

## European Rates Weekly

### Bund Yields to Dip Into QE

- **New Bund projections:** Citi economists attach a high probability to further downside inflation surprises, which would likely trigger QE. The “Japanisation” scenario has always been, and still is, our benchmark for the Eurozone. The recent blend of fundamental data, asset prices and policy response simply confirm this scenario in our view. We expect Bund yields to drop to 0.75% in Q4, before reverting to their fundamental equilibrium level of 1.5% during the course of 2015.
- **EUR spread options look expensive vs. USD at the front-end:** We ascribe the divergence to the disanchoring of the USD front-end. At current valuations - with an accommodative ECB and post-tapering effects to weigh on the belly of the USD curve, whilst the Fed stays on hold in terms of rate-setting - we like long USD 2s5s cap positions vs. EUR.
- **Gilt flattening view – the same, but different:** The gilt yield forecasts have been revised lower. In the front-end, this reflects Citi’s new policy rate view. In the long-end, this reflects the likely impact on gilts from full-blown QE by the ECB. The net impact is that we continue to anticipate a strong flattening trend for the gilt curve, well beyond the forwards.
- **Spain to outperform further:** For various fundamental and technical considerations, we would not fade Spain’s outperformance of Italy. In an environment of a Moody’s upgrade of Spain and ongoing divergence in growth prospects between Italy, a more negative Bono-BTP spread is justified in our view. We target a 10yr cross-market spread of -35bp.
- **Attractive Laender:** The recent rally in most liquid supras and agencies is lagged by the German sub-sovereign segment. It’s particularly the spread to the KFW curve which provides investors with interesting opportunities.
- **Multi-cédula shakeups:** Several rating actions on multi-cédulas occurred during the last few weeks. But that was not all which happened in this segment. A planned acquisition as well as unilateral taps ensures that the market continues to evolve.
- **RV trade ideas:** We highlight five relative value trades in the front-end (primarily 2016-2018 maturities) of the German, French, Italian and gilt yield curves. All the trades offer positive 3m carry and attractive mean reversion potential.
- **Supply:** Next week’s EGB supply comes only from Italy (estimated €12bn) across 5yr and 10yr BTP, CTZ and CCTeu. The US Treasury will issue an estimated \$105bn across the 2yr, 5yr and 7yr sectors and 2yr FRN next week. The UK DMO will issue £0.9bn of the 0.625% Index-linked Treasury Gilt 2040 next Wednesday.

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**See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.**

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## European Rates Strategy Yield Outlook

**Core Europe:** We have lowered the year-end Bund forecast to an unprecedented 0.75%, followed by a rebound to 1% in Q1-15, which is a reaction we have observed in other episodes of QE. From there, we expect Bunds to reach 1.50% by Q3-15, a more justified fundamental yield level in our mind. We detail our reasons in the next section.

**EMU Periphery:** We forecast ongoing spread compression for the periphery markets of Greece, Portugal, Italy and Spain compared to Germany, largely as a function of QE forecast. Moreover, we see scope for Spain to outperform further. Spain is benefiting from an improved growth environment which should enhance fundamental credit metrics — and we believe there are rising prospects for Spain to be rated higher than Italy over the medium term. Together with recent market behaviour (whereby Spain has been outperforming in both sell offs and rallies), we look for 10yr Bono spreads to Bunds to average 75bp in Q4 and would not fade the rally vs Italy. We target a 10yr Bono-BTP spread of -35bp in Q4.

**UK:** Citi now expects the first rate hike in February 2015, rather than November 2014 previously, following the BoE's reassessment of the supply-side of the economy. The hiking cycle is also now more likely to be back-loaded than front-loaded. This has prompted us to revise down our front-end yield forecasts. However, we have also revised down our long-end yield forecasts. This is more a reflection of our lower Bund yield forecasts to reflect a higher probability of full-blown QE. The net result is that we still expect gilt curves (2s5s, 2s10s, 10s30s) to flatten sharply. We expect the 10yr gilt-Bund spread will widen to 175bp by year-end. A rally in Bunds below 1% is also likely to have a greater impact on gilts than Treasuries. The 10yr gilt-UST spread may spend some time in negative territory.

Figure 1. Interest Rate and Bond Market Forecasts as of 20 August 2014

|   |         | Quarterly Average (Unless Specified) |        |        |        |        |        |
|---|---------|--------------------------------------|--------|--------|--------|--------|--------|
|   | Current | 4Q 14                                | 1Q 15F | 2Q 15F | 3Q 15F | 4Q 15F | 1Q 16F |
| Euro Area                                 |         |                                      |        |        |        |        |        |
| Policy Rate End Quarter                   | 0.15    | 0.15                                 | 0.15   | 0.15   | 0.15   | 0.15   | 0.15   |
| Overnight Rate (EONIA)                    | 0.01    | 0.05                                 | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |
| 3-Month (EURIBOR)                         | 0.15    | 0.15                                 | 0.15   | 0.15   | 0.15   | 0.15   | 0.15   |
| 2 Year Schatz Yield                       | -0.01   | 0.05                                 | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   |
| 5 Year Bobl Yield                         | 0.22    | 0.15                                 | 0.20   | 0.35   | 0.50   | 0.50   | 0.60   |
| 10 Year Bund Yield                        | 1.00    | 0.75                                 | 1.00   | 1.25   | 1.50   | 1.50   | 1.75   |
| 30 Year Bund Yield                        | 1.87    | 1.60                                 | 1.90   | 2.15   | 2.40   | 2.40   | 2.65   |
| 2-10 Year Bund Curve                      | 99      | 70                                   | 95     | 120    | 145    | 145    | 170    |
| 10 Year BTP-Bund Spread                   | 150     | 110                                  | 100    | 100    | 100    | 100    | 100    |
| 10 Year Bono-Bund Spread                  | 132     | 75                                   | 65     | 65     | 65     | 65     | 65     |
| 2 Year BTP-Schatz Spread                  | 32      | 25                                   | 25     | 25     | 25     | 25     | 25     |
| 2 Year Bono Schatz Spread                 | 22      | 15                                   | 15     | 15     | 15     | 15     | 15     |
| 10 Year OAT-Bund Spread                   | 38      | 30                                   | 30     | 30     | 30     | 30     | 30     |
| 10 Year Swap Spread (Swap Less Govt.), bp | 23      | 25                                   | 20     | 20     | 20     | 20     | 20     |
| 10 Year Breakeven Inflation               | 118     | 135                                  | 140    | 140    | 145    | 145    | 145    |
| 5y5y Implied Vol                          | 72      | 72                                   | 70     | 70     | 70     | 70     | 70     |
| UK  |         |                                      |        |        |        |        |        |
| Policy Rate End Quarter                   | 0.50    | 0.50                                 | 0.75   | 1.00   | 1.25   | 1.75   | 2.00   |
| 3-Month Libor                             | 0.56    | 0.55                                 | 1.00   | 1.25   | 1.55   | 1.80   | 2.05   |
| 2 Year Treasury Yield                     | 0.72    | 1.15                                 | 1.60   | 1.90   | 2.20   | 2.40   | 2.45   |
| 5 Year Treasury Yield                     | 1.83    | 2.00                                 | 2.30   | 2.50   | 2.75   | 2.85   | 2.90   |
| 10 Year Treasury Yield                    | 2.40    | 2.50                                 | 2.80   | 3.00   | 3.20   | 3.25   | 3.30   |
| 30 Year Treasury Yield                    | 3.11    | 3.10                                 | 3.25   | 3.40   | 3.55   | 3.55   | 3.60   |
| 2-10 Year Treasury Curve                  | 168     | 135                                  | 120    | 110    | 100    | 85     | 85     |
| 10 Year Swap Spread (Swap Less Govt.), bp | 13      | 12                                   | 15     | 20     | 20     | 25     | 25     |
| 10 Year Breakeven Inflation               | 296     | 305                                  | 310    | 315    | 325    | 330    | 340    |

Source: Citi Research

## Bund: Yields to Dip Into QE

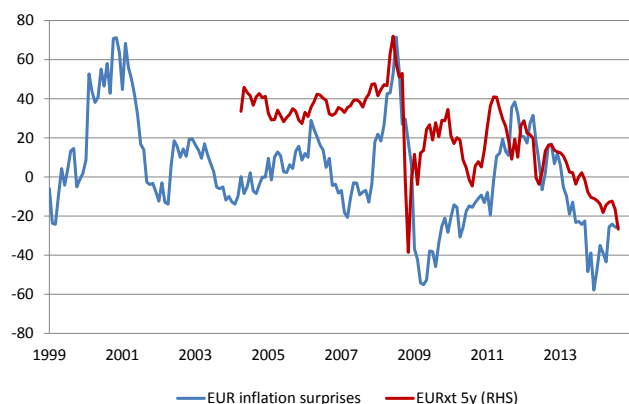
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Our new Bund projections differ radically from last month's. Citi economists attach a high probability to further downside inflation surprises, which would trigger ECB's digital QE response. We expect Bund yields to drop to 0.75% in Q4, before reverting to their fundamental equilibrium level of 1.5% during the course of 2015.

Bunds have started the year at 1.95% (2013 high at 2.09% in early November) and have closed at lower yields in seven out of ten weeks ever since. In total return terms, 2014 has been a very strong year for EGBs so far: Citi's EMU government bond index has delivered +8.7% with contributions from France (+7.9%), Germany (+6.5%), Italy (+10.2%) and Spain (+11.3%).

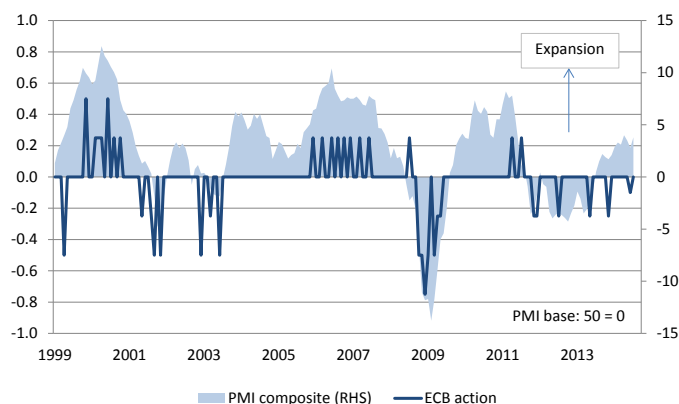
We attribute the bulk of this performance to an unprecedented string of negative economic surprises, while geopolitical factors have played a second-order role in our view. Inflation measures have consistently surprised on the downside this year and the string of below-consensus index prints goes back to February 2013, according to Citi's inflation surprise indicator (Figure 2). The market has re-priced in line with this tendency and we're now close to inflation swap levels seen in the aftermath of the US mortgage crisis. The probability of the ECB having to deploy QE in order to rescue its price stability mandate is directly proportional to the risk of deflation and a de-anchoring of medium-term inflation expectations.

Figure 2. Inflation remains surprisingly low...



Source: Citi Research

Figure 3. ...prompting the ECB to diverge from their habits



Source: Markit, ECB, Citi Research

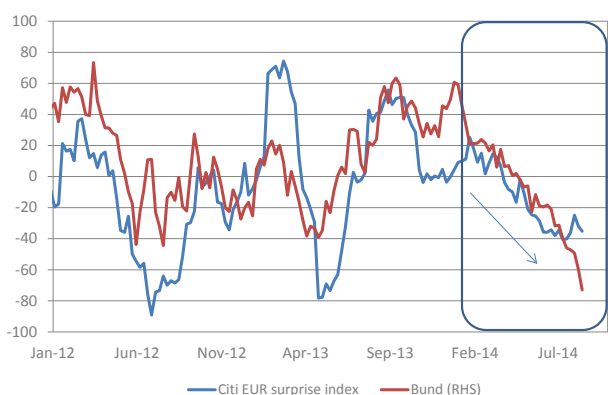
It's not all about inflation, though. The divergence between forward-looking business cycle indicators and actual growth has induced the ECB to alter their standard behavior: Rate cuts have been possible even with Eurozone PMIs in expansionary mode (Figure 3), a "rule" that has counted only very few exceptions since 1999. It's no mystery that ECB's loss function may have evolved since the early stages of the crisis and most likely includes multiple arguments at this stage, rather than just inflation (and inflation expectations). In our view, this is a direct result of the persistently strong heterogeneity of the single currency area.

Looking at a broad index of economic indicators, incoming Eurozone data have surprised on the downside since the end of Q1 (Figure 4) and the magnitude of negative surprises has only stabilized after the very dovish June ECB meeting, which in our view prompted the consensus to revise down its estimates. The current level of Bund yields stands out in comparison with the lows previously reached in summer 2012. Risk aversion is significantly lower now, gauged for example by several indicators of asset price volatility and credit risk premium, despite ongoing geopolitical tensions.

We've analyzed the so-called "Japanisation" scenario at length in previous research<sup>1</sup>, dissenting somewhat from the Draghian mantra that the Eurozone is different from Japan on at least three accounts. On the strategy desk, our view has always been and still is that the Eurozone is heading towards a full Japanisation, with all the consequences it bears in terms of income re-distribution and re-structuring of the industrial landscape. Our biggest uncertainty is about the exact timing, i.e. this cycle or the next?

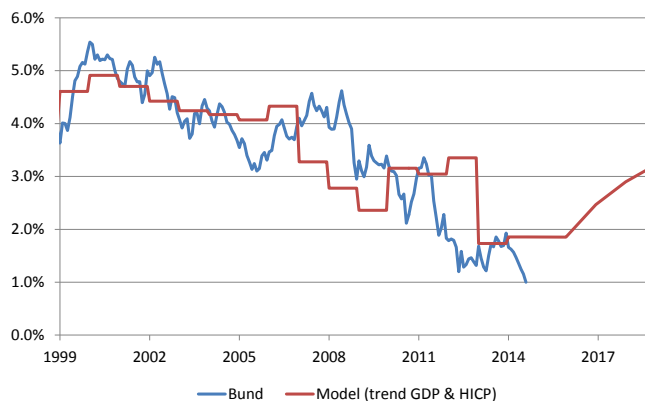
Of course, the ECB dissents from this particular scenario, in Mr Draghi's own words, "...we asked ourselves – and perhaps I have explained this on another occasion – are we close to the Japanese scenario? And the answer we gave ourselves is no, we are not. For a variety of reasons. The first one of which is the most important, i.e. that the ECB has taken decisive action at a very early stage of this crisis. The second is that the condition of the balance sheets of the banking sector and the corporate sector is not as bad as it was in the 1990s there. The third reason is that we are now proceeding fast with the asset quality review (AQR), which will lead to the repair of our banking system. And the final reason is that if we look back at how long-term inflation expectations were actually behaving in Japan at that time, we would find out that they were actually not firmly anchored. That is why it is so important that our inflation expectations remain firmly anchored, because they tell people that in a certain amount of time, over the medium term, inflation will go back to our objective, namely close to but below 2%."<sup>2</sup>

Figure 4. The consensus got 2014's macro picture wrong



Source: Citi Research

Figure 5. A naïve model of Bund yields using trend growth and inflation



Source: EC, Citi Research

Let's get back to the Bund. A naïve model based on trend growth and HICP seems to provide a rough approximation of the downward drift in Bund yields observed since adoption of the single currency (Figure 5). Feeding the model with data from the European Commission<sup>3</sup>, suggests that the equilibrium Bund yield should remain unchanged at 2013/2014 levels (1.8%) at least for the next two years, before rapidly rising due to the usual mean reversion assumption embedded into standard macroeconomic models. Note that this basic framework does not account for external factors like US Treasury yields. Furthermore, the methodology is very sensitive to – not infrequent – data revisions.

<sup>1</sup> ["Low-for-Longer: Not Even at Half-Time"](#) (30 May-14)

<sup>2</sup> ["Introductory statement to the press conference \(with Q&A\)"](#) (9 Jan-14)

<sup>3</sup> ["European Economic Forecast – Spring 2014"](#) (Mar-14)

Another, slightly more refined model is shown in Figure 6. We use EC's output gap estimate together with Citi forecasts for HICP to define an equilibrium level for the short term rate (Taylor rule). Subsequently, we add historical yield curve and credit curve premia in order to estimate the Bund yield. The projection derived within this framework is less bearish than the naïve model (5y average is 1.5% vs 2.3%), mainly due to a pronounced dip to 0.5% in 2014 (negative Taylor interest rate) and a less aggressive terminal yield of 2.3% in 2018. The interesting point is that the projected 2014 dip is based exclusively on fundamental factors and does not include exogenous variables like QE or international financial variables.

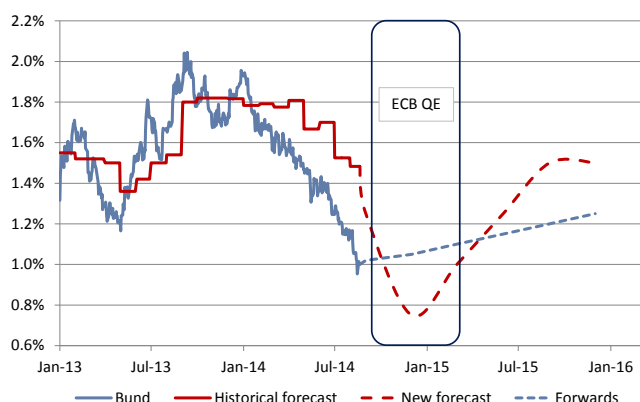
So, where does this leave us with our forecast? Given the digital nature of QE ("they either do it or they don't"), the continued disappointment on the fundamental front, ongoing geopolitical tensions as well as other systemically relevant central banks shifting back their exit plans, we have revised our year-end call for Bunds. We now expect Bund yields to dip to 0.75% in Q4 and then to rebound back to 1% in Q1 2015, a typical knee-jerk reaction to QE motivated by a jump in long-dated inflation expectations. This forecast stands out in comparison to the linear trajectory described by quarterly Bund forwards (Figure 7), thus underlining once again the high probability of the QE-event in our forecast.

