 Oct-14)

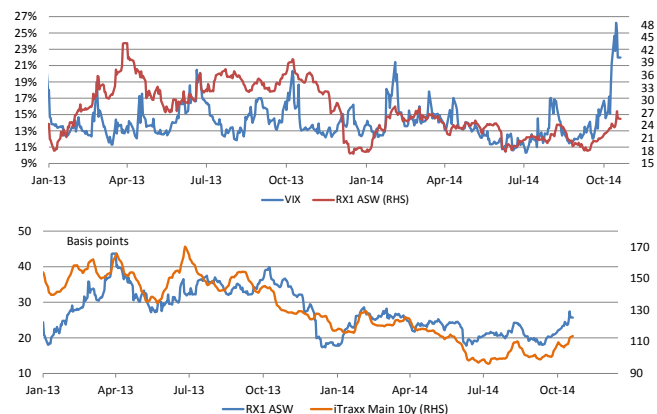
The mix of endogenous and exogenous forces that is behind the most recent underperformance of European risky assets⁷ is so far just a gentle reminder of the persistent fragility of European markets and monetary policy's theoretical and practical boundaries. Markets and policy makers alike have not experienced significant levels of volatility for some time, especially not in spread space. Add a dose of overly complacent positioning and we get an 8-10bp jump in swap spreads over the course of a month, which reflects not only a sudden decline in liquidity⁸, but also an increase in the level of perceived credit risk (Figure 6).

Figure 5. Inflation surprises are improving...



Source: EC, Citi Research

Figure 6. ...liquidity and credit risk are increasing



Source: Markit, Citi Research

Strategy & Trade Recommendation

Let's put all the pieces together:

- Potential growth is forecast⁹ to improve from 0.6% to 0.8% in 2015 (Figure 7). There are chances this number will be revised down due to the weak performance in the 1st half of 2014, though. Furthermore, the long-term trajectory will be negatively influenced by population dynamics.
- Headline inflation is expected¹⁰ to improve from 0.6% to 1.1% in 2015, but core inflation should stay subdued (0.6% on average in 2015). Overall, inflation pressures are likely to be very low in the coming 12-15 months¹¹, thus preventing real interest rates from declining to levels reached in the US during QE.
- ECB's forward guidance should prevent rate hike expectations from materializing, despite the Taylor rule suggesting a full normalization of policy rates over the next three years (Figure 8).
- ECB's QE will most likely pull Bund yields a bit lower from current levels. We have adjusted our Q4 target from 0.75%¹² to 0.65%.

⁷ One month performance: EuroStoxx -10.4%, iTraxx Europe +15bp, BTP/Bund 10y +40bp.

⁸ ["Swap Spreads: Liquidity Matters"](#) (1 Oct-14)

⁹ ["European Commission – Economic Forecast"](#) (Spring 2014)

¹⁰ ["Global Economic Outlook and Strategy"](#) (Sep-14)

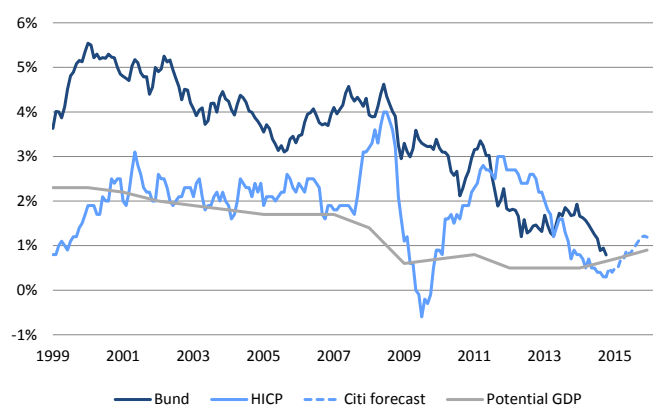
¹¹ ["Low-flation is Here to Stay"](#) (5 Sep-14)

¹² ["Bund: Yields to Dip into QE"](#) (21 Aug-14)

- More interesting is the Bund trajectory in the aftermath of QE. Inflation premia may increase, but the prospects of substantially higher inflation prints should remain low, thus providing limited domestic fuel to any bearish correction. We expect Bund yields to be within a 1.00% - 1.25% range at the end of Dec-15 (current forward at 1.05%). Previously, we were looking for yields at around 1.50% at the end of next year.

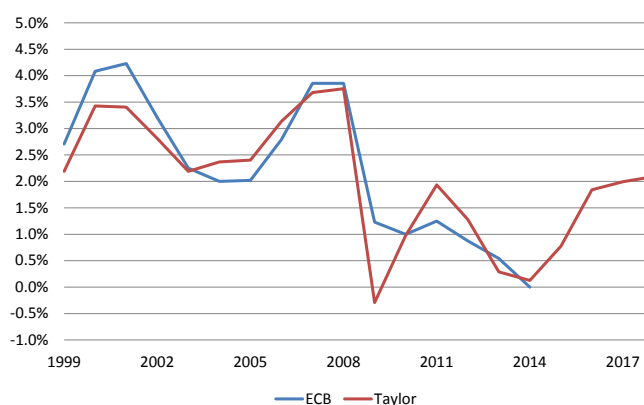
Risks to this scenario come mainly from the global environment, which once again could prove strong in 2015, despite the “usual” year-end early warning signals. Especially, we don’t think that a steady rise in UST yields would leave Bund yields completely unaffected (albeit the sensitivity is likely to be very low).

Figure 7. HICP is expected to rebound somewhat into year-end...



Source: EC, Citi Research

Figure 8. ...but ECB's forward guidance will keep rates very low



Source: Citi Research

EGB Strategy: Where next for the periphery

Spain & Italy: near-term drivers to look out for

Peter Goves

EGB and SSA Strategy

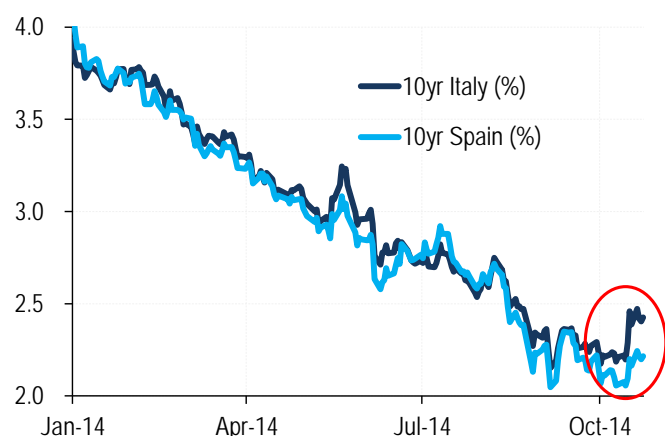
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10yr BTP-Bono spread still relatively wide: Recent weeks have not been kind to periphery markets, and risk assets more generally. However, it is really Italy's underperformance that stands out with 10yr yields still at levels last seen in August, unlike Spain whose yields are within the range seen since September (Figure 9). Consequently, the 10yr BTP-Bono spread remains relatively wide at 32bp.

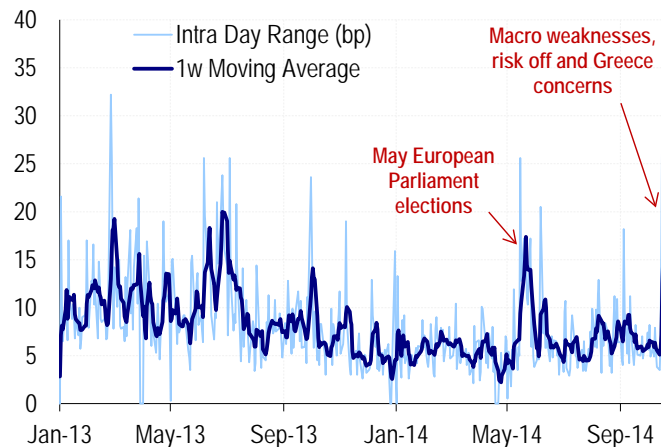
Yield moves mask the degree of *intra-day* volatility: Cumulatively, 10yr Italian yields are 25bp higher and 10yr Spanish yields 15bp higher since the beginning of October, with much of the underperformance seen last week ([Contagion returns](#)). However, to us, it is the rise in the *intra-day* volatility that is most striking as seen in the daily yield ranges shown in Figure 10 for 10yr BTPs. Last Thursday, 10yr BTPs oscillated between 2.74% and 2.42% or 32bp in a single day, the highest intra-day range since February 2013. The 5-day moving average is still around 12bp having peaked at 19bp recently, which is higher than the volatility induced by the European elections earlier in May (Figure 10). But where do we go from here?

Figure 9. 10yr BTP and Bono Yields (%)



Source: Citi Research

Figure 10. Intra-day ranges for 10yr Italy (bp)



Source: Citi Research, Bloomberg

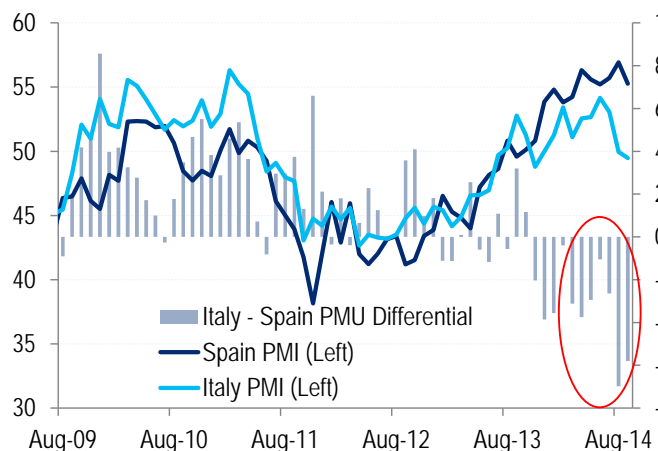
Upcoming PMI data

October flash PMIs surprised to the upside, slightly: Note that the recent flash euro area composite PMI rose by 0.2pt to 52.2 (Mkt. 51.5) in October and the flash manufacturing PMI rose by 0.4pt to 50.7 (Mkt. 49.9) in October.

Country-level split comes in early November: For near-term drivers of the BTP-Bono spread, we look for the country-level split which is available in a couple of weeks. Spanish PMI data has consistently been above that of Italy for 2014 signifying the diverging growth trajectories (Figure 11). In our view, this is one reason that helps justify a degree of Bono outperformance vs BTPs ([Why Spain Is Likely To Decouple The Periphery](#)).

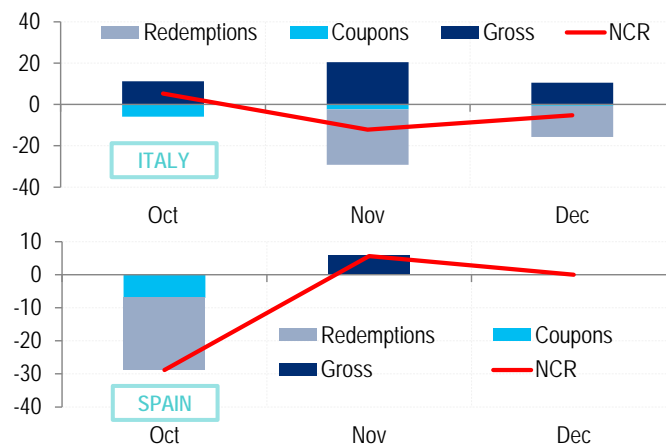
Q3 GDP data: Looking even further ahead, Italy's Q3 GDP data are released on 14th November. H1 data were disappointing, with Q1 GDP at -0.1 QoQ and Q2 GDP at -0.2% QoQ. In their recent Economic Bulletin, the Bank of Italy stated that "indicators now available signal that GDP slipped again in the third quarter, as is suggested by the drop in industrial production". Overall for 2014, Citi expects Italian GDP growth to be -0.4% which compares with Spain at +1.3% ([GEOS](#)).

Figure 11. Composite PMIs for Italy and Spain (Index level & difference)



Source: Citi Research, Haver Analytics

Figure 12. Remaining supply and cash flows for Spain and Italy (€bn)



Source: Citi Research, DMOs

Spanish coupons and redemptions in late October

Next week's cash flows: Away from fundamental drivers, next week there are considerable cash flows that are supportive for Spain: €21.8bn in redemption payments and €7bn in coupon payments. Note that there is no further supply from Spain in October, and just two remaining auctions scheduled for November. Italy on the other hand has around €11.2bn of issuance to carry out next week which is only partially offset by €5.9bn in coupon payments. For the remainder of the month, the net cash requirements are more supportive for Bonos vs BTPs (Figure 12).

Conclusion – near-term still supportive for Spain vs Italy

Considering these various factors, we wouldn't fade Spain's outperformance of Italy just yet. Even if PMI data is slightly better than expected for both sovereigns, on a relative basis, economic and growth dynamics still provide a more favourable backdrop for Spain (which remains at Baa2 positive outlook by Moody's). Moreover, next week's cash flows are also supportive for Spain vs Italy. Therefore, despite the recent Spanish outperformance and the 10yr Bono-BTP spread remaining at relatively wide levels, we believe Bonos are likely to remain supported for now.

UK Rates – Extend into super-longs

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The gilt market remains extremely volatile, making conditions a little tricky ahead of next week's major supply event of the quarter. A good indicator for this is the intra-day trading range for 10yr gilts. For the last 10 days, the intra-day range has averaged 11bp (min 5.9bp, max 22.1bp). **Daily volatility has not spiked to this level, and for such a persistent period, since late-2011.**

Much of the focus recently has been on the front-end, with the market pushing back the anticipated hiking cycle much later into 2015. The MPC minutes confirmed a more dovish outlook, but it will really be the Inflation Report on 12 November that will set the tone for the coming months (although next week's Fed meeting - 29 October – is bound to have an impact). **In the very near-term, however, the domestic focus is likely to switch to the long-end and the gilt syndication.**

Preparing for the super-long syndication

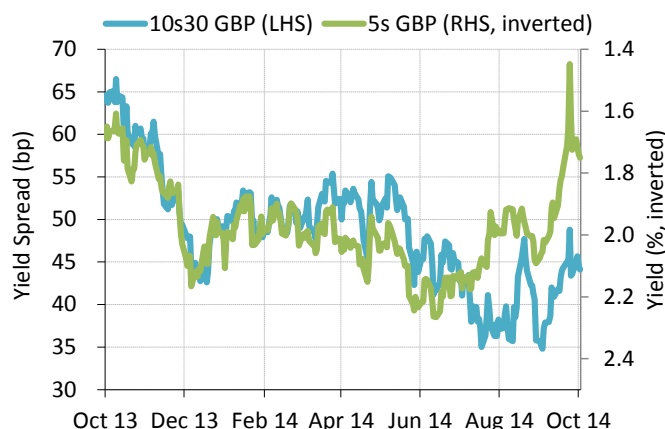
The DMO plans to re-open the 2068 gilt via syndication next week. Past precedent suggests that Tuesday is the most likely timing. This will be just the third offering of the 2068s which were first issued in June 2013 (£5bn) and then re-opened in October 2013 (£4.5bn), both times by syndication.

A size of £4bn is required to meet the remit plan, but a larger size can be accommodated by reducing mini-tenders (of which £2.8bn is still left to issue this fiscal year out of a £4bn target). This will also be the last conventional gilt syndication of the fiscal year. **Note, the gilt remit may change at the Autumn Statement (3 December), but fiscal slippage this year could be offset by the recent admission by the ONS that the CGNCR has been overestimated by a cumulative £9.7bn over the last three fiscal years.** The DMO may also prefer to adjust Treasury bill issuance in order to maintain stability in the gilt remit.

