19 September 2013 │ 39 pages
Western Europe

European Rates Weekly

The Other Side of Forward Guidance

- **State-contingent vs open-ended forward guidance:** Assuming that investors rely on “external” information more heavily than in the past when pricing the ECB curve and that we’re unlikely to see an outperformance of the Eurozone vs the US in economic terms, we like the idea of receiving EUR 1y1y vs USD.

- **EUR swap trades:** We believe the latest moves in 30yr Bund ASW provide a good opportunity to establish spread wideners (we target the -10bp level). Separately, we suggest taking profits on long EONIA 1Y1YF given that the risk-reward of holding outright positions no longer looks attractive.

- **S&P changes its BB outlook on Portugal:** While near-term PGB spread volatility can be expected, Portugal’s long-term rating is sub-IG by Moody’s and S&P and hence out of benchmark indices. We believe the wider market impact of this event is likely to be limited, but it does put the current Troika review much more in focus.

- **UK Rates - asymmetric risks for 10s30s:** The 10s30s gilt curve has steepened post-FOMC and this may well continue into next week’s heavy IL supply. But the medium-term outlook is likely to depend first and foremost on direction and secondly on increasing pension fund demand. As a result of the latter, we expect the curve to exhibit a greater propensity to bear flatten than to bull steepen.

- **EUR - long-end forward steepener re-load:** Given the subdued positioning on carry trades after the summer unwinds we believe that market conditions are ripe to establish conditional bear steepeners at the long-end of the EUR curve.

- **SSA post-Fed opportunities:** A core EMU market rally and a return of market conviction is likely to spur interest in opportunities where switches into the SSA sector mean a move up in quality at a spread pick-up. We also look at extension trades in the front-end of core curves.

- **NIBC - covered bond revolution ahead?** NIBC will probably come to the covered bond market with its newly established partial pass-through covered bond. We present the new structure and its implications for investors, issuers and the market.

- **Month-end EGBI projections:** We expect the EGBI changes to be relatively supportive for France and Belgium. Specifically, Belgium is projected to extend by its largest amount in 5 years.

- **Supply:** Within EMU, next week’s bond supply comes from the Netherlands (€2-3bn) & Italy (around €10bn). The US Treasury will issue $97bn across the 2-, 5- and 7-year sectors. The UK DMO is expected to issue around £4bn of a new linker ’68.

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Figure 1. Strategy Summary Table

Europe	View	Strategies
Direction	Our duration scorecard for the week ahead is bullish. This is based on momentum from the Fed, positioning, lessening event risk and technicals.	Long
Money Market	Assuming that investors rely on "external" information more heavily than in the past when pricing the ECB curve and that we're unlikely to see an outperformance of the Eurozone vs the US in economic terms, we like receiving EUR money market rates (especially vs the US). Take profits on long EONIA 1Y1Y as the risk-reward no longer looks attractive. In the UK, the Short-sterling red pack remains volatile but has richened since last week's jobless report. We think there is further to go	Long EUR 1y1y vs USD Long Short-sterling red pack Take profits on long EONIA 1Y1YF Hold long ERZ3 1x2 call spread Hold long ECB Mar14 EONIA
Yield Curve	The Fed has driven a bull flattening dynamic in EUR 2s10s and we expect the front-end to be anchored even further. The 2s10s UK curve has bull flattened post-Fed, but we still think the path of least resistance is for steepening over the medium-term. 10s30s in the UK remains directional but we think it has a greater propensity to bear flatten than to bull steepen.	UKT 2s10s steepeners as a medium-term strategy Sell 10yr OATs vs 5yr and 30yr
Cross-market	The UST-Bund spread has broken its recent range convincingly given noted outperformance of USTs. Over the longer-term, we would still expect Bunds to outperform given diverging economic fundamentals. The gilt-Bund spread continues to be driven by broader market direction (especially Treasuries). We expect it to widen over the medium-term.	Sell EUR 2y cross-ccy basis Long Bunds vs UST trades over the medium-term (add on corrections)
EMU Spreads	A near-term political collapse in Italy has been averted and the BTP-Bono spread has returned to near zero. Although this has improved the near-term outlook for BTPs, we are mindful of the impending full Senate vote to strip Berlusconi of his seat in Parliament. Separately, we continue to like Belgium vs France and 2yr DSL-RAGB spreads appear too tight and are at attractive levels to initiate wideners	Buy 5yr Belgium vs France Buy 2yr Netherlands vs Austria Prefer 2yr Spain vs Italy
Swap Spreads	Political uncertainty in Italy, EM concerns and geo-political risks in Syria, upcoming cash flows in Germany are favourable for 10yr and 30yr Bund spread wideners. In the UK, 5yr swap spreads look attractive boxed against 10s.	Buy 5yr gilt spreads vs 10yr Long 10yr Bunds vs EONIA Long 30yr Bunds vs swaps (Euribor)
Inflation	With inflation subdued, euro break-evens are likely to remain stuck in the range for the foreseeable future. In the UK, front-end break-evens look a little cheap to the likely path of inflation, especially given the nominal market is pricing higher policy rates in late-2014 and the widening RPI-CPI wedge in realised inflation.	Long 5yr UK break-evens Sell OATei24 vs Bundei23 break-even inflation box Buy Boblei18 break-even vs inflation swap Sell 5yr, 5yr euro HICPxT as a long-term fundamental trade
Volatility	EUR 10s30s forwards are too flat vs spot and we expect the forward curve to roll up to the spot curve. Our preferred way to play this is via bear-steepeners. The current level of EUR 2y2y & 5y5y implied skews are too steep when compared to previous levels of implied volatility for a range of underlying rates. Given current vol directionality we prefer short EUR collar positions hedged with USD longs, instead of outright shorts.	EUR 2y 10s30s conditional bear-steepener Short EUR 5y5y 100bp wide collar vs USD 5y5y 100bp wide collar
SSA	Post Fed we would expect the primary market to show increased activity and we would focus on "laggards" in the rally between core government bond markets and the SSA sector.	Relative value in supras vs France Maintain front-end KfW vs France over the medium term Prefer EU vs other supras in the sub 5yr sectors
For a list of outstanding trade strategies please see the Tradesheet section of this report		

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

Duration Scorecard

Figure 2. Bund Weekly Cheat Sheet: 20th-26th September

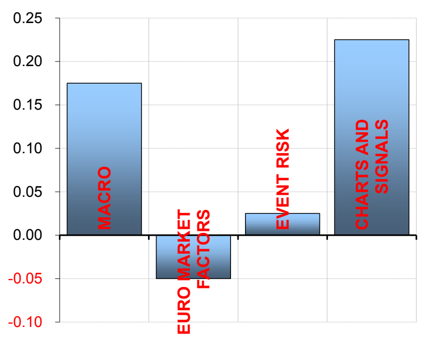
Bund Directional Scorecard (1wk horizon)

RECOMMENDATION	Long	RXZ3 (EOD Thurs) = 138.73	
Conviction level	19%	CTD yield = 1.68%	10day del vol = 7.06%

	SIGNAL STRENGTH (+/-2)		
MACRO	**0.2**		**Weight = 38%**
ECB	1	Monetary policy to be accommodative for as long as needed	7.5%
Fed, BoE and BOJ	1	No tapering; Fed now more dovish than expected	7.5%
Inflation	1	HICP inflation likely to remain subdued	5.0%
Growth related data	0	September PMI likely to point to mild but positive growth	5.0%
Citi surprise	-1	Citi Economic Surprise Index remains firmly elevated	7.5%
Middle East / Oil	1	Oil prices coming down after tensions ease in Syria	5.0%
EURO MARKET FACTORS	**-0.1**		**Weight = 28%**
Supply	0	Dutch and Italian supply. Cash flows from Belgium and Italy	7.5%
Risk appetite	0	GRAMI points to very low levels of risk aversion	7.5%
Positioning	1	Short squeeze post FOMC	2.5%
Equity	-1	Eurostoxx50 at 2 year high	2.5%
Sovereign credit	-1	Peripheral spreads remain tight	5.0%
FX	0	EUR effective exchange rate range bound at high levels	2.5%
EVENT RISK	**0.0**		**Weight = 13%**
Politics	0	No material long-term impact expected from the German elections	7.5%
3yr LTRO	1	Excess liquidity unlikely to fall below €100bn before May 2015	2.5%
Stability mechanisms	0	Further ESM activation unlikely in the short-term	2.5%
CHARTS AND SIGNALS	**0.2**		**Weight = 23%**
Technicals	1	RX1 broke out of its downward channel	7.5%
T-Note	1	Bias towards lower Treasury yields post FOMC	5.0%
CFTC	1	Positioning short and getting squeezed	5.0%
ARTS	1	Mild long	5.0%