Figure 6. The equilibrium yield for Bunds is probably around 1.5%...

| Eurozone                        | 2014        | 2015       | 2016       | 2017       | 2018       |
|---------------------------------|-------------|------------|------------|------------|------------|
| GDP (Citi)                      | 0.8         | 1.5        | 1.9        | 1.9        | 1.8        |
| Output gap (EC)                 | -2.7        | -1.8       | -1.3       | -0.8       | -0.3       |
| HICP (Citi)                     | 0.5         | 0.9        | 1.2        | 1.5        | 1.7        |
| ECB target                      | 1.9         | 1.9        | 1.9        | 1.9        | 1.9        |
| <b>ECB refi (Taylor rule)</b>   | <b>-0.1</b> | <b>0.6</b> | <b>1.0</b> | <b>1.4</b> | <b>1.8</b> |
| Avg ECB/Bund spread             | 1.2         | 1.2        | 1.2        | 1.2        | 1.2        |
| Bund spread vs EMU              | -0.6        | -0.6       | -0.6       | -0.6       | -0.6       |
| <b>Bund 10y yield (implied)</b> | <b>0.5</b>  | <b>1.2</b> | <b>1.6</b> | <b>2.0</b> | <b>2.3</b> |
| <b>5y-avg Bund 10y yield</b>    | <b>1.5</b>  |            |            |            |            |

Source: EC, ECB, Citi Research

Figure 7. ...but we must model a high-prob of QE in our forecast now



Source: Citi Research

We leave the question about the usefulness of QE in a highly heterogeneous currency area unanswered, as there will be a time in the not too distant future when this will become a key theme<sup>4</sup>. However, another question may be more relevant in the near term: "Mr Draghi, with 5y xt-swaps below 1%, with the ongoing real-devaluation that is taking place in the periphery and with disinflationary tendencies also appearing in the core, how can you say that inflation expectations for the euro area over the medium to long term continue to be firmly anchored?" Needless to say, any revision to the Governing Council's view on deflation will almost automatically trigger a full-blown QE response in order to defend the ECB's price stability mandate in our view. Our Bund forecast implies exactly that scenario.

<sup>4</sup> ["What's Behind the Periphery Growth Outperformance"](#) (15 Aug-14)

## EUR Spread Options Look Expensive vs. USD

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Derivatives

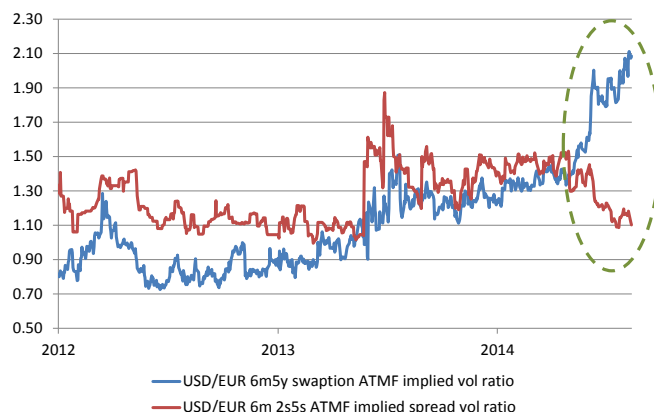
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EUR 6m 2s5s spread vol looks rich vs. USD. This can be illustrated via the recent decoupling between the USD/EUR 6m 2s5s ATM implied spread vol ratio and USD/EUR 6m5y swaption ATM implied vol (see Figure 8).

More generally the table in Figure 9 shows current USD/EUR single look ATM implied spread vol ratios across liquid curve segments and maturities. Observe also that USD 10s30s implied spread vol trades at a discount vs. EUR up to one year maturity.

Figure 8. EUR implied spread vol looks expensive vs. USD



Source: Citi Research

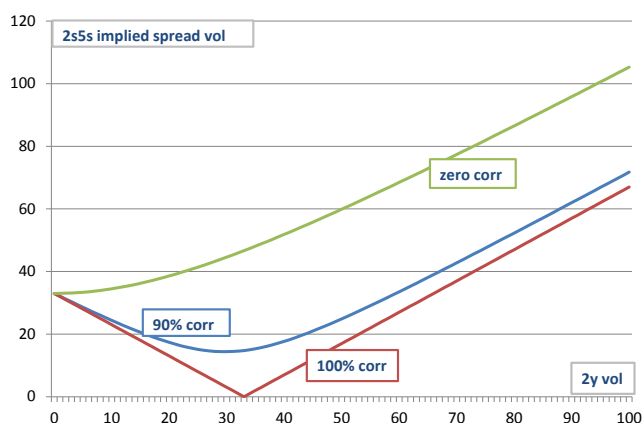
Figure 9. USD 10s30s spread vol trades at a discount vs. EUR up to 1y

|    | 2s5s | 2s10s | 2s20s | 2s30s | 5s10s | 5s30s | 10s30s |
|----|------|-------|-------|-------|-------|-------|--------|
| 1m | 1.09 | 1.13  | 1.80  | 1.08  | 1.04  | 1.02  | 0.79   |
| 2m | 1.07 | 1.16  | 1.86  | 1.13  | 1.05  | 1.11  | 0.83   |
| 3m | 1.05 | 1.19  | 1.92  | 1.19  | 1.06  | 1.20  | 0.86   |
| 6m | 1.10 | 1.24  | 1.99  | 1.33  | 1.08  | 1.25  | 0.84   |
| 9m | 1.17 | 1.32  | 2.01  | 1.45  | 1.12  | 1.25  | 0.84   |
| 1y | 1.24 | 1.38  | 2.03  | 1.54  | 1.14  | 1.28  | 0.86   |
| 2y | 1.56 | 1.69  | 2.10  | 1.65  | 1.31  | 1.21  | 1.01   |
| 3y | 1.73 | 1.77  | 2.08  | 1.63  | 1.30  | 1.21  | 1.06   |
| 4y | 1.75 | 1.67  | 1.80  | 1.54  | 1.32  | 1.19  | 1.07   |
| 5y | 1.61 | 1.51  | 1.72  | 1.54  | 1.27  | 1.22  | 1.08   |

Source: Citi Research

How has such divergence come about? Chart in Figure 10 plots implied spread vol as a function of implied vol of one of the two underlying rates. As long as implied correlation has reasonable values, if implied volatility increases from historically low values below the level of implied volatility of the other underlying, implied spread vol will decrease, everything else equal. Indeed, USD implied spread vol has cheapened vs. EUR implied spread vol with USD front-end vol having picked up while EUR top-left has been subject to downward pressure.

Figure 10. USD 2s5s implied spread vol has decreased with higher 2y vol



Source: Citi Research

Figure 11. Short EUR 2s5s vol vs USD strategies enjoy positive rolldown

| One year EUR ATM SL Cap Rolldown |       |       |       |       |       |       |        |
|----------------------------------|-------|-------|-------|-------|-------|-------|--------|
|                                  | 2s5s  | 2s10s | 2s20s | 2s30s | 5s10s | 5s30s | 10s30s |
| 1y                               | -100% | -100% | -100% | -100% | -96%  | -4%   | 28%    |
| 2y                               | -47%  | -29%  | -8%   | -8%   | 8%    | 24%   | 33%    |
| 3y                               | -21%  | 2%    | 21%   | 20%   | 27%   | 30%   | 30%    |
| 4y                               | 1%    | 18%   | 36%   | 34%   | 28%   | 32%   | 27%    |
| 5y                               | 8%    | 19%   | 35%   | 36%   | 20%   | 26%   | 18%    |

| One year USD ATM SL Cap Rolldown |      |       |       |       |       |       |        |
|----------------------------------|------|-------|-------|-------|-------|-------|--------|
|                                  | 2s5s | 2s10s | 2s20s | 2s30s | 5s10s | 5s30s | 10s30s |
| 1y                               | 53%  | 91%   | 60%   | 112%  | 69%   | 70%   | 54%    |
| 2y                               | 47%  | 55%   | 42%   | 58%   | 28%   | 38%   | 16%    |
| 3y                               | 8%   | 15%   | 15%   | 21%   | 15%   | 13%   | 7%     |
| 4y                               | -1%  | 5%    | 17%   | 10%   | 0%    | 5%    | 2%     |
| 5y                               | 1%   | 5%    | 6%    | 4%    | 0%    | 1%    | -1%    |

Source: Citi Research



If, however, the market reprices aggressively to the Fed's current expected rate levels (Yellen seems pretty determined, and we expect her to surprise to the downside in her speech at Jackson Hole<sup>5</sup>), the equilibrium level of the USD front-end will be lower (and in turn USD front-end implied vol should decrease from current values) whilst the belly of the USD curve ought to take the brunt of the pressure of the Treasury market with the tapering having come to an end.

## Conclusion

EUR 2s5s spread vol looks expensive vs. USD. We ascribe the divergence to the disanchoring of the USD front-end. At current valuations, with an accommodative ECB and post-tapering effects to weigh on the belly of the USD curve whilst the Fed stays on hold in terms of rate-setting, we like long USD 2s5s cap vs. EUR. Roll-down considerations also favour short EUR cap positions vs. USD (Figure 11).

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<sup>5</sup> [How to position for Jackson Hole \(19 Aug-14\)](#)

## Gilt flattening view: the same, but different

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Citi now expects the Bank of England to begin the hiking cycle in February 2015 compared with our previous base case of November 2014. However, there remains a high degree of uncertainty over the timing of the first rate hike. This is likely to make for a fairly volatile period for the front-end, albeit with a bias to higher yields. We have updated our yield forecasts to reflect the new policy rate profile and the sharp downward revisions made to our Bund yield forecasts (see the table on page 4). The net impact is that we continue to anticipate a strong flattening trend for the gilt curve, well beyond the forwards.

### Front-end –near-term sideways, but with bearish risks

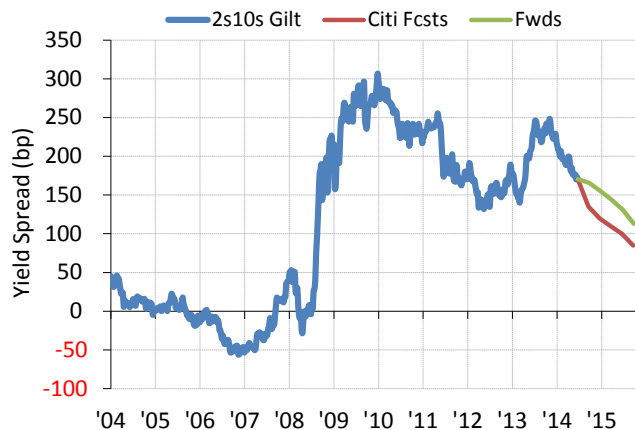
- **Uncertainty breeds volatility:** It has been a busy couple of weeks for the front-end. The dovish Inflation Report, geopolitical tensions and downside CPI surprise drove the initial rally. This was then partially offset by Carney's more hawkish interview in the Sunday Times and the 7-2 split vote in the MPC minutes (Figure 12). The most prominent near-term events risks have now passed, but the front-end is likely to remain volatile in the weeks ahead. The data will provide the impetus, but it is still unclear how the majority voting for unchanged rates will react to the data. According to the minutes, they need to see "*firmer evidence that solid increases in pay growth were in prospect*". Many surveys already point to that. However, the Inflation Report did appear to buy time for a more 'wait-and-see' approach and a rate hike in 2014 is now less probable. This suggests to us that the front-end is, for now, likely to establish a sideways, albeit quite volatile range.
- **Risk of a sudden lurch to higher yields:** For all the volatility, rates hikes are still coming. The market, and Citi, expects the first hike in February. But, given the uncertainty over the data, as well as uncertainty over the MPC's exact reaction function, a consensus for a hike could still come together very quickly. This is especially true as it seems quite likely that the four internal members, other than the Governor, will follow his lead. Three of the internals have joined since Carney took over while the fourth, Broadbent, has only recently switched from being an external member. A rate hike could still happen anytime, with little, if any, warning. Given the uncertainty - on the pace of the cycle as well as the timing - we believe that there should be a much larger risk premium in the front-end (2yr gilt yield are still just 0.73%). An unexpected timing for the first hike could well be the trigger for a risk premium to be more adequately priced into front-end valuations.

Figure 12. Recent price action in the front-end



Source: Citi Research, Bloomberg.

Figure 13. 2s10s likely to flatten beyond the forwards



Source: Citi Research, Bloomberg.

## Curve view – the same, but different

Negative carry, as well as the 'lower-for-longer' feel of the Inflation Report, presents a challenge to outright short positions, especially in the front-end. Curve flatteners offer much better risk-reward, in our view, and significantly reduce the negative carry. For example, the total carry on a 2s5s flattener over the next three-months is just -1.9bp and for 2s10s it is only -6bp.

The flattening trend on the gilt curve has been established for a while, with 2s increasingly leading in the sell-offs and lagging in the rallies. We expect this dynamic to continue. Moreover, we continue to expect the curve to flatten quite sharply and significantly beyond the forwards (Figure 13).

This partly reflects a bearish medium-term view on the front-end. Our new policy rate view has prompted us to push back the path to higher front-end yields, and slow the pace (we now expect the hiking cycle to be more back-loaded than front-loaded). However, the lack of risk premium in the front-end suggests there is still plenty of scope for a sudden, sharp sell-off.

Moreover, the flattening trend is likely to be greatly accelerated by relative stability in long-end yields. Longer-dated yields are likely to be capped by expectations of a lower terminal policy rate (driven by structural factors) and also international factors.

It has been notable in the last couple of weeks that domestic drivers are having little impact on the long-end of the gilt curve. The Inflation Report prompted a fairly modest daily move in 10yr gilt yields of -4bp, CPI -3bp and the MPC minutes +2bp. Meanwhile, geopolitical headlines prompted a Friday rally of 12bp, which was subsequently fully reversed. The spread to Bunds has also held relatively steady in a range of around 140-145bp over the last month or so.

As discussed in an earlier section, we have taken the view that the ECB will embark on QE around the end of this year and that this will prompt a rally in Bunds to 0.75% in Q4. This is bound to impact gilts. We have reflected this in the forecasts by lowering the 10yr yield forecasts (and the 5yr yield forecasts). Consequently, our forecasts continue to point to a strong flattening trend, despite the change in our policy rate view.

## Strategy – 2s5s/2s10s to beat the forwards by 25bp+

The combination of an approaching hiking cycle and long-end yields capped by international factors, in particular the prospect of QE from the ECB, points to 2s10s flatteners. The 5yr point is somewhere caught in the middle, but may be driven more by 10s than 2s given that it already fairly prices a hiking cycle in our view (with 5yr gilt yields already around 130bp above prevailing policy rates). This is especially true given the likelihood of a lower terminal rate.

We expect 2s10s to flatten by around 25-35bp beyond the forwards in the coming quarters. We also expect 2s5s to flatten further, beating the forwards by a similar amount. The 5s10s curve, in contrast, may remain relatively stable.

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## The case for Spain to outperform further

Full details of our view on Spain can be found in our broader piece published yesterday, [Why Spain Is Likely To Further Decouple From The Periphery](#).

### Broad supports remain in place

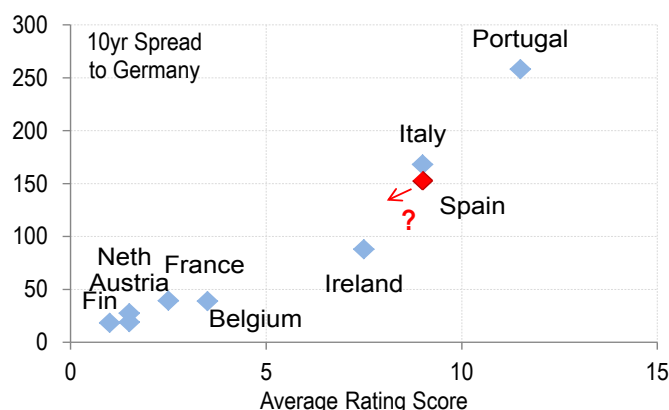
From a macro perspective, the configuration of market supports remains conducive for ongoing tightening of the periphery relative to Germany. These include the hunt-for-yield, ECB policy and QE expectations, the reliable domestic bank bid and relatively low EMU systemic risk. Much of the spread compression envisaged in Q4 and beyond is predicated on the ECB delivering some form of QE later this year as discussed on many occasions ([European Rates Weekly -ECB: Thoughts on Asset Purchases](#)).

### Rating outlook and prospects for a Spanish upgrade

Within the periphery however, we see various drivers that support the case for Spain to continue outperforming, especially given improving credit fundamentals.

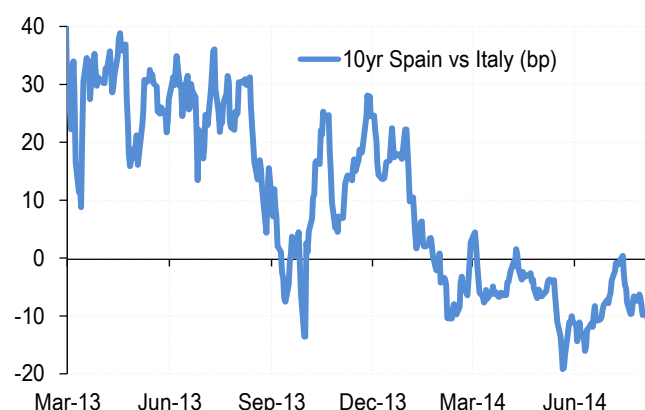
- **Composite PMI data** for Spain have been consistently above that of Italy's over the course of 2014 ([USD Supranational and non-US Agency Notes](#))
- **Unit labour costs** of Spain have improved over recent years and have led to larger export competitive gains than other periphery sovereigns ([Euro Weekly What's Behind Periphery Growth Outperformance?](#))
- **Growth and rating outlook:** Citi expects Spanish growth of 1.3% for 2014 and this expectation has been rising over the course of year. For Italy, Citi now expects 2014 GDP growth to be -0.1% ([Europe - Sovereign Debt Update 12<sup>th</sup> August](#)). Furthermore, Spain is one of the few sovereigns to have a positive outlook on its Moody's rating. On balance, we see it more likely than not that Spain is upgraded to Baa1 in October by Moody's, which would put Spain's rating one notch higher than Italy's and support a slightly tighter spread to Bunds (Figure 14).

Figure 14. EMU credit curve (10yr spread to Germany vs average rating score of S&P and Moody's)



Source: Citi Research, Moody's, S&P, Bloomberg

Figure 15. Range bound or trending?



Source: Citi Research

### We expect continued outperformance vs BTPs

For the various fundamental reasons and technical considerations detailed in our note, we would not fade Spain's outperformance of Italy. In an environment of a Moody's upgrade for Spain and ongoing divergence in growth prospects between Italy, a more negative Bono-BTP spread is justified in our view. We target the 10yr cross market spread at -35bp from a current level of around -19bp.