The long-end is still relatively rich....

The long-end of the curve continues to perform relatively well. **The 10s30s gilt curve has steepened over the last few weeks, but this looks modest in the context of just how much the front-end has rallied** (Figure 13). The level of 30- and 50-yr yields also remains near the historic lows, although there has been a reversal since the 'flash crash' of last week. Similarly, the long-end forwards have failed to materially cheapen ahead of the syndication.

Figure 13. The 10s30s curve looks flat relative to 5yr yields



Source: Citi Research, Bloomberg.

Figure 14. Outright yield levels have fallen ahead of the syndication



Source: Citi Research, Bloomberg.

...but super-longs are cheap

Although the long-end maintains a degree of richness vs the front-end – and is likely to continue to do so thanks to structural demand – **the super-long sector offers a clear concession ahead of the syndication.**

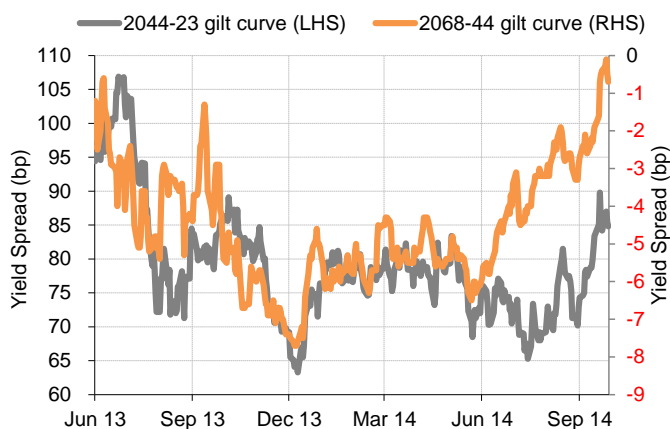
This is illustrated by the 2068-44 yield curve which has almost fully dis-inverted having been inverted by 6.5bp in mid-June. The steepening trend in the 30s50s sector looks, by usual standards, excessive relative to the 10s30s curve - Figure 15. On this basis, there is potential for the super-long sector to richen once next week's syndication is out of the way, in our view.

This relative cheapness of the 2068s can also be seen on the swap spread curve. As Figure 16 shows, the 2068-44 swap spread box is very close to its cheapest ever levels. **The trading range for the box is relatively well behaved and has reversed from around these levels on several occasions in the past.** With little prospect for any further supply into the 2068s any time soon, the box is likely to correct in our view.

To sum up, although outright yield levels (and long-end forwards) have richened ahead of the syndication, there are clear signs of a concession in the 50yr sector vs the 30yr sector. **This should encourage extension trades and we expect to the see the 50yr sector outperform post syndication.**

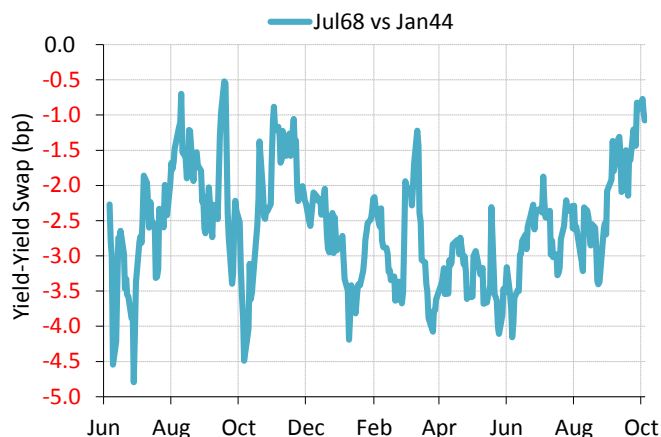
■ **Trade idea:** buy gilt 3.5% 2068 vs gilt 3.25% 2044. Yield spread = -0.7bp, target -4.5bp, stop +1.2bp.

Figure 15. The 30s50s curve look steep relative to 10s30s



Source: Citi Research, Bloomberg.

Figure 16. The 30s50 swap spread box has a well-defined trading range



Source: Citi Research

Targeting Rates with Swaption Flies

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Trading EUR curve Japanification via swaption flies

We do not believe that volatility last week has ushered us into a new market regime: the macro and governance landscapes in the Eurozone as well as current monetary policy have little scope to reflate the economy in the medium term, in our view.

We believe a simple and relatively safe approach to trading the Japanification of the EUR curve is via swaption butterflies. If we assume range bound swap rates it is appealing to look at swaption flies centered on the current *spot rate*. To fix ideas we take a look at payer swaption flies whereby we set lower and upper strikes 35bp below and above current spot respectively¹³.

Simple RV measures to help pick and choose

In Figure 17 we compute one-month rolldown, which we have measured as the ratio of one-month rolldown PnL to the spot premium of the fly. Swap tenors below 5 years are excluded because in many instances the lower strike or the lower terminal breakeven are negative: as shown, rolldown on these flies is (unsurprisingly) a function of maturity. For very short maturities (three months or lower) rolldown increases with the underlying swap tenor.

In Figure 18 we compute the payout ratios, that is the maximum profit as a proportion of the spot premium of the fly. In order to reach payout ratios in excess of 2, we need to move to nine month expiry and above. For options with nine month maturity, payout ratio above 2 is obtained by flies on the 10y swap tenor and longer.

Figure 17. One month rolldown of flies is highest for short maturities ...

| | 5y | 6y | 7y | 8y | 9y | 10y | 15y | 20y | 25y | 30y |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1m | 31.3% | 37.5% | 43.4% | 49.7% | 55.8% | 61.4% | 73.7% | 83.1% | 86.3% | 86.5% |
| 3m | 7.1% | 7.6% | 8.6% | 9.8% | 11.3% | 11.0% | 11.9% | 11.9% | 12.8% | 13.5% |
| 6m | 5.7% | 6.4% | 7.0% | 7.2% | 7.0% | 7.7% | 7.2% | 7.1% | 6.9% | 7.1% |
| 9m | 5.1% | 5.8% | 5.8% | 5.7% | 5.7% | 5.3% | 5.0% | 4.5% | 4.6% | 4.2% |
| 1y | 5.3% | 5.3% | 5.1% | 5.0% | 4.5% | 4.7% | 4.4% | 4.2% | 3.7% | 3.8% |
| 2y | 3.9% | 3.7% | 3.5% | 3.4% | 3.2% | 3.3% | 2.8% | 2.6% | 2.3% | 2.2% |
| 3y | 3.5% | 3.2% | 2.9% | 2.7% | 2.4% | 2.2% | 1.7% | 1.4% | 1.3% | 1.2% |
| 4y | 2.2% | 2.1% | 1.9% | 1.7% | 1.6% | 1.5% | 1.2% | 1.1% | 1.0% | 0.9% |
| 5y | 1.8% | 1.6% | 1.5% | 1.3% | 1.3% | 1.2% | 1.0% | 1.0% | 0.9% | 0.8% |
| 6y | 1.7% | 1.5% | 1.3% | 1.2% | 1.1% | 1.0% | 0.8% | 0.7% | 0.6% | 0.6% |
| 7y | 1.2% | 1.1% | 1.0% | 0.9% | 0.9% | 0.8% | 0.7% | 0.7% | 0.6% | 0.6% |
| 8y | 1.0% | 0.9% | 0.8% | 0.7% | 0.7% | 0.7% | 0.6% | 0.6% | 0.5% | 0.5% |
| 9y | 0.9% | 0.7% | 0.7% | 0.6% | 0.6% | 0.5% | 0.5% | 0.5% | 0.5% | 0.5% |
| 10y | 1.0% | 0.8% | 0.7% | 0.6% | 0.5% | 0.5% | 0.5% | 0.5% | 0.4% | 0.5% |
| 15y | 0.1% | 0.2% | 0.2% | 0.2% | 0.2% | 0.3% | 0.3% | 0.3% | 0.3% | 0.3% |
| 20y | 0.0% | 0.1% | 0.1% | 0.2% | 0.2% | 0.2% | 0.2% | 0.2% | 0.2% | 0.2% |
| 30y | 0.4% | 0.3% | 0.3% | 0.2% | 0.2% | 0.2% | 0.1% | 0.1% | 0.1% | 0.1% |

Source: Citi Research

Figure 18. ... but longer expiries are required to obtain decent payout ratios

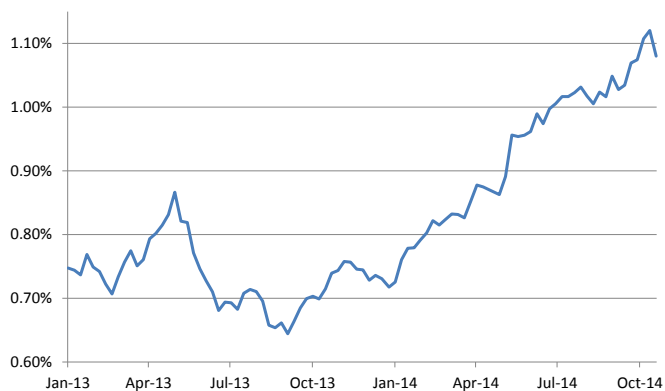
| | 5y | 6y | 7y | 8y | 9y | 10y | 15y | 20y | 25y | 30y |
|-----|------|------|------|------|------|------|------|------|------|------|
| 1m | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 |
| 3m | 0.5 | 0.6 | 0.7 | 0.9 | 1.0 | 1.1 | 1.2 | 1.3 | 1.4 | 1.4 |
| 6m | 0.8 | 1.0 | 1.2 | 1.3 | 1.5 | 1.7 | 1.8 | 2.0 | 2.1 | 2.1 |
| 9m | 1.1 | 1.4 | 1.6 | 1.8 | 2.0 | 2.1 | 2.3 | 2.5 | 2.6 | 2.6 |
| 1y | 1.5 | 1.8 | 2.0 | 2.2 | 2.4 | 2.6 | 2.8 | 3.0 | 3.0 | 3.1 |
| 2y | 3.1 | 3.5 | 3.8 | 4.1 | 4.3 | 4.6 | 4.5 | 4.6 | 4.5 | 4.5 |
| 3y | 5.5 | 5.9 | 6.1 | 6.3 | 6.4 | 6.4 | 6.0 | 5.8 | 5.6 | 5.5 |
| 4y | 7.8 | 8.1 | 8.2 | 8.2 | 8.1 | 8.1 | 7.2 | 6.8 | 6.5 | 6.3 |
| 5y | 10.2 | 10.3 | 10.2 | 9.9 | 9.7 | 9.5 | 8.2 | 7.7 | 7.4 | 7.1 |
| 6y | 12.8 | 12.5 | 12.0 | 11.6 | 11.1 | 10.8 | 9.1 | 8.4 | 7.9 | 7.6 |
| 7y | 15.0 | 14.4 | 13.6 | 13.0 | 12.4 | 11.9 | 9.9 | 9.0 | 8.5 | 8.1 |
| 8y | 16.9 | 16.0 | 15.0 | 14.1 | 13.4 | 12.8 | 10.6 | 9.6 | 9.0 | 8.5 |
| 9y | 18.8 | 17.4 | 16.2 | 15.1 | 14.2 | 13.6 | 11.1 | 10.1 | 9.5 | 9.0 |
| 10y | 20.7 | 18.9 | 17.3 | 16.0 | 15.0 | 14.2 | 11.6 | 10.5 | 9.9 | 9.4 |
| 15y | 22.4 | 20.1 | 18.4 | 17.1 | 16.2 | 15.5 | 13.1 | 12.0 | 11.4 | 10.9 |
| 20y | 20.7 | 19.1 | 18.0 | 17.1 | 16.5 | 16.0 | 14.1 | 12.9 | 12.3 | 11.9 |
| 30y | 25.5 | 22.2 | 20.0 | 18.4 | 17.2 | 16.4 | 13.5 | 12.1 | 11.6 | 11.1 |

Source: Citi Research

The 9m10y 0.78/1.13/1.48 payer fly is currently offered around 108 cents. Admittedly, the pv of 9m10y spot-35bp/spot 35bp/spot+35bp is currently in the upper region of the two-year range but we believe that this should not discourage investors from entering the trade; indeed, realized volatility of 10y swap rate is set to remain subdued in the medium term, in our view.

¹³ Another approach is, for each fly, to set the distance between strikes by adding increasing weights of current implied volatility. There are good reasons to do so. We will explain and apply this measure in future research.

Figure 19. Admittedly the 9m10y spot-35bp/spot 35bp/spot+35bp fly is trading on the expensive side from a historical standpoint ...



Source: Citi Research

Figure 20. ... however if 10y rlz vol remains depressed in the medium term, timing does not matter



Source: Citi Research

Conclusion

Weak rate of economic activity, ultra low level of inflation and structural issues in the governance of the Eurozone argue for subdued realized rate vol in the medium term. A relatively safe strategy to play this scenario is by means of swaption flies positions, in our view. We have shown a simple choice methodology which ranks flies via payout ratios and rolldown.

Time to think differently about SSA spreads

With spreads this tight, think proportionally

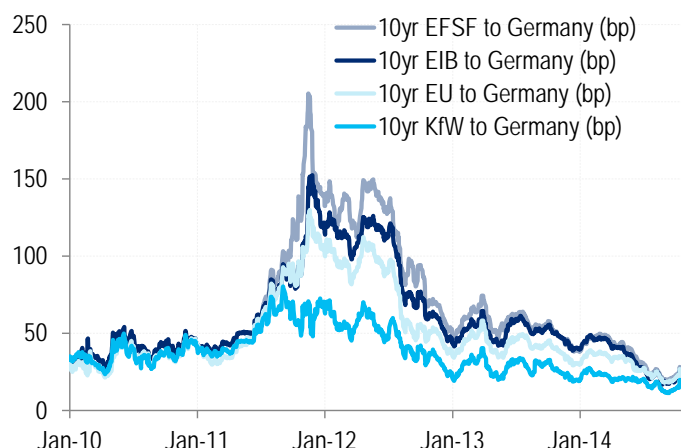
Peter Goves
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This is an excerpt from our piece, [Euro SSA Strategy - Time To Think Differently About SSA Spreads](#), in which full details can be found.

Spreads at tights.... Our [Weekly SSA Chart Pack](#) has been pointing to the historically low level of spreads for some time. To provide context, we use our fitted SSA curves to give a fuller sense of history. As shown in Figure 21, spreads are now at, or even below pre-crisis tights.

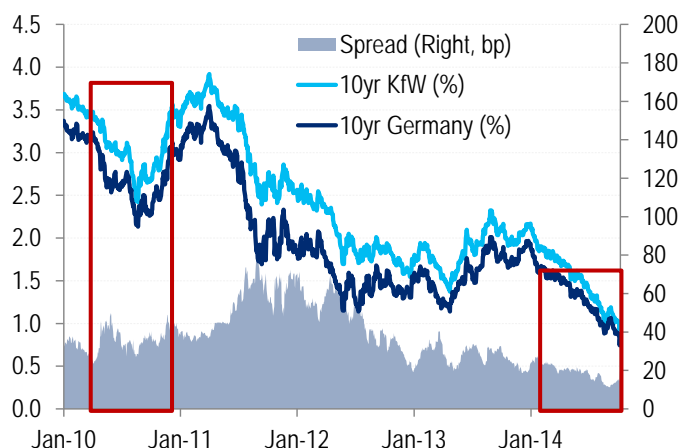
...but are a larger share of overall yield: 10yr KfW-Germany is currently around 15bp, but the key observation now is that this relatively tight spread is increasingly accounting for a larger share of the *overall yield* give just how low German rates are. Indeed, the last time spreads were anywhere near this tight, absolute 10yr KfW yields were nearer 2.5%-3% (Figure 22). Today 10yr KfW is yielding 0.97%.