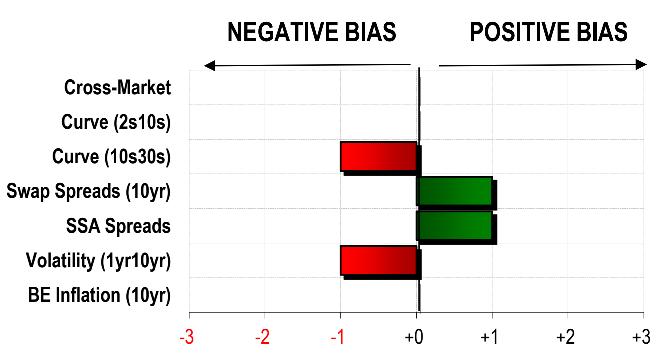
Source: Citi Research

Figure 3. Contribution to Bund Signals



Source: Citi Research

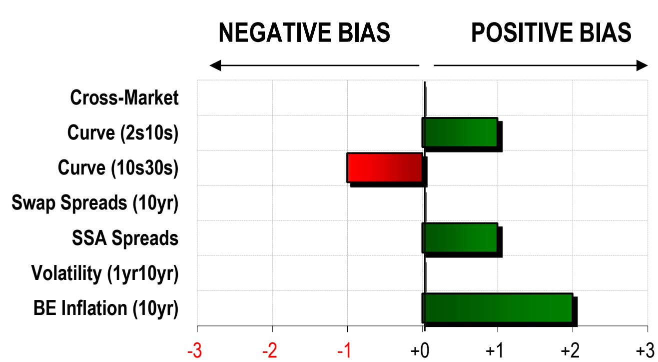
Figure 4. EURO AREA (Near-term Bias)



Source: Citi Research

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

Figure 5. UK (Near-term Bias)



Source: Citi Research

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

Tradesheet

New Trade

Please see page 10 for the details

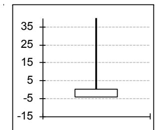
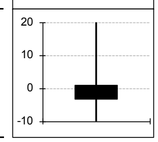
1. Buy 30yr Bund vs swaps (YYS)

Buy Bund 2.5% Jul44 vs swaps (YYS) at -1.5bp.

Open -1.5bp. Current -1.5bp. Target -10bp. Stop 3bp.

Record of Our Closed Trades

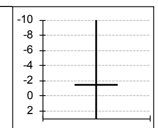
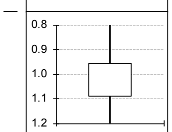
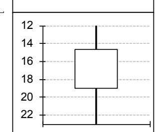
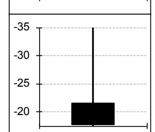
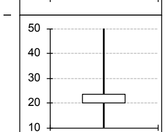
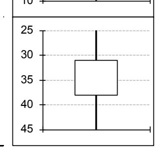
Figure 6. Record of our Closed Trades

Region	Trade	Levels		Rationale	
Europe	**Sell OAT 5s10s30s**	Open	-4bp		
		Current	0bp	Hit Revised stop on 19 Sep 2013.	
Curve	Buy OAT Nov18 at 1.10%	**P&L**	**4bp**		
	Sell OAT May23 at 2.19%	Target	40bp	*European Interest Rate Strategy, 22 July 2013*	
	Buy OAT May45 at 3.32%	Stop	0bp	*Revise stop to 0 (European Rates Strategy, 29 August)*	
Europe	**Long KfW 1.375% Feb17s vs OAT 5% Oct16s**	Open	1bp		
		Current	-3bp	Tired of waiting.	
Cross Market	Buy KfW 1.375% Feb17 at 0.62%	**P&L**	**-4bp**		
	Sell OAT 5% Oct16s at 0.63%	Target	20bp		
		Stop	-10bp	*IIRS 2 August 2012*	

Source: Citi Research

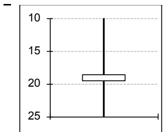
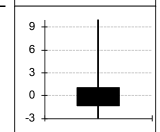
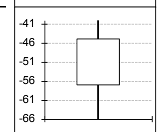
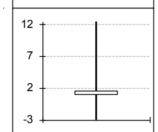
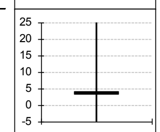
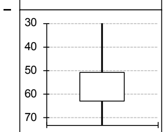
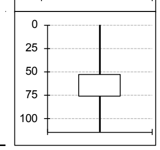
Record of Open Trades

Figure 7. Record of our Open Trades

Region	Trade	Levels		Rationale + Publication Date	
EUR	**Buy 30yr Bund vs swaps (YYS)**	Open	-1.5bp		
		Current	-1.5bp	Technical levels, supply projections and upcoming cash flows	
Swap Spread	Buy Bund 2.5% Jul44 vs swaps (YYS) at -1.5bp	**P&L**	**0bp**		
		Target	-10bp		
		Stop	3bp	*European Rates Weekly, 19 September 2013*	
UK	**Long Short-sterling red-pack**	Open	1.09%		
		Current	0.96%	The rate-hike expectations have been brought forward more than warranted, in our view.	
Futures	Long Short-sterling red-pack at 1.09%	**P&L**	**0.13%**		
		Target	0.8%		
		Stop	1.2%	*UK Rates Strategy, 11 September 2013*	
UK	**Buy IL gilt Mar24 vs Nov22 and Nov27**	Open	19bp		
		Current	15bp	Speed of recent cheapening looks overdone, equivalent nominal fly has turned and no further suppy in 2013	
Inflation	Buy IL gilt 0.125% Mar24 at -0.13%	**P&L**	**4bp**		
	Sell IL gilt 1.875% Nov22 at -0.42%	Target	12bp		
	Sell IL gilt 1.255 Nov27 at -0.03%	Stop	23bp	*UK Inflation Strategy, 2 September 2013*	
Europe / US	**Sell EUR 2y cross-ccy basis**	Open	-21.5bp		
		Current	-17.8bp	Worries about escalation of the Syrain conflict are not yet reflected in the EUR cross-ccy basis curve.	
Cross Market	Sell EUR 2y cross-ccy basis at -21.5bp	**P&L**	**-4bp**		
		Target	-35bp		
		Stop	-17.5bp	*EUR: Fear of geopolitical risk, 28 August 2013*	
UK	**Sell 30yr gilt swap spreads vs 10yr**	Open	20bp		
		Current	24bp	Fiscal risks, supply pressures and the absence of QE to put steepening pressure on the gilt curve.	
Swap spread	Sell gilt 3.25% Jan44 ASW at 20bp	**P&L**	**4bp**		
	Buy gilt 1.75% Sep22 ASW at 0bp	Target	50bp		
		Stop	10bp	*UK Rates Strategy, 30 July 2013*	
Europe	**Sell OATei24 break-even vs Bundei23**	Open	38bp		
		Current	31bp	Relative outperformance of 10yr OATei break-evens is overdone, especially now that the 25 July coupons have been paid.	
Inlfation	Sell OATei24 break-even at 168bp	**P&L**	**7bp**		
	Buy Bundei23 break-even at 130bp	Target	25bp		
		Stop	45bp	*European Rates Weekly, 25 July 2013*	

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

Figure 8. Record of our Open Trades (continued)