# European SSA Strategy: German Laender

## Fundamentals improve, value vs agencies?

Michael Spies

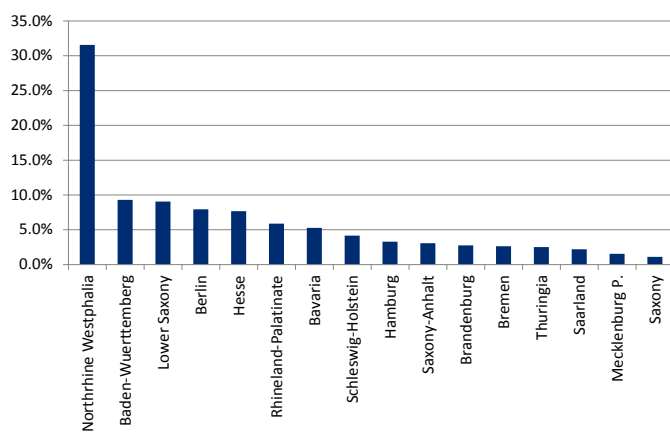
Covered bonds, SSAs

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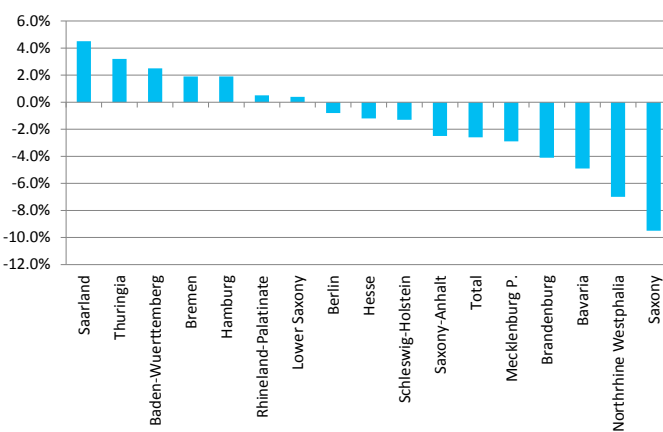
**Lower debt burden:** Last week, Germany published FY13 numbers on the public debt situation. Since the statistics were initially collected in 1950, it's the first time that the debt owed by the central state, federal states, municipalities, social security funds and extra budgets decreased on a yearly basis, according to Destatis. A drop of 1.5% was recorded (€30.3bn). However, while the debt burden of municipalities remained stable, the improvement of the federal state budget was most remarkable as it saw a drop of 3.1% yoy.

Figure 16. The Laenders' relative share of total federal state and municipal debt, %



Source: Destatis, Citi Research

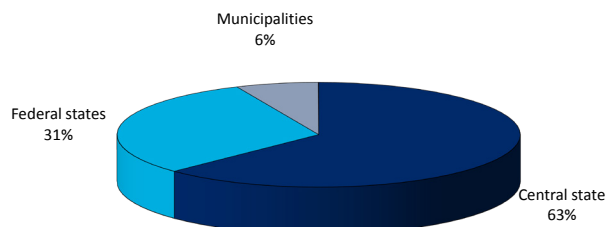
Figure 17. Yearly change on federal and municipal state debt, %



Source: Destatis, Citi Research

**Bad banks as main debt drivers:** The main driver for the decrease was the continuing portfolio shrinkage of Germany's bad banks FMS Wertmanagement as well as Erste Abwicklungsanstalt (EAA). Yet, the relative share on total debt remained stable: the total debt burden of €2,038bn is split among the central state (63%), the federal state (31%) and municipalities (6%). For more information on German Laender, please see [Euro SSA & Covered Bond Monthly - German Länder](#).

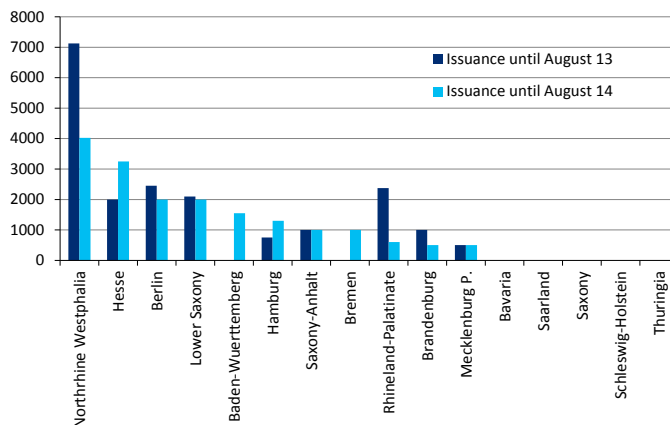
Figure 18. Split of total German debt, %



Total debt FY13: EUR2,038bn

Source: Destatis, Citi Research

Figure 19. Euro benchmark issuance until August, 2013 vs 2014, EURmn

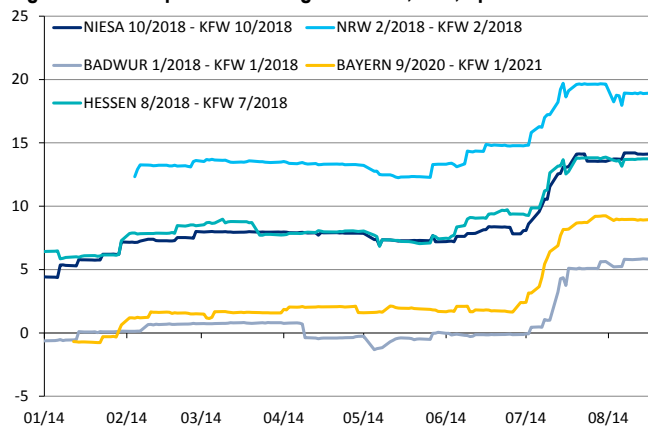


Source: Bloomberg, Citi Research

**Secondary market performance in 1H14:** During the first six months of this year, the overall spread compression also spurred demand for German Laender bonds, leading to general spread tightening against bunds as well as swap. One additional idiosyncratic reason might be the decrease in benchmark supply from these issuers. Year to date the overall euro benchmark volume stands at €17.7bn whereas 22% accounts for Northrhine-Westphalia (NRW), according to Bloomberg. Five of the 16 federal states have so far not used the benchmark format for refinancing purposes whereas Thuringia and Saxony have been completely absent from capital markets. In total, benchmark issuance volume dropped by 8% (€1.6bn) compared to the same period last year. This is again mainly driven by NRW as the issuer refinanced €7.2bn during January and August 2013, nearly twice as much as ytd (Figure 19).

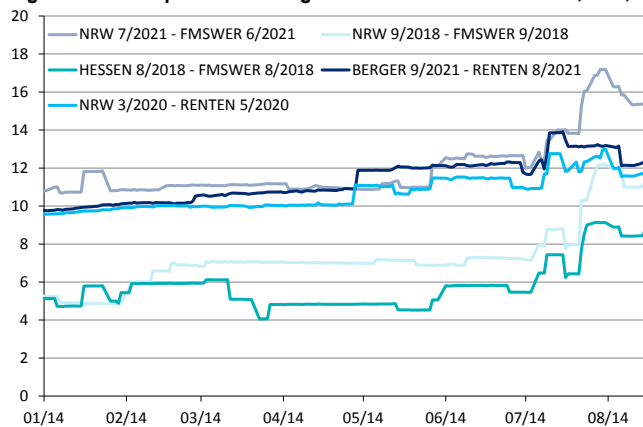
**Underperformance since June:** However, since June, German Laender underperformed bunds as well as German agency debt. In our opinion, one main driver for this underperformance among others is the relatively poor liquidity in the German sub-sovereign names compared to bunds as well as issuers like KFW. In our latest [Weekly SSA Chart Pack](#) as well as in the [USD Supranational and non-US Agency Weekly Summary](#) we observed a strong coherence between relative performance and the size of the entities, pointing to liquidity as being a main driver for spreads at current stage. Hence, the lagging reaction of German Laender to the strong rally in bunds as well as in liquid agencies like KFW put bonds of German Laender to attractive levels on a swap spread basis. Yet, attractiveness to bunds already lost its appeal and performance potential is now rather limited. Equally, Laender bonds trade extremely stable to German pfandbriefe. Hence, on a cross-asset basis German Laender don't provide attractive switch opportunities.

Figure 20. Underperformance against KFW, asw, bp



Source: Citi Research

Figure 21. Underperformance against RENTEN and FMSWER, asw, bp



Source: Citi Research

**Several opportunities to switch from KFW to sub-sovereigns:** When compared to German agencies, however, switch opportunities arise while a clear pattern can be recorded. On the one hand, German Laender underperformed KFW on average by 6bp since the beginning of July 2014 (Figure 20). During the last three weeks, this spread has been extremely stable. On the other hand, the performance against agencies depends on the size of the agency. The widening move versus FMSWER and RENTEN has been less substantial, as seen in Figure 21. We think that current spreads levels versus KFW on a swap basis make it attractive to switch from KFW into Laender bonds, especially in the belly of the curve. For investors which prefer to stay in the triple-A rated universe, a switch into bonds like BADWUR 01/18 and BAYERN 09/20 make most sense. The more liquid German sub-sovereign issuers, however, would be NRW (Aa1/AA-/AAA) as well as HESSEN (A-/AA-/A-) given the relatively high amount of benchmark bonds outstanding. Two examples are NRW 02/18 as well as HESSEN 08/18 which additionally provide a pick-up to the stronger Laender in the German sub-sovereign market.

# Spanish covered bonds: Shakeups

## Multi-cédulas: OC and ratings go up – and so do NPLs

Michael Spies

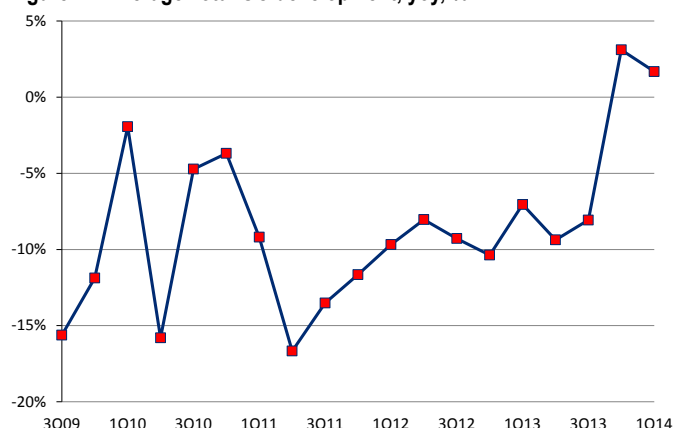
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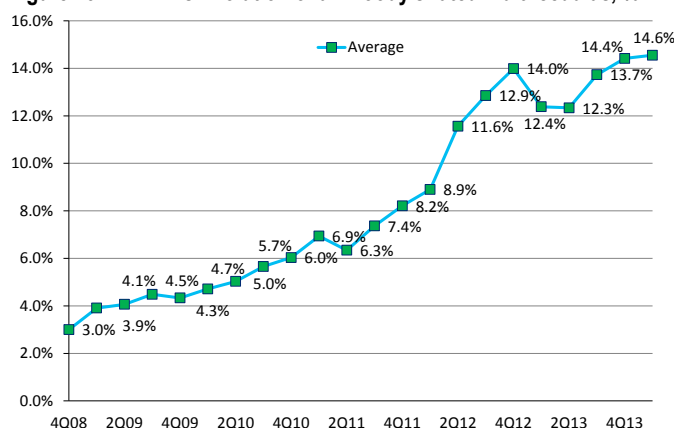
**OC develops positively:** For the Spanish multi-cédula market, one main trend recorded during the last years has been broken within the last six months (our latest data is as of 1Q14). The total as well as the eligible OC ratio has been increasing from its all-time lows in 2Q13. Between 3Q08 and 2Q13, the average of the total OC ratio of all Spanish issuers which are engaged in the multi-cédula market fell from 283.5% to 163.5%. Since then, the ratio recovered and now stands at 175% after 177.6% in 4Q13. Hence, the last quarter of 2013 and the first quarter of 2014 both recorded the first positive year-on-year development for more than four years. In a segment where several flaws within the legal framework are mitigated by extremely high OC levels, this clearly is a very positive development.

Figure 22. Average Total OC development, yoy, %



Source: Moody's, Citi Research; avg. of single-cédula issuers active in multi-cédulas

Figure 23. WA NPLs Evolution of all Moody's rated multi-cédulas, %



Source: Moody's, Citi Research

**NPLs rising:** However, it's not all positive in the multi-cédula segment. The share of non-performing loans in Spanish cover pools is still on the rise in general. This also translates into higher weighted average NPLs per structure. As Figure 23 shows, the share of NPLs has been increasing steadily from 3.0% to 14.6% during the last five years. The only remarkable drop recorded during this time period was at the beginning of 2013. Then, state owned and state supported banks were forced to clean their balance sheets and remove non-performing loans to the state-owned bad bank SAREB. This even led to temporary under-collateralizations in some of the covered bond programs which were affected by this asset transfer. However, early amortizations as well as the cancellation of retained bonds brought OC levels back to legal minimum. Other banks started to set up own bad banks which brought some relief to the overall credit quality of Spanish cover pools. For the upcoming months, we would expect NPLs in cover pools to fall, following the overall NPL ratio which fell from 13.39% to 13.06% in May, [marking the fifth month-on-month drop](#).

## Consolidation and other changes to collateral composition

**FROB disburdens itself:** During the last six months, many planned mergers and acquisitions have been finalized or driven further. The most significant consolidation processes were recorded for institutions which have formerly been owned or supported by FROB.

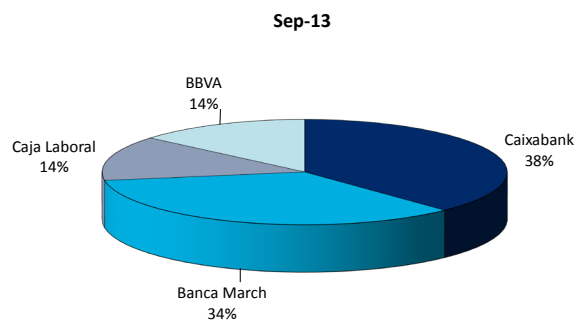
- Firstly, NCG Banco was acquired by American Banesco Group which eventually led to a downgrade of the Spanish bank from B3 to Caa1 as systemic support assumptions have been amended. As a consequence, the covered bonds have also been downgraded from Ba1 to Ba2. Both credit assessments contain a negative outlook. This should not have any effects on the issuer's cover pool composition the near-term in our opinion. NCG Banco is heavily involved in AYTCD 12/18 (16%), AYTCD 06/25 (20%) any AYTCD 03/21 (20%).



- Secondly, Banco CEISS has been acquired by Unicaja Group at the end of March 2014 as the latter took majority control (60.7%) of the former. At current stage, we are not aware that a merger of both cover pools is planned in the near term. According to Fitch, the completion of the acquisition is targeted to happen within the next three years. Until then, it could also be possible to have merged cover pools. Note, however, that there are examples in the Spanish banking system with consolidation processes which didn't result in the merger of the cover pools (e.g. Kutxabank and Cajasur Banco). Needless to say, the acquisition of a weaker credit by a stronger name should nevertheless be seen as a positive for the multi-cédulas affected, especially given the high involvement of Banco CEISS in several structures.
- Thirdly, the sale of Catalunya Banc has been concluded at the end of July 2014. After two unsuccessful attempts to sell the issuer by FROB, the public body decided to separately sell problematic assets of the bank. With this, the balance sheet was shrinking while investors were found for problematic assets. This eventually increased interest from other banks to take over the FROB supported entity. In the end, BBVA managed to win the auction on Catalunya Banc. It remains to be seen what will happen with the covered bond programs but we would expect the covered bond programs to be merged. Apart from the CAIXAC single cédulas, IMCEDI 02/22 has been affected most as 16% of the structure is backed by Catalunya Banc ([BBVA buys Catalunya Banc](#)).

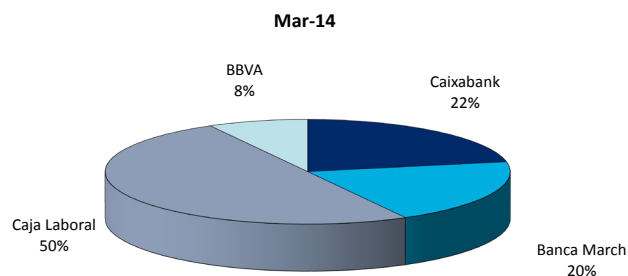
**Changes to cover pool composition:** In our last [Multi-Cédula Road Map](#), we already bespoke changes in the structure composition due to taps, asset transfers (Banco Mare Nostrum to Banco Sabadell) or bond characteristics which allow issuers to call the bond unilaterally (e.g. CEDTDA 21). During the last six months, we have again recorded a change in the overall composition of one structure.

Figure 24. IMCEDI 03/21: composition in Sept. 2013



Source: Moody's, Citi Research

Figure 25. IMCEDI 03/21: composition in Mar. 2014



Source: Moody's, Citi Research

**Tap by Caja Laboral:** IMCEDI 03/21, which is among the best rated multi-cédulas and among the best performing ones within its credit spectrum, has been amended quite substantially. The overall volume increased by €525mn to €1.25bn. This was driven by a tap of Caja Laboral while the volumes of all other contributors remained stable. Hence, Caja Laboral is now the most involved party within this multi-cédula which should be seen as a credit negative. However, it also needs to be said that Caja Laboral is rated Ba1/--/BBB+ which is even slightly better than the issuer rating of a strong Tier-2 name like Kutxabank (Ba1/BBB-/BBB). Hence, we would not expect this bond to underperform equally rated peers in the near-term.



## Rating actions – any downside surprise ahead?

**Moody's neutral, Fitch positive:** The general overhaul of multi-cédula ratings was in full steam during August. While Moody's stance was rather neutral (ten upgrades, ten downgrades, 25 confirmations), Fitch was very positive on the segment. The rating agency upgraded 13 multi-cédulas and affirmed the ratings of 19 other structures. The bonds that have been upgraded now have a stable outlook while the outlook on ten of the affirmed series has also been raised from negative to stable ([Fitch ups 13 multi-cédulas](#)). At Moody's, a further [expected upgrade of Spain](#) should be an additional positive factor in the medium-term for multi-cédula ratings.

**S&P – the great unknown:** Back in April, S&P published its last concerted rating action on Spanish multi-cédulas. At this point, 20 structures have been downgraded while five have been upgraded. Five multi-cédula ratings were affirmed. The rather negative rating action was mainly driven by a rating deterioration of the underlying credits as well as higher concentration risk within structures. Yet, the great overhaul should still be expected. In July, the rating agency published a note underscoring the importance of Spain's upgrade to lift covered bond ratings or grant them a positive outlook. It also mentions that covered bond ratings have become more resilient for issuer downgrades. Since the last rating action on multi-cédulas, S&P upgraded five Spanish covered bond programs. This should also translate into upward pressure for those multi-cédulas in which these issuers are involved (i.e. Bankia and BBVA covered bond programs).

**Methodology amendments:** However, the current methodology for rating structured finance transactions above the sovereign will probably be amended until the end of the year in the form that the gap between the sovereign rating and the higher rated structured finance rating should be lowered. In the case of Spanish covered bonds, S&P would expect 50% to 60% of all bonds being downgraded, which would directly affect highest rated multi-cédulas (due to the cap) but the whole segment in general (due to potential downgrade of the single-cédulas).