Figure 21. 10yr Spreads to Germany*



Source: Citi Research *Based on Citi Fitted Modeled Curves

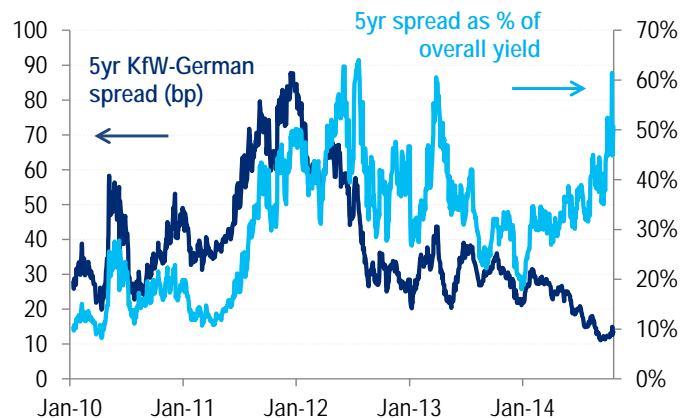
Figure 22. 10yr KfW and Germany (%) and spread (bp)*



Source: Citi Research *Based on Citi Fitted Modeled Curves

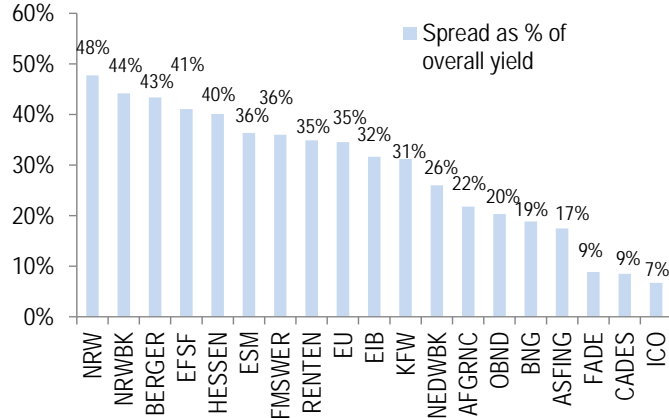
Spread-to-yield ratios are rising: Spreads may have been around (or at slightly higher) levels back in 2010, but proportional to the yield, the ratio was very different (Figure 23). There is much single name variation as shown in Figure 24 which illustrates the extent to which spreads are now a higher share of overall SSA yields.

Figure 23. 5yr KfW-Germany Spreads (bp) and Spread-Yield Ratio (%)



Source: Citi Research *Based on Citi Fitted Modeled Curves

Figure 24. 7yr KfW-Germany Spreads (bp) and Spread-Yield Ratio (%)

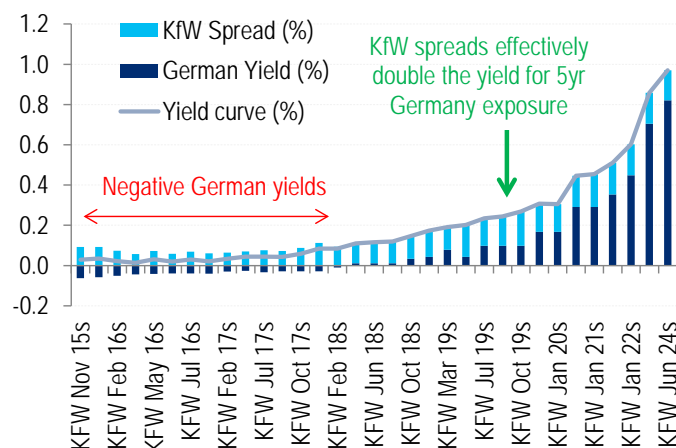


Source: Citi Research *Based on Citi Fitted Modeled Curves

Want to be long 5yr Germany? Double the yield with KfW

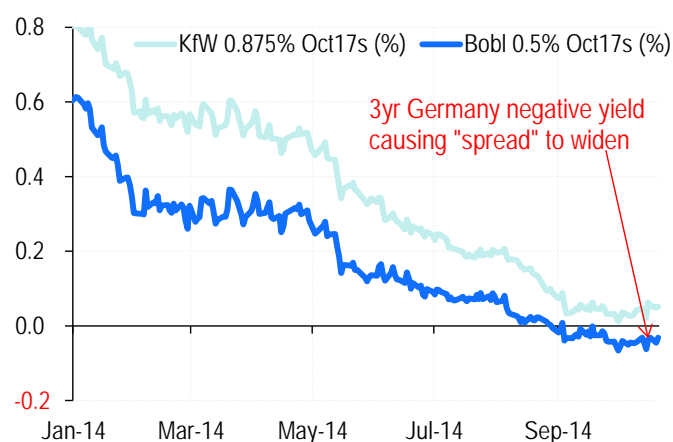
KfW's yield curve: Put another way, if 40%-50% of KfW's yield is its spreads in the 5yr sector to Bobls, then one way of gaining exposure to 5yr Germany is to consider explicitly guaranteed KfW which can effectively double the yield. Specifically, 5yr Germany is currently trading around 0.16%, whereas 5yr KfW is trading around 0.28%. Hence although the spread, in absolute terms is a mere 12bp, this is around 43% of the overall yield. The full curve is shown in Figure 25.

Figure 25. 10yr SSA yield composition: spread and underlying govt yield



Source: Citi Research *Based on Citi Fitted Modeled Curves

Figure 26. Proportion of spread to the overall total 10yr yield (%)



Source: Citi Research *Based on Citi Fitted Modeled Curves

Paradox of negative German rates in the front-end: One dynamic to note is the impact negative German yields are making to "spreads". In the front-end (well, up to the 4yr sector now), as many SSAs struggle to follow Germany into negative yield territory, the rally of Germany is causing "spreads" artificially to widen slightly. In other terms, the yield difference between 3yr KfW and negatively yielding 3yr Germany can be higher than the overall yield of a KfW bond (Figure 26).

Conclusion – another way to think about spreads

As a theme, thinking about spreads as their overall proportion to the SSA yield is yet another way of assessing value given current market pricing. We stress this must be taken with context and this chart pack does not (and neither intended to) control for such spread drivers such as rating, guarantee structure, liquidity or regulatory demand factors. Our broad views remain unchanged: that the SSA market looks to set to stay supported by many factors and we continue to hunt for RV both within the sector and vs EMU governments. At the same time, we also think it is important to consider spreads in a variety of ways, especially given just how tight they can be to underlying government yields. We believe assessing spreads as a proportion to the overall yield for a given SSA bond is another lens through which to view the market and this can provide further insights when considering the overall investment process.

Covered Bond Strategy

CBPP3 and market divergence

Michael Spies

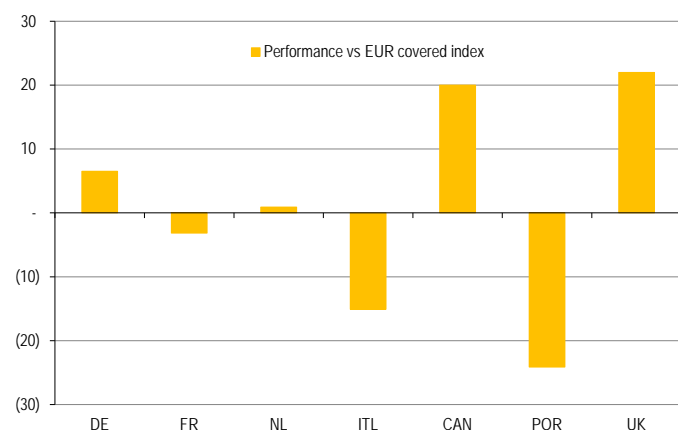
Covered Bonds, SSAs

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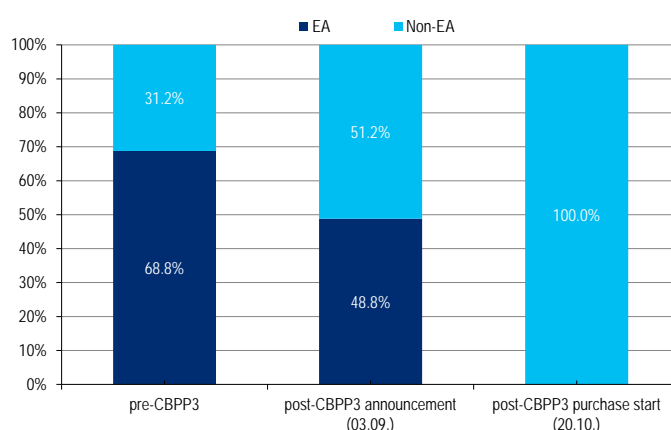
Non-EA primary market dominance: Covered bonds have not been infected by government bond volatility of recent days and spreads have remained stable during this period. Yet, CBPP3 is already leading to the first divergences within covered bond markets, on both the secondary and the primary markets. Figure 27 depicts the relative performance of covered bond sub-segments versus the EUR aggregate covered bond index since the announcement of CBPP3. While it may not surprise that peripheral covered bonds have outperformed the market during this time, it is more remarkable how strongly the more expensive non-EA covered bond segments have underperformed the market aggregate, particularly if one considers the relative performance of pfandbriefe as well as Dutch and French covered bonds. This is in line with our general portfolio allocation preference for overweighting euro area covered bonds from core and peripheral countries.

Figure 27. Performance of covered bond indices versus the aggregate EUR covered bond index since CBPP3 announcement, asw, bp



Source: Markit, Citi Research

Figure 28. Primary market activity pre- and post CBPP3 by area, %

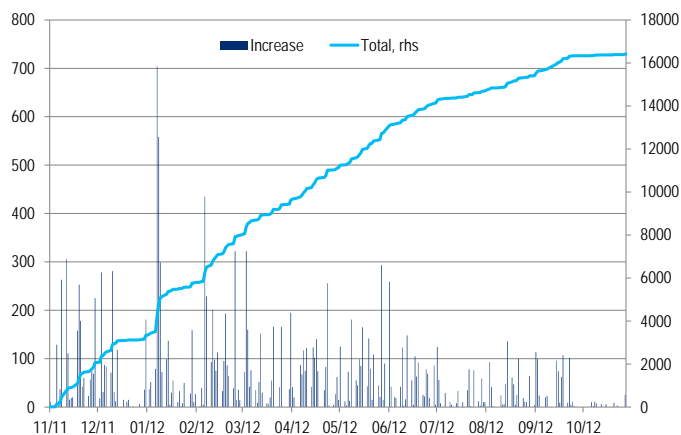


Source: Citi Research

Primary market issuance drop: However, the relative performance paths from these segments might be driven not only by the ECB support for euro area segments via CBPP3 but also by higher-than-expected issuance from non-EA covered bonds (Figure 28). While more than two-thirds of euro benchmark gross supply came from euro-area banks until the announcement of CBPP3 (beginning of September), this relative share declined markedly while issuance from non-EA entities increased and dominated the primary market during the first week of covered bond purchases within CBPP3. At current stage, the deal pipeline is still filled exclusively by issuers from non-EA countries, to our knowledge.

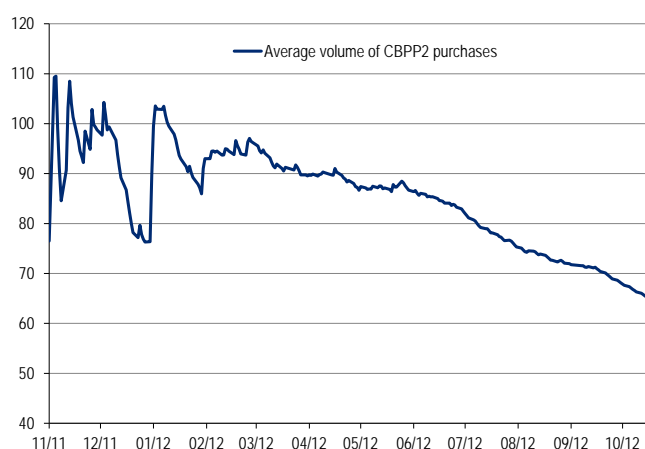
Reasons for euro-area issuers' absence: There are several reasons for this pattern, in our opinion. Firstly, non-EA covered bond segments have also been performing well versus swaps in the slipstream of CBPP3, having brought funding levels for these banks to all-time lows. Secondly, euro area banks still have several funding options at hand. The use of retained covered bonds remains a possibility to ensure stable liquidity. Moreover, the second TLTRO, which is due in December, provides issuers an opportunity to fund via the ECB for a maturity of up to four years. As already stated in our last [Euro SSA and Covered Bond Monthly](#), TLTRO2 conditions are still more attractive than public issuance in tenors of up to five years for many issuers. Thirdly, European banks are still deleveraging, starkly reducing the need for secured funding. And lastly, most European banks will probably want to wait for the final results and the implications of the comprehensive assessment, published on Sunday. Yet, we would still expect a slow pick-up of euro-area covered bond primary market activity over the coming weeks.

Figure 29. Daily purchase volumes under CBPP2, EURmn



Source: ECB, CBR, Citi Research

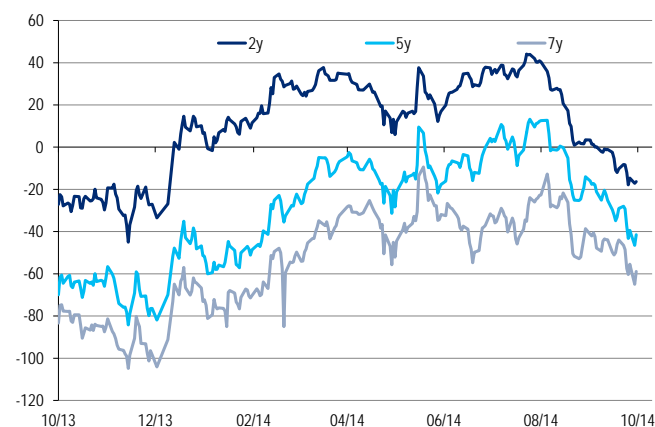
Figure 30. Average daily purchase volumes under CBPP2, EURmn



Source: ECB, CBR, Citi Research

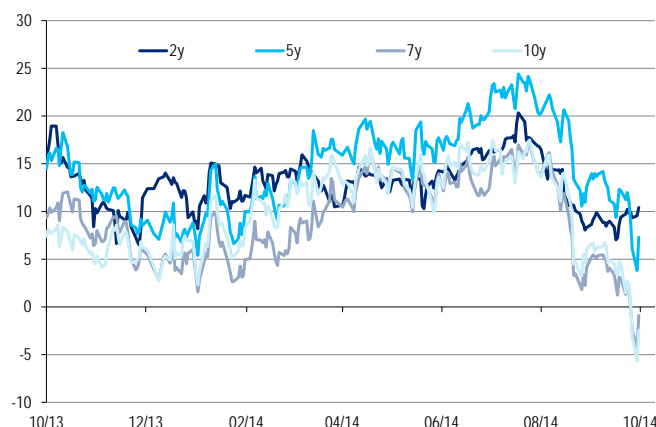
Importance of primary market for CBPPs: During the last covered bond purchase program, most of the ECB activity was concentrated in the secondary market and only 37% were bought on the primary market. Note that during the period of purchases (Nov 2011 – Nov 2012), euro area issuers placed a total of €69bn of benchmark bonds. Yet, one should add that the daily purchase volume gradually decreased, with central banks buying more aggressively at the beginning, particularly at the start of 2012 when banks came back to the primary market with new bonds – the usual seasonal pattern observed each year (Figure 29 and Figure 30). Overall, the ECB bought on 50 days more than €100mn within the one-year period. For CBPP3, we expect the first data point to be published next Monday by the ECB. This should help us draw conclusions and comparisons regarding central banks' ability to purchase covered bonds under CBPP3.