Region	Trade			Rationale	Chart
Europe *Cross Market*	**Buy 5yr Belgium vs France** Buy OLO 4% Mar18 at 1.15% Sell OAT 4% Apr18 at 0.95%	Open Current **P&L** Target Stop	19.5bp 19bp **1bp** 10bp 25bp	Tactical long supported by upcoming cash flows. *Euro Rates Strategy, 24 July 2013*	
Europe *Cross Market*	**Buy 2yr Netherlands vs Austria** Buy DSL 0.75% Apr15 at 16bp Sell RAGB 3.5% Jul15 at 17bp	Open Current **P&L** Target Stop	1bp -1bp **-2bp** 10bp -3bp	Attractive entry level to move up the credit curve. Relative value is also supportive. *The Morning Call, 17 July 2013*	
Europe *Inflation*	**Buy Boblei18 break-even vs 5yr HICPxT swap** Buy Boblei18 break-even at 98bp Sell 5yr HICPxT swap at 155bp	Open Current **P&L** Target Stop	-57bp -45bp **12bp** -40bp -66bp	Euro break-evens should be supported by rally in oil and upcoming coupon payments. *The Morning Call, 16 July 2013*	
Europe *Money Market*	**Buy ERZ3 1x2 call spread** Buy ERZ3 99.750/.875 1x2 call spread at 1c	Open Current **P&L** Target Stop	1c 1.5c **0.5c** 12.5c -3c	Dec Euribor has cheapened 30/35c since May ECB rate cut. Howevre, a cut to the deposit rate would be required for a signifcant rally. *Euribor, 24 June 2013*	
Europe *Curve*	**Receive EUR 10y2y vs 12y3y** Receive EUR 10y2y at 3.1% Pay EUR 12y3y at 3.14%	Open Current **P&L** Target Stop	4bp 3bp **-1bp** 25bp -5bp	Cheapness of the sector due to legacy ASW positions. The trade offers a positive roll-down for relatively low volatility *The Morning Call, 23 January 2013*	
Europe *Volatility*	**Sell EUR 1y3yF ATMF straddle and buy ATMF-25 receiver** Sell EUR 1y3yF ATMF (=1.36%) straddle for 98bp Buy EUR 1y3yF ATMF-25 receiver for 35bp	Open Current **P&L** Target Stop	63bp 51bp **12bp** 30bp 73bp	Fwd levels in front-end EUR swaps are too high when additional policy measures by the ECB are likely to be undertaken *IIRS 9 August 2012*	
UK *Volatility*	**Sell GBP 2y2y ATMF straddle** Sell GBP 2y2y ATMF (1.04%) straddle at 76bps	Open Current **P&L** Target Stop	76bp 53bp **23bp** 0bp 114bp	The fundamental backdrop in the UK supports selling GBP 2y2y vol *IIRS 12 July 2012*	

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

ECB: The Other Side of Forward Guidance

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Forward guidance vs market behavior

Markets seldom reshape in a smooth way following policy news. On the contrary, markets have a tendency to over/undershoot as well as to prefer simple policy instructions to complex instructions. Forward guidance is a set of instructions that central bankers deliver to market participants in order to minimize wealth losses that could result as a consequence of not achieving policy objective.

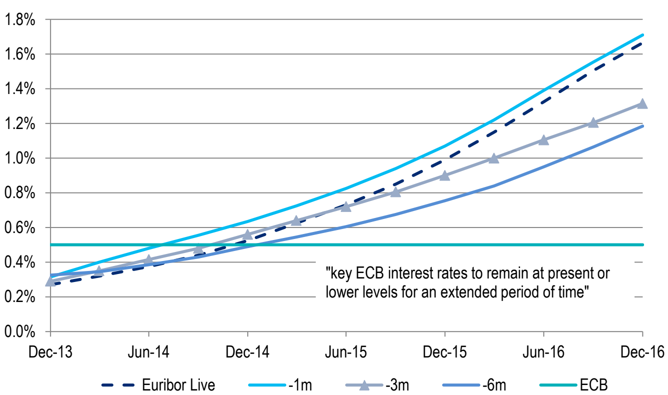
Open-ended vs state-contingent

Forward guidance takes several forms of complexity, but recent experience shows that a state-contingent guidance based on several thresholds must not necessarily be more complex than a very basic open-ended guidance. The ECB adopts this latter form of guidance by informing markets that "key ECB interest rates (are) to remain at present or lower levels for an extended period of time"[1]. Such a statement is quite vague, in the sense that it does not inform us either about the length of this "period of time" (time-contingent guidance) or about the conditions that must be met in order for the policy instrument to change (state-contingent guidance).

ECB adds complexity

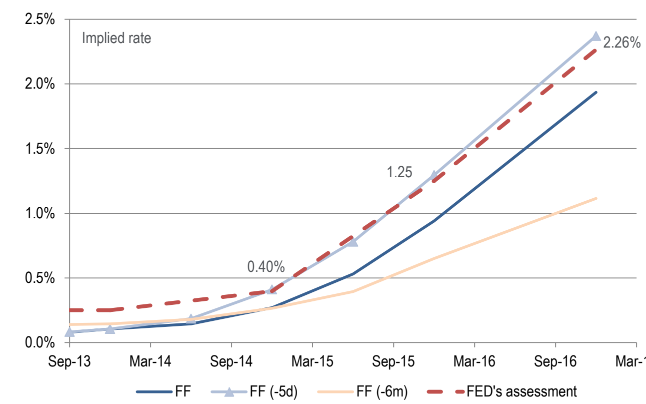
At the same time, such an "open-ended" statement adds a layer of complexity to the decision making process of market participants. Often complex systems are defined as process dependent, organic, evolving and self-organizing and compare to a pure mechanical system in which dynamics are regulated exclusively by initial conditions and a fixed set of deterministic equations.

Figure 9. Open-ended guidance



Source: Citi Research

Figure 10. State-contingent guidance



Source: FED, Citi Research

Complexity might distort the reaction of investors to a set of policy instructions

In other words, while FED's and BOE's reaction function can be predicted fairly accurately given economic conditions ("if state X then response Y with a certain probability"), assessing ECB's behavior to changing economic conditions is less straightforward. One example often used to describe the limits of decision-making in a complex system is Brian Arthur's "El Farol Bar Problem"[2], which shows how deductive logic fails in the presence of complexity. The solution to the original El Farol problem is a symmetric equilibrium, where decision-makers (or decision rules) change all the time but the macro outcome is stable. However, less well behaved variations of this problem exist.

What drives the Euribor curve?

What does the market make of all this? Let's look at the Euribor curve first (Figure 9). Leaving excess liquidity issues aside, we can expect only two variables to affect the shape of the curve:

[1] http://www.ecb.europa.eu/press/pressconf/2013/html/is130905.en.html

[2] http://tuvalu.santafe.edu/~wbarthur/Papers/El_Farol.pdf

- Eurozone economic data, i.e. standard variables. The steepening observed during the past 6 months reflects the improvement in sentiment indicators and is in line with the consensus of a better economic performance in H2;
- US/global economic data and monetary policy: This variable has had a tremendous gain in importance amongst ECB watchers and investors exactly for the reasons discussed above, i.e. in the presence of complexity, decision makers try to simplify the ill-defined problems they are confronted with by introducing some assumptions[3].

Don't price the ECB curve with US data

Currently, the market is pricing the Euribor curve relying heavily on "external" information. Reading between the lines this is exactly what both Mr Draghi and Mr Praet are suggesting to avoid. Looking at the FF curve (Figure 10), we note how the market has re-priced state-contingent guidance information provided by Mr Bernanke very accurately over the past 6 months. Furthermore, the market has been quick at re-pricing new information available at the September FOMC.

Strategy and Trade Ideas

What do we know?

- The FED won't taper now, perhaps will taper in the future depending on business cycle conditions.
- The ECB wants to keep rates at current or lower levels for an extended period.
- Improved sentiment needs to be confirmed by activity data.
- Excess liquidity is unlikely to alter Eonia fixings over the coming 6 months.
- There are disinflationary tendencies in the Eurozone, while it's uncertain how transitory low inflation is going to be in the US.
- FED's monetary policy is boosting both nominal and real assets globally.

Rec EUR 1y1y vs USD @1bp

Trade Idea: Assuming that investors rely on "external" information more heavily than in the past when pricing the ECB curve and that we're unlikely to see an outperformance of the Eurozone vs the US in economic terms, we like the idea of receiving EUR 1y1y vs USD @1bp. Excluding the "LTRO repayment" shock in late January, this year's range for this spread has been -3/+20bp with an ECB-related peak at 30bp in July. Carry is slightly negative (approximately -3bp/6m), but in terms of location vs the range this position still makes a lot of sense in our view. We expect the trade to perform in a global bear market and break-even in a mildly bullish environment, at the same time retaining the option of the ECB having to cut rates or to provide a new LTRO (or both). Main local risk is a sudden sharp decline in Eurosystem excess liquidity (perhaps on a one-off repayment) followed by a jump in EUR money market rates not mirrored by USD rates.

[3] For example, decision makers could be tempted to rely more heavily on information coming from the US economy and the FED's behaviour than in past cycles.

EUR Swaps: 30yr Bund ASW & EONIA 1Y1Y

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Buy 30yr Bunds vs swaps

We believe the latest moves in 30yr Bund ASW coupled with our outlook for 30yr swap spreads over the next few months provides a good opportunity to establish spread wideners. We highlight our reasons below and recommend an initial target of -10bp.