Figure 26. Which bonds could be affected of an amended structured finance rating methodology at S&P?

| Multi-cédulas          | Current Rating (S&P) | Potential downgrade (no. of notches) | Single-cédulas | Current Rating (S&P) | Potential downgrade (no. of notches) |
|------------------------|----------------------|--------------------------------------|----------------|----------------------|--------------------------------------|
| AYTCED 4 18/11/2014    | AA-                  | 1                                    | BBVA           | AA-                  | 3                                    |
| CEDGBP 4.25 26/04/2017 | AA                   | 2                                    | Bankinter      | A+                   | 2                                    |
| IMCEDI 4 19/11/2014    | AA-                  | 1                                    | Caixabank      | AA-                  | 3                                    |
| IMCEDI 3.75 11/03/2015 | AA-                  | 1                                    | Kutxabank      | AA-                  | 3                                    |
|                        |                      |                                      | Ibercaja Banco | A                    | 1                                    |

Source: Bloomberg, Citi Research

**Some downgrades ahead:** Those bonds which would be directly affected from a cap would generally be shorter dated bonds as those are usually higher rated at S&P than longer dated ones. As multi-cédulas contain liquidity risk mitigating factors (i.e. option for extension periods, liquidity lines or buffers), the gap between sovereign and covered bond ratings could be up to four notches. With the current BBB rating for Spain, this would mean that all multi-cédulas rated AA- or better should be downgraded by one or two notches. For single-cédula programs which don't have a liquidity buffer or a soft bullet option, the gap would be reduced to two notches according to the methodology proposal. In this case, the downgrades would be substantial. Single-cédulas of Tier-1 issuers like BBVA and Caixabank would be at risk of being downgraded by up to three notches.

# Tradesheet

## New Trade

Recommended in [Euro Rates Strategy](#),  
18<sup>th</sup> August 2014

### Buy 10yr Spain vs Italy

Buy Bono 3.8% Apr24 at 2.34%

Sell BTP 4.5% Mar24 at 2.53%

Open -19bp. Current -21bp. Target -35bp. Stop -9bp

## Record of Our Closed Trades

Figure 27. Record of our Closed Trades

| Region     | Trade                                | Levels   | Rationale  |  |
|------------|--------------------------------------|--|--|--|
| EUR        | Buy EUR 1y30y straddle               | Open 54bp<br>Current 60bp<br>P&L 6bp<br>Target 35bp<br>Stop 50bp | Hit Target 8th August 2014                             |  |
| Volatility | Buy EUR 1y30y 2.14% straddle at 54bp |  | Italy vs Spain: Macro, Markets & More, 6th August 2014 |  |

Source: Citi Research

## Record of Our Open Trades

Figure 28. Record of our Open Trades

| Region       | Trade   | Levels  | Rationale + Publication Date  |  |
|--------------|---|---|---|--|
| EUR          | Buy 10yr Spain vs Italy   | Open -19bp<br>Current -21bp<br>P&L 2bp<br>Target -35bp<br>Stop -9bp | Improvements in Spanish fundamental and rating outlook<br><br>Euro rates Strategy, 18th August 2014   |  |
| Cross Market | Buy Bono 3.8% Apr24 at 2.34%<br>Sell BTP 4.5% Mar24 at 2.53%                |   |   |  |
| EUR          | BTP 5s7s flattener  | Open 68bp<br>Current 62bp<br>P&L 6bp<br>Target 50bp<br>Stop 80bp    | 5s7s look steep. Ongoing yield grab and the likelihood of further ECB support should be supportive.<br><br>Italy vs Spain: Macro, Markets & More, 6th August 2014 |  |
| Curve        | Sell BTP 4.25% Sep19 @ 1.32%<br>Buy BTP 3.75% Aug21s @ 1.96%                |   |   |  |
| EUR          | Buy CCTeu Jun17 z-spread vs BTP Jun17                                       | Open 15bp<br>Current 14bp<br>P&L 2bp<br>Target 0bp<br>Stop 25bp     | Fade the cheapness of CCTeu<br><br>Italy vs Spain: Macro, Markets & More, 6th August 2014   |  |
| Basis        | Buy CCTeu Jun17 z-spread at 57bps<br>Sell BTP 4.75% Jun17 z-spread at 42bps |   |   |  |
| EUR          | PGB 7s9s flattener  | Open 64bp<br>Current 65bp<br>P&L -1bp<br>Target 50bp<br>Stop 71bp   | Extension trade fading the richness of the belly of the curve<br><br>European Rates Weekly, 31st July 2014  |  |
| Curve        | Sell PGB 3.85% Apr21 @ 2.87%<br>Buy PGB 4.95% Oct23s @ 3.48%                |   |   |  |
| EUR          | Buy KfW 0.375% Apr17s vs OLO 4% Mar17                                       | Open 0bp<br>Current -1bp<br>P&L 1bp<br>Target -6bp<br>Stop 3bp      | Move up in quality at a flat spread<br><br>European Rates Weekly, 24th July 2014  |  |
| SSA          | Buy KfW 0.375% Apr17s @ 0.13%<br>Sell OLO 4% Mar17 @ 0.13%                  |   |   |  |
| EUR          | EUR HICPxt 2s5s flattener   | Open 45bp<br>Current 41bp<br>P&L 4bp<br>Target 33bp<br>Stop 51bp    | Any inflation surprise would cause sudden pricing out of low inflation likely causing curve to flatten<br><br>Trading Rates in Summer 2014, 9th July 2014         |  |
| Inflation    | Receive HICPxt 2yr at 0.80%<br>Pay HICPxt 5yr at 1.25%                      |   |   |  |
| EUR          | Buy KfW 3.5% Jul21s vs DSL 3.25% Jul21s                                     | Open 0bp<br>Current -3.3bp<br>P&L 3.3bp<br>Target -6bp<br>Stop 3bp  | Hunt for yield likely to contain widening in KfW-DSL spreads<br><br>The Morning Call, 3rd July 2014   |  |
| SSA          | Buy KfW 3.5% Jul21s at 0.93%<br>Sell DSL 3.25% Jul21s at 0.93%              |   |   |  |

Source: Citi Research

Figure 29. Record of our Open Trades (continued)

|              |  |  |  |   |  |  |
|--------------|--|--|--|---|--|--|
| EUR          | Buy 10yr France vs Belgium   |  | Open<br>Current<br>P&L<br>Target<br>Stop | -2bp<br>-2bp<br>0bp<br>8bp<br>-7bp      | The trade allows moving up the credit curve at attractive level ahead of supportive cash flow profile for France vs Belgium<br><br>The Morning Call, 3rd July 2014   |  |
| Cross Market | Buy OAT 1.75 Nov24 at 1.71%<br>Sell OLO 2.6% Jun24 at 1.69%          |  |  |   |  |  |
| UK           | 2s5s gilt flattener  |  | Open<br>Current<br>P&L<br>Target<br>Stop | 118bp<br>109bp<br>9bp<br>90bp<br>130bp  | Front-end should price in a higher risk premium for an earlier than expected rate hike.<br><br>European Rates Weekly, 26th June 2014                                 |  |
| Curve        | Sell UKT 2% Jan16 at 0.83%<br>Buy UKT 1.75% Jul19 at 2.01%           |  |  |   |  |  |
| EUR          | Buy ERZ4 and sell EDZ4   |  | Open<br>Current<br>P&L<br>Target<br>Stop | 10.5bp<br>9bp<br>-1.5bp<br>15bp<br>0bp  | Attractive entry levels and benefits from ECB policy rate view<br><br>Euro Rates Strategy, 11 March 2014<br>Rolled from June to Dec on 12th June 2014                |  |
| Money Market | Buy ERZ4 at 99.835<br>Sell EDZ4 at 99.73                             |  |  |   |  |  |
| UK           | Pay GBP 1y1y vs 3y1y   |  | Open<br>Current<br>P&L<br>Target<br>Stop | 132bp<br>110bp<br>22bp<br>50bp<br>170bp | The very front-end is still lagging in the sell-off.<br><br>Euro Rates Weekly, 24 April 2014   |  |
| Swap Curve   | Pay GBP 1y1y at 1.47%<br>Receive GBP 3y1y at 2.79%                   |  |  |   |  |  |
| EUR          | Sell BTPei18 break-even vs OATei18                                   |  | Open<br>Current<br>P&L<br>Target<br>Stop | 13.5bp<br>15bp<br>1bp<br>28bp<br>6bp    | BTPei18 likely to reverse some of the richness now that Bolebi18 and OATei18 auctions are over.<br><br>European Rates Weekly, 20 February 2014                       |  |
| Inflation    | Sell BTPei18 break-even at 79.5bp<br>Buy OATei18 break-even at 93bp  |  |  |   |  |  |
| EUR          | Buy 30yr Netherlands vs Austria                                      |  | Open<br>Current<br>P&L<br>Target<br>Stop | 14bp<br>14bp<br>0bp<br>24bp<br>8bp      | Close to historically tight levels. Uncertainty surrounding the Austria banking sector should weigh on Austrian bonds<br><br>European Rates Weekly, 12 February 2014 |  |
| Cross Market | Buy DSL Jan42 at 2.67%<br>Sell RAGB Jun44 at 2.81%                   |  |  |   |  |  |
| UK / US      | Sell UKT 2.25% Sep23 vs UST 2.5% Aug23                               |  | Open<br>Current<br>P&L<br>Target<br>Stop | 6.5bp<br>7bp<br>1bp<br>30bp<br>-5bp     | We expect the MPC to hike three quarters ahead of the Fed<br><br>European Rates Weekly, 23 January 2014  |  |
| Cross Market | Sell UKT 2.25% Sep23 at 2.82%<br>Buy UST 2.5% Aug23 at 2.77%         |  |  |   |  |  |
| UK           | Sell 30yr gilt swap spreads vs 10yr                                  |  | Open<br>Current<br>P&L<br>Target<br>Stop | 20bp<br>29bp<br>9bp<br>50bp<br>10bp     | Fiscal risks, supply pressures and the absence of QE to put steepening pressure on the gilt curve.<br><br>UK Rates Strategy, 30 July 2013                            |  |
| Swap spread  | Sell gilt 3.25% Jan44 ASW at 20bp<br>Buy gilt 1.75% Sep22 ASW at 0bp |  |  |   |  |  |
| EUR          | Receive EUR 10y2y vs 12y3y   |  | Open<br>Current<br>P&L<br>Target<br>Stop | 4bp<br>16bp<br>12bp<br>25bp<br>-5bp     | Cheapness of the sector due to legacy ASW positions. The trade offers a positive roll-down for relatively low volatility<br><br>The Morning Call, 23 January 2013    |  |
| Curve        | Receive EUR 10y2y at 3.1%<br>Pay EUR 12y3y at 3.14%                  |  |  |   |  |  |

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

Figure 30. Strategy Summary Table

| Europe  | View   | Strategies  |
|---|--|---|
| <b>Direction</b>  | We have updated our yield forecasts with a new target of 0.75% for Bunds in Q4.  | Long Bunds  |
| <b>Money Market</b>   | Focus is now turning to the TLTROs take-up of which looks to be in the range of €450bn- €850bn according to the August ECB . Money market rates stand to benefit from liquidity generation should take-up be at the top end of this range. In the UK, the front-end is likely to enter a sideways, albeit volatile range following the dovish Inflation Report and more hawkish MPC minutes.   | 1y/1y1y EUR steepeners<br>Buy ERZ4 vs EDZ4<br>Receive EUR 2y1y vs USD 2y1y  |
| <b>Yield Curve</b>  | We expect the 2s10s Bund curve to flatten into year-end as inflation expectations fall and full-blown QE is priced. 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. In the UK, we expect the 2s5s and 2s10s curves to flatten well beyond the forward with the front-end driven by MPC policy and the long-end driven, to an extent, by ECB QE and lower Bund yields. | 2s5s gilt flatteners<br>Receive EUR 20y10y vs 30y10y<br>Pay GBP 1y1y vs 3y1y  |
| <b>Cross-market</b>   | Our new yield forecasts imply a sharp widening in Bund-UST and Bund-gilt yield spreads in Q4. Seasonals support being short 10yr gilts vs USTs in September.   | Long 10yr Bunds vs UST<br>Stay short 10yr gilts vs Bunds  |
| <b>EMU Spreads</b>  | Fundamentals increasingly point to further outperformance of Spain vs Italy in our view. Separately, we hold 5s10s flatteners in Portugal and are short OLOs vs OATs. Looking further ahead, we expect flatter spread curves in a scenario of QE.  | Long 10yr Spain vs Italy<br>BTP 5s7s flatteners given the strong outperformance of 5s Portugal 5s10s flatteners<br>Long France vs Belgium |
| <b>Swap Spreads</b>   | Broadly neutral. We expect recent ranges to hold. In the UK, 30yr spreads are vulnerable to a Scottish 'Yes' vote, but this seems a highly unlikely outcome.   | Hold on to strategic longs in 30yr gilts vs swaps   |
| <b>Inflation</b>  | Euro area break-evens remain under pressure. At least some of the factors driving the underperformance, such as carry and summer illiquidity, are likely to fade. However, any rebound is likely to be modest and the risks are still to the downside. We continue to like 2s5s HICPxT flatteners. In the UK, 30yr break-evens appear to be finding a floor and offer medium-term value in our view.   | Buy 30yr IL gilt break-evens<br>2s5s euro HICPxT flatteners<br>Buy IL 19 vs TIPS 1/20 on a real yield basis                               |
| <b>Volatility</b>   | Long-tail vol seem to correlate better than medium tail vol during market regimes of BTP-Bund spread compression. The announcement of the new measures by the ECB, in particular the tightening of the corridor, argues for keeping option roll down trades at the front-end of the curve.   | Long EUR 1y30y straddles has hit target<br>Maintain 1y3y ATM Receiver Swaption  |
| <b>SSA</b>  | KfW has reduced its funding requirement for 2014 and we doubt that supply can not meaningfully disturb its spreads to Bunds in Q3/Q4.  | Long 3yr KfW and 4yr EIB vs OLOs<br>Long 7yr KfW vs DSLs  |
| For a list of outstanding trade strategies please see the Tradesheet section of this report |  |   |

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

## Duration Scorecard

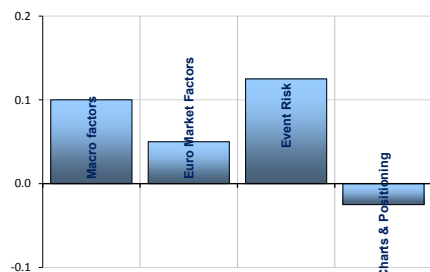
Figure 31. Bund Weekly Cheat Sheet: 22<sup>nd</sup>-28<sup>th</sup> August

### Bund Directional Scorecard (1w horizon)

|                                 |               |   |      |
|---------------------------------|---------------|---|------|
| <b>Recommendation</b>           | <b>Buy</b>    | RXU4 (EOD Thurs) = 149.99                                       |      |
| <b>Conviction level</b>         | <b>Medium</b> | CTD yield = 0.88%      10day del vol = 3.33%                    |      |
| Signal Strength<br>(+/-2)       |               |   |      |
| <b>Macro factors</b>            | <b>0.1</b>    | <b>Weight = 30%</b>   |      |
| ECB                             | 0             | Accommodative monetary policy largely priced in                 | 7.5% |
| Fed, BoE and BOJ                | -1            | Citi expects the MPC to hike within the next six months         | 5.0% |
| Inflation                       | 1             | Citi expects HICP to bottom at 0.3% in August                   | 7.5% |
| Growth related data             | 1             | Citi has cut its euro area GDP growth estimate to 0.8% for 2014 | 5.0% |
| Citi surprise                   | 1             | Citi Economic Surprise Index remains firmly negative            | 2.5% |
| Middle East / Oil               | 0             | Brent close to 10-month lows                                    | 2.5% |
| <b>Euro Market Factors</b>      | <b>0.1</b>    | <b>Weight = 30%</b>   |      |
| Supply                          | 0             | Net cash requirement neutral for Germany next week              | 5.0% |
| Risk appetite                   | 1             | Risk aversion remains high                                      | 5.0% |
| Flow                            | 1             | Net demand for the core remains firm (4wk m.a.)                 | 5.0% |
| Equity                          | -1            | Eurostoxx50 bouncing from lows                                  | 5.0% |
| Sovereign credit                | -1            | We expect spread tightening to continue                         | 5.0% |
| FX                              | 1             | EUR effective exchange rate is at its lowest level in a year    | 5.0% |
| <b>Event Risk</b>               | <b>0.1</b>    | <b>Weight = 18%</b>   |      |
| Politics                        | 1             | Geopolitical concerns likely to continue to provide support     | 7.5% |
| LTRO                            | 0             | TLTROs in September and December                                | 5.0% |
| QE                              | 1             | Citi expects the ECB to embark upon QE in coming quarters       | 5.0% |
| <b>Charts &amp; Positioning</b> | <b>0.0</b>    | <b>Weight = 23%</b>   |      |
| Technicals                      | -1            | Upward channel broken, RSI and Bollinger Bands look bearish     | 7.5% |
| T-Note                          | -1            | Short   | 5.0% |
| CFTC                            | 1             | Positioning long  | 5.0% |
| ARTS                            | 1             | Mild long   | 5.0% |

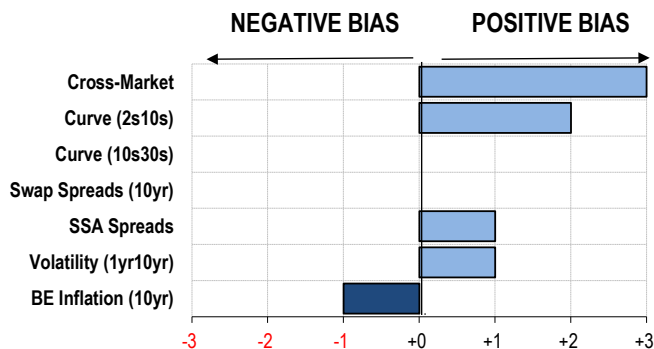
Source: Citi Research Note: Futures trading involves a substantial risk of loss.

Figure 32. Contribution to Bund Signals



Source: Citi Research

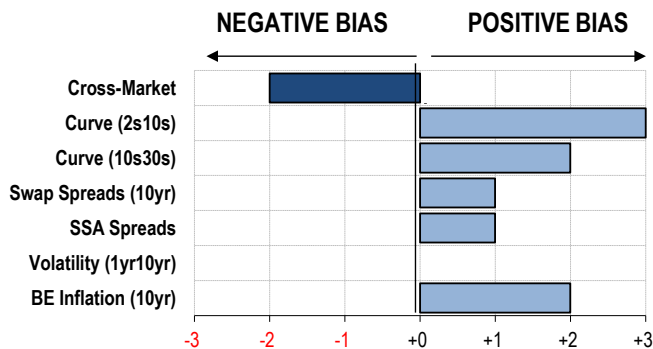
Figure 33. EURO AREA (Near-term Bias)



Source: Citi Research

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

Figure 34. UK (Near-term Bias)



Source: Citi Research

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

## Relative Value Trades

Puja V Sawant

We highlight five relative value trade opportunities on the German, French, Italian and gilt yield curves, all offering positive 3m carry.