Figure 31. Spain: SPGBs versus Tier-1 céduas, yield spread, bp



Source: Citi Research

Figure 32. France: OATs versus Tier-1 covered bonds, yield spread, bp



Source: Citi Research

Cross-asset RV opportunities: Within the covered bond segment, we continue to like euro area peripheral and core covered bond segments, while we would expect further underperformance of non-EA covered bond segments. On a cross-asset basis, near-term outperformance of Tier-1 covered bonds versus government bonds cannot be ruled out, particularly in the peripheral and semi-core segments (Figure 31 and Figure 32). Yet, in the medium to long term, we would prefer sovereign bonds, given our base case of full-blown QE being announced at the end of 2014 or beginning of 2015.

Tradesheet

New Trade

Buy gilt 3.5% 2068 vs gilt 3.25% 2044.

Open (yield spread) = -0.7bp, target -4.5bp, stop +1.2bp.

Record of Our Open Trades

Figure 33. Record of our Open Trades

| Region | Trade | Levels | Rationale + Publication Date | |
|--------------|---|---|--|--|
| EUR | Buy OATe27 and OATe30 vs OATi29 | Open 19bp Current 18.8bp P&L 0bp Target 9bp Stop 24bp | Fading supply related distortions The Morning Call, 16th October 2014 | |
| Inflation | Buy OATe27 real yield at 0.20% Sell OATi29 real yield at 0.20% Buy OATe30 real yield at 0.39% | | | |
| EUR | Buy OATe22 break-even vs Bundel23 | Open 19.5bp Current 21bp P&L 2bp Target 26bp Stop 16bp | Fade the richness of Bundel23 break-even ahead of the auction. OATe22 break-evens look cheap on various metrics. European Rates Weekly, 9th October 2014 | |
| Inflation | Buy OATe22 break-even at 108bp Sell Bundel23 break-even at 89bp | | | |
| UK | Buy 30yr gilt swap spreads | Open 21bp Current 22bp P&L -1bp Target 16bp Stop 23bp | Attractive risk-reward to fade referendum risks UK Rates Strategy, 11th September | |
| Swap Spreads | Buy UKT 3.25% Jan44 YYS at 21bp | | | |
| EUR | Buy Bundel30 break-evens vs OATe30 | Open 17bp Current 12bp P&L 5bp Target 8bp Stop 22bp | Seasonal-adjustment suggests Bundel30 break-evens are around 10bps too cheap vs OATe30 The Morning Call, 9th September 2014 | |
| Inflation | Buy Bundel30 break-even at 147bp Sell OATe30 break-even at 164bp | | | |
| EUR | BTP 5s7s flattener | Open 68bp Current 62bp P&L 6bp Target 50bp Stop 80bp | 5s7s look steep. Ongoing yield grab and the likelihood of further ECB support should be supportive. Italy vs Spain: Macro, Markets & More, 6th August 2014 | |
| Curve | Sell BTP 4.25% Sep19 @ 1.32% Buy BTP 3.75% Aug21s @ 1.96% | | | |
| EUR | Buy CCTeu Jun17 z-spread vs BTP Jun17 | Open 15bp Current 9bp P&L 6bp Target 0bp Stop 25bp | Fade the cheapness of CCTeu Italy vs Spain: Macro, Markets & More, 6th August 2014 | |
| Basis | Buy CCTeu Jun17 z-spread at 57bps Sell BTP 4.75% Jun17 z-spread at 42bps | | | |
| EUR | Buy KfW 0.375% Apr17s vs OLO 4% Mar17 | Open 0bp Current 0bp P&L 0bp Target -6bp Stop 3bp | Move up in quality at a flat spread European Rates Weekly, 24th July 2014 | |
| SSA | Buy KfW 0.375% Apr17s @ 0.13% Sell OLO 4% Mar17 @ 0.13% | | | |
| UK | Pay GBP 1y1y vs 3y1y | Open 132bp Current 95bp P&L 37bp Target 50bp Stop 170bp | The very front-end is still lagging in the sell-off. Euro Rates Weekly, 24 April 2014 | |
| Swap Curve | Pay GBP 1y1y at 1.47% Receive GBP 3y1y at 2.79% | | | |
| EUR | Buy 30yr Netherlands vs Austria | Open 14bp Current 14bp P&L 0bp Target 24bp Stop 8bp | Close to historically tight levels. Uncertainty surrounding the Austria banking sector should weigh on Austrian bonds European Rates Weekly, 12 February 2014 | |
| Cross Market | Buy DSL Jan42 at 2.67% Sell RAGB Jun44 at 2.81% | | | |
| UK | Sell 30yr gilt swap spreads vs 10yr | Open 20bp Current 37bp P&L 17bp Target 50bp Stop 10bp | Fiscal risks, supply pressures and the absence of QE to put steepening pressure on the gilt curve. UK Rates Strategy, 30 July 2013 | |
| Swap spread | Sell gilt 3.25% Jan44 ASW at 20bp Buy gilt 1.75% Sep22 ASW at 0bp | | | |

Source: Citi Research

Figure 34. 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 in the public sector. | Long 2yr Italy vs Portugal has hit target Long OAT Oct19s vs ESM Oct19s has hit stop Long 10yr Spain vs Italy has hit target BTP 5s7s flatteners given the strong outperformance of 5s |
| Swap Spreads | In the UK, 5yr spreads offer value boxed against 10s given supply pressure has switched to the former. The 30s50s gilt swap spread box is at the cheap-end of its trading range with supply looming. | Long Bund ASW Buy 5yr vs 10yr gilt swap spreads Buy 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. | Buy 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 | The ESM has joined KfW and ICO in reducing funding requirements for 2014 (now expecting €5bn in Q4 from €7bn previously). We doubt that supply can not meaningfully disturb its spreads to govts in Q4. Overall, 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

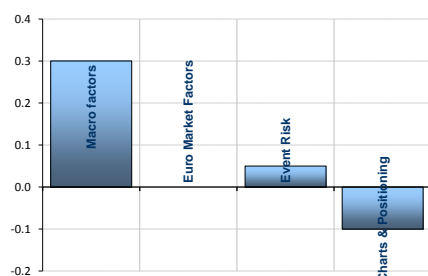
Figure 35. Bund Weekly Cheat Sheet: 24th – 30th October

Bund Directional Scorecard (1w horizon)

| | | | |
|---------------------------|--------|--|-------|
| Recommendation | Buy | RXZ4 (EOD Thurs) = 150.33 | |
| Conviction level | Medium | CTD yield = 0.73% 10day del vol = 5.29% | |
| Signal Strength (+/-2) | | | |
| Macro factors | 0.3 | Weight = 38% | |
| ECB | 1 | The ECB are likely to add further stimulus | 10.0% |
| Fed, BoE and BOJ | 1 | FOMC decision next week | 5.0% |
| Inflation | 1 | 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 | 1 | Final results to be published on Sunday | 5.0% |
| Euro Market Factors | 0.0 | Weight = 28% | |
| Supply | 1 | Net cash requirement supportive next week | 7.5% |
| Risk appetite | 0 | Risk aversion remains on elevated levels | 2.5% |
| Flow | 1 | Net selling of peripherals last week | 2.5% |
| Equity | -1 | Strong Eurostoxx50 rally last week | 5.0% |
| Sovereign credit | 0 | Volatile market lacking strong directionality | 5.0% |
| FX | -1 | EUR is close to its lowest level in a year | 5.0% |
| Event Risk | 0.1 | Weight = 13% | |
| Politics | 0 | 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 | Bunds back in range at 1m average | 7.5% |
| T-Note | -1 | Short | 5.0% |
| CFTC | -1 | Positioning slightly short | 5.0% |
| ARTS | 0 | Neutral | 5.0% |

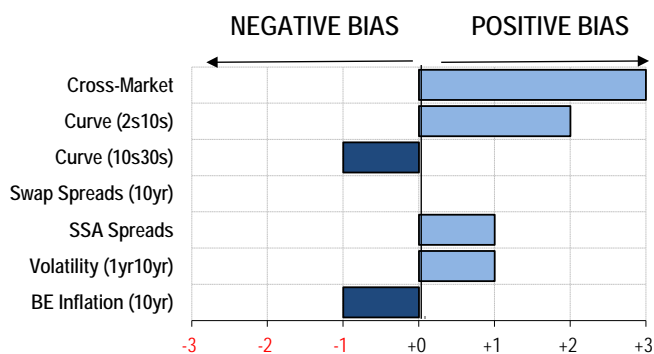
Source: Citi Research Note: Futures trading involves a substantial risk of loss.

Figure 36. Contribution to Bund Signals



Source: Citi Research

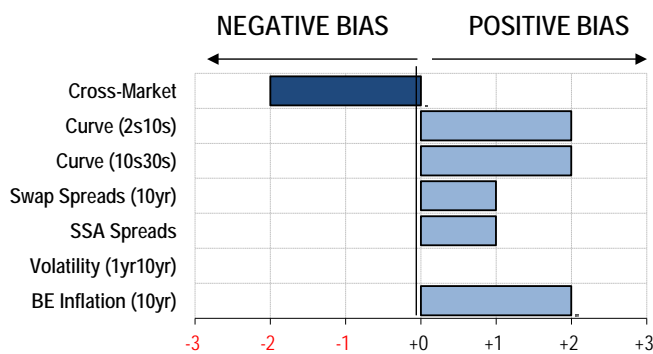
Figure 37. EURO AREA (Near-term Bias)



Source: Citi Research

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

Figure 38. 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

Euro Relative Value Screen – All Maturities

Figure 39. Coupon adjusted spread (CAS) to fitted curve and swap curve by country (6m history) - all bonds on each curve