Rationale for buying 30yr Bunds vs swaps:

- entry level (close to top of 1yr range)

- macro tail risks (political uncertainty in Italy, geo-political risks in the Middle East, EM outlook and German elections)

- upcoming cash flows

- lower issuance in 2014 for Germany

- **Entry level:** 30yr Bund spreads have traded in a well establish range over the past year (-13/+1). With current levels close to the top of this range (and at levels where they have retraced from on a number of occasions) spread wideners look attractive from a technical perspective (Figure 11).
- **Macro picture:** Political uncertainty in Italy (a full senate vote is due by late October), geo-political risk in the Middle East around the situation in Syria and the economic outlook for China and some of the other emerging markets are still significant tail risks[4]. Further, at this week's German election (22 September) the probability of an extreme outcome (such as leftist coalition of SPD, Greens and the Left) is non-negligible[5]. An escalation of any of these risks is likely to result in wider swap spreads, in our view.
- **Cash flows:** A €16bn redemption from Germany will be paid on 11 October 2013. As a result, the net cash requirement for Germany in October is only +€3bn. All things being equal, this should help absorb issuance - including October's 30yr Bund supply which will be the last 30yr auction from Germany in 2013. As a reminder, last year's 30yr Bund auction in October (the last for 2012) was extremely strong (the adjusted bid-to-cover was 2.3x vs only 1.2x in the previous three 30yr auctions in 2012).

New trade:
Buy Bund 2.5% Jul44 vs swaps
Current/Open -1.5bp. Stop +3bp. Target -10bp.

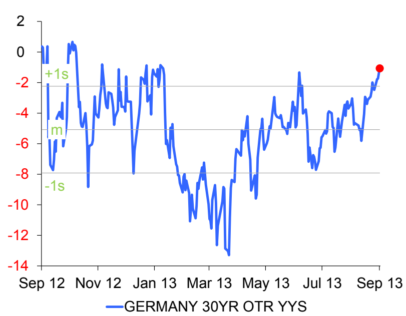
- **Supply:** Conventional issuance from Germany has declined in each of the last four years. We expect this trend to continue for 2014 where we project around €145bn of conventional supply (Figure 12). This is much lower than conventional supply in 2011 (€175bn) and 2012 (€173bn). All things being equal, this should be supportive for wider spreads.

Update: Take profits on long EONIA 1Y1YF

Take profits on long EONIA 1Y1YF due to the risk-reward on outright longs no longer looking attractive

- Ahead of the September ECB meeting we recommended receiving EONIA 1Y1YF with the view that EONIA 1Y1Y would below the refi-rate[6]. With EONIA 1Y1YF now comfortably below the refi-rate (current 38bp) the risk-reward for holding outright longs no longer looks attractive (Figure 13). We recommend taking profits on outright positions.

Figure 11. 30yr Bund Swap spread (YYS, bp)



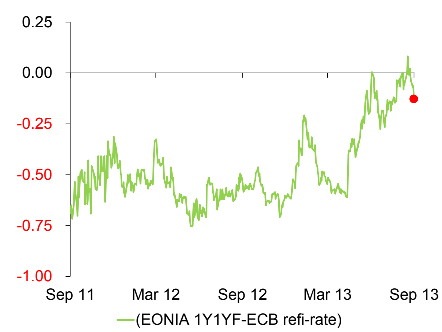
Source: Citi Research

Figure 12. Germany: Conventional supply

Issuance	2010	2011	2012	2013	2014F
Conventional (€bn)	196	181	172	173	145
30yr Bund (% of total)	5%	4%	6%	5%	5%

Source: Citi Research

Figure 13. EONIA 1Y1YF – ECB Refi Rate (%)



Source: Citi Research

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Portugal put on Watch Negative by S&P

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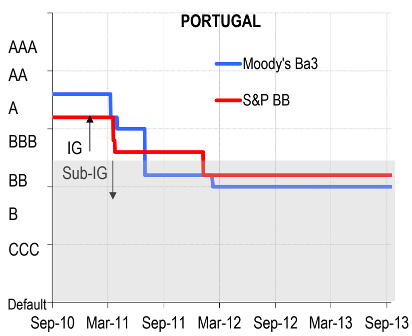
Downgrade pressure lingers in EMU

S&P today changed Portugal's BB outlook to "Watch Negative". This follows S&P's move to put the rating on "Outlook Negative" back in early July. The driver behind the July move was mostly based on political uncertainties and the impact on debt dynamics. This remains as true now as it did then.

Specifically, S&P cites the following for the change in the BB rating outlook[7]:

- Potential shortfalls in meeting program targets which could increase uncertainty about the trajectory of government debt and increase the likelihood of Portugal receiving a second support program
- The extent of official creditor's willingness to increase exposure to Portugal between now and 2016 will likely affect Portugal's capacity to service its outstanding commercial debt, according to S&P

Figure 14. Portugal's Rating History



Source: Citi Research, S&P

We would note that such drivers are idiosyncratic by nature, pertaining to domestic Portuguese economics and politics, rather than wider systemic fears. In terms of politics, both the Constitutional Court's rejection of various government reforms and the July ministerial resignations both serve to underscore an environment of political unease. Given this context, S&P notes that "*We therefore expect that corrections to fiscal deficits and the government's debt burden could be slower and more complicated that we previously anticipated*". In addition, S&P is also mindful of any further support that might be needed for Portugal and the question of full market access once its Troika programme expires next year. Such concerns have been clearly identified by our economists in Citi's *Global Economic Outlook and Strategy*.

Watch Negative vs Outlook Negative - what's the difference?

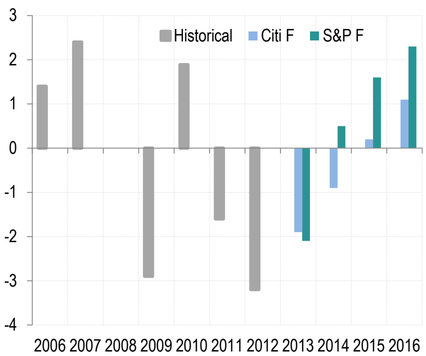
To be clear, Portugal's BB rating has been moved from Outlook Negative to Watch Negative to S&P. In general, a "Watch" is a shorter review period for a rating whereas an "Outlook" is concerned with a longer time horizon. Definitions differ by rating agency and there is no "axiomatic" law about specific time horizons. According to S&P's definitions (*S&P Rating Definitions June 2013*):

- **CreditWatch:** *CreditWatch highlights our opinion regarding the potential direction of a short-term or long-term rating. It focuses on identifiable events and short-term trends that cause ratings to be placed under special surveillance by Standard & Poor's analytical staff.*
- **Outlooks:** *Standard & Poor's rating outlook assesses the potential direction of a long-term credit rating over the intermediate term (typically six months to two years). In determining a rating outlook, consideration is given to any changes in the economic and/or fundamental business conditions. An outlook is not necessarily a precursor of a rating change or future CreditWatch action*

The case of Portugal: In this specific case, S&P have been clear that the CreditWatch negative reflects the view that there are significant risks that Portugal will not be able to comply with the IMF/EU program because of uncertainties in the fiscal consolidation path. S&P says "*there is a one-in-two change that we could lower the rating in the next few months if fiscal performance falls short, if reform plans falter, if official support waivers, or if increased political tensions lead to delays in 2014 budget or program reviews*".

[7] S&P Ratings Direct: "Portugal BB Long-Term Ratings On Watch Negative On Budgetary Risks" 18th September 2013

Figure 15. Portugal Real GDP YoY %, Historical and Forecasts



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

Wider impact limited in our view

Given the idiosyncratic nature of this rating action, we believe wider contagion should be limited, especially in the context of other, more dominant drivers (such as Fed policy needless to say) to the wider macro tone. Volatility in PGBs can of course be expected, but that is nothing new given ongoing uncertainties in this sector. Furthermore, Portugal's long-term rating is sub-IG at BB and its debt (much of which is held in the official rather than the private sector) remains out of benchmark indices. Therefore, it's probable that even a one-notch downgrade from BB to BB- is unlikely to have material market impact in itself. What is more likely to govern the trajectory of PGB spreads and yields is the government's political commitment or reform, the economic outlook in meeting targets (where S&P acknowledges the positives in export growth for example) and its eventual path back to market access. Cleary, the next Troika review will grow in importance and be key in assessing such drivers for the outlook.

UK Rates – asymmetric risks for 10s30s

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The UK rates market went into the FOMC meeting with a bearish mood. In the 10yr sector, yields had risen by 12bp in two days pre-FOMC (underperforming Treasuries by a distance) and the 10s30s curve had bear flattened by 7bp. The MPC minutes played a starring role in the sell-off; there was no attempt at a 'rate protest', no obvious signs of dissent and an upward revision in the growth forecast for Q3. The proximity of supply probably also played a part, especially with the IL68 syndication looming next week (see below).