### Germany: take advantage of the cheapness of Jan17s

- Buy 3.75% Jan17 vs 4% Jul16 and 4.25% Jul17 (3m carry: 0.4bp) - Figure 35

### France: fade the richness of Jul17s

- Sell 1% Jul17 vs 3.75% Apr17 and 4.25% Oct17 (3m carry: 0.1bp) - Figure 36

Figure 35. Germany: 4% Jul16, 3.75% Jan17, 4.25% Jul17 microfly (bp)



Source: Citi Research

Figure 36. France: 3.75% Apr17, 1% Jul17, 4.25% Oct17 microfly (bp)



Source: Citi Research

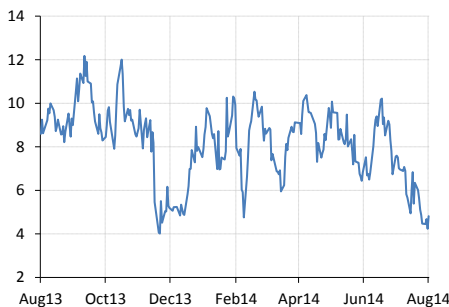
### Italy: fade the richness of Nov17s and Jun18s

- Sell 3.5% Nov17 vs 4.75% May17 and 4.5% Feb18 (3m carry: 0.4bp) - Figure 37
- Sell 3.5% Jun18 vs 4.5% Feb18 and 4.5% Aug18 (3m carry: 0.5bp) - Figure 38

### UK: fade the richness of Jul18s

- Sell 1.25% Jul18 vs 4% Sep16 and 4.75% Mar20 (3m carry: 1bp) - Figure 39

Figure 37. Italy: 4.75% May17, 3.5% Nov17, 4.5% Feb18 microfly (bp)



Source: Citi Research

Figure 38. Italy: 4.5% Feb18, 3.5% Jun18, 4.5% Aug18 microfly (bp)



Source: Citi Research

Figure 39. UK: 4% Sep16, 1.25% Jul18, 4.75% Mar20 microfly (bp)



Source: Citi Research

# Euro Relative Value Screen – All Maturities

Figure 40. 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                       | 2.00 Jan22       | -3.49  | Nov11  | 20         | 1                       | 1.00 Oct18       | -0.51  | Sep13  | 17         |
|         |          | 2                       | 1.00 Oct18       | -2.33  | Sep13  | 17         | 2                       | 0.50 Apr19       | -0.41  | May14  | 16         |
|         |          | 3                       | 2.50 Jan21       | -2.28  | Nov10  | 19         | 3                       | 0.25 Apr18       | -0.21  | Apr13  | 17         |
|         |          | 4                       | 2.25 Sep21       | -2.11  | Aug11  | 16         | 4                       | 6.25 Jan30       | -0.12  | Jan00  | 9          |
|         |          | 5                       | 3.25 Jul42       | -2.05  | Jul10  | 15         | 5                       | 0.50 Feb18       | -0.10  | Jan13  | 17         |
|         | Cheapest | 5                       | 1.75 Feb24       | 1.40   | Jan14  | 18         | 5                       | 4.00 Jan37       | 1.18   | Jan05  | 23         |
|         |          | 4                       | 1.50 May24       | 1.51   | May14  | 18         | 4                       | 3.25 Jul42       | 1.28   | Jul10  | 15         |
|         |          | 3                       | 3.75 Jan17       | 2.41   | Nov06  | 20         | 3                       | 2.50 Jul44       | 1.32   | Apr12  | 16         |
|         |          | 2                       | 0.75 Feb17       | 2.45   | Jan12  | 16         | 2                       | 4.75 Jul40       | 1.45   | Jul08  | 16         |
|         |          | 1                       | 2.00 Aug23       | 2.54   | Sep13  | 18         | 1                       | 4.25 Jul39       | 1.60   | Jan07  | 14         |
| FRANCE  | Richest  | 1                       | 4.00 Apr55       | -2.72  | Apr04  | 15         | 1                       | 1.00 Jul17       | -1.86  | Jul11  | 20         |
|         |          | 2                       | 4.25 Oct23 (OAT) | -1.65  | Oct06  | 33         | 2                       | 3.75 Apr17       | -1.85  | Apr06  | 37         |
|         |          | 3                       | 1.00 Nov18       | -1.20  | Nov12  | 21         | 3                       | 1.75 Feb17       | -1.79  | Feb11  | 20         |
|         |          | 4                       | 3.75 Apr21       | -1.11  | Apr05  | 36         | 4                       | 1.00 May18       | -1.61  | May12  | 23         |
|         |          | 5                       | 2.25 May24       | -1.06  | Nov13  | 28         | 5                       | 4.00 Apr18       | -1.60  | Apr07  | 28         |
|         | Cheapest | 5                       | 5.75 Oct32       | 1.20   | Oct00  | 26         | 5                       | 4.75 Apr35       | -0.70  | Apr03  | 21         |
|         |          | 4                       | 2.75 Oct27       | 1.35   | Oct11  | 29         | 4                       | 1.75 Nov24       | -0.61  | Jun14  | 10         |
|         |          | 3                       | 4.00 Oct38       | 1.43   | Oct05  | 24         | 3                       | 4.00 Oct38       | -0.61  | Oct05  | 24         |
|         |          | 2                       | 5.00 Oct16       | 1.57   | Oct00  | 29         | 2                       | 0.50 Nov19       | -0.60  | Jun14  | 8          |
|         |          | 1                       | 1.75 Nov24       | 1.63   | Jun14  | 10         | 1                       | 2.50 May30       | -0.45  | May14  | 11         |
| ITALY   | Richest  | 1                       | 4.75 Sep16 (BTS) | -1.95  | Sep11  | 16         | 1                       | 4.75 Sep16 (BTS) | -1.84  | Sep11  | 16         |
|         |          | 2                       | 3.50 Nov17       | -1.09  | Nov12  | 17         | 2                       | 1.50 Dec16       | -1.78  | Jan14  | 16         |
|         |          | 3                       | 5.25 Aug17       | -0.92  | Feb02  | 24         | 3                       | 2.75 Nov16       | -1.76  | Sep13  | 12         |
|         |          | 4                       | 4.75 Jun17       | -0.85  | Jun12  | 16         | 4                       | 4.00 Feb17       | -1.67  | Aug06  | 25         |
|         |          | 5                       | 4.75 Sep44       | -0.82  | Mar13  | 13         | 5                       | 5.25 Aug17       | -1.62  | Feb02  | 24         |
|         | Cheapest | 5                       | 1.50 Aug19       | 1.27   | Jul14  | 8          | 5                       | 5.00 Aug34       | 1.27   | Aug03  | 22         |
|         |          | 4                       | 4.00 Feb37       | 1.35   | Aug05  | 26         | 4                       | 4.75 Sep44       | 1.35   | Mar13  | 13         |
|         |          | 3                       | 4.50 May23 (IK)  | 1.60   | Mar13  | 18         | 3                       | 5.00 Sep40       | 1.48   | Sep09  | 21         |
|         |          | 2                       | 2.50 May19 (MFB) | 1.67   | Feb14  | 15         | 2                       | 5.00 Aug39       | 1.52   | Aug07  | 19         |
|         |          | 1                       | 4.75 Aug23       | 1.88   | Feb08  | 25         | 1                       | 4.00 Feb37       | 2.11   | Aug05  | 26         |
| N'LANDS | Richest  | 1                       | 3.25 Jul21       | -2.61  | Mar11  | 16         | 1                       | 4.50 Jul17       | -1.85  | Jul07  | 15         |
|         |          | 2                       | 0.50 Apr17       | -0.89  | Jan14  | 12         | 2                       | 0.50 Apr17       | -1.83  | Jan14  | 12         |
|         |          | 3                       | 4.00 Jul18       | -0.84  | Feb08  | 15         | 3                       | 4.00 Jul18       | -1.77  | Feb08  | 15         |
|         |          | 4                       | 2.00 Jul24       | -0.78  | Mar14  | 12         | 4                       | 1.25 Jan18       | -1.76  | Jul12  | 15         |
|         |          | 5                       | 1.25 Jan18       | -0.37  | Jul12  | 15         | 5                       | 2.50 Jan17       | -1.74  | Jun11  | 16         |
|         | Cheapest | 5                       | 3.50 Jul20       | 0.57   | Feb10  | 15         | 5                       | 2.00 Jul24       | -1.36  | Mar14  | 12         |
|         |          | 4                       | 3.75 Jan23       | 0.89   | Jan06  | 11         | 4                       | 2.75 Jan47       | -1.30  | Feb14  | 4          |
|         |          | 3                       | 2.25 Jul22       | 0.97   | Feb12  | 15         | 3                       | 3.75 Jan42       | -0.96  | May10  | 15         |
|         |          | 2                       | 1.75 Jul23       | 1.20   | Mar13  | 16         | 2                       | 4.00 Jan37       | -0.76  | Apr05  | 14         |
|         |          | 1                       | 4.00 Jul19       | 2.00   | Feb09  | 14         | 1                       | 2.50 Jan33       | -0.67  | Mar12  | 10         |
| SPAIN   | Richest  | 1                       | 5.85 Jan22 (FBB) | -2.03  | Nov11  | 20         | 1                       | 3.80 Jan17       | -1.81  | Oct06  | 21         |
|         |          | 2                       | 3.80 Jan17       | -1.71  | Oct06  | 21         | 2                       | 4.25 Oct16       | -1.81  | Sep11  | 21         |
|         |          | 3                       | 5.50 Apr21       | -1.70  | Jan11  | 24         | 3                       | 3.75 Oct18       | -1.79  | Jul13  | 19         |
|         |          | 4                       | 5.75 Jul32       | -1.32  | Jan01  | 16         | 4                       | 2.10 Apr17       | -1.75  | Nov13  | 21         |
|         |          | 5                       | 3.75 Oct18       | -1.00  | Jul13  | 19         | 5                       | 2.75 Apr19       | -1.71  | Jan14  | 20         |
|         | Cheapest | 5                       | 5.50 Jul17       | 1.52   | Mar02  | 20         | 5                       | 5.75 Jul32       | -0.44  | Jan01  | 76         |
|         |          | 4                       | 3.80 Apr24       | 1.65   | Jan14  | 21         | 4                       | 4.20 Jan37       | -0.34  | Jan05  | 16         |
|         |          | 3                       | 4.30 Oct19       | 1.68   | Jun09  | 21         | 3                       | 4.90 Jul40       | -0.24  | Jun07  | 13         |
|         |          | 2                       | 4.60 Jul19       | 1.73   | Feb09  | 20         | 2                       | 5.15 Oct44       | -0.20  | Oct13  | 6          |
|         |          | 1                       | 4.10 Jul18       | 2.09   | Feb08  | 19         | 1                       | 4.70 Jul41       | -0.09  | Sep09  | 12         |
| BELGIUM | Richest  | 1                       | 4.25 Sep21       | -2.00  | Jan11  | 15         | 1                       | 2.60 Jun24       | -1.66  | Jan14  | 12         |
|         |          | 2                       | 4.25 Sep22       | -1.18  | Jan12  | 15         | 2                       | 4.25 Sep21       | -1.65  | Jan11  | 15         |
|         |          | 3                       | 4.00 Mar22       | -1.06  | May06  | 14         | 3                       | 4.50 Mar26       | -1.64  | Jun11  | 9          |
|         |          | 4                       | 3.00 Jun34       | -1.00  | Mar14  | 5          | 4                       | 3.75 Sep20       | -1.62  | Jan10  | 18         |
|         |          | 5                       | 1.25 Jun18       | -0.87  | Feb13  | 12         | 5                       | 2.25 Jun23       | -1.62  | Jan13  | 14         |
|         | Cheapest | 5                       | 4.00 Mar32       | 1.17   | Mar12  | 8          | 5                       | 3.75 Jun45       | -1.10  | Sep13  | 5          |
|         |          | 4                       | 4.00 Mar17       | 1.38   | Jan07  | 11         | 4                       | 5.00 Mar35       | -1.08  | May04  | 19         |
|         |          | 3                       | 3.25 Sep16       | 1.54   | Jan06  | 13         | 3                       | 4.25 Mar41       | -1.06  | Apr10  | 14         |
|         |          | 2                       | 3.00 Sep19       | 1.60   | Apr12  | 11         | 2                       | 4.00 Mar32       | -1.05  | Mar12  | 8          |
|         |          | 1                       | 2.25 Jun23       | 1.79   | Jan13  | 14         | 1                       | 3.00 Jun34       | -0.88  | Mar14  | 5          |

Source: Citi Research



## Euro Relative Value Screen – Sub-12yrs

Figure 41. 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 | <div>Richest</div>  | 1                       | 2.00 Jan22       | -3.49  | Nov11  | 20         | <div>Richest</div>      | 1          | 1.00 Oct18       | -0.51  | Sep13      | 17 |
|         |                     | 2                       | 1.00 Oct18       | -2.33  | Sep13  | 17         |                         | 2          | 0.50 Apr19       | -0.41  | May14      | 16 |
|         |                     | 3                       | 2.50 Jan21       | -2.28  | Nov10  | 19         |                         | 3          | 0.25 Apr18       | -0.21  | Apr13      | 17 |
|         |                     | 4                       | 2.25 Sep21       | -2.11  | Aug11  | 16         |                         | 4          | 0.50 Feb18       | -0.10  | Jan13      | 17 |
|         |                     | 5                       | 2.25 Sep20       | -1.90  | Aug10  | 16         |                         | 5          | 1.00 Feb19       | -0.03  | Jan14      | 16 |
|         | <div>Cheapest</div> | 5                       | 1.75 Feb24       | 1.40   | Jan14  | 18         | 5                       | 1.50 Sep22 | 0.77             | Sep12  | 18         |    |
|         |                     | 4                       | 1.50 May24       | 1.51   | May14  | 18         | 4                       | 1.75 Feb24 | 0.87             | Jan14  | 18         |    |
|         |                     | 3                       | 3.75 Jan17       | 2.41   | Nov06  | 20         | 3                       | 1.50 Feb23 | 0.89             | Jan13  | 18         |    |
|         |                     | 2                       | 0.75 Feb17       | 2.45   | Jan12  | 16         | 2                       | 2.00 Aug23 | 0.98             | Sep13  | 18         |    |
|         |                     | 1                       | 2.00 Aug23       | 2.54   | Sep13  | 18         | 1                       | 3.75 Jan17 | 1.08             | Nov06  | 20         |    |
| FRANCE  | <div>Richest</div>  | 1                       | 4.25 Oct23 (OAT) | -1.65  | Oct06  | 33         | <div>Richest</div>      | 1          | 1.00 Jul17       | -1.86  | Jul11      | 20 |
|         |                     | 2                       | 1.00 Nov18       | -1.20  | Nov12  | 21         |                         | 2          | 3.75 Apr17       | -1.85  | Apr06      | 37 |
|         |                     | 3                       | 3.75 Apr21       | -1.11  | Apr05  | 36         |                         | 3          | 1.75 Feb17       | -1.79  | Feb11      | 20 |
|         |                     | 4                       | 2.25 May24       | -1.06  | Nov13  | 28         |                         | 4          | 1.00 May18       | -1.61  | May12      | 23 |
|         |                     | 5                       | 4.00 Apr18       | -0.78  | Apr07  | 28         |                         | 5          | 4.00 Apr18       | -1.60  | Apr07      | 28 |
|         | <div>Cheapest</div> | 5                       | 1.75 Feb17       | 0.83   | Feb11  | 20         | 5                       | 3.50 Apr20 | -1.35            | Feb10  | 36         |    |
|         |                     | 4                       | 4.25 Oct17       | 1.18   | Oct06  | 30         | 4                       | 3.50 Apr26 | -1.33            | Apr10  | 30         |    |
|         |                     | 3                       | 0.25 Nov16       | 1.19   | Apr14  | 13         | 3                       | 2.50 Oct20 | -1.32            | Oct09  | 35         |    |
|         |                     | 2                       | 5.00 Oct16       | 1.57   | Oct00  | 29         | 2                       | 1.75 Nov24 | -0.61            | Jun14  | 10         |    |
|         |                     | 1                       | 1.75 Nov24       | 1.63   | Jun14  | 10         | 1                       | 0.50 Nov19 | -0.60            | Jun14  | 8          |    |
| ITALY   | <div>Richest</div>  | 1                       | 4.75 Sep16 (BTS) | -1.95  | Sep11  | 16         | <div>Richest</div>      | 1          | 4.75 Sep16 (BTS) | -1.84  | Sep11      | 16 |
|         |                     | 2                       | 3.50 Nov17       | -1.09  | Nov12  | 17         |                         | 2          | 1.50 Dec16       | -1.78  | Jan14      | 16 |
|         |                     | 3                       | 5.25 Aug17       | -0.92  | Feb02  | 24         |                         | 3          | 2.75 Nov16       | -1.76  | Sep13      | 12 |
|         |                     | 4                       | 4.75 Jun17       | -0.85  | Jun12  | 16         |                         | 4          | 4.00 Feb17       | -1.67  | Aug06      | 25 |
|         |                     | 5                       | 3.50 Jun18       | -0.76  | Apr13  | 20         |                         | 5          | 5.25 Aug17       | -1.62  | Feb02      | 24 |
|         | <div>Cheapest</div> | 5                       | 4.25 Sep19       | 1.08   | May09  | 25         | 5                       | 4.75 Aug23 | -0.79            | Feb08  | 25         |    |
|         |                     | 4                       | 1.50 Aug19       | 1.27   | Jul14  | 8          | 4                       | 4.50 Mar24 | -0.72            | Aug13  | 23         |    |
|         |                     | 3                       | 4.50 May23 (IK)  | 1.60   | Mar13  | 18         | 3                       | 5.00 Mar25 | -0.56            | Mar09  | 22         |    |
|         |                     | 2                       | 2.50 May19 (MFB) | 1.67   | Feb14  | 15         | 2                       | 3.75 Sep24 | -0.49            | Mar14  | 20         |    |
|         |                     | 1                       | 4.75 Aug23       | 1.88   | Feb08  | 25         | 1                       | 4.50 Mar26 | -0.14            | Sep10  | 21         |    |
| N'LANDS | <div>Richest</div>  | 1                       | 3.25 Jul21       | -2.61  | Mar11  | 16         | <div>Richest</div>      | 1          | 4.50 Jul17       | -1.85  | Jul07      | 15 |
|         |                     | 2                       | 0.50 Apr17       | -0.89  | Jan14  | 12         |                         | 2          | 0.50 Apr17       | -1.83  | Jan14      | 12 |
|         |                     | 3                       | 4.00 Jul18       | -0.84  | Feb08  | 15         |                         | 3          | 4.00 Jul18       | -1.77  | Feb08      | 15 |
|         |                     | 4                       | 2.00 Jul24       | -0.78  | Mar14  | 12         |                         | 4          | 1.25 Jan18       | -1.76  | Jul12      | 15 |
|         |                     | 5                       | 1.25 Jan18       | -0.37  | Jul12  | 15         |                         | 5          | 2.50 Jan17       | -1.74  | Jun11      | 16 |
|         | <div>Cheapest</div> | 5                       | 3.50 Jul20       | 0.57   | Feb10  | 15         | 5                       | 3.50 Jul20 | -1.43            | Feb10  | 15         |    |
|         |                     | 4                       | 3.75 Jan23       | 0.89   | Jan06  | 11         | 4                       | 2.25 Jul22 | -1.43            | Feb12  | 15         |    |
|         |                     | 3                       | 2.25 Jul22       | 0.97   | Feb12  | 15         | 3                       | 1.75 Jul23 | -1.41            | Mar13  | 16         |    |
|         |                     | 2                       | 1.75 Jul23       | 1.20   | Mar13  | 16         | 2                       | 4.00 Jul19 | -1.37            | Feb09  | 14         |    |
|         |                     | 1                       | 4.00 Jul19       | 2.00   | Feb09  | 14         | 1                       | 2.00 Jul24 | -1.36            | Mar14  | 12         |    |
| SPAIN   | <div>Richest</div>  | 1                       | 5.85 Jan22 (FBB) | -2.03  | Nov11  | 20         | <div>Richest</div>      | 1          | 3.80 Jan17       | -1.81  | Oct06      | 21 |
|         |                     | 2                       | 3.80 Jan17       | -1.71  | Oct06  | 21         |                         | 2          | 4.25 Oct16       | -1.81  | Sep11      | 21 |
|         |                     | 3                       | 5.50 Apr21       | -1.70  | Jan11  | 24         |                         | 3          | 3.75 Oct18       | -1.79  | Jul13      | 19 |
|         |                     | 4                       | 3.75 Oct18       | -1.00  | Jul13  | 19         |                         | 4          | 2.10 Apr17       | -1.75  | Nov13      | 21 |
|         |                     | 5                       | 4.25 Oct16       | -0.53  | Sep11  | 21         |                         | 5          | 2.75 Apr19       | -1.71  | Jan14      | 20 |
|         | <div>Cheapest</div> | 5                       | 5.50 Jul17       | 1.52   | Mar02  | 20         | 5                       | 4.80 Jan24 | -1.51            | Sep08  | 15         |    |
|         |                     | 4                       | 3.80 Apr24       | 1.65   | Jan14  | 21         | 4                       | 3.80 Apr24 | -1.46            | Jan14  | 21         |    |
|         |                     | 3                       | 4.30 Oct19       | 1.68   | Jun09  | 21         | 3                       | 4.65 Jul25 | -1.27            | Feb10  | 14         |    |
|         |                     | 2                       | 4.60 Jul19       | 1.73   | Feb09  | 20         | 2                       | 2.75 Oct24 | -1.20            | Jun14  | 11         |    |
|         |                     | 1                       | 4.10 Jul18       | 2.09   | Feb08  | 19         | 1                       | 5.90 Jul26 | -1.13            | Mar11  | 14         |    |
| BELGIUM | <div>Richest</div>  | 1                       | 4.25 Sep21       | -2.00  | Jan11  | 15         | <div>Richest</div>      | 1          | 2.60 Jun24       | -1.66  | Jan14      | 12 |
|         |                     | 2                       | 4.25 Sep22       | -1.18  | Jan12  | 15         |                         | 2          | 4.25 Sep21       | -1.65  | Jan11      | 15 |
|         |                     | 3                       | 4.00 Mar22       | -1.06  | May06  | 14         |                         | 3          | 4.50 Mar26       | -1.64  | Jun11      | 9  |
|         |                     | 4                       | 1.25 Jun18       | -0.87  | Feb13  | 12         |                         | 4          | 3.75 Sep20       | -1.62  | Jan10      | 18 |
|         |                     | 5                       | 4.50 Mar26       | -0.86  | Jun11  | 9          |                         | 5          | 2.25 Jun23       | -1.62  | Jan13      | 14 |
|         | <div>Cheapest</div> | 5                       | 5.50 Sep17       | 1.10   | Jun02  | 8          | 5                       | 1.25 Jun18 | -1.55            | Feb13  | 12         |    |
|         |                     | 4                       | 4.00 Mar17       | 1.38   | Jan07  | 11         | 4                       | 3.50 Jun17 | -1.53            | Mar11  | 13         |    |
|         |                     | 3                       | 3.25 Sep16       | 1.54   | Jan06  | 13         | 3                       | 5.50 Sep17 | -1.52            | Jun02  | 8          |    |
|         |                     | 2                       | 3.00 Sep19       | 1.60   | Apr12  | 11         | 2                       | 4.00 Mar17 | -1.37            | Jan07  | 11         |    |
|         |                     | 1                       | 2.25 Jun23       | 1.79   | Jan13  | 14         | 1                       | 3.25 Sep16 | -1.21            | Jan06  | 13         |    |