| | | Versus Govt Curve (CAS) | | | | | Versus Swap Curve (CAS) | | | | |
|---------|----------|-------------------------|------------------|--------|--------|------------|-------------------------|------------------|--------|--------|------------|
| | | Rank | | ZScore | Issued | Size (€bn) | Rank | | ZScore | Issued | Size (€bn) |
| GERMANY | Richest | 1 | 4.75 Jul34 | -3.04 | Jan03 | 20 | 1 | 5.50 Jan31 | -3.31 | Oct00 | 17 |
| | | 2 | 6.25 Jan30 | -2.18 | Jan00 | 9 | 2 | 4.75 Jul34 | -3.21 | Jan03 | 20 |
| | | 3 | 0.50 Apr19 | -2.09 | May14 | 16 | 3 | 6.25 Jan30 | -3.20 | May00 | 9 |
| | | 4 | 4.00 Jan37 | -2.03 | Jan05 | 23 | 4 | 4.00 Jan37 | -2.89 | Jan05 | 23 |
| | | 5 | 1.50 May23 | -2.02 | May13 | 18 | 5 | 1.50 May23 | -2.79 | May13 | 18 |
| | Cheapest | 5 | 4.00 Jan18 | 2.21 | Nov07 | 20 | 5 | 4.00 Jan18 | 0.79 | Nov07 | 20 |
| | | 4 | 2.25 Sep20 | 2.33 | Aug10 | 16 | 4 | 4.25 Jul17 | 0.79 | May07 | 19 |
| | | 3 | 4.75 Jul40 | 2.36 | Jul08 | 16 | 3 | 0.50 Apr17 | 0.85 | Apr12 | 18 |
| | | 2 | 3.00 Jul20 | 2.39 | Apr10 | 22 | 2 | 0.75 Feb17 | 0.91 | Jan12 | 16 |
| | | 1 | 4.25 Jul39 | 2.43 | Jan07 | 14 | 1 | 3.75 Jan17 | 0.98 | Nov06 | 20 |
| FRANCE | Richest | 1 | 4.00 Apr55 | -2.81 | Apr04 | 15 | 1 | 2.25 May24 | -0.33 | Nov13 | 28 |
| | | 2 | 3.50 Apr26 | -1.32 | Apr10 | 30 | 2 | 4.25 Oct23 (OAT) | -0.24 | Oct06 | 33 |
| | | 3 | 2.25 May24 | -1.18 | Nov13 | 28 | 3 | 3.50 Apr26 | -0.21 | Apr10 | 30 |
| | | 4 | 2.50 May30 | -1.17 | May14 | 15 | 4 | 1.75 May23 | -0.20 | May12 | 27 |
| | | 5 | 1.75 Nov24 | -1.09 | Jun14 | 19 | 5 | 1.00 May19 | -0.18 | Jan14 | 23 |
| | Cheapest | 5 | 4.50 Apr41 | 1.27 | Apr09 | 24 | 5 | 3.25 May45 | 0.49 | May12 | 12 |
| | | 4 | 2.50 Oct20 | 1.40 | Oct09 | 35 | 4 | 2.75 Oct27 | 0.56 | Oct11 | 32 |
| | | 3 | 1.75 Feb17 | 1.41 | Feb11 | 20 | 3 | 4.50 Apr41 | 0.66 | Apr09 | 24 |
| | | 2 | 4.00 Oct38 | 1.84 | Oct05 | 24 | 2 | 4.00 Oct38 | 0.81 | Oct05 | 24 |
| | | 1 | 4.25 Oct17 | 3.22 | Oct06 | 33 | 1 | 0.50 Nov19 | 0.89 | Jun14 | 16 |
| ITALY | Richest | 1 | 3.50 Nov17 | -2.85 | Nov12 | 17 | 1 | 4.25 Mar20 | -0.04 | Sep09 | 24 |
| | | 2 | 4.25 Mar20 | -2.78 | Sep09 | 24 | 2 | 4.50 Feb20 | 0.02 | Mar04 | 23 |
| | | 3 | 5.25 Aug17 | -2.04 | Feb02 | 24 | 3 | 3.50 Dec18 | 0.09 | Sep13 | 20 |
| | | 4 | 4.50 Feb20 | -1.97 | Mar04 | 23 | 4 | 4.00 Sep20 | 0.12 | Mar10 | 25 |
| | | 5 | 3.50 Dec18 | -1.95 | Sep13 | 20 | 5 | 4.25 Sep19 (MFB) | 0.13 | May09 | 25 |
| | Cheapest | 5 | 4.75 Aug23 (IK) | 1.70 | Apr08 | 25 | 5 | 5.00 Aug39 | 1.79 | Aug07 | 19 |
| | | 4 | 4.50 Mar26 | 2.02 | Sep10 | 21 | 4 | 4.00 Feb37 | 1.79 | Aug05 | 26 |
| | | 3 | 5.50 Sep22 | 2.04 | Mar12 | 20 | 3 | 5.00 Sep40 | 1.89 | Sep09 | 21 |
| | | 2 | 5.00 Mar25 | 2.23 | Jul09 | 22 | 2 | 4.75 Sep44 | 1.89 | Mar13 | 15 |
| | | 1 | 5.50 Nov22 | 3.09 | May12 | 21 | 1 | 2.15 Dec21 | 1.99 | Jun14 | 13 |
| N'LANDS | Richest | 1 | 2.50 Jan33 | -3.56 | Mar12 | 10 | 1 | 2.50 Jan33 | -2.65 | Mar12 | 10 |
| | | 2 | 2.75 Jan47 | -2.22 | Feb14 | 4 | 2 | 4.00 Jan37 | -2.49 | Apr05 | 14 |
| | | 3 | 0.25 Jan20 | -1.84 | Sep14 | 5 | 3 | 3.75 Jan42 | -2.12 | May10 | 15 |
| | | 4 | 1.25 Jan18 | -1.36 | Jul12 | 15 | 4 | 2.75 Jan47 | -1.92 | Feb14 | 4 |
| | | 5 | 2.25 Jul22 | -1.31 | Feb12 | 15 | 5 | 3.75 Jan23 | -1.83 | Jan06 | 11 |
| | Cheapest | 5 | 3.25 Jul21 | 1.60 | Mar11 | 16 | 5 | 1.25 Jan19 | -0.94 | Jun13 | 15 |
| | | 4 | 4.00 Jul19 | 1.71 | Feb09 | 14 | 4 | 1.25 Jan18 | -0.89 | Jul12 | 15 |
| | | 3 | 3.50 Jul20 | 2.19 | Feb10 | 15 | 3 | 4.50 Jul17 | -0.18 | Jul07 | 15 |
| | | 2 | 1.25 Jan19 | 2.31 | Jun13 | 15 | 2 | 0.50 Apr17 | -0.13 | Jan14 | 15 |
| | | 1 | 3.75 Jan42 | 2.93 | May10 | 15 | 1 | 2.50 Jan17 | 0.16 | Jun11 | 16 |
| SPAIN | Richest | 1 | 5.40 Jan23 | -2.24 | Jan13 | 17 | 1 | 5.40 Jan23 | -0.98 | Jan13 | 17 |
| | | 2 | 5.85 Jan22 (FBB) | -1.68 | Nov11 | 20 | 2 | 5.85 Jan22 (FBB) | -0.94 | Nov11 | 20 |
| | | 3 | 4.25 Oct16 | -1.66 | Sep11 | 21 | 3 | 4.80 Jan24 | -0.93 | Sep08 | 15 |
| | | 4 | 0.50 Oct17 | -1.45 | Sep14 | 4 | 4 | 4.40 Oct23 | -0.92 | May13 | 18 |
| | | 5 | 3.75 Oct18 | -1.34 | Jul13 | 19 | 5 | 3.80 Apr24 | -0.78 | Jan14 | 21 |
| | Cheapest | 5 | 4.10 Jul18 | 1.26 | Feb08 | 19 | 5 | 4.25 Oct16 | 0.15 | Sep11 | 21 |
| | | 4 | 1.40 Jan20 | 1.30 | Jul14 | 7 | 4 | 2.10 Apr17 | 0.16 | Nov13 | 21 |
| | | 3 | 3.80 Apr24 | 1.32 | Jan14 | 21 | 3 | 4.20 Jan37 | 0.22 | Jan05 | 16 |
| | | 2 | 4.00 Apr20 | 1.33 | Jan10 | 22 | 2 | 3.80 Jan17 | 0.23 | Oct06 | 21 |
| | | 1 | 4.85 Oct20 | 1.58 | Jul10 | 18 | 1 | 0.50 Oct17 | 1.62 | Sep14 | 4 |
| BELGIUM | Richest | 1 | 4.25 Sep21 | -1.71 | Jan11 | 15 | 1 | 4.25 Sep21 | -0.97 | Jan11 | 15 |
| | | 2 | 4.00 Mar18 | -1.56 | Jan08 | 12 | 2 | 2.60 Jun24 | -0.96 | Jan14 | 14 |
| | | 3 | 2.60 Jun24 | -1.51 | Jan14 | 14 | 3 | 2.25 Jun23 | -0.84 | Jan13 | 14 |
| | | 4 | 5.00 Mar35 | -1.41 | May04 | 19 | 4 | 3.00 Sep19 | -0.84 | Apr12 | 11 |
| | | 5 | 3.75 Jun45 | -1.14 | Sep13 | 5 | 5 | 4.25 Sep22 | -0.82 | Jan12 | 15 |
| | Cheapest | 5 | 4.50 Mar26 | 0.88 | Jun11 | 9 | 5 | 4.00 Mar17 | -0.43 | Jan07 | 11 |
| | | 4 | 4.25 Sep22 | 1.42 | Jan12 | 15 | 4 | 5.50 Sep17 | -0.40 | Jun02 | 8 |
| | | 3 | 3.75 Sep20 | 1.43 | Jan10 | 18 | 3 | 3.50 Jun17 | -0.40 | Mar11 | 13 |
| | | 2 | 2.25 Jun23 | 2.04 | Jan13 | 14 | 2 | 3.75 Jun45 | -0.35 | Sep13 | 5 |
| | | 1 | 4.00 Mar22 | 2.09 | May06 | 14 | 1 | 4.25 Mar41 | -0.35 | Apr10 | 14 |

Source: Citi Research

Euro Relative Value Screen – Sub-12yr

Figure 40. 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) | | | | | |
|-------------------------|------|------------------|--------|--------|------------|-------------------------|------|------------------|--------|--------|------------|
| | Rank | | ZScore | Issued | Size (€bn) | | Rank | | ZScore | Issued | Size (€bn) |
| GERMANY | | Richest | | | | | | Richest | | | |
| | 1 | 0.50 Apr19 | -2.09 | May14 | 16 | | 1 | 1.50 May23 | -2.79 | May13 | 18 |
| | 2 | 1.50 May23 | -2.02 | May13 | 18 | | 2 | 1.50 May24 | -2.74 | May14 | 18 |
| | 3 | 1.00 Oct18 | -1.73 | Sep13 | 17 | | 3 | 1.50 Feb23 | -2.55 | Jan13 | 18 |
| | 4 | 1.00 Feb19 | -1.29 | Jan14 | 16 | | 4 | 1.75 Feb24 | -2.51 | Jan14 | 18 |
| | 5 | 0.25 Apr18 | -1.24 | Apr13 | 17 | | 5 | 2.00 Aug23 | -2.51 | Sep13 | 18 |
| | 5 | 3.25 Jan20 | 2.07 | Nov09 | 22 | | 5 | 4.00 Jan18 | 0.79 | Nov07 | 20 |
| | 4 | 1.75 Jul22 | 2.15 | Apr12 | 24 | | 4 | 4.25 Jul17 | 0.79 | May07 | 19 |
| | 3 | 4.00 Jan18 | 2.21 | Nov07 | 20 | | 3 | 0.50 Apr17 | 0.85 | Apr12 | 18 |
| | 2 | 2.25 Sep20 | 2.33 | Aug10 | 16 | | 2 | 0.75 Feb17 | 0.91 | Jan12 | 16 |
| | 1 | 3.00 Jul20 | 2.40 | Apr10 | 22 | | 1 | 3.75 Jan17 | 0.98 | Nov06 | 20 |
| | | Cheapest | | | | | | Cheapest | | | |
| FRANCE | | Richest | | | | | | Richest | | | |
| | 1 | 3.50 Apr26 | -1.32 | Apr10 | 30 | | 1 | 2.25 May24 | -0.33 | Nov13 | 28 |
| | 2 | 2.25 May24 | -1.18 | Nov13 | 28 | | 2 | 4.25 Oct23 (OAT) | -0.24 | Oct06 | 33 |
| | 3 | 1.75 Nov24 | -1.09 | Jun14 | 19 | | 3 | 3.50 Apr26 | -0.21 | Apr10 | 30 |
| | 4 | 4.25 Oct23 (OAT) | -0.79 | Oct06 | 33 | | 4 | 1.75 May23 | -0.20 | May12 | 27 |
| | 5 | 1.00 May19 | -0.18 | Jan14 | 23 | | 5 | 1.00 May19 | -0.18 | Jan14 | 23 |
| | 5 | 3.50 Apr20 | 0.81 | Feb10 | 36 | | 5 | 1.75 Feb17 | 0.22 | Feb11 | 20 |
| | 4 | 3.75 Oct19 (BTA) | 1.23 | Oct08 | 32 | | 4 | 2.50 Oct20 | 0.26 | Oct09 | 35 |
| | 3 | 2.50 Oct20 | 1.40 | Oct09 | 35 | | 3 | 3.75 Apr17 | 0.26 | Apr06 | 37 |
| | 2 | 1.75 Feb17 | 1.41 | Feb11 | 20 | | 2 | 4.25 Oct17 | 0.44 | Oct06 | 33 |
| | 1 | 4.25 Oct17 | 3.22 | Oct06 | 33 | | 1 | 0.50 Nov19 | 0.89 | Jun14 | 16 |
| | | Cheapest | | | | | | Cheapest | | | |
| ITALY | | Richest | | | | | | Richest | | | |
| | 1 | 3.50 Nov17 | -2.85 | Nov12 | 17 | | 1 | 4.25 Mar20 | -0.04 | Sep09 | 24 |
| | 2 | 4.25 Mar20 | -2.78 | Sep09 | 24 | | 2 | 4.50 Feb20 | 0.02 | Mar04 | 23 |
| | 3 | 5.25 Aug17 | -2.04 | Feb02 | 24 | | 3 | 3.50 Dec18 | 0.09 | Sep13 | 20 |
| | 4 | 4.50 Feb20 | -1.97 | Mar04 | 23 | | 4 | 4.00 Sep20 | 0.12 | Mar10 | 25 |
| | 5 | 3.50 Dec18 | -1.95 | Sep13 | 20 | | 5 | 4.25 Sep19 (MFB) | 0.13 | May09 | 25 |
| | 5 | 4.75 Aug23 (IK) | 1.70 | Apr08 | 25 | | 5 | 2.75 Nov16 | 0.74 | Sep13 | 12 |
| | 4 | 4.50 Mar26 | 2.02 | Sep10 | 21 | | 4 | 4.50 Mar26 | 1.06 | Sep10 | 21 |
| | 3 | 5.50 Sep22 | 2.04 | Mar12 | 20 | | 3 | 1.50 Aug19 | 1.30 | Jul14 | 14 |
| | 2 | 5.00 Mar25 | 2.23 | Jul09 | 22 | | 2 | 2.50 Dec24 | 1.39 | Sep14 | 7 |
| | 1 | 5.50 Nov22 | 3.09 | May12 | 21 | | 1 | 2.15 Dec21 | 1.99 | Jun14 | 13 |
| | | Cheapest | | | | | | Cheapest | | | |
| N'LANDS | | Richest | | | | | | Richest | | | |
| | 1 | 0.25 Jan20 | -1.84 | Sep14 | 5 | | 1 | 3.75 Jan23 | -1.83 | Jan06 | 11 |
| | 2 | 1.25 Jan18 | -1.36 | Jul12 | 15 | | 2 | 1.75 Jul23 | -1.78 | Mar13 | 16 |
| | 3 | 2.25 Jul22 | -1.31 | Feb12 | 15 | | 3 | 2.25 Jul22 | -1.74 | Feb12 | 15 |
| | 4 | 4.00 Jul18 | -0.43 | Feb08 | 15 | | 4 | 2.00 Jul24 | -1.65 | Mar14 | 13 |
| | 5 | 1.75 Jul23 | -0.41 | Mar13 | 16 | | 5 | 0.25 Jan20 | -1.19 | Sep14 | 5 |
| | 5 | 2.00 Jul24 | 1.45 | Mar14 | 13 | | 5 | 1.25 Jan19 | -0.94 | Jun13 | 15 |
| | 4 | 3.25 Jul21 | 1.60 | Mar11 | 16 | | 4 | 1.25 Jan18 | -0.89 | Jul12 | 15 |
| | 3 | 4.00 Jul19 | 1.71 | Feb09 | 14 | | 3 | 4.50 Jul17 | -0.18 | Jul07 | 15 |
| | 2 | 3.50 Jul20 | 2.19 | Feb10 | 15 | | 2 | 0.50 Apr17 | -0.13 | Jan14 | 15 |
| | 1 | 1.25 Jan19 | 2.31 | Jun13 | 15 | | 1 | 2.50 Jan17 | 0.16 | Jun11 | 16 |
| | | Cheapest | | | | | | Cheapest | | | |
| SPAIN | | Richest | | | | | | Richest | | | |
| | 1 | 5.40 Jan23 | -2.24 | Jan13 | 17 | | 1 | 5.40 Jan23 | -0.98 | Jan13 | 17 |
| | 2 | 5.85 Jan22 (FBB) | -1.68 | Nov11 | 20 | | 2 | 5.85 Jan22 (FBB) | -0.94 | Nov11 | 20 |
| | 3 | 4.25 Oct16 | -1.66 | Sep11 | 21 | | 3 | 4.80 Jan24 | -0.93 | Sep08 | 15 |
| | 4 | 0.50 Oct17 | -1.45 | Sep14 | 4 | | 4 | 4.40 Oct23 | -0.92 | May13 | 18 |
| | 5 | 3.75 Oct18 | -1.34 | Jul13 | 19 | | 5 | 3.80 Apr24 | -0.78 | Jan14 | 21 |
| | 5 | 4.10 Jul18 | 1.26 | Feb08 | 19 | | 5 | 5.50 Jul17 | 0.14 | Mar02 | 20 |
| | 4 | 1.40 Jan20 | 1.30 | Jul14 | 7 | | 4 | 4.25 Oct16 | 0.15 | Sep11 | 21 |
| | 3 | 3.80 Apr24 | 1.32 | Jan14 | 21 | | 3 | 2.10 Apr17 | 0.16 | Nov13 | 21 |
| | 2 | 4.00 Apr20 | 1.33 | Jan10 | 22 | | 2 | 3.80 Jan17 | 0.23 | Oct06 | 21 |
| | 1 | 4.85 Oct20 | 1.58 | Jul10 | 18 | | 1 | 0.50 Oct17 | 1.62 | Sep14 | 4 |
| | | Cheapest | | | | | | Cheapest | | | |
| BELGIUM | | Richest | | | | | | Richest | | | |
| | 1 | 4.25 Sep21 | -1.72 | Jan11 | 15 | | 1 | 4.25 Sep21 | -0.97 | Jan11 | 15 |
| | 2 | 4.00 Mar18 | -1.56 | Jan08 | 12 | | 2 | 2.60 Jun24 | -0.96 | Jan14 | 14 |
| | 3 | 2.60 Jun24 | -1.52 | Jan14 | 14 | | 3 | 2.25 Jun23 | -0.84 | Jan13 | 14 |
| | 4 | 3.00 Sep19 | -1.09 | Apr12 | 11 | | 4 | 3.00 Sep19 | -0.84 | Apr12 | 11 |
| | 5 | 4.00 Mar17 | -0.53 | Jan07 | 11 | | 5 | 4.25 Sep22 | -0.82 | Jan12 | 15 |
| | 5 | 4.50 Mar26 | 0.88 | Jun11 | 9 | | 5 | 4.00 Mar18 | -0.62 | Jan08 | 12 |
| | 4 | 4.25 Sep22 | 1.40 | Jan12 | 15 | | 4 | 1.25 Jun18 | -0.58 | Feb13 | 12 |
| | 3 | 3.75 Sep20 | 1.43 | Jan10 | 18 | | 3 | 4.00 Mar17 | -0.43 | Jan07 | 11 |
| | 2 | 2.25 Jan23 | 2.04 | Jan13 | 14 | | 2 | 5.50 Sep17 | -0.40 | Jun02 | 8 |
| | 1 | 4.00 Mar22 | 2.09 | May06 | 14 | | 1 | 3.50 Jun17 | -0.40 | Mar11 | 13 |
| | | Cheapest | | | | | | Cheapest | | | |