The Fed's decision prompted a steeper 10s30s gilt curve…

All of these moves have fully reversed post-FOMC, with gilts reacting in accordance with the prevailing high beta to Treasuries. The gilt market has probably also taken note of the slow speed at which the Fed expect to raise policy rates as well as the Fed's concern over the recent tightening of financial conditions. Both topics are just as relevant to the UK outlook as to that of the US, especially given the similarities of forward guidance.

…helped along by the first price of poor domestic data in a while

Furthermore, gilts have received a further boost today from the surprise fall in retail sales in August (-0.9% MoM vs median of 0.4%). This is the first piece of bad data in a while and is a timely reminder that the recovery won't all be plain sailing. That said, the CBI survey for September, also released today, again pointed to strength.

Supply likely to dictate the near-term outlook for 10s30s…

The combination of the Fed and the poor retail sales data has triggered corrective steepening in the 10s30s gilt curve, which has undoubtedly benefited from strong LDI interest of late. The curve is also likely to face added steepening pressure in the coming days from the aforementioned syndication. The new IL68 will extend the real yield curve by six years. Assuming a size of just over £4bn, the dv01 of the new issue will be very meaningful at £22.5mn/bp. To put this into perspective, this is just a touch below the sum total of the dv01 of all eight gilt and linker auctions that have taken place since the beginning of August.

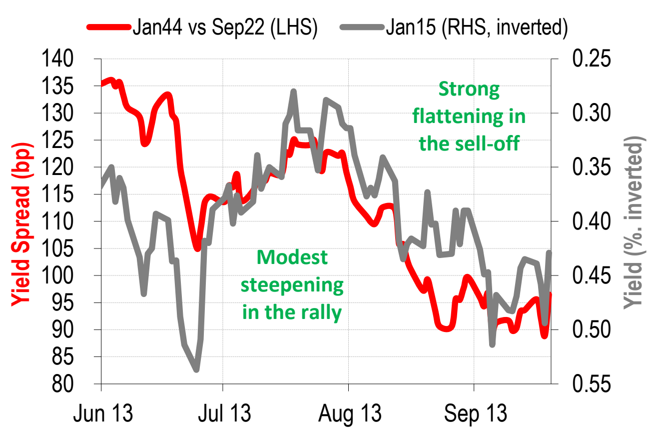
…but the medium-term outlook is likely to depend on direction and PF demand

The very near-term outlook for the curve is therefore biased towards further steepening. But the medium-term outlook is likely to depend first and foremost on the direction of the front-end and secondly on increasing pension fund demand.

The curve has become more directional

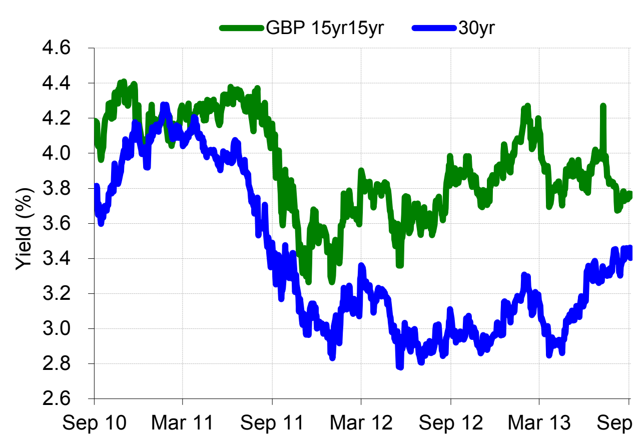
The directionality of the curve is of course nothing new, but the sensitivity has picked up in the last few months. The recent sharp flattening - taking the 10s30s gilt curve from 120bp at the beginning of August to 96bp currently - is largely associated with the back-up in front-end yields (Figure 16).

Figure 16. The strong flattening has been driven by the sell-off



Source: Citi Research, Bloomberg.

Figure 17. The forwards look rich, but outright yields are still attractive



Source: Citi Research, Bloomberg.

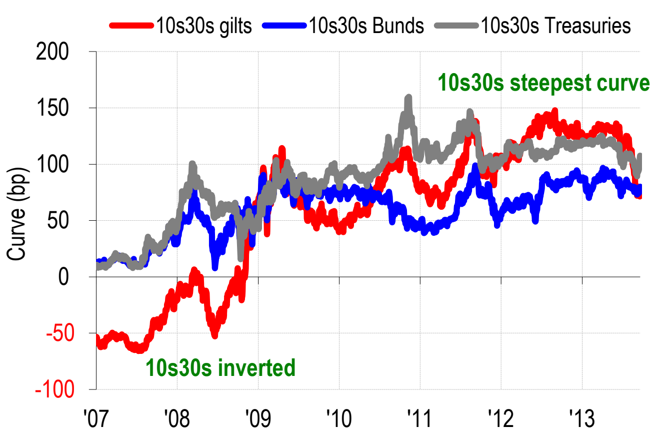
Strong LDI demand is likely behind the increased sensitivity in bearish yield moves

However, the reason that the sensitivity has picked up (at least in a bear market) is probably related to increased hedging activity from LDI. This can be attributed to the rise in yields coupled with the performance of equities, which have helped to reduce deficits and encourage de-risking. The strength of this demand is evident, for example, from the historical richness of forwards in this part of the curve, as illustrated by the 15yr15yr forward GBP swap rate in Figure 17.

The gilt curve has flattened markedly vs the Bunds and Treasury curves

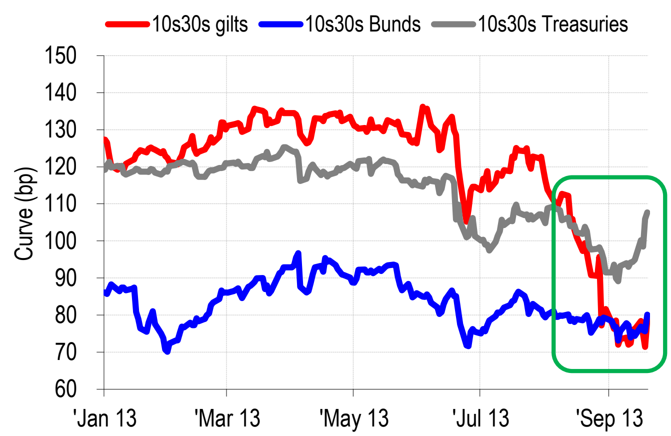
The speed of the recent flattening of the gilt curve is also put into perspective when compared with Bunds and Treasuries. In recent years, the 10s30s gilt curve has been relatively steep, reflecting significant long-end supply but muted demand. This was in sharp contrast to five years ago when the gilt curve was inverted and much flatter than its peers. Zooming into the recent history shows how quickly the picture is changing. The 10s30s gilt curve now has the same slope as the Bund curve and is much flatter than the Treasury curve which has steepened recently (Figure 19).

Figure 18. The UK 10s30s curve is no longer the steepest…



Source: Citi Research, Bloomberg.

Figure 19. …and the sharp flattening contrasts with steepening in the US



Source: Citi Research, Bloomberg.

The IL68s is likely to be met with strong demand

The strength of demand for the long-end of the UK curve bodes well for next week's IL68 syndication. Long-end break-evens are historically expensive, but real yields have risen sharply over the last few months and this is likely to drive demand. There is also likely to be index demand given that the new IL68s will extend the 5yr+ and 15yr+ indices by around 0.4yrs and 0.7yrs respectively (assuming a cash size of £4.2bn). There may also be interest to extend into the IL68s as it opens up new possibilities in terms of liability hedging.

Strategy summary – asymmetric risks for 10s30s

The curve is likely to exhibit a greater propensity to bear flatten than to bull steepen.

The gilt and linker yield curves are likely to face a steepening bias over the coming days ahead of next week's supply (dv01 £22.5mn/bp). The longer-term outlook for 10s30s, however, is likely to be governed by two main factors 1) rate hike expectations and 2) pension fund demand. The first is likely to explain the bulk of the volatility in 10s30s, especially as the directionality of the curve has increased in recent months. However, the long-end is clearly benefiting from strong demand from liability hedgers and this looks set to continue. As such, we expect the curve to (continue to) behave asymmetrically with a greater propensity to bear flatten than to bull steepen. Next week's IL68 syndication is likely to provide another indication that demand for the very long-end of the curve is robust.