Source: Citi Research



# Euro Relative Value Screen – 8yr+

Figure 42. 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 | Richest  | 1                       | 3.25 Jul42       | -2.05  | Jul10  | 15         | 1                       | 6.25 Jan30       | -0.12  | Jan00  | 9          |
|         |          | 2                       | 6.25 Jan30       | -1.94  | Jan00  | 9          | 2                       | 5.50 Jan31       | 0.31   | Oct00  | 17         |
|         |          | 3                       | 5.50 Jan31       | -1.55  | Oct00  | 17         | 3                       | 1.50 May24       | 0.50   | May14  | 18         |
|         |          | 4                       | 2.50 Jul44       | -0.34  | Apr12  | 16         | 4                       | 1.50 May23       | 0.74   | May13  | 18         |
|         |          | 5                       | 2.50 Aug46       | -0.11  | Feb14  | 5          | 5                       | 1.50 Sep22       | 0.77   | Sep12  | 18         |
|         | Cheapest | 5                       | 4.25 Jul39       | 0.99   | Jan07  | 14         | 5                       | 4.00 Jan37       | 1.18   | Jan05  | 23         |
|         |          | 4                       | 1.50 Feb23       | 1.20   | Jan13  | 18         | 4                       | 3.25 Jul42       | 1.28   | Jul10  | 15         |
|         |          | 3                       | 1.75 Feb24       | 1.40   | Jan14  | 18         | 3                       | 2.50 Jul44       | 1.32   | Apr12  | 16         |
|         |          | 2                       | 1.50 May24       | 1.51   | May14  | 18         | 2                       | 4.75 Jul40       | 1.45   | Jul08  | 16         |
|         |          | 1                       | 2.00 Aug23       | 2.54   | Sep13  | 18         | 1                       | 4.25 Jul39       | 1.60   | Jan07  | 14         |
| FRANCE  | Richest  | 1                       | 4.00 Apr55       | -2.72  | Apr04  | 15         | 1                       | 4.25 Oct23 (OAT) | -1.44  | Oct06  | 33         |
|         |          | 2                       | 4.25 Oct23 (OAT) | -1.65  | Oct06  | 33         | 2                       | 2.25 Oct22       | -1.40  | Oct11  | 25         |
|         |          | 3                       | 2.25 May24       | -1.06  | Nov13  | 28         | 3                       | 2.25 May24       | -1.36  | Nov13  | 28         |
|         |          | 4                       | 3.25 May45       | -1.05  | May12  | 11         | 4                       | 1.75 May23       | -1.36  | May12  | 26         |
|         |          | 5                       | 4.50 Apr41       | -0.31  | Apr09  | 24         | 5                       | 3.50 Apr26       | -1.33  | Apr10  | 30         |
|         | Cheapest | 5                       | 4.00 Apr60       | 0.93   | Apr09  | 11         | 5                       | 4.50 Apr41       | -0.72  | Apr09  | 24         |
|         |          | 4                       | 5.75 Oct32       | 1.20   | Oct00  | 26         | 4                       | 4.75 Apr35       | -0.70  | Apr03  | 21         |
|         |          | 3                       | 2.75 Oct27       | 1.35   | Oct11  | 29         | 3                       | 1.75 Nov24       | -0.61  | Jun14  | 10         |
|         |          | 2                       | 4.00 Oct38       | 1.43   | Oct05  | 24         | 2                       | 4.00 Oct38       | -0.61  | Oct05  | 24         |
|         |          | 1                       | 1.75 Nov24       | 1.63   | Jun14  | 10         | 1                       | 2.50 May30       | -0.45  | May14  | 11         |
| ITALY   | Richest  | 1                       | 4.75 Sep44       | -0.82  | Mar13  | 13         | 1                       | 5.50 Sep22       | -1.06  | Mar12  | 20         |
|         |          | 2                       | 5.75 Feb33       | 0.11   | Feb02  | 15         | 2                       | 5.50 Nov22       | -1.04  | May12  | 21         |
|         |          | 3                       | 5.00 Mar25       | 0.32   | Mar09  | 22         | 3                       | 4.50 May23 (IK)  | -0.87  | Mar13  | 18         |
|         |          | 4                       | 5.50 Sep22       | 0.40   | Mar12  | 20         | 4                       | 4.75 Aug23       | -0.79  | Feb08  | 25         |
|         |          | 5                       | 4.75 Sep28       | 0.41   | Jan13  | 18         | 5                       | 4.50 Mar24       | -0.72  | Aug13  | 23         |
|         | Cheapest | 5                       | 3.75 Sep24       | 0.94   | Mar14  | 20         | 5                       | 5.00 Aug34       | 1.27   | Aug03  | 22         |
|         |          | 4                       | 4.50 Mar24       | 1.05   | Aug13  | 23         | 4                       | 4.75 Sep44       | 1.35   | Mar13  | 13         |
|         |          | 3                       | 4.00 Feb37       | 1.35   | Aug05  | 26         | 3                       | 5.00 Sep40       | 1.48   | Sep09  | 21         |
|         |          | 2                       | 4.50 May23 (IK)  | 1.60   | Mar13  | 18         | 2                       | 5.00 Aug39       | 1.52   | Aug07  | 19         |
|         |          | 1                       | 4.75 Aug23       | 1.88   | Feb08  | 25         | 1                       | 4.00 Feb37       | 2.11   | Aug05  | 26         |
| N'LANDS | Richest  | 1                       | 2.00 Jul24       | -0.78  | Mar14  | 12         | 1                       | 3.75 Jan23       | -1.50  | Jan06  | 11         |
|         |          | 2                       | 2.75 Jan47       | -0.12  | Feb14  | 4          | 2                       | 1.75 Jul23       | -1.41  | Mar13  | 16         |
|         |          | 3                       | 4.00 Jan37       | 0.12   | Apr05  | 14         | 3                       | 2.00 Jul24       | -1.36  | Mar14  | 12         |
|         | Cheapest | 3                       | 2.50 Jan33       | 0.56   | Mar12  | 10         | 3                       | 3.75 Jan42       | -0.96  | May10  | 15         |
|         |          | 2                       | 3.75 Jan23       | 0.89   | Jan06  | 11         | 2                       | 4.00 Jan37       | -0.76  | Apr05  | 14         |
|         |          | 1                       | 1.75 Jul23       | 1.20   | Mar13  | 16         | 1                       | 2.50 Jan33       | -0.67  | Mar12  | 10         |
| SPAIN   | Richest  | 1                       | 5.75 Jul32       | -1.32  | Jan01  | 16         | 1                       | 4.40 Oct23       | -1.60  | May13  | 18         |
|         |          | 2                       | 4.20 Jan37       | -0.98  | Jan05  | 16         | 2                       | 5.40 Jan23       | -1.60  | Jan13  | 17         |
|         |          | 3                       | 4.90 Jul40       | -0.66  | Jun07  | 13         | 3                       | 4.80 Jan24       | -1.51  | Sep08  | 15         |
|         |          | 4                       | 4.40 Oct23       | -0.22  | May13  | 18         | 4                       | 3.80 Apr24       | -1.46  | Jan14  | 21         |
|         |          | 5                       | 5.15 Oct44       | -0.11  | Oct13  | 6          | 5                       | 4.65 Jul25       | -1.27  | Feb10  | 14         |
|         | Cheapest | 5                       | 4.65 Jul25       | 0.90   | Feb10  | 14         | 5                       | 5.75 Jul32       | -0.44  | Jan01  | 76         |
|         |          | 4                       | 5.15 Oct28       | 0.96   | Jul13  | 10         | 4                       | 4.20 Jan37       | -0.34  | Jan05  | 16         |
|         |          | 3                       | 4.80 Jan24       | 0.99   | Sep08  | 15         | 3                       | 4.90 Jul40       | -0.24  | Jun07  | 13         |
|         |          | 2                       | 2.75 Oct24       | 1.43   | Jun14  | 11         | 2                       | 5.15 Oct44       | -0.20  | Oct13  | 6          |
|         |          | 1                       | 3.80 Apr24       | 1.65   | Jan14  | 21         | 1                       | 4.70 Jul41       | -0.09  | Sep09  | 12         |
| BELGIUM | Richest  | 1                       | 4.25 Sep22       | -1.18  | Jan12  | 15         | 1                       | 2.60 Jun24       | -1.66  | Jan14  | 12         |
|         |          | 2                       | 3.00 Jun34       | -1.00  | Mar14  | 5          | 2                       | 4.50 Mar26       | -1.64  | Jun11  | 9          |
|         |          | 3                       | 4.50 Mar26       | -0.86  | Jun11  | 9          | 3                       | 2.25 Jun23       | -1.62  | Jan13  | 14         |
|         |          | 4                       | 3.75 Jun45       | -0.44  | Sep13  | 5          | 4                       | 4.25 Sep22       | -1.60  | Jan12  | 15         |
|         | Cheapest | 4                       | 5.00 Mar35       | 0.38   | May04  | 19         | 4                       | 5.00 Mar35       | -1.08  | May04  | 19         |
|         |          | 3                       | 4.25 Mar41       | 0.81   | Apr10  | 14         | 3                       | 4.25 Mar41       | -1.06  | Apr10  | 14         |
|         |          | 2                       | 4.00 Mar32       | 1.17   | Mar12  | 8          | 2                       | 4.00 Mar32       | -1.05  | Mar12  | 8          |
|         |          | 1                       | 2.25 Jun23       | 1.79   | Jan13  | 14         | 1                       | 3.00 Jun34       | -0.88  | Mar14  | 5          |

Source: Citi Research

## UK Relative Value Screen

Figure 43. 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                       | 4.00 Mar22       | -3.38  | Feb09  | 38         | 1                       | 2.75 Jan15      | -2.15  | Nov09  | 29         |
|            |          | 2                       | 1.75 Sep22       | -3.09  | Jun12  | 29         | 2                       | 1.75 Jan17      | -1.53  | Aug11  | 29         |
|            |          | 3                       | 1.75 Jan17       | -2.66  | Aug11  | 29         | 3                       | 4.00 Mar22      | -1.27  | Feb09  | 38         |
|            |          | 4                       | 4.50 Dec42       | -2.49  | Jun07  | 26         | 4                       | 4.50 Mar19      | -1.13  | Sep08  | 36         |
|            |          | 5                       | 2.75 Jan15       | -2.35  | Nov09  | 29         | 5                       | 1.75 Sep22      | -1.08  | Jun12  | 29         |
|            | Cheapest | 5                       | 4.00 Sep16       | 2.58   | Mar06  | 35         | 5                       | 4.25 Dec49      | 0.59   | Sep08  | 20         |
|            |          | 4                       | 5.00 Sep14       | 2.60   | Jul02  | 41         | 4                       | 4.00 Jan60      | 0.60   | Oct09  | 21         |
|            |          | 3                       | 1.75 Jul19       | 2.71   | Nov13  | 30         | 3                       | 5.00 Sep14      | 0.89   | Jul02  | 41         |
|            |          | 2                       | 3.50 Jul68       | 3.02   | Jun13  | 10         | 2                       | 4.00 Sep16      | 1.20   | Mar06  | 35         |
|            |          | 1                       | 3.75 Sep19       | 3.21   | Jul09  | 28         | 1                       | 3.50 Jan45      | 1.96   | Jun14  | 5          |
| 2yr - 7yr  | Richest  | 1                       | 1.75 Jan17       | -2.66  | Aug11  | 29         | 1                       | 1.75 Jan17      | -1.53  | Aug11  | 29         |
|            |          | 2                       | 4.50 Mar19 (WX)  | -1.47  | Sep08  | 36         | 2                       | 4.50 Mar19 (WX) | -1.13  | Sep08  | 36         |
|            |          | 3                       | 5.00 Mar18       | 0.52   | May07  | 35         | 3                       | 1.25 Jul18      | -0.93  | Feb13  | 34         |
|            |          | 4                       | 1.00 Sep17       | 1.00   | Mar12  | 32         | 4                       | 5.00 Mar18      | -0.89  | May07  | 35         |
|            |          | 5                       | 1.25 Jul18       | 1.20   | Feb13  | 34         | 5                       | 1.75 Jul19 (5y) | -0.81  | Nov13  | 30         |
|            | Cheapest | 5                       | 3.75 Sep20       | 1.46   | Jun10  | 24         | 5                       | 1.00 Sep17      | -0.63  | Mar12  | 32         |
|            |          | 4                       | 4.75 Mar20       | 1.80   | Mar05  | 33         | 4                       | 3.75 Sep19      | -0.57  | Jul09  | 28         |
|            |          | 3                       | 4.00 Sep16 (WB)  | 2.58   | Mar06  | 35         | 3                       | 3.75 Sep20      | -0.49  | Jun10  | 24         |
|            |          | 2                       | 1.75 Jul19 (5y)  | 2.71   | Nov13  | 30         | 2                       | 4.75 Mar20      | -0.46  | Mar05  | 33         |
|            |          | 1                       | 3.75 Sep19       | 3.21   | Jul09  | 28         | 1                       | 4.00 Sep16 (WB) | 1.20   | Mar06  | 35         |
| 7yr - 15yr | Richest  | 1                       | 4.00 Mar22       | -3.38  | Feb09  | 38         | 1                       | 4.00 Mar22      | -1.27  | Feb09  | 38         |
|            |          | 2                       | 1.75 Sep22       | -3.09  | Jun12  | 29         | 2                       | 1.75 Sep22      | -1.08  | Jun12  | 29         |
|            |          | 3                       | 3.75 Sep21       | -1.41  | Mar11  | 28         | 3                       | 3.75 Sep21      | -0.83  | Mar11  | 28         |
|            |          | 4                       |                  |        |        |            | 4                       |                 |        |        |            |
|            |          | 5                       |                  |        |        |            | 5                       |                 |        |        |            |
|            | Cheapest | 5                       |                  |        |        |            | 5                       |                 |        |        |            |
|            |          | 4                       |                  |        |        |            | 4                       |                 |        |        |            |
|            |          | 3                       | 2.25 Sep23 (10y) | 0.08   | Jun13  | 27         | 3                       | 2.75 Sep24      | -0.70  | Mar14  | 14         |
|            |          | 2                       | 5.00 Mar25 (G )  | 0.34   | Sep01  | 35         | 2                       | 5.00 Mar25 (G ) | -0.64  | Sep01  | 35         |
|            |          | 1                       | 2.75 Sep24       | 0.88   | Mar14  | 14         | 1                       | 4.25 Dec27      | -0.32  | Sep06  | 30         |
| >15yr      | Richest  | 1                       | 4.50 Dec42       | -2.49  | Jun07  | 26         | 1                       | 4.75 Dec30      | -0.40  | Oct07  | 32         |
|            |          | 2                       | 4.25 Dec40       | -2.26  | Jun10  | 25         | 2                       | 4.25 Sep39      | -0.36  | Mar09  | 20         |
|            |          | 3                       | 4.25 Sep39       | -2.04  | Mar09  | 20         | 3                       | 4.25 Jun32      | -0.34  | May00  | 35         |
|            |          | 4                       | 3.75 Jul52       | -1.96  | Sep11  | 22         | 4                       | 4.25 Dec40      | -0.32  | Jun10  | 25         |
|            |          | 5                       | 4.25 Dec46       | -1.92  | May06  | 21         | 5                       | 4.25 Mar36      | -0.20  | Feb03  | 26         |
|            | Cheapest | 5                       | 4.00 Jan60       | 0.33   | Oct09  | 21         | 5                       | 4.25 Dec55      | 0.44   | May05  | 24         |
|            |          | 4                       | 4.75 Dec38       | 1.44   | Apr04  | 25         | 4                       | 3.75 Jul52      | 0.47   | Sep11  | 22         |
|            |          | 3                       | 4.25 Mar36       | 1.44   | Feb03  | 26         | 3                       | 4.25 Dec49      | 0.59   | Sep08  | 20         |
|            |          | 2                       | 4.50 Sep34       | 1.98   | Jun09  | 28         | 2                       | 4.00 Jan60      | 0.60   | Oct09  | 21         |
|            |          | 1                       | 3.50 Jul68       | 3.02   | Jun13  | 10         | 1                       | 3.50 Jan45      | 1.96   | Jun14  | 5          |