Source: Citi Research

Euro Relative Value Screen – 8yr+

Figure 41. 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) | | | | | | | | | |
|-------------------------|-----------------------------------|----------|---|-----------------|-------|--------|------------|--|--|-------------------------|------|------------------|--------|-------|--------|------------|--|--|--|
| | | Rank | | ZScore | | Issued | Size (€bn) | | | | Rank | | ZScore | | Issued | Size (€bn) | | | |
| | | | | | | | | | | | | | | | | | | | |
| GERMANY | <div><div></div><div></div></div> | Richest | 1 | 4.75 Jul34 | -3.04 | Jan03 | 20 | | | Richest | 1 | 5.50 Jan31 | -3.31 | Oct00 | 17 | | | | |
| | | | 2 | 6.25 Jan30 | -2.18 | Jan00 | 9 | | | | 2 | 4.75 Jul34 | -3.21 | Jan03 | 20 | | | | |
| | | | 3 | 4.00 Jan37 | -2.03 | Jan05 | 23 | | | | 3 | 6.25 Jan30 | -3.20 | Jan00 | 9 | | | | |
| | | | 4 | 1.50 May23 | -2.02 | May13 | 18 | | | | 4 | 4.00 Jan37 | -2.89 | Jan05 | 23 | | | | |
| | | | 5 | 5.50 Jan31 | -1.97 | Oct00 | 17 | | | | 5 | 1.50 May23 | -2.79 | May13 | 18 | | | | |
| | <div><div></div><div></div></div> | Cheapest | 5 | 2.50 Jul44 | 0.45 | Apr12 | 16 | | | Cheapest | 5 | 1.75 Feb24 | -2.51 | Jan14 | 18 | | | | |
| | | | 4 | 1.75 Feb24 | 0.88 | Jan14 | 18 | | | | 4 | 2.00 Aug23 | -2.51 | Sep13 | 18 | | | | |
| | | | 3 | 3.25 Jul42 | 1.53 | Jul10 | 15 | | | | 3 | 4.75 Jul40 | -2.46 | Jul08 | 16 | | | | |
| | | | 2 | 4.75 Jul40 | 2.36 | Jul08 | 16 | | | | 2 | 4.25 Jul39 | -2.39 | Jan07 | 14 | | | | |
| | | | 1 | 4.25 Jul39 | 2.43 | Jan07 | 14 | | | | 1 | 1.00 Aug24 | -1.75 | Sep14 | 14 | | | | |
| FRANCE | <div><div></div><div></div></div> | Richest | 1 | 4.00 Apr55 | -2.75 | Apr04 | 15 | | | Richest | 1 | 2.25 May24 | -0.33 | Nov13 | 28 | | | | |
| | | | 2 | 3.50 Apr26 | -1.27 | Apr10 | 30 | | | | 2 | 4.25 Oct23 (OAT) | -0.24 | Oct06 | 33 | | | | |
| | | | 3 | 2.25 May24 | -1.13 | Nov13 | 28 | | | | 3 | 3.50 Apr26 | -0.21 | Apr10 | 30 | | | | |
| | | | 4 | 2.50 May30 | -1.05 | May14 | 15 | | | | 4 | 1.75 May23 | -0.20 | May12 | 27 | | | | |
| | | | 5 | 1.75 Nov24 | -1.02 | Jun14 | 19 | | | | 5 | 2.25 Oct22 | -0.13 | Oct11 | 25 | | | | |
| | <div><div></div><div></div></div> | Cheapest | 5 | 2.25 Oct22 | 0.15 | Oct11 | 25 | | | Cheapest | 5 | 2.50 May30 | 0.49 | May14 | 15 | | | | |
| | | | 4 | 3.25 May45 | 0.71 | May12 | 12 | | | | 4 | 3.25 May45 | 0.49 | May12 | 12 | | | | |
| | | | 3 | 2.75 Oct27 | 1.19 | Oct11 | 32 | | | | 3 | 2.75 Oct27 | 0.56 | Oct11 | 32 | | | | |
| | | | 2 | 4.50 Apr41 | 1.33 | Apr09 | 24 | | | | 2 | 4.50 Apr41 | 0.66 | Apr09 | 24 | | | | |
| | | | 1 | 4.00 Oct38 | 1.90 | Oct05 | 24 | | | | 1 | 4.00 Oct38 | 0.81 | Oct05 | 24 | | | | |
| ITALY | <div><div></div><div></div></div> | Richest | 1 | 2.50 Dec24 | -1.98 | Sep14 | 7 | | | Richest | 1 | 4.50 May23 | 0.44 | Mar13 | 18 | | | | |
| | | | 2 | 5.75 Feb33 | -0.53 | Feb02 | 15 | | | | 2 | 4.50 Mar24 | 0.46 | Aug13 | 23 | | | | |
| | | | 3 | 5.00 Aug39 | -0.48 | Aug07 | 19 | | | | 3 | 3.75 Sep24 | 0.49 | Mar14 | 20 | | | | |
| | | | 4 | 5.00 Aug34 | -0.28 | Aug03 | 22 | | | | 4 | 5.50 Nov22 | 0.56 | May12 | 21 | | | | |
| | | | 5 | 5.00 Sep40 | -0.01 | Sep09 | 21 | | | | 5 | 4.75 Aug23 (IK) | 0.57 | Apr08 | 25 | | | | |
| | <div><div></div><div></div></div> | Cheapest | 5 | 4.75 Sep28 | 1.42 | Jan13 | 18 | | | Cheapest | 5 | 5.00 Aug34 | 1.52 | Aug03 | 22 | | | | |
| | | | 4 | 4.75 Aug23 (IK) | 1.70 | Apr08 | 25 | | | | 4 | 5.00 Aug39 | 1.79 | Aug07 | 19 | | | | |
| | | | 3 | 4.50 Mar26 | 1.99 | Sep10 | 21 | | | | 3 | 4.00 Feb37 | 1.79 | Aug05 | 26 | | | | |
| | | | 2 | 5.00 Mar25 | 2.18 | Jul09 | 22 | | | | 2 | 5.00 Sep40 | 1.89 | Sep09 | 21 | | | | |
| | | | 1 | 5.50 Nov22 | 3.02 | May12 | 21 | | | | 1 | 4.75 Sep44 | 1.89 | Mar13 | 15 | | | | |
| N'LANDS | <div><div></div><div></div></div> | Richest | 1 | 2.50 Jan33 | -3.22 | Mar12 | 10 | | | Richest | 1 | 2.50 Jan33 | -2.65 | Mar12 | 10 | | | | |
| | | | 2 | 2.75 Jan47 | -0.55 | Feb14 | 4 | | | | 2 | 4.00 Jan37 | -2.49 | Apr05 | 14 | | | | |
| | | | 3 | 1.75 Jul23 | -0.29 | Mar13 | 16 | | | | 3 | 3.75 Jan42 | -2.12 | May10 | 15 | | | | |
| | <div><div></div><div></div></div> | Cheapest | 3 | 3.75 Jan23 | 0.27 | Jan06 | 11 | | | Cheapest | 3 | 3.75 Jan23 | -1.83 | Jan06 | 11 | | | | |
| | | | 2 | 2.00 Jul24 | 1.64 | Mar14 | 13 | | | | 2 | 1.75 Jul23 | -1.78 | Mar13 | 16 | | | | |
| | | | 1 | 3.75 Jan42 | 3.10 | May10 | 15 | | | | 1 | 2.00 Jul24 | -1.65 | Mar14 | 13 | | | | |
| SPAIN | <div><div></div><div></div></div> | Richest | 1 | 5.40 Jan23 | -2.25 | Jan13 | 17 | | | Richest | 1 | 5.40 Jan23 | -0.98 | Jan13 | 17 | | | | |
| | | | 2 | 4.40 Oct23 | -1.31 | May13 | 18 | | | | 2 | 4.80 Jan24 | -0.93 | Sep08 | 15 | | | | |
| | | | 3 | 5.75 Jul32 | -1.03 | Jan01 | 16 | | | | 3 | 4.40 Oct23 | -0.92 | May13 | 18 | | | | |
| | | | 4 | 4.80 Jan24 | -0.71 | Sep08 | 15 | | | | 4 | 3.80 Apr24 | -0.78 | Jan14 | 21 | | | | |
| | | | 5 | 4.70 Jul41 | -0.25 | Sep09 | 12 | | | | 5 | 4.65 Jul25 | -0.74 | Feb10 | 14 | | | | |
| | <div><div></div><div></div></div> | Cheapest | 5 | 5.15 Oct44 | 0.33 | Oct13 | 6 | | | Cheapest | 5 | 5.15 Oct44 | -0.11 | Oct13 | 6 | | | | |
| | | | 4 | 5.90 Jul26 | 0.50 | Mar11 | 14 | | | | 4 | 4.70 Jul41 | -0.07 | Sep09 | 12 | | | | |
| | | | 3 | 5.15 Oct28 | 0.59 | Jul13 | 12 | | | | 3 | 4.90 Jul40 | -0.02 | Jun07 | 13 | | | | |
| | | | 2 | 2.75 Oct24 | 1.00 | Jun14 | 18 | | | | 2 | 4.00 Oct64 | 0.00 | Sep14 | 1 | | | | |
| | | | 1 | 3.80 Apr24 | 1.33 | Jan14 | 21 | | | | 1 | 4.20 Jan37 | 0.22 | Jan05 | 16 | | | | |
| BELGIUM | <div><div></div><div></div></div> | Richest | 1 | 3.75 Jun45 | -3.42 | Sep13 | 5 | | | Richest | 1 | 2.60 Jun24 | -0.96 | Jan14 | 14 | | | | |
| | | | 2 | 2.60 Jun24 | -1.55 | Jan14 | 14 | | | | 2 | 2.25 Jun23 | -0.84 | Jan13 | 14 | | | | |
| | | | 3 | 5.00 Mar35 | -1.39 | May04 | 19 | | | | 3 | 5.00 Mar35 | -0.76 | May04 | 19 | | | | |
| | | | 4 | 3.00 Jun34 | -0.23 | Mar14 | 6 | | | | 4 | 4.50 Mar26 | -0.76 | Jun11 | 9 | | | | |
| | <div><div></div><div></div></div> | Cheapest | 4 | 4.00 Mar32 | 0.25 | Mar12 | 8 | | | Cheapest | 4 | 4.00 Mar32 | -0.71 | Mar12 | 8 | | | | |
| | | | 3 | 4.25 Mar41 | 0.75 | Apr10 | 14 | | | | 3 | 3.00 Jun34 | -0.66 | Mar14 | 6 | | | | |
| | | | 2 | 4.50 Mar26 | 0.86 | Jun11 | 9 | | | | 2 | 3.75 Jun45 | -0.35 | Sep13 | 5 | | | | |
| | | | 1 | 2.25 Jun23 | 2.01 | Jan13 | 14 | | | | 1 | 4.25 Mar41 | -0.35 | Apr10 | 14 | | | | |

Source: Citi Research

UK Relative Value Screen

Figure 42. Coupon adjusted spread (CAS) to fitted curve and swap curve by maturity (6m history)