EUR: Long-End Forward Steepener Reload

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We recommend investors enter the following trade:

Buy EUR 45mn 2y30y ATMF swaption payer vs sell EUR 104mn 2y10y ATMF+12.5bp, at zero cost.

Position is forward DV01 and vega neutral. Six month curve and vol total rolldown equates to EUR 370k PnL.

Rationale:

- Bearish Bernanke has given Draghi additional room for manoeuvre in keeping monetary policy accommodative in the Eurozone. In the meantime positioning in carry trades is clean after the unwinds during the summer. In our view the market conditions are ripe to reload on forward steepeners.

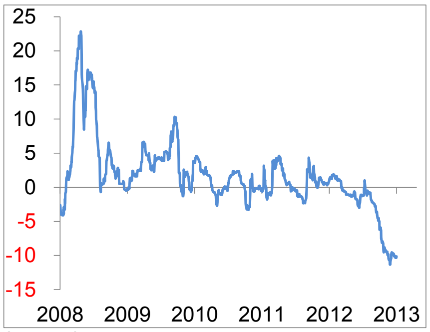
- Currently 10s30s is trading around 50bp. The 2 year forward rate spread is at 14bp. However, via options it looks even more attractive as the volatility pick is around 10bp, allowing investors to enter the trade via swaption payers some 12bp better than on the forwards. Indeed, as shown in Figure 1, 30y vol has significantly cheapened vs 10y over the previous two quarters following the Bernanke testimony in late May and the ensuing rate sell-off.

- After having started its steepening trend in June 2012 following the agreement between the Danish government and the Danish insurance association on the liability discounting methodology, the slope of the long end of the swap curve continued to trend higher after the summer after the introduction of the “ultimate forward rate” in the Dutch September pension package: EUR 10s30s was hovering around 60bp in early October. Since then the curve managed to steepen further; however the dynamics of the curve have been highly directional with the 10y rate: since late 2012 EUR 10s30s has steepened in a rally and flattened in a sell off. It has indeed become increasingly clear that, in practice, taking regulatory as well as economic considerations on board, further large unwinds of receiving swap positions at the long end are not necessary; at the same time the need to hedge at the long-end has diminished. In other words, pension funds enjoy more flexibility and can wait for the market to move to a higher yield environment before adding duration at the long-end of the curve. Note that the average funding ratio of Dutch pension funds has increased to 104% in August from 102% in June (Figure 2).

- As shown by Figure 3, with strikes as per trade construction the trade would have expired with flat terminal PnL if executed over the past year. Assuming however that the dynamics between the 10y and the 30y remains roughly constant, we would expect a profit at expiry if rates were to drift higher over the period.

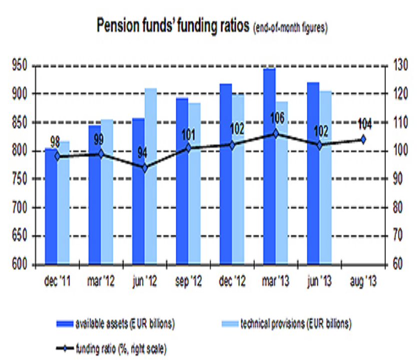
- Two drivers which were putting downward pressure on the long-end during particular market regimes are significantly less relevant at the current juncture:
  a) Banks’ counterparty credit risk to periphery via non – collateralized swap transactions has significantly diminished mainly as a result of the reduced exposure: many positions have been restructured/unwound. Admittedly, peripheral spreads have not been moving for some time as well.
  b) Short linear floor and long digital positions stemming from issuance of CMS spread and spread range accrual on 10s30s have been significantly reduced to negligible size.

Figure 20. 2y30y normal vol looks cheap to 2y10y normal vol



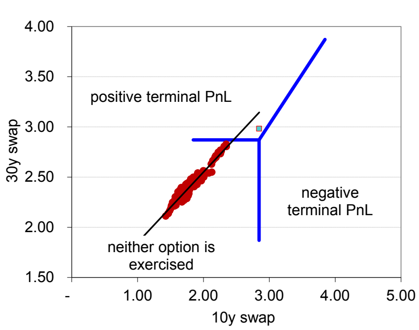
Source: Citi Research

Figure 21. Evolution of Dutch Pension funds’ funding ratios



Source: DNB

Figure 22. Terminal PnL for Forward DV01 neutral trade construction



Source: Citi Research

SSA Strategy – post-Fed opportunities

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The surprising decision by the Fed not to announce tapering has certainly delivered a dose of market volatility. The sharp market moves are indeed testament to the off-consensus outcome. Away from US Treasury yield moves, the rally in Bunds and on-going EMU periphery market concerns, we believe the volatility has presented some opportunities in the SSA space. Fundamentally, the high credit quality and ratings of SSAs remain a beneficial characteristic for investors and we think the return of conviction will also be generally supportive. We focus on the lower-beta nature of SSAs and hunt out the laggards in the march lower in yields.

Look for the laggards

Hunt out switches where spreads have widened due to the sharp move lower in EMU government yields

Conviction in spread products has seemingly been re-charged. iTraxx Main at 88bp speaks for itself. For the SSA market specifically, we think the current march lower in core yields has presented various opportunities. In particular, attractive entry points have materialised between various issuers and the underling government market. Historically, such yield pick-ups between these two markets, traditionally strongly correlated, provide a convenient way of generating alpha among lower volatility credits. This is a popular theme in SSA trades given the lower beta of the SSA sector in general - the quest becomes to hunt out the laggards. This is as true now was it was in the intense hunt-for-yield environment last summer (*Euro Rates Strategy - Why we like the European SSA market in a low yield environment**).

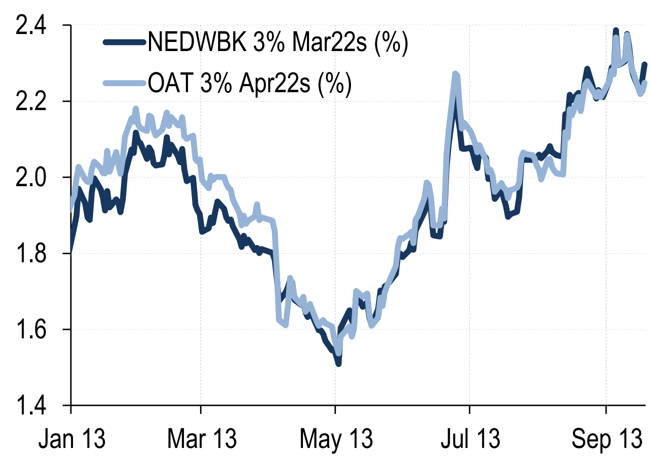
Agencies vs EMU governments

Relative value in Dutch agencies

Last week we assessed supranationals and France, and we continue to hold firm to the relative value between these two markets. Within the agency space, this week we take a look at the Dutch sector. While spreads to the Netherlands remain at relatively tight levels (ranging from 10bp-30bp depending on the sector), spreads to France look better value from a historical perspective.

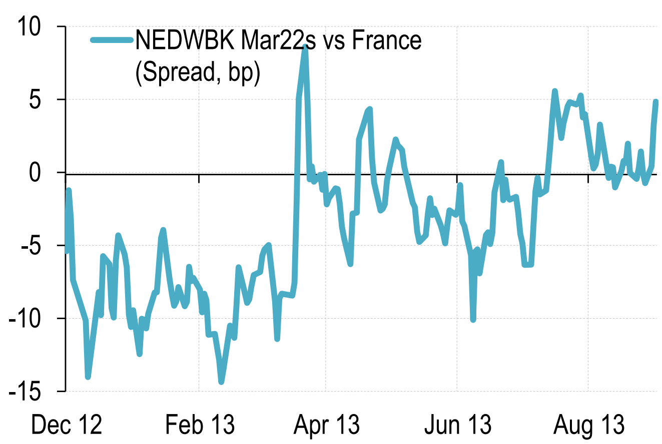
For example, NEDWBK has lagged the rally in OATs and in the 9yr sector. This has moved spreads to the wide end of ranges (Figure 23, Figure 24). Of course this is highly likely to be affected by differences in liquidity, but ultimately, we would expect this spread to mean revert, especially as such switches also allow a move up in quality into a AAA/Aaa issuer.