Source: Citi Research

## 4 Week Auction Calendar: Euro, UK and US

Aman Bansal, CFA

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

| Date                                     | Country | Nominal Size<br>(Local Ccy, bn) | Issue Details   | DV01<br>\$million/bp | Approx. Number 10yr Futures |             |             |
|--|---------|---------------------------------|---|----------------------|-----------------------------|-------------|-------------|
|  |         |                                 |   |                      | TYU4 (UST)                  | G U4 (Gilt) | RXU4 (Bund) |
| 26 Aug (Tue)                             | Italy   | 3.0                             | New CTZ Aug16 (issue confirmed, estimated size)                           |                      |                             |             | 5k          |
| 26 Aug (Tue)                             | US      | 28.0                            | 2-year  |                      | 91k                         |             |             |
| 26 Aug (Tue)                             | US      | 2 - 2.5                         | Outright Treasury Coupon Purchases: 31-5-2020 - 15-8-2021                 |                      | -17k                        |             |             |
| 27 Aug (Wed)                             | UK      | 0.9                             | 0 5/8% Index-linked Treasury Gilt 2040 (issue and size confirmed)         |                      |                             | 28k         |             |
| 27 Aug (Wed)                             | US      | 13.0                            | 2-Year FRN (re-opening)   |                      | 42k                         |             |             |
| 27 Aug (Wed)                             | US      | 35.0                            | 5-year  |                      | 191k                        |             |             |
| 27 Aug (Wed)                             | US      | 0.95 - 1.15                     | Outright Treasury Coupon Purchases : 15-2-2036 - 15-8-2044                |                      | -26k                        |             |             |
| 28 Aug (Thu)                             | Italy   | 7.3                             | BTP 1.5% Aug19 and new Dec24 (new 10yr confirmed, estimated 5yr and size) |                      |                             |             | 44k         |
| 28 Aug (Thu)                             | Italy   | 1.5                             | CCTeu (estimated size)  |                      |                             |             | 6k          |
| 28 Aug (Thu)                             | US      | 29.0                            | 7-year  |                      | 226k                        |             |             |
| <b>Weekly \$DV01 of Issuance</b>         |         |                                 |   | <b>52.5</b>          |                             |             |             |
| <b>Total Number of Futures Contracts</b> |         |                                 |   |                      | <b>506k</b>                 | <b>28k</b>  | <b>54k</b>  |

| Date                                     | Country | Nominal Size<br>(Local Ccy, bn) | Issue Details   | DV01<br>\$million/bp | Approx. Number 10yr Futures |             |             |
|--|---------|---------------------------------|---|----------------------|-----------------------------|-------------|-------------|
|  |         |                                 |   |                      | TYU4 (UST)                  | G U4 (Gilt) | RXU4 (Bund) |
| 02 Sep (Tue)                             | UK      | 4.0                             | New conventional gilt July 2020 (issue confirmed, estimated size) |                      |                             | 25k         |             |
| 03 Sep (Wed)                             | Germany | 5.0                             | New Bobl Oct19 (issue and size confirmed)                         |                      |                             |             | 19k         |
| 04 Sep (Thu)                             | France  | 8.0                             | OAT 5yr, 10yr and 30yr (estimated tenors and size)                |                      |                             |             | 82k         |
| 04 Sep (Thu)                             | Spain   | 4.0                             | Bono 5yr and 10yr (estimated tenors and size)                     |                      |                             |             | 21k         |
| <b>Weekly \$DV01 of Issuance</b>         |         |                                 |   | <b>24.1</b>          |                             |             |             |
| <b>Total Number of Futures Contracts</b> |         |                                 |   |                      | <b>0k</b>                   | <b>25k</b>  | <b>122k</b> |

| Date                                     | Country     | Nominal Size<br>(Local Ccy, bn) | Issue Details   | DV01<br>\$million/bp | Approx. Number 10yr Futures |             |             |
|--|-------------|---------------------------------|---|----------------------|-----------------------------|-------------|-------------|
|  |             |                                 |   |                      | TYU4 (UST)                  | G U4 (Gilt) | RXU4 (Bund) |
| 09 Sep (Tue)                             | Austria     | 6.0                             | RAGB 5yr and 30yr (estimated tenors and size)                         |                      |                             |             | 62k         |
| 09 Sep (Tue)                             | Germany     | 1.0                             | Boblei/Bundei (estimated size)  |                      |                             |             | 7k          |
| 09 Sep (Tue)                             | Netherlands | 1.7                             | DSL Jul24 re-opening (issue confirmed, size €1.5-2.5bn)               |                      |                             |             | 12k         |
| 09 Sep (Tue)                             | UK          | 1.5                             | 0¼% Index-linked Treasury Gilt 2052 (issue confirmed, estimated size) |                      |                             | 66k         |             |
| 09 Sep (Tue)                             | US          | 26.0                            | 3-Year  |                      | 84k                         |             |             |
| 10 Sep (Wed)                             | Germany     | 5.0                             | New Bund Aug24 (issue and size confirmed)                             |                      |                             |             | 37k         |
| 10 Sep (Wed)                             | US          | 21.0                            | 10-Year (re-opening)  |                      | 232k                        |             |             |
| 11 Sep (Thu)                             | Italy       | 7.3                             | BTP 1.15% May17, 2.15% Dec21 and 15yr (estimated issue and size)      |                      |                             |             | 40k         |
| 11 Sep (Thu)                             | UK          | 2.4                             | 3½% Treasury Gilt 2045 (issue confirmed, estimated size)              |                      |                             | 58k         |             |
| 11 Sep (Thu)                             | US          | 13.0                            | 30-year (re-opening)  |                      | 295k                        |             |             |
| <b>Weekly \$DV01 of Issuance</b>         |             |                                 |   | <b>93.0</b>          |                             |             |             |
| <b>Total Number of Futures Contracts</b> |             |                                 |   |                      | <b>611k</b>                 | <b>124k</b> | <b>158k</b> |

| Date                                     | Country | Nominal Size<br>(Local Ccy, bn) | Issue Details   | DV01<br>\$million/bp | Approx. Number 10yr Futures |             |             |
|--|---------|---------------------------------|---|----------------------|-----------------------------|-------------|-------------|
|  |         |                                 |   |                      | TYU4 (UST)                  | G U4 (Gilt) | RXU4 (Bund) |
| 17 Sep (Wed)                             | Germany | 4.0                             | Schatz Sep16 re-opening (issue and size confirmed)            |                      |                             |             | 6k          |
| 18 Sep (Thu)                             | France  | 9.1                             | OAT 2yr and 5yr, index-linked OAT (estimated tenors and size) |                      |                             |             | 32k         |
| 18 Sep (Thu)                             | Spain   | 4.5                             | Bono 3yr and 15yr (estimated tenors and size)                 |                      |                             |             | 19k         |
| 18 Sep (Thu)                             | US      | 13.0                            | 10-Year TIPS (re-opening)                                     |                      | 153k                        |             |             |
| <b>Weekly \$DV01 of Issuance</b>         |         |                                 |   | <b>21.3</b>          |                             |             |             |
| <b>Total Number of Futures Contracts</b> |         |                                 |   |                      | <b>153k</b>                 | <b>0k</b>   | <b>57k</b>  |

The next release of the tentative outright Treasury operation schedule will be at 3 p.m. NY time on 29 August 2014. Therefore we have included Fed buybacks only upto that time in this calendar. Additional issues expected in August/September: Finland 5yr syndication (€4bn) and Portugal 10yr re-opening. They are not included in the table above as the timing of these supply events have not been announced.

Source: DMOs, Citi Research

## EMU: Coupons & Redemptions (Next 3mths)

Figure 45. EMU-11 Bond redemptions over the next three months (€bn)

| Redemptions = €170bn |           |           |          |           |           |           |           |          |          |          |
|----------------------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|----------|----------|
| Redemptions          | DEU<br>32 | FRA<br>36 | NLD<br>0 | ITA<br>47 | ESP<br>22 | BEL<br>10 | AUT<br>11 | FIN<br>7 | PRT<br>5 | IRL<br>0 |
| (Fri) 12-Sep-14      | 15.0      |           |          |           |           |           |           |          |          |          |
| (Mon) 15-Sep-14      |           |           |          | 18.4      |           |           |           | 6.5      |          |          |
| (Thu) 25-Sep-14      |           | 15.0      |          |           |           |           |           |          |          |          |
| (Sun) 28-Sep-14      |           |           |          |           |           | 10.3      |           |          |          |          |
| (Tue) 30-Sep-14      |           |           |          | 14.3      |           |           |           |          |          |          |
| (Fri) 10-Oct-14      | 17.0      |           |          |           |           |           |           |          |          |          |
| (Wed) 15-Oct-14      |           |           |          |           |           |           |           |          | 5.1      |          |
| (Mon) 20-Oct-14      |           |           |          |           |           |           | 11.1      |          |          |          |
| (Sat) 25-Oct-14      |           | 21.1      |          |           |           |           |           |          |          |          |
| (Fri) 31-Oct-14      |           |           |          |           | 21.8      |           |           |          |          |          |
| (Sat) 15-Nov-14      |           |           |          | 14.5      |           |           |           |          |          |          |

Source: DMOs, Bloomberg, Citi Research

This table is on a calendar-date basis

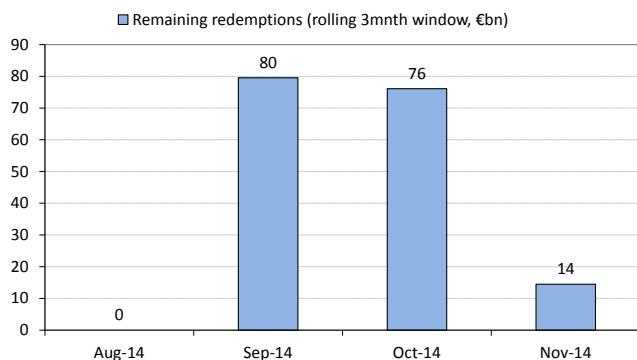
Figure 46. EMU-11 Coupon payments over the next three months (€bn)

| Coupons = €52bn |          |           |          |           |          |          |          |          |          |          |
|-----------------|----------|-----------|----------|-----------|----------|----------|----------|----------|----------|----------|
| Coupons         | DEU<br>2 | FRA<br>16 | NLD<br>0 | ITA<br>17 | ESP<br>7 | BEL<br>4 | AUT<br>2 | FIN<br>1 | PRT<br>2 | IRL<br>2 |
| (Mon) 01-Sep-14 |          |           |          | 7.8       |          |          |          |          |          |          |
| (Thu) 04-Sep-14 | 1.0      |           |          |           |          |          |          |          |          |          |
| (Thu) 11-Sep-14 | 0.0      |           |          |           |          |          |          |          |          |          |
| (Mon) 15-Sep-14 |          |           |          | 2.0       |          |          | 1.3      | 0.6      |          |          |
| (Sat) 20-Sep-14 | 0.0      |           |          |           |          |          |          |          |          | 0.0      |
| (Thu) 25-Sep-14 |          | 0.1       |          |           |          |          |          |          |          |          |
| (Sun) 28-Sep-14 |          |           |          |           |          | 4.0      |          |          |          |          |
| (Thu) 09-Oct-14 | 0.3      |           |          |           |          |          |          |          |          |          |
| (Fri) 10-Oct-14 | 0.4      |           |          |           |          |          |          |          |          |          |
| (Sun) 12-Oct-14 | 0.2      |           |          |           |          |          |          |          |          |          |
| (Mon) 13-Oct-14 | 0.1      |           |          |           |          |          |          |          |          |          |
| (Tue) 14-Oct-14 | 0.2      |           |          |           |          |          |          |          |          |          |
| (Wed) 15-Oct-14 |          |           |          | 0.8       |          |          |          |          | 0.7      |          |
| (Thu) 16-Oct-14 |          |           |          |           |          |          |          |          | 0.5      |          |
| (Sat) 18-Oct-14 |          |           |          |           |          |          |          |          |          | 1.6      |
| (Sun) 19-Oct-14 |          |           |          |           |          |          | 0.1      |          |          |          |
| (Mon) 20-Oct-14 |          |           |          |           |          |          | 0.5      |          |          |          |
| (Tue) 21-Oct-14 |          |           |          |           |          |          | 0.1      |          |          |          |
| (Sat) 25-Oct-14 |          | 16.0      |          |           |          |          |          |          | 0.4      |          |
| (Fri) 31-Oct-14 |          |           |          |           | 6.6      |          |          |          |          |          |
| (Sat) 01-Nov-14 |          |           |          | 5.9       |          |          |          |          |          |          |
| (Sat) 15-Nov-14 |          |           |          | 0.9       |          |          |          |          |          |          |

Source: DMOs, Bloomberg, Citi Research

This table is on a calendar-date basis

Figure 47. EMU-11 remaining redemptions over the next 3 months (€bn)



Source: DMOs, Bloomberg, Citi Research

This chart is on a calendar-date basis

Figure 48. EMU-11 remaining coupons over the next 3 months (€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 49. Provisional Bill Auction Calendar for the Next Four Weeks, Gross Issuance (Billions), DV01 (EUR Million/bp)

| Week                 | Date         | Country | Issue Details   | Total Size (€bn) |
|----------------------|--------------|---------|---|------------------|
| Week 1               | 26 Aug (Tue) | Spain   | 3month (21 November 2014) and 9month (15 May 2015) - tenors confirmed, estimated issue and size | 4                |
|                      | 27 Aug (Wed) | Italy   | 6 month (27 February 2015; issue confirmed, estimated size)                                     | 7.5              |
| Total Size in Week 1 |              |         |   | 11.5             |
| Week 3               | 10 Sep (Wed) | Italy   | 12 month (14 September 2015; issue confirmed, estimated size)                                   | 7.5              |
| Total Size in Week 3 |              |         |   | 7.5              |
| Week 4               | 16 Sep (Tue) | Spain   | 6month (13 March 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 50. 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   | 1.0  | 1.0  | 3.0  | 3.6  |     | 9            | 8           | 1   |
| Sep   | 1.0  | 1.0  | 3.0  | 4.0  |     | 9            | 7           | 2   |
| Oct   | 1.0  | 1.0  | 3.0  | 4.0  |     | 9            | 9           |     |
| Nov   | 1.0  | 1.0  | 3.0  | 4.0  |     | 9            | 8           | 1   |
| Dec   | 1.0  | 1.0  | 2.8  | 4.0  |     | 9            | 7           | 2   |
| Total | 11.7 | 12.5 | 31.0 | 45.9 |     | 101          | 110         | -9  |

| ITALY | 3m* | 6m   | 9m | 12m  | Flexible BOT | Gross Supply | Redemptions | NCR |
|-------|-----|------|----|------|--------------|--------------|-------------|-----|
| Jan   |     | 8.1  |    | 9.3  |              | 17           | 20          | -2  |
| Feb   |     | 8.6  |    | 8.0  |              | 17           | 19          | -3  |
| Mar   |     | 8.3  |    | 7.6  |              | 16           | 16          | -1  |
| Apr   |     | 7.7  |    | 7.5  |              | 15           | 17          | -2  |
| May   |     | 7.2  |    | 7.2  |              | 14           | 14          |     |
| Jun   |     | 8.3  |    | 7.2  |              | 15           | 16          |     |
| Jul   |     | 7.2  |    | 7.2  |              | 14           | 15          | -1  |
| Aug   |     | 7.5  |    | 7.7  |              | 15           | 17          | -2  |
| Sep   |     | 7.5  |    | 7.5  |              | 15           | 18          | -3  |
| Oct   |     | 7.0  |    | 8.5  |              | 16           | 17          | -1  |
| Nov   |     | 7.0  |    | 7.0  |              | 14           | 14          |     |
| Dec   |     | 7.0  |    | 6.0  |              | 13           | 14          | -1  |
| Total |     | 91.3 |    | 90.5 |              | 182          | 197         | -16 |

\*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 51. Citi Inflation Forecasts

| Month  | EUR HICPxT |        |        | France CPIxT |        |        | UK RPI   |        |        | US CPURNSA |        |        |
|--------|------------|--------|--------|--------------|--------|--------|----------|--------|--------|------------|--------|--------|
|        | Index      | MoM    | YoY    | Index        | MoM    | YoY    | Index    | MoM    | YoY    | Index      | MoM    | YoY    |
|        | Forecast   | Change | Change | Forecast     | Change | Change | Forecast | Change | Change | Forecast   | Change | Change |
| Jul 14 | 116.78     | -0.7   | 0.3    | 125.81       | -0.3   | 0.4    | 256.00   | -0.1   | 2.5    | 238.25     | -0.0   | 2.0    |
| Aug 14 | 116.79     | 0.0    | 0.2    | 126.22       | 0.3    | 0.3    | 256.90   | 0.4    | 2.4    | 238.85     | 0.3    | 2.1    |
| Sep 14 | 117.42     | 0.5    | 0.3    | 126.09       | -0.1   | 0.4    | 257.90   | 0.4    | 2.4    | 239.15     | 0.1    | 2.1    |
| Oct 14 | 117.56     | 0.1    | 0.5    | 126.20       | 0.1    | 0.6    | 258.40   | 0.2    | 2.6    | 238.85     | -0.1   | 2.3    |
| Nov 14 | 117.48     | -0.1   | 0.5    | 126.24       | 0.0    | 0.7    | 258.80   | 0.2    | 2.7    | 238.55     | -0.1   | 2.4    |
| Dec 14 | 117.90     | 0.4    | 0.5    | 126.58       | 0.3    | 0.6    | 259.60   | 0.3    | 2.4    | 238.25     | -0.1   | 2.2    |