| Versus Govt Curve (CAS) | | | | | | | | | | Versus Swap Curve (CAS) | | | | | | | | | |
|-------------------------|----------|---|------------------|--------|--------|------------|----------|------|------------------|-------------------------|--------|--------|------------|--|--|--|--|--|--|
| | Rank | | | ZScore | Issued | Size (€bn) | | Rank | | | ZScore | Issued | Size (€bn) | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| ALL | Richest | 1 | 4.25 Sep39 | -2.42 | Mar09 | 20 | Richest | 1 | 1.00 Sep17 | -2.90 | Mar12 | 32 | | | | | | | |
| | | 2 | 1.00 Sep17 | -2.23 | Mar12 | 32 | | 2 | 5.00 Mar18 | -2.55 | May07 | 35 | | | | | | | |
| | | 3 | 5.00 Mar25 | -2.04 | Sep01 | 35 | | 3 | 3.75 Sep19 | -2.41 | Jul09 | 28 | | | | | | | |
| | | 4 | 3.75 Sep19 | -1.81 | Jul09 | 28 | | 4 | 3.75 Sep20 | -2.25 | Jun10 | 24 | | | | | | | |
| | | 5 | 4.75 Dec38 | -1.69 | Apr04 | 25 | | 5 | 4.75 Mar20 | -2.22 | Mar05 | 33 | | | | | | | |
| | Cheapest | 5 | 2.75 Sep24 | 1.31 | Mar14 | 17 | Cheapest | 5 | 4.25 Dec46 | 2.24 | May06 | 21 | | | | | | | |
| | | 4 | 4.25 Jun32 | 1.56 | May00 | 35 | | 4 | 4.25 Dec49 | 2.25 | Sep08 | 20 | | | | | | | |
| | | 3 | 4.00 Sep16 | 1.56 | Mar06 | 35 | | 3 | 4.25 Dec55 | 2.26 | May05 | 24 | | | | | | | |
| | | 2 | 4.00 Jan60 | 1.75 | Oct09 | 21 | | 2 | 4.00 Jan60 | 2.70 | Oct09 | 21 | | | | | | | |
| | | 1 | 1.25 Jul18 | 2.30 | Feb13 | 34 | | 1 | 3.50 Jul68 | 2.89 | Jun13 | 10 | | | | | | | |
| 2yr - 7yr | Richest | 1 | 1.00 Sep17 | -2.07 | Mar12 | 32 | Richest | 1 | 1.00 Sep17 | -2.90 | Mar12 | 32 | | | | | | | |
| | | 2 | 3.75 Sep19 | -1.76 | Jul09 | 28 | | 2 | 5.00 Mar18 | -2.55 | May07 | 35 | | | | | | | |
| | | 3 | 4.50 Mar19 (WX) | -1.63 | Sep08 | 36 | | 3 | 3.75 Sep19 | -2.41 | Jul09 | 28 | | | | | | | |
| | | 4 | 3.75 Sep20 | -1.51 | Jun10 | 24 | | 4 | 3.75 Sep20 | -2.25 | Jun10 | 24 | | | | | | | |
| | | 5 | 4.75 Mar20 | -1.41 | Mar05 | 33 | | 5 | 4.75 Mar20 | -2.22 | Mar05 | 33 | | | | | | | |
| | Cheapest | 5 | 2.00 Jul20 | -0.35 | Sep14 | 9 | Cheapest | 5 | 1.25 Jul18 | -2.16 | Feb13 | 34 | | | | | | | |
| | | 4 | 1.75 Jan17 | 0.12 | Aug11 | 29 | | 4 | 2.00 Jul20 | -1.99 | Sep14 | 0 | | | | | | | |
| | | 3 | 5.00 Mar18 | 0.62 | May07 | 35 | | 3 | 1.75 Jan17 | -1.98 | Aug11 | 29 | | | | | | | |
| | | 2 | 2.00 Jul20 | 1.43 | Sep14 | 0 | | 2 | 3.75 Sep21 | -1.85 | Mar11 | 28 | | | | | | | |
| | | 1 | 1.25 Jul18 | 2.47 | Feb13 | 34 | | 1 | 2.00 Jul20 | -1.32 | Sep14 | 9 | | | | | | | |
| 7yr - 15yr | Richest | 1 | 5.00 Mar25 (G) | -1.91 | Sep01 | 35 | Richest | 1 | 5.00 Mar25 (G) | -2.12 | Sep01 | 35 | | | | | | | |
| | | 2 | 4.00 Mar22 | -1.51 | Feb09 | 38 | | 2 | 2.75 Sep24 (10y) | -1.98 | Mar14 | 17 | | | | | | | |
| | | 3 | 1.75 Sep22 | -1.46 | Jun12 | 29 | | 3 | 4.00 Mar22 | -1.87 | Feb09 | 38 | | | | | | | |
| | | 4 | | | | | | 4 | | | | | | | | | | | |
| | | 5 | | | | | | 5 | | | | | | | | | | | |
| | Cheapest | 5 | | | | | Cheapest | 5 | | | | | | | | | | | |
| | | 4 | | | | | | 4 | | | | | | | | | | | |
| | | 3 | 2.25 Sep23 | -0.08 | Jun13 | 27 | | 3 | 2.25 Sep23 | -1.86 | Jun13 | 27 | | | | | | | |
| | | 2 | 4.25 Dec27 | 0.33 | Sep06 | 31 | | 2 | 1.75 Sep22 | -1.84 | Jun12 | 29 | | | | | | | |
| | | 1 | 2.75 Sep24 (10y) | 1.51 | Mar14 | 17 | | 1 | 4.25 Dec27 | -1.74 | Sep06 | 31 | | | | | | | |
| >15yr | Richest | 1 | 4.25 Sep39 | -2.15 | Mar09 | 20 | Richest | 1 | 4.75 Dec30 | -0.96 | Oct07 | 32 | | | | | | | |
| | | 2 | 4.75 Dec38 | -1.47 | Apr04 | 25 | | 2 | 4.25 Jun32 | -0.36 | May00 | 35 | | | | | | | |
| | | 3 | 3.25 Jan44 (30y) | -1.27 | Oct12 | 27 | | 3 | 4.50 Sep34 | 0.16 | Jun09 | 28 | | | | | | | |
| | | 4 | 3.75 Jul52 | -1.03 | Sep11 | 22 | | 4 | 4.25 Mar36 | 0.79 | Feb03 | 26 | | | | | | | |
| | | 5 | 4.25 Dec46 | -0.63 | May06 | 21 | | 5 | 4.75 Dec38 | 1.01 | Apr04 | 25 | | | | | | | |
| | Cheapest | 5 | 4.25 Dec40 | 1.41 | Jun10 | 25 | Cheapest | 5 | 4.25 Dec46 | 2.24 | May06 | 21 | | | | | | | |
| | | 4 | 3.50 Jan45 | 1.54 | Sep14 | 0 | | 4 | 4.25 Dec49 | 2.25 | Sep08 | 20 | | | | | | | |
| | | 3 | 4.25 Jun32 | 1.75 | May00 | 35 | | 3 | 4.25 Dec55 | 2.26 | May05 | 24 | | | | | | | |
| | | 2 | 4.00 Jan60 | 2.01 | Oct09 | 21 | | 2 | 4.00 Jan60 | 2.70 | Oct09 | 21 | | | | | | | |
| | | 1 | 3.50 Jul68 | 4.66 | Jun13 | 10 | | 1 | 3.50 Jul68 | 2.89 | Jun13 | 10 | | | | | | | |

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 43. 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) |
| 27 Oct (Mon) | US | 0.85 - 1.05 | Outright Treasury Coupon Purchases : 15/2/2036 - 15/8/2044 | | -24k | | |
| 28 Oct (Tue) | Italy | 2.3 | CTZ Aug16 | | | | 4k |
| 28 Oct (Tue) | Italy | 1.0 | BTPei24 and BTPei26 | | | | 9k |
| 28 Oct (Tue) | UK | 4.0 | Syndication of 3.5% Treasury Gilt 2068 (estimated size, w/c 27th October) | | | 135k | |
| 28 Oct (Tue) | US | 29.0 | 2-year | | 90k | | |
| 29 Oct (Wed) | Germany | 4.0 | Bund 1% Aug24 re-opening (issue and size confirmed) | | | | 30k |
| 29 Oct (Wed) | US | 15.0 | 2-Year FRN | | 47k | | |
| 29 Oct (Wed) | US | 35.0 | 5-year | | 183k | | |
| 30 Oct (Thu) | Italy | 6.0 | BTP 1.5% Aug19 and Dec24 (estimated issue and size) | | | | 34k |
| 30 Oct (Thu) | Italy | 1.5 | CCTeu Dec20 (estimated size) | | | | 6k |
| 30 Oct (Thu) | US | 29.0 | 7-year | | 216k | | |
| Weekly \$DV01 of Issuance | | | | 75.2 | | | |
| Total Number of Futures Contracts | | | | | 512k | 135k | 82k |

| 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 | 3.5 | RAGB 10yr and 30yr (estimated tenors and size) | | | | 56k |
| 04 Nov (Tue) | UK | 1.1 | 0.5% Index-linked Treasury Gilt 2050 (issue confirmed, estimated size) | | | 50k | |
| 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) | | | | 75k |
| 06 Nov (Thu) | Spain | 3.0 | Bono 5yr and 10yr (estimated tenors and size) | | | | 19k |
| Weekly \$DV01 of Issuance | | | | 33.8 | | | |
| Total Number of Futures Contracts | | | | | 0k | 50k | 166k |

| 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 | | 84k | | |
| 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 | | 254k | | |
| 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 | | 348k | | |
| Weekly \$DV01 of Issuance | | | | 77.1 | | | |
| Total Number of Futures Contracts | | | | | 686k | 30k | 110k |

| 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) | | | | 32k |
| 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) | | | 39k | |
| 20 Nov (Thu) | US | 13.0 | 10-Year TIPS (re-opening) | | 147k | | |
| Weekly \$DV01 of Issuance | | | | 24.4 | | | |
| Total Number of Futures Contracts | | | | | 147k | 39k | 40k |

Source: DMOs, Citi Research

EMU: Coupons & Redemptions (Next 3mths)

Figure 44. EMU-11 Bond redemptions over the rest of 2014 (€bn)

| Redemptions | Redemptions = €99bn | | | | | | | | | | |
|-----------------|---------------------|-----------|----------|-----------|-----------|----------|----------|----------|----------|----------|----------|
| | DEU 14 | FRA 21 | NLD 0 | ITA 42 | ESP 22 | BEL 0 | AUT 0 | FIN 0 | PRT 0 | GRC 0 | IRL 0 |
| (Sat) 25-Oct-14 | | 21.1 | | | 21.8 | | | | | | |
| (Fri) 31-Oct-14 | | | | | | | | | | | |
| (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

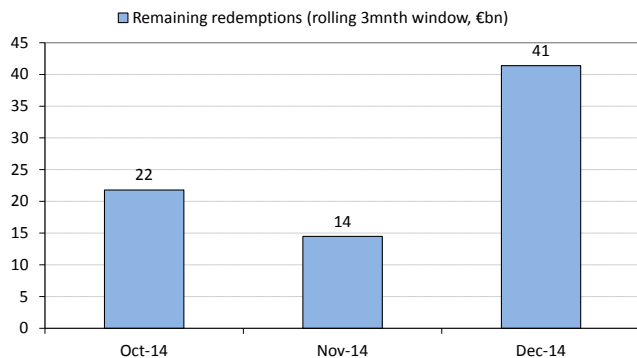
Figure 45. EMU-11 Coupon payments over the rest of 2014 (€bn)

| | Coupons = €34bn | | | | | | | | | |
|-----------------|-----------------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Coupons | DEU 0 | FRA 17 | NLD 0 | ITA 9 | ESP 7 | BEL 0 | AUT 0 | PRT 0 | GRC 0 | IRL 0 |
| (Sat) 25-Oct-14 | | 16.2 | | | | | | 0.4 | | |
| (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 46. EMU-11 remaining redemptions over the rest of 2014 (€bn)



Source: DMOs, Bloomberg, Citi Research

This chart is on a calendar-date basis

Figure 47. EMU-11 remaining coupons over the rest of 2014 (€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 48. 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 | 29 Oct (Wed) | Italy | 6 month (30 April 2015; issue confirmed, estimated size) | 7.5 |
| Total Size in Week 1 | | | | 7.5 |
| Week 3 | 12 Nov (Wed) | Italy | 12 month (13 November 2015; issue confirmed, estimated size) | 7.5 |
| Total Size in Week 3 | | | | 7.5 |
| Week 4 | 18 Nov (Tue) | Spain | 6month (16 May 2015) and 12month (new bill) - tenors confirmed, estimated issue and size | 5 |
| Total Size in Week 4 | | | | 5.0 |

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 49. 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 | 3.0 | 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 | 30.2 | 45.1 | | 100 | 110 | -10 |

| 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 | | 7.5 | | 8.0 | | 16 | 17 | -1 |
| Nov | | 7.5 | | 7.5 | | 15 | 14 | 1 |
| Dec | | 7.0 | | 7.0 | | 14 | 14 | |
| Total | | 92.5 | | 93.1 | | 186 | 197 | -12 |

*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 50. Citi Inflation Forecasts

| Month | EUR HICPxT | | | France CPIxT | | | UK RPI | | | US CPURNSA | | |
|--------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|----------------|------------|------------|
| | Index Forecast | MoM Change | YoY Change | Index Forecast | MoM Change | YoY Change | Index Forecast | MoM Change | YoY Change | Index Forecast | MoM Change | YoY Change |
| Aug 14 | 116.91 | 0.1 | 0.3 | 126.38 | 0.5 | 0.4 | 257.00 | 0.4 | 2.4 | 237.85 | -0.2 | 1.7 |
| Sep 14 | 117.43 | 0.4 | 0.3 | 125.88 | -0.4 | 0.2 | 257.60 | 0.2 | 2.3 | 238.10 | 0.1 | 1.7 |
| Oct 14 | 117.58 | 0.1 | 0.5 | 125.78 | -0.1 | 0.3 | 257.90 | 0.1 | 2.4 | 237.80 | -0.1 | 1.8 |
| Nov 14 | 117.49 | -0.1 | 0.5 | 125.85 | 0.1 | 0.4 | 258.20 | 0.1 | 2.4 | 237.50 | -0.1 | 1.9 |
| Dec 14 | 117.90 | 0.3 | 0.5 | 126.21 | 0.3 | 0.3 | 259.00 | 0.3 | 2.2 | 237.20 | -0.1 | 1.8 |
| Jan 15 | 116.65 | -1.1 | 0.6 | 125.52 | -0.5 | 0.4 | 257.70 | -0.5 | 2.0 | 238.30 | 0.5 | 1.9 |

Source: Citi Research, Bloomberg

Shaded = Already released

Figure 51. US TIPS Inflation-linked Carry (based on forecasts above) – One week changes

| Bond | RY (%) | Chg (bp) | Carry-adj chg | Carry: RY (bp) | | | Reference Conventional | BE (bp) | Chg (bp) | Carry-adj chg | Carry: BE (bp) | | | ZC Swap - BE Spread (bp) | Chg (bp) |
|-----------|--------|----------|---------------|----------------|-------|-------|------------------------|---------|----------|---------------|----------------|-------|-------|--------------------------|----------|
| | | | | 1 Dec | 1 Jan | 1 Feb | | | | | 1 Dec | 1 Jan | 1 Feb | | |
| Repo (%) | | | | 0.09 | 0.09 | 0.09 | | | | | | | | | |
| TIPS 1/16 | -0.68 | -11 | -7 | -2 | -21 | -43 | US-2.625-02/29/16 | 89 | 14 | 10 | -3 | -23 | -46 | 9 | -5 |
| TIPS 4/16 | -0.65 | -9 | -6 | -2 | -16 | -33 | US-2.000-04/30/16 | 93 | 14 | 11 | -3 | -19 | -38 | 3 | -6 |
| TIPS 7/16 | -1.01 | -7 | -4 | -4 | -19 | -35 | US-4.875-08/15/16 | 137 | 12 | 8 | -6 | -22 | -40 | 10 | -5 |
| TIPS 1/17 | -0.76 | -6 | -4 | -2 | -12 | -23 | US-3.125-01/31/17 | 129 | 13 | 10 | -4 | -16 | -29 | 11 | -6 |
| TIPS 4/17 | -0.59 | -5 | -3 | -1 | -9 | -17 | US-0.875-04/30/17 | 122 | 12 | 9 | -3 | -13 | -24 | 15 | -4 |
| TIPS 7/17 | -0.78 | -4 | -2 | -1 | -10 | -18 | US-4.750-08/15/17 | 154 | 12 | 10 | -4 | -15 | -26 | 13 | -4 |
| TIPS 1/18 | -0.49 | -3 | -1 | 0 | -6 | -12 | US-3.500-02/15/18 | 146 | 11 | 9 | -3 | -12 | -21 | 17 | -1 |
| TIPS 4/18 | -0.34 | -3 | -2 | 0 | -5 | -10 | US-0.625-04/30/18 | 141 | 14 | 12 | -3 | -10 | -18 | 19 | -3 |
| TIPS 7/18 | -0.50 | -1 | 0 | 0 | -5 | -11 | US-4.000-08/15/18 | 163 | 9 | 7 | -3 | -11 | -19 | 19 | 2 |
| TIPS 1/19 | -0.29 | -1 | 0 | 0 | -4 | -8 | US-2.750-02/15/19 | 162 | 13 | 11 | -3 | -10 | -17 | 15 | -1 |
| TIPS 4/19 | -0.19 | -1 | 0 | 1 | -3 | -7 | US-1.625-04/30/19 | 157 | 14 | 12 | -3 | -9 | -15 | 17 | -2 |
| TIPS 7/19 | -0.29 | 0 | 1 | 0 | -3 | -7 | US-3.625-08/15/19 | 173 | 13 | 12 | -3 | -9 | -16 | 19 | -1 |
| TIPS 1/20 | -0.09 | 2 | 3 | 1 | -2 | -5 | US-3.625-02/15/20 | 163 | 12 | 11 | -2 | -8 | -14 | 26 | -0 |
| TIPS 7/20 | -0.08 | 3 | 4 | 1 | -2 | -5 | US-2.625-08/15/20 | 178 | 13 | 12 | -3 | -8 | -13 | 23 | -2 |
| TIPS 1/21 | 0.08 | 5 | 5 | 1 | -1 | -3 | US-3.625-02/15/21 | 170 | 11 | 10 | -2 | -7 | -12 | 30 | -1 |
| TIPS 7/21 | 0.08 | 6 | 7 | 1 | -1 | -3 | US-2.125-08/15/21 | 180 | 9 | 8 | -2 | -7 | -11 | 29 | 1 |
| TIPS 1/22 | 0.19 | 6 | 6 | 1 | -1 | -2 | US-2.000-02/15/22 | 175 | 9 | 8 | -2 | -6 | -10 | 33 | -0 |
| TIPS 7/22 | 0.18 | 6 | 6 | 1 | -1 | -2 | US-1.625-08/15/22 | 183 | 9 | 8 | -2 | -6 | -10 | 33 | -1 |
| TIPS 1/23 | 0.27 | 6 | 6 | 1 | 0 | -2 | US-2.000-02/15/23 | 182 | 9 | 8 | -2 | -6 | -9 | 33 | -1 |
| TIPS 7/23 | 0.25 | 6 | 6 | 1 | 0 | -2 | US-2.500-08/15/23 | 189 | 10 | 9 | -2 | -6 | -9 | 35 | -2 |
| TIPS 1/24 | 0.32 | 6 | 7 | 1 | 0 | -2 | US-2.750-02/15/24 | 187 | 8 | 7 | -2 | -5 | -9 | 34 | -1 |
| TIPS 7/24 | 0.39 | 5 | 6 | 1 | 0 | -1 | US-7.625-02/15/25 | 182 | 9 | 8 | -2 | -5 | -9 | 43 | -3 |
| TIPS 1/26 | 0.45 | 6 | 6 | 1 | 0 | -1 | US-6.000-02/15/26 | 187 | 9 | 8 | -2 | -5 | -8 | 41 | -2 |
| TIPS 7/26 | 0.53 | 7 | 7 | 1 | 0 | -1 | US-6.625-02/15/27 | 187 | 8 | 7 | -2 | -5 | -8 | 45 | -1 |
| TIPS 1/28 | 0.57 | 7 | 8 | 1 | 0 | -1 | US-6.125-11/15/27 | 189 | 7 | 6 | -2 | -5 | -8 | 46 | -1 |
| TIPS 4/28 | 0.55 | 7 | 8 | 1 | 0 | -1 | US-5.500-08/15/28 | 196 | 7 | 6 | -2 | -4 | -7 | 38 | -0 |
| TIPS 7/28 | 0.58 | 7 | 7 | 1 | 0 | -1 | US-5.250-02/15/29 | 196 | 7 | 6 | -2 | -4 | -7 | 42 | -0 |
| TIPS 1/29 | 0.59 | 7 | 7 | 1 | 0 | -1 | US-5.250-02/15/29 | 195 | 7 | 6 | -2 | -4 | -7 | 41 | -0 |
| TIPS 4/29 | 0.69 | 7 | 7 | 1 | 0 | 0 | US-5.375-02/15/31 | 192 | 6 | 6 | -1 | -4 | -6 | 50 | 0 |
| TIPS 7/29 | 0.86 | 8 | 9 | 1 | 0 | 0 | US-4.625-02/15/40 | 202 | 5 | 4 | -1 | -3 | -5 | 46 | 1 |
| TIPS 1/30 | 0.87 | 9 | 9 | 1 | 0 | 0 | US-4.750-02/15/41 | 202 | 4 | 4 | -1 | -3 | -5 | 47 | 1 |
| TIPS 4/30 | 0.92 | 8 | 8 | 1 | 0 | 0 | US-3.125-02/15/42 | 205 | 5 | 5 | -1 | -3 | -4 | 43 | -0 |
| TIPS 7/30 | 0.92 | 8 | 8 | 1 | 0 | 0 | US-3.125-02/15/43 | 208 | 5 | 5 | -1 | -3 | -4 | 41 | -0 |
| TIPS 1/31 | 0.91 | 8 | 8 | 1 | 0 | 0 | US-3.625-02/15/44 | 208 | 5 | 5 | -1 | -3 | -4 | 41 | -0 |