Figure 23. 9yr NEDWBK and 9yr France, Yields(%)



Source: Citi Research

Figure 24. 9y NEDWBK vs France (bp)



Source: Citi Research

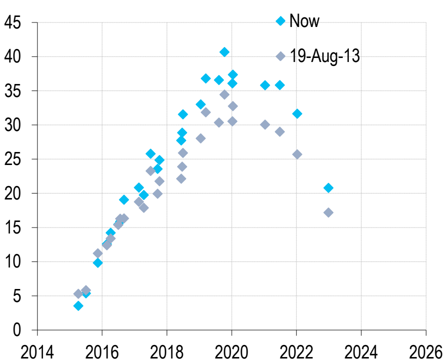
Further details on the Dutch agency sector can be found in our primer: *Euro SSA and Covered Bond Monthly - The Dutch and Austrian markets in focus*.

Extensions in the front-end

Another trading theme which is likely to attract attention is the opportunity to extend on the curve for those with a flattening view in 2s5s. KfW's spread curve to Germany is shown in Figure 25. A couple of examples of switches with a flattening bias are shown in Figure 26 and Figure 27.

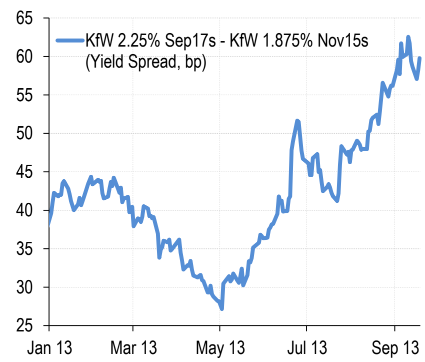
Further details on the German agency sector can be found in our primer: *Euro SSA and Covered Bond Strategy - Overview and opportunities: German agency and covered bonds.*

Figure 25. KfW's Spread Curve to Germany (bp)



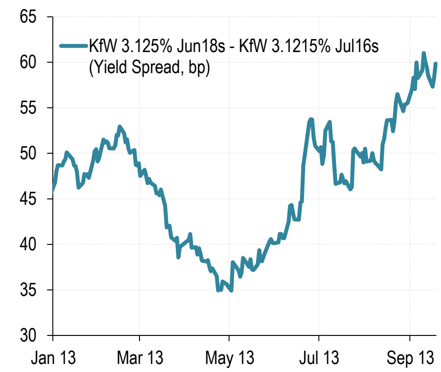
Source: Citi Research

Figure 26. KfW Sep17s – KfW Nov15s (bp)



Source: Citi Research

Figure 27. KfW Jun18s – KfW Jul16s (bp)



Source: Citi Research

Conclusion

Improved market tone also likely to be supportive of extension trades in the front-end of curves and the primary market

A core EMU market rally and a return of market conviction are likely to spur interest in opportunities where switches into the SSA sector mean a move up in quality at a spread pick-up. We see relative value in this context in some supras and NEDWBK vs France. As well as delivering such opportunities, there will likely be other second-order consequences of the core market rally. Firstly, anchoring the front-end will likely bring interest to extension trades in the 2yr-5yr sector and secondly, the improved market tone should also be beneficial for the primary market.

Covered Bond Strategy

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NIBC will probably come to the covered bond market with its newly established partial pass-through covered bond. We present the new structure and its implications for investors, issuers and the market.

NIBC – covered bond revolution ahead?

The covered bond market is evolving

The covered bond market is evolving: Commerzbank not only backed its secured bond by SME loans but also introduced a pass-through structure for its bond program. Traditional covered bond investors were (and still are) extremely skeptical on this product. Next week, traditional investors again need to rise to a basic issue: can covered bonds backed by mortgage loans but characterized by a partial pass-through structure be treated equally to traditional bullet covered bonds? As in the case of SME, our answer is that everything has its price and investors' attitude will be more flexible the more attractive the relative pricing of such bonds is.

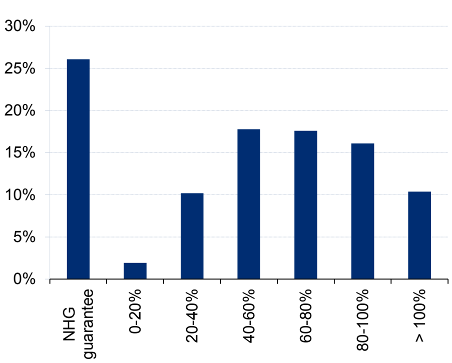
Before explaining the structure of this new program, we summarize the facts. NIBC bank (Baa3/BBB-/BBB-) already has covered bonds outstanding that have been issued under a traditional program but which have been downgraded recently (--/--/A+). The Dutch covered bond law generally does not allow covered bond issuance if such bonds are rated lower than AA-. Amendments to the covered bond law in 2008 introduced the necessity for a covered bond issuance to obtain at least one credit step 1 rating (i.e. Aa3/AA-/AA-) while still giving the central bank the ultimate right to question credit ratings and hence still allow the covered bond issuance. We understand that the old program will not be used for wholesale funding in the future. The new program will not founder against the disputable regulatory necessities the regulators demands: it will be rated AAA by S&P and Fitch. The program is registered with the Dutch Central Bank, is compliant with the Dutch covered bond law and is therefore UCITS and CRD compliant. Moreover, it is eligible for the iBoxx index and already received the ECBC Label. The pool will be comprised by 100% residential Dutch mortgages while the issuer commits to a minimum OC level of 15%. The pool will comprise of €608mn which – in case of a €500mn benchmark issuance – would result in 22% OC. Derivatives are not used in the covered bond program. The pool consists of 8063 loan parts which are exclusively denominated in Euro. The current WA indexed LTMV (M stands for market) is 73.7% while – as expected given the development on the Dutch housing market – the WA original LTMV stands at 67.7%. WA seasoning is 111 months. 69% of the pool is comprised from interest-only loans while all loans are secured by owner-occupied housing. Currently, loans in arrears are at 0.3%. The share of NHG guaranteed loans is 24.5%.

Figure 28. Key Figures

Outstanding assets, EURmn	607.667
Expected issuance, EURmn	500
Expected OC, %	21.53%
Committed OC, %	15.00%
Number of loans	4122
Number of loan parts	8063
Avg. principal balance, EUR	147,421
WA current interest rate, %	4.82%
WA maturity, years	19.77
WA original LTV, %	67.72%
WA indexed LTV, %	73.66%
Interest-only redemptions, %	69.00%
Share fixed interest payment, %	90.55%
Share NHG loans, %	24.45%
Issuer rating	Baa3/BBB-/BBB-
Covered bond rating	--/AAA/AAA