Source: Citi Research, Bloomberg

Shaded = Already released

Figure 52. 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 Oct          | 1 Nov | 1 Dec |                        |         |          |               | 1 Oct          | 1 Nov | 1 Dec |                          |          |
| Repo (%)  |        |          |               | 0.09           | 0.10  | 0.10  |                        |         |          |               |                |       |       |                          |          |
| TIPS 1/16 | -1.05  | 14       | 13            | -8             | 4     | 7     | US-2.625-02/29/16      | 139     | -9       | -8            | -10            | 1     | 2     | 6                        | -1       |
| TIPS 4/16 | -0.94  | 14       | 13            | -6             | 5     | 8     | US-2.000-04/30/16      | 134     | -9       | -8            | -8             | 1     | 2     | 6                        | -1       |
| TIPS 7/16 | -1.22  | 15       | 14            | -7             | 1     | 2     | US-4.875-08/15/16      | 174     | -9       | -9            | -9             | -4    | -5    | 10                       | -0       |
| TIPS 1/17 | -0.91  | 12       | 11            | -4             | 4     | 6     | US-3.125-01/31/17      | 163     | -5       | -5            | -7             | -2    | -2    | 14                       | -4       |
| TIPS 4/17 | -0.75  | 12       | 11            | -3             | 4     | 7     | US-0.875-04/30/17      | 160     | -7       | -7            | -6             | -2    | -2    | 13                       | -2       |
| TIPS 7/17 | -0.91  | 12       | 12            | -3             | 3     | 5     | US-4.750-08/15/17      | 188     | -6       | -5            | -7             | -3    | -5    | 12                       | -3       |
| TIPS 1/18 | -0.62  | 12       | 11            | -2             | 4     | 7     | US-3.500-02/15/18      | 182     | -5       | -5            | -6             | -3    | -3    | 12                       | -3       |
| TIPS 4/18 | -0.46  | 13       | 12            | -1             | 5     | 7     | US-0.625-04/30/18      | 176     | -6       | -6            | -5             | -2    | -3    | 14                       | -1       |
| TIPS 7/18 | -0.62  | 12       | 11            | -2             | 4     | 6     | US-4.000-08/15/18      | 196     | -6       | -6            | -5             | -3    | -4    | 14                       | -2       |
| TIPS 1/19 | -0.40  | 13       | 12            | -1             | 4     | 7     | US-2.750-02/15/19      | 194     | -5       | -5            | -5             | -3    | -3    | 11                       | -2       |
| TIPS 4/19 | -0.28  | 13       | 12            | 0              | 5     | 7     | US-1.625-04/30/19      | 188     | -6       | -6            | -4             | -2    | -3    | 14                       | -1       |
| TIPS 7/19 | -0.39  | 12       | 12            | -1             | 4     | 6     | US-3.625-08/15/19      | 205     | -5       | -5            | -4             | -3    | -4    | 13                       | -2       |
| TIPS 1/20 | -0.20  | 12       | 11            | 0              | 4     | 6     | US-3.625-02/15/20      | 196     | -4       | -4            | -4             | -2    | -3    | 19                       | -3       |
| TIPS 7/20 | -0.19  | 11       | 11            | 0              | 4     | 6     | US-2.625-08/15/20      | 209     | -5       | -5            | -4             | -3    | -4    | 17                       | -2       |
| TIPS 1/21 | -0.03  | 11       | 10            | 0              | 4     | 6     | US-3.625-02/15/21      | 201     | -4       | -4            | -3             | -2    | -3    | 23                       | -3       |
| TIPS 7/21 | -0.03  | 10       | 10            | 0              | 4     | 6     | US-2.125-08/15/21      | 212     | -5       | -5            | -3             | -2    | -3    | 22                       | -2       |
| TIPS 1/22 | 0.11   | 10       | 9             | 0              | 4     | 6     | US-2.000-02/15/22      | 206     | -4       | -4            | -3             | -2    | -3    | 26                       | -2       |
| TIPS 7/22 | 0.11   | 10       | 9             | 0              | 4     | 5     | US-1.625-08/15/22      | 213     | -5       | -5            | -3             | -2    | -3    | 27                       | -1       |
| TIPS 1/23 | 0.21   | 9        | 9             | 0              | 4     | 5     | US-2.000-02/15/23      | 209     | -5       | -5            | -3             | -2    | -3    | 29                       | -1       |
| TIPS 7/23 | 0.19   | 9        | 8             | 0              | 3     | 5     | US-2.500-08/15/23      | 216     | -5       | -5            | -3             | -2    | -3    | 30                       | -1       |
| TIPS 1/24 | 0.28   | 10       | 9             | 0              | 3     | 5     | US-2.750-02/15/24      | 212     | -6       | -6            | -3             | -2    | -3    | 32                       | -0       |
| TIPS 7/24 | 0.33   | 8        | 8             | 1              | 3     | 5     | US-7.625-02/15/25      | 206     | -4       | -4            | -3             | -2    | -3    | 41                       | -1       |
| TIPS 1/26 | 0.40   | 8        | 8             | 1              | 3     | 5     | US-6.000-02/15/26      | 212     | -4       | -4            | -2             | -2    | -3    | 39                       | -1       |
| TIPS 7/26 | 0.48   | 8        | 7             | 1              | 3     | 5     | US-6.625-02/15/27      | 211     | -4       | -4            | -2             | -2    | -3    | 42                       | -1       |
| TIPS 1/28 | 0.55   | 8        | 7             | 1              | 3     | 4     | US-6.125-11/15/27      | 211     | -3       | -3            | -2             | -2    | -3    | 44                       | -2       |
| TIPS 4/28 | 0.53   | 7        | 7             | 1              | 3     | 5     | US-5.500-08/15/28      | 220     | -3       | -3            | -2             | -2    | -2    | 35                       | -2       |
| TIPS 7/28 | 0.57   | 7        | 7             | 1              | 3     | 4     | US-5.250-02/15/29      | 219     | -3       | -3            | -2             | -2    | -3    | 38                       | -1       |
| TIPS 1/29 | 0.57   | 8        | 8             | 1              | 3     | 5     | US-5.250-02/15/29      | 219     | -4       | -4            | -2             | -2    | -2    | 37                       | -1       |
| TIPS 4/32 | 0.67   | 7        | 7             | 1              | 3     | 4     | US-5.375-02/15/31      | 217     | -4       | -4            | -2             | -2    | -3    | 44                       | -1       |
| TIPS 7/40 | 0.90   | 7        | 7             | 1              | 2     | 3     | US-4.625-02/15/40      | 222     | -4       | -4            | -1             | -2    | -2    | 45                       | 0        |
| TIPS 1/41 | 0.89   | 7        | 7             | 1              | 2     | 3     | US-4.750-02/15/41      | 222     | -4       | -4            | -1             | -2    | -2    | 45                       | 0        |
| TIPS 7/42 | 0.95   | 6        | 6             | 0              | 2     | 3     | US-3.125-02/15/42      | 224     | -3       | -3            | -1             | -2    | -2    | 43                       | -1       |
| TIPS 1/43 | 0.95   | 6        | 6             | 0              | 2     | 2     | US-3.125-02/15/43      | 227     | -3       | -3            | -1             | -2    | -2    | 41                       | -1       |
| TIPS 7/44 | 0.95   | 6        | 6             | 0              | 2     | 3     | US-3.625-02/15/44      | 227     | -3       | -3            | -1             | -1    | -2    | 41                       | -1       |

Source: Citi Research, Bloomberg

Figure 53. 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) |
|----------|--------|----------|---------------|----------------|-------|-------|------------------------|---------|----------|---------------|----------------|-------|-------|--------------------------|----------|
|          |        |          |               | 1 Oct          | 1 Nov | 1 Dec |                        |         |          |               | 1 Oct          | 1 Nov | 1 Dec |                          |          |
| Repo (%) |        |          |               | 0.04           | 0.03  | 0.03  |                        |         |          |               |                |       |       |                          |          |
| BUNDei16 | 0.30   | 7        | 5             | -41            | -41   | -3    | BUND 1/16              | -31     | -8       | -7            | -41            | -41   | -2    | 11                       | 4        |
| BTANI16  | -0.31  | 3        | 3             | -20            | -4    | -12   | FFRG 4/16              | 33      | -3       | -4            | -20            | -4    | -12   | 18                       | 2        |
| BTPei16  | 0.17   | -5       | -6            | -33            | -34   | -4    | BTP 8/16               | 22      | 3        | 4             | -35            | -38   | -10   | 18                       | -7       |
| OATi17   | -0.37  | -1       | -0            | -13            | -3    | -8    | FFRG 4/17              | 43      | 0        | -0            | -13            | -3    | -9    | 22                       | 0        |
| BTPei17  | 0.31   | -7       | -9            | -22            | -21   | -1    | BTP 8/17               | 35      | 4        | 5             | -24            | -26   | -8    | 26                       | -7       |
| BOBLEi18 | -0.32  | 1        | 1             | -20            | -21   | -6    | BUND 1/18              | 33      | -1       | -1            | -20            | -21   | -6    | 13                       | -1       |
| OATei18  | -0.45  | -1       | -2            | -18            | -20   | -6    | FFRG 4/18              | 62      | 1        | 2             | -19            | -20   | -8    | 21                       | -3       |
| BTPei18  | 0.44   | -8       | -9            | -16            | -15   | 0     | BTP 8/18               | 47      | 2        | 2             | -18            | -20   | -7    | 29                       | -4       |
| OATi19   | -0.45  | 2        | 2             | -8             | -2    | -5    | FFRG 4/19              | 77      | -1       | -2            | -9             | -3    | -7    | 19                       | 0        |
| BTPei19  | 0.59   | -6       | -7            | -13            | -12   | 1     | BTP 9/19               | 59      | -1       | -1            | -15            | -17   | -6    | 34                       | -2       |
| BUNDei20 | -0.43  | 1        | 0             | -13            | -14   | -4    | BUND 1/20              | 70      | -1       | -0            | -14            | -15   | -6    | 15                       | -3       |
| OATei20  | -0.39  | 1        | 1             | -13            | -13   | -4    | FFRG 4/20              | 89      | -1       | -1            | -13            | -15   | -7    | 21                       | -2       |
| OATi21   | -0.24  | 3        | 4             | -5             | -1    | -3    | FFRG 4/21              | 93      | -4       | -4            | -6             | -3    | -6    | 31                       | 1        |
| BTPei21  | 0.96   | -7       | -7            | -9             | -7    | 2     | BTP 9/21               | 84      | -3       | -3            | -12            | -13   | -6    | 32                       | -0       |
| OATei22  | -0.20  | 2        | 1             | -9             | -9    | -2    | FFRG 4/21              | 88      | -2       | -2            | -10            | -11   | -5    | 41                       | -3       |
| BUNDei23 | -0.30  | 1        | 1             | -8             | -8    | -2    | BUND 1/22              | 89      | -2       | -2            | -9             | -10   | -5    | 32                       | -3       |
| OATi23   | -0.13  | 3        | 3             | -4             | 0     | -2    | FFRG 10/23             | 128     | -4       | -4            | -6             | -3    | -6    | 17                       | -2       |
| BTPei23  | 1.40   | -7       | -8            | -7             | -5    | 3     | BTP 8/23               | 94      | -1       | -1            | -10            | -11   | -5    | 41                       | -4       |
| OATei24  | -0.01  | 1        | 0             | -7             | -7    | -1    | FFRG 10/23             | 115     | -2       | -2            | -8             | -9    | -5    | 31                       | -3       |
| BTPei24  | 1.53   | -9       | -9            | -6             | -4    | 3     | BTP 9/24               | 103     | -0       | -0            | -9             | -10   | -5    | 40                       | -5       |
| SPGBEi24 | 1.23   | -9       | -9            | -6             | -5    | 2     | SPAG 4/24              | 102     | -3       | -3            | -9             | -10   | -5    | 43                       | -1       |
| BTPei26  | 1.73   | -10      | -10           | -5             | -3    | 3     | BTP 3/26               | 105     | -0       | -0            | -8             | -9    | -5    | 53                       | -4       |
| OATei27  | 0.18   | -2       | -2            | -5             | -5    | -1    | FFRG 4/26              | 138     | -0       | -0            | -7             | -8    | -5    | 28                       | -4       |
| OATi29   | 0.23   | -2       | -1            | -3             | 0     | 0     | FFRG 4/29              | 157     | -2       | -3            | -4             | -3    | -5    | 27                       | -2       |
| BUNDei30 | 0.05   | -4       | -4            | -4             | -4    | -1    | BUND 1/30              | 143     | -1       | -1            | -6             | -7    | -4    | 26                       | -2       |
| OATei30  | 0.36   | -5       | -5            | -4             | -4    | 0     | FFRG 5/30              | 158     | 1        | 1             | -6             | -7    | -4    | 20                       | -4       |
| OATei32  | 0.38   | -5       | -5            | -4             | -4    | 0     | FFRG 5/30              | 156     | 0        | 0             | -6             | -7    | -4    | 28                       | 1        |
| BTPei35  | 2.06   | -8       | -8            | -3             | -2    | 3     | BTP 8/34               | 142     | -2       | -2            | -5             | -6    | -4    | 46                       | 0        |
| OATei40  | 0.50   | -4       | -4            | -3             | -3    | 0     | FFRG 4/41              | 176     | 0        | 0             | -4             | -5    | -3    | 20                       | -1       |
| BTPei41  | 2.41   | -7       | -8            | -2             | -1    | 3     | BTP 9/40               | 134     | -2       | -2            | -5             | -6    | -4    | 62                       | 1        |

Source: Citi Research

Figure 54. 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) |
|------------|--------|----------|---------------|----------------|-------|-------|------------------------|---------|----------|---------------|----------------|-------|-------|--------------------------|----------|
|            |        |          |               | 1 Oct          | 1 Nov | 1 Dec |                        |         |          |               | 1 Oct          | 1 Nov | 1 Dec |                          |          |
| Repo (%)   |        |          |               | 0.43           | 0.44  | 0.45  |                        |         |          |               |                |       |       |                          |          |
| UKTi Jul16 | -1.82  | -14      | -15           | 4              | 8     | 11    | UKT 9/16               | 272     | 16       | 16            | 1              | 3     | 4     | 23                       | -31      |
| UKTi Nov17 | -1.39  | 1        | 1             | -9             | -2    | 6     | UKT 3/18               | 283     | 0        | -0            | -12            | -9    | -4    | 15                       | -3       |
| UKTi Nov19 | -0.97  | 0        | 0             | -4             | 0     | 6     | UKT 9/19               | 279     | 2        | 1             | -8             | -6    | -3    | 26                       | -6       |
| UKTi Apr20 | -0.97  | -8       | -8            | 3              | 6     | 8     | UKT 3/20               | 288     | 9        | 9             | 0              | 0     | 0     | 10                       | -14      |
| UKTi Nov22 | -0.67  | -2       | -2            | -2             | 1     | 5     | UKT 3/22               | 286     | 3        | 3             | -5             | -4    | -3    | 29                       | -5       |
| UKTi Mar24 | -0.45  | -2       | -2            | -2             | 1     | 5     | UKT 3/25               | 299     | 3        | 2             | -5             | -4    | -3    | 12                       | -7       |
| UKTi Jul24 | -0.49  | -5       | -6            | 2              | 4     | 6     | UKT 3/25               | 303     | 6        | 6             | 0              | -1    | -1    | 19                       | -7       |
| UKTi Nov27 | -0.36  | -2       | -2            | -1             | 1     | 4     | UKT 12/27              | 310     | 2        | 1             | -4             | -3    | -3    | 22                       | -2       |
| UKTi Mar29 | -0.27  | -2       | -3            | -1             | 1     | 3     | UKT 12/30              | 315     | 1        | 1             | -3             | -3    | -2    | 15                       | -4       |
| UKTi Jul30 | -0.32  | -4       | -5            | 2              | 3     | 5     | UKT 6/32               | 327     | 3        | 3             | 0              | 0     | -1    | 14                       | -10      |
| UKTi Nov32 | -0.28  | -3       | -3            | -1             | 1     | 3     | UKT 6/32               | 323     | 1        | 1             | -3             | -3    | -3    | 23                       | -2       |
| UKTi Mar34 | -0.24  | -4       | -4            | -1             | 1     | 3     | UKT 9/34               | 325     | 2        | 2             | -3             | -3    | -3    | 19                       | -4       |
| UKTi Jan35 | -0.26  | -6       | -6            | 1              | 2     | 4     | UKT 3/36               | 330     | 4        | 4             | -1             | -1    | -1    | 18                       | -5       |
| UKTi Nov37 | -0.26  | -4       | -4            | -1             | 1     | 2     | UKT 12/38              | 331     | 1        | 1             | -3             | -3    | -2    | 22                       | -2       |
| UKTi Mar40 | -0.25  | -4       | -4            | -1             | 1     | 2     | UKT 9/39               | 331     | 1        | 1             | -2             | -3    | -2    | 19                       | -2       |
| UKTi Nov42 | -0.28  | -4       | -4            | -1             | 1     | 2     | UKT 12/42              | 336     | 1        | 1             | -2             | -2    | -2    | 18                       | -1       |
| UKTi Mar44 | -0.24  | -4       | -4            | 0              | 1     | 2     | UKT 1/44               | 335     | 1        | 0             | -2             | -2    | -2    | 16                       | -2       |
| UKTi Nov47 | -0.27  | -4       | -4            | 0              | 0     | 2     | UKT 12/46              | 336     | 1        | 1             | -2             | -2    | -2    | 17                       | -1       |
| UKTi Mar50 | -0.26  | -4       | -4            | 0              | 0     | 1     | UKT 12/49              | 334     | 1        | 1             | -2             | -2    | -2    | 16                       | -2       |
| UKTi Mar52 | -0.25  | -4       | -4            | 0              | 0     | 1     | UKT 7/52               | 334     | 1        | 1             | -2             | -2    | -2    | 16                       | -2       |
| UKTi Nov55 | -0.28  | -4       | -4            | 0              | 0     | 1     | UKT 12/55              | 334     | 1        | 1             | -2             | -2    | -2    | 18                       | -1       |
| UKTi Mar62 | -0.27  | -3       | -3            | 0              | 0     | 1     | UKT 1/60               | 333     | 0        | 0             | -2             | -2    | -2    | 18                       | -2       |
| UKTi Mar68 | -0.27  | -3       | -3            | 0              | 0     | 1     | UKT 7/68               | 335     | 0        | 0             | -1             | -2    | -2    | 17                       | -1       |

Source: Citi Research



## Summary of Recent Publications

| Date      | Publication     | Topic  | Page | Region |
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| 19-Aug-14 | NOTE            | <a href="#">European Inflation-linked Index Projection: Little change at month-end</a>       | -    | EUR    |
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