Source: Citi Research, Bloomberg

Figure 52. EUR Inflation-linked Carry (based on forecasts above) – One week changes

| Bond | RY (%) | Chg (bp) | Carry-adj chg | Carry: RY (bp) | | | Reference Conventional | BE (bp) | Chg (bp) | Carry-adj chg | Carry: BE (bp) | | | ZC Swap - BE Spread (bp) | Chg (bp) | Beta |
|----------|--------|----------|---------------|----------------|-------|-------|------------------------|---------|----------|---------------|----------------|-------|-------|--------------------------|----------|-------|
| Repo (%) | | | | 1 Dec | 1 Jan | 1 Feb | | | | | 1 Dec | 1 Jan | 1 Feb | | | |
| BUNDei16 | -0.21 | -11 | -12 | 33 | 44 | 39 | BUND 1/16 | 15 | 11 | 12 | 34 | 45 | 41 | 5 | -2 | -1.75 |
| BTANi16 | -0.69 | -6 | -11 | -21 | -31 | -33 | FFRG 4/16 | 68 | 8 | 13 | -21 | -31 | -33 | 22 | 7 | -0.49 |
| BTPei16 | 0.02 | -8 | -9 | 27 | 36 | 34 | BTP 8/16 | 57 | 12 | 13 | 23 | 29 | 143 | 21 | -1 | 0.82 |
| OATi17 | -0.67 | -11 | -15 | -13 | -19 | -20 | FFRG 4/17 | 69 | 13 | 17 | -13 | -19 | -20 | 26 | 3 | 0.11 |
| BTPei17 | 0.16 | -9 | -11 | 18 | 24 | 22 | BTP 8/17 | 62 | 14 | 15 | 15 | 18 | 112 | 22 | -0 | 0.84 |
| BOBLEi18 | -0.54 | -12 | -13 | 12 | 15 | 12 | BUND 1/18 | 51 | 17 | 17 | 13 | 15 | 12 | 15 | -2 | 0.41 |
| OATei18 | -0.71 | -13 | -13 | 11 | 13 | 9 | FFRG 4/18 | 82 | 18 | 19 | 11 | 12 | 9 | 22 | -4 | 0.63 |
| BTPei18 | 0.36 | -10 | -11 | 14 | 19 | 18 | BTP 8/18 | 64 | 16 | 17 | 11 | 13 | 70 | 30 | -3 | 1.00 |
| OATi19 | -0.62 | -9 | -11 | -8 | -11 | -11 | FFRG 4/19 | 86 | 15 | 17 | -8 | -12 | -13 | 28 | -1 | 0.60 |
| BTPei19 | 0.48 | -8 | -9 | 12 | 15 | 15 | BTP 9/19 | 69 | 15 | 15 | 9 | 10 | 7 | 34 | -2 | 0.87 |
| BUNDei20 | -0.60 | -9 | -9 | 8 | 9 | 7 | BUND 1/20 | 78 | 16 | 16 | 8 | 9 | 6 | 16 | -3 | 0.67 |
| OATei20 | -0.57 | -9 | -9 | 8 | 9 | 7 | FFRG 4/20 | 99 | 16 | 17 | 7 | 8 | 5 | 20 | -3 | 0.71 |
| OATi21 | -0.42 | -8 | -10 | -5 | -7 | -7 | FFRG 4/21 | 102 | 18 | 20 | -6 | -9 | -9 | 30 | -3 | 0.70 |
| BTPei21 | 0.91 | -6 | -7 | 9 | 12 | 13 | BTP 9/21 | 90 | 15 | 15 | 6 | 6 | 4 | 31 | -3 | 0.98 |
| OATei22 | -0.32 | -5 | -5 | 6 | 7 | 6 | FFRG 4/21 | 92 | 15 | 15 | 5 | 5 | 3 | 41 | -3 | 0.76 |
| BUNDei23 | -0.45 | -5 | -5 | 5 | 6 | 5 | BUND 1/22 | 91 | 15 | 15 | 4 | 5 | 3 | 32 | -3 | 0.75 |
| OATi23 | -0.21 | -7 | -8 | -4 | -5 | -5 | FFRG 10/23 | 127 | 22 | 23 | -5 | -8 | -8 | 21 | -7 | 0.68 |
| BTPei23 | 1.21 | -6 | -7 | 8 | 11 | 11 | BTP 8/23 | 106 | 15 | 15 | 4 | 5 | 30 | 29 | -4 | 1.00 |
| OATei24 | -0.08 | -3 | -3 | 5 | 6 | 5 | FFRG 10/23 | 113 | 18 | 18 | 3 | 4 | 2 | 33 | -6 | 0.71 |
| BTPei24 | 1.36 | -4 | -4 | 7 | 10 | 11 | BTP 9/24 | 111 | 11 | 11 | 4 | 4 | 2 | 32 | 0 | 0.92 |
| SPGBEi24 | 0.90 | -5 | -5 | 6 | 8 | 9 | SPAG 4/24 | 116 | 12 | 12 | 4 | 4 | 1 | 29 | -1 | 0.84 |
| BTPei26 | 1.60 | -1 | -1 | 6 | 9 | 10 | BTP 3/26 | 114 | 10 | 10 | 3 | 3 | 1 | 40 | 1 | 0.99 |
| OATei27 | 0.18 | -1 | -1 | 4 | 6 | 5 | FFRG 4/26 | 130 | 15 | 15 | 3 | 3 | 1 | 32 | -5 | 0.70 |
| OATi29 | 0.20 | -0 | -1 | -2 | -3 | -2 | FFRG 4/29 | 155 | 17 | 17 | -4 | -6 | -7 | 25 | -4 | 0.64 |
| BUNDei30 | -0.08 | -7 | -7 | 3 | 4 | 3 | BUND 1/30 | 137 | 18 | 18 | 2 | 2 | 0 | 27 | -8 | 0.62 |
| OATei30 | 0.41 | 1 | 1 | 3 | 5 | 4 | FFRG 5/30 | 149 | 15 | 15 | 2 | 2 | 0 | 25 | -6 | 0.67 |
| OATei32 | 0.43 | 4 | 4 | 4 | 5 | 5 | FFRG 5/30 | 147 | 13 | 13 | 2 | 2 | 0 | 32 | 1 | 0.65 |
| BTPei35 | 1.95 | 6 | 6 | 4 | 6 | 7 | BTP 8/34 | 149 | 5 | 5 | 1 | 1 | 15 | 33 | 5 | 0.81 |
| OATei40 | 0.62 | 6 | 6 | 3 | 3 | 3 | FFRG 4/41 | 165 | 13 | 13 | 1 | 1 | 0 | 24 | -4 | 0.67 |
| BTPei41 | 2.29 | 8 | 7 | 4 | 5 | 6 | BTP 9/40 | 148 | 2 | 2 | 1 | 1 | -1 | 41 | 7 | 0.92 |

Source: Citi Research

Figure 53. UK Gilts Inflation-linked Carry (based on forecasts above) – One week changes

| Bond | RY (%) | Chg (bp) | Carry-adj chg | Carry: RY (bp) | | | Reference Conventional | BE (bp) | Chg (bp) | Carry-adj chg | Carry: BE (bp) | | | ZC Swap - BE Spread (bp) | Chg (bp) |
|------------|--------|----------|---------------|----------------|-------|-------|------------------------|---------|----------|---------------|----------------|-------|-------|--------------------------|----------|
| Repo (%) | | | | 1 Dec | 1 Jan | 1 Feb | | | | | 1 Dec | 1 Jan | 1 Feb | | |
| UKTi Jul16 | -1.71 | 2 | 1 | 5 | 10 | 15 | UKT 9/16 | 239 | 12 | 13 | 4 | 7 | 10 | 45 | 6 |
| UKTi Nov17 | -1.48 | 5 | 3 | 5 | 3 | 2 | UKT 3/18 | 262 | 18 | 20 | 2 | -1 | -5 | 19 | -8 |
| UKTi Nov19 | -1.14 | 2 | 1 | 4 | 3 | 3 | UKT 9/19 | 263 | 23 | 23 | 1 | -1 | -4 | 30 | -3 |
| UKTi Apr20 | -1.01 | 4 | 3 | 3 | 6 | 8 | UKT 3/20 | 259 | 21 | 21 | 1 | 1 | 2 | 28 | -3 |
| UKTi Nov22 | -0.87 | 4 | 3 | 3 | 3 | 3 | UKT 3/22 | 272 | 20 | 21 | 0 | -1 | -3 | 37 | -2 |
| UKTi Mar24 | -0.66 | 4 | 3 | 2 | 3 | 3 | UKT 3/25 | 287 | 19 | 19 | 0 | -1 | -3 | 20 | -5 |
| UKTi Jul24 | -0.67 | 4 | 3 | 2 | 4 | 6 | UKT 3/25 | 287 | 19 | 19 | 0 | 0 | 0 | 31 | -2 |
| UKTi Nov27 | -0.57 | 6 | 6 | 2 | 2 | 3 | UKT 12/27 | 300 | 15 | 16 | 0 | -1 | -3 | 32 | -2 |
| UKTi Mar29 | -0.49 | 6 | 6 | 2 | 2 | 2 | UKT 12/30 | 310 | 14 | 14 | 0 | -2 | -3 | 21 | -5 |
| UKTi Jul30 | -0.49 | 6 | 6 | 2 | 3 | 4 | UKT 6/32 | 318 | 15 | 15 | 0 | 0 | 0 | 24 | -12 |
| UKTi Nov32 | -0.50 | 8 | 7 | 1 | 2 | 2 | UKT 6/32 | 320 | 13 | 13 | 0 | -2 | -3 | 28 | -4 |
| UKTi Mar34 | -0.45 | 8 | 8 | 1 | 2 | 2 | UKT 9/34 | 323 | 12 | 12 | 0 | -2 | -3 | 23 | -6 |
| UKTi Jan35 | -0.45 | 7 | 7 | 1 | 2 | 3 | UKT 3/36 | 328 | 13 | 13 | 0 | -1 | -1 | 23 | -6 |
| UKTi Nov37 | -0.46 | 9 | 8 | 1 | 1 | 2 | UKT 12/38 | 332 | 11 | 11 | 0 | -2 | -3 | 23 | -4 |
| UKTi Mar40 | -0.45 | 9 | 9 | 1 | 1 | 1 | UKT 9/39 | 333 | 11 | 11 | -1 | -2 | -3 | 20 | -3 |
| UKTi Nov42 | -0.46 | 10 | 10 | 1 | 1 | 1 | UKT 12/42 | 337 | 10 | 10 | -1 | -2 | -3 | 19 | -3 |
| UKTi Mar44 | -0.42 | 10 | 10 | 1 | 1 | 1 | UKT 1/44 | 337 | 10 | 10 | 0 | -1 | -2 | 17 | -4 |
| UKTi Nov47 | -0.44 | 10 | 9 | 1 | 1 | 1 | UKT 12/46 | 338 | 10 | 10 | -1 | -1 | -2 | 18 | -3 |
| UKTi Mar50 | -0.43 | 10 | 10 | 1 | 1 | 1 | UKT 12/49 | 336 | 9 | 9 | -1 | -1 | -2 | 17 | -4 |
| UKTi Mar52 | -0.42 | 10 | 9 | 1 | 1 | 1 | UKT 7/52 | 336 | 10 | 10 | 0 | -1 | -2 | 16 | -4 |
| UKTi Nov55 | -0.44 | 10 | 10 | 1 | 1 | 1 | UKT 12/55 | 335 | 10 | 10 | 0 | -1 | -2 | 18 | -3 |
| UKTi Mar62 | -0.43 | 10 | 10 | 1 | 1 | 1 | UKT 1/60 | 336 | 10 | 10 | -1 | -1 | -2 | 16 | -5 |
| UKTi Mar68 | -0.43 | 10 | 10 | 0 | 1 | 1 | UKT 7/68 | 338 | 10 | 10 | -1 | -1 | -2 | 15 | -5 |

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