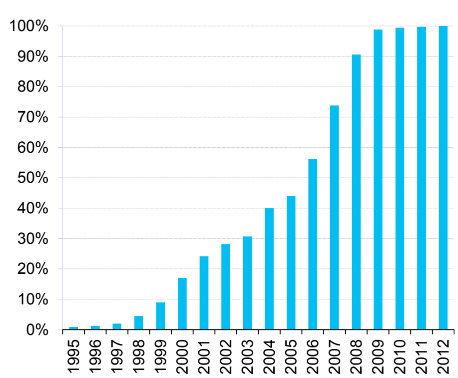
Source: NIBC, Citi Research

Figure 29. Current LTVM brackets, %



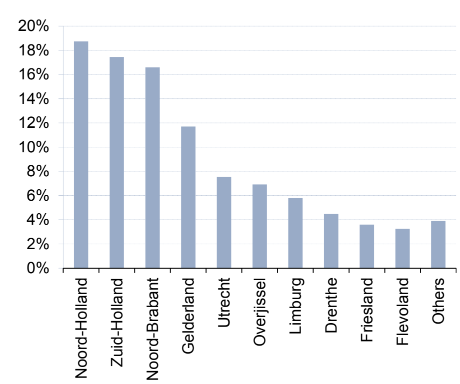
Source: NIBC, Citi Research

Figure 30. Origination year, %



Source: NIBC, Citi Research

Figure 31. Geographical distribution, %



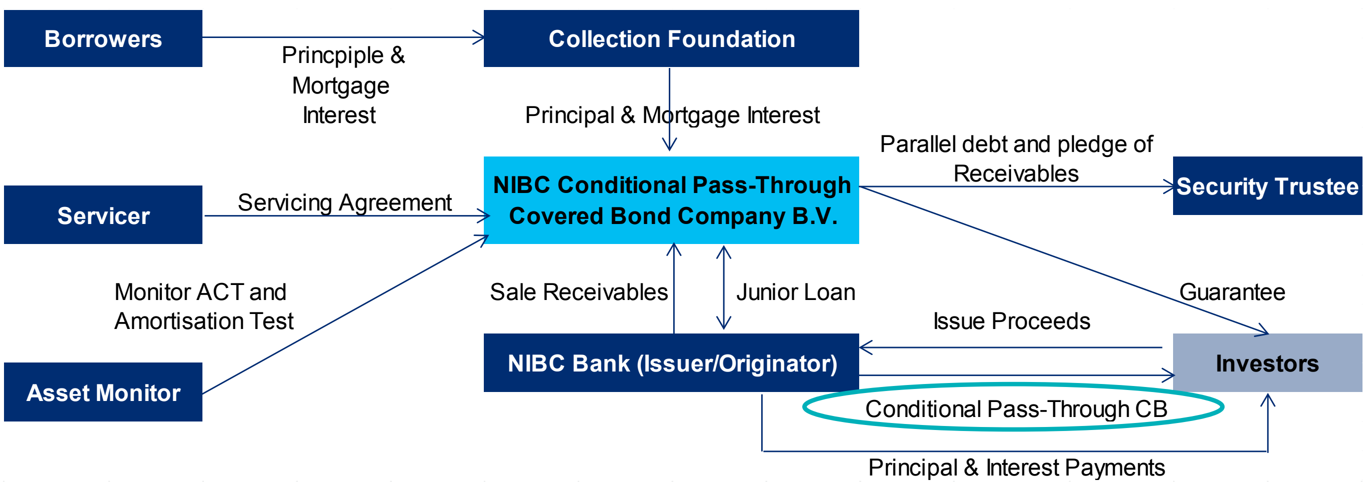
Source: NIBC, Citi Research

The structure

No acceleration in case of partial pass-through covered bonds

So far, there are two structures which dominate the EUR covered bond market: the hard bullet structure and the soft bullet structure. In the case of the former, expected and legal maturity coincide. Hence, after an issuer and cover pool event of default, the acceleration of outstanding bonds is the consequence. In case of the latter, expected maturity and legal maturity can differ. In this case, after an issuer and cover pool event of default, the issuer has the option to extend the remaining maturity which should help to reduce the potential loss on fire sales. If proceeds are not enough at legal final maturity, the consequence would be an acceleration of the outstanding covered bonds. Usually, the soft bullet option contains a lengthening period of one year. Only in rare cases (e.g. certain multi-cédulas) this option can contain a substantial extension of legal maturity.

Figure 32. NIBC – the covered bond structure



Source: NIBC, Citi Research

Several factors need to be triggered to come to a switch to partial pass through bonds…

NIBC's partial pass through covered bond program works like every other Dutch covered bond program as long as the issuer is a going concern. This means that bonds issued by NIBC Bank are guaranteed by the Covered Bond Company (CBC). The guarantee is backed by a cover pool that is segregated in the CBC by a subordinated loan which has been granted by NIBC Bank. The cash flows from borrowers are directly channeled to the CBC. The difference to other Dutch covered bond programs only becomes obvious if all of the following conditions are fulfilled:

- NIBC has defaulted and is no longer able to redeem the covered bond
- A covered bond reaches its maturity date
- The partial sale of the cover pool by the CBC would not be sufficient to redeem the relevant covered bond.

…but only for the respective bond, in the beginning

This would lead to the trigger of the partial pass-through mechanism for the respective series – not for all outstanding bonds. In this scenario, according to NIBC, the CBC attempts to sell a randomly selected part of the pool every six months. However, the CBC will only sell if the proceeds of the sale are sufficient to redeem the relevant bond without a loss on the bonds and without deteriorating of the Amortisation Test for the remaining outstanding covered bonds (it should be stated that the Asset Coverage Test will be superseded by the Amortisation Test after the default of the issuer). In the meantime, principal proceeds and excess

interest will be distributed pari passu to the pass-through covered bonds. Coupon payments will continue at original fixed rate level, only for pass-through bonds coupons are paid on a monthly basis. Later maturing covered bonds are protected against time subordination through the Amortisation Test which also includes the hard OC minimum of 15%. If however, the Amortisation Test is breached all bonds become pass-through covered bonds, irrespective of their maturity date.

Assessment

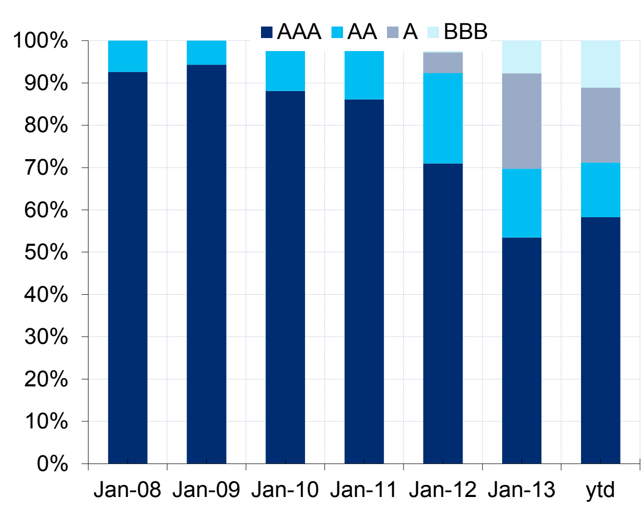
Preferential treatment of such bonds by rating agencies…

First of all, the most obvious advantage of the new structure is the rating agencies' stance on it. Given the fact that the bonds are not only rated AAA by Fitch and S&P but still have rating buffers leads to the situation that rating uplifts are extremely big. Under Fitch criteria (we haven't seen an S&P report so far) banks which copy NIBC's structure would be able to issue AAA rated covered bonds while the issuer default rating (IDR) was BB+. The potential ten notch uplift compares to a five notch uplift in the old NIBC program. In case of a downgrade of the IDR of NIBC to BB+ the AAA "would be vulnerable to downgrade". In the case of Fitch the main reason for the substantial preferential treatment is the "minimal discontinuity assessment of the liquidity gap and systemic risk component. This is due to the pass-through structure and the three-month interest reserve including senior costs in place for the bonds."[8] S&P on the other side argues with the substantial decrease of asset-liability mismatch risk. Bullet structures usually imply that cover assets need to be sold at high discounts just for service obligations of the own covered bond program. Therefore substantially higher OC levels are required. This is not the case for pass-through structures.

…which is positive for rating sensitive investors

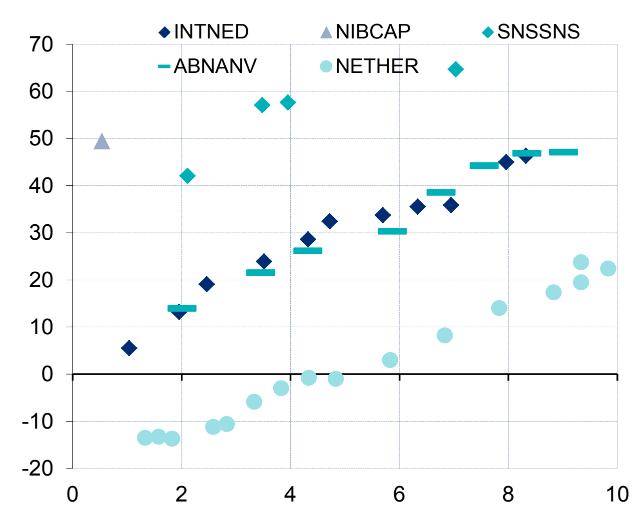
For investors, the new structure has its positive features with regards to rating sustainability on the one hand and – looking forward – the potential re-growth of the AAA rated covered bond segment on the other hand. Still, many investors have strict rating guidelines they have to follow. An increase of the AAA universe induced by partial pass through covered bonds would be a welcome countermotion to the general rating trend in covered bonds which could eventually lead to a broadening of the investment horizon for rating sensitive investors. However, this implies that issuers are keen to copy NIBC's revolutionary step.

Figure 33. Rating migration in the iBoxx covered bond index



Source: Citi Research

Figure 34. Dutch covered bond universe, ASW-spread, bp



Source: Citi Research

[8] Fitch: "NIBC Bank N.V.: Conditional Pass-Through Mortgage Covered Bond", 17.09.2013

Pricing levels should differ between equally rated bullet and pass through bonds

Secondly, secondary market levels should be relatively attractive from at least two angles. For NIBC, the funding costs will eventually be lower than with issuing lower rated bullet covered bonds. Although we don't expect pricing of AAA rated partial pass through covered bonds at same levels as the traditional covered bonds with the same credit assessment, it should provide NIBC with the most attractive wholesale funding level it can get for medium- and long-term refinancing. For rating sensitive investors, such AAA rated bonds should offer a decent premium to the established AAA covered bond curves from the same country.

Liquidity risk decreases while extension risk increases

Thirdly, the program structure as itself clearly has its disadvantages and advantages. On the one hand, we see it as a positive that the potential higher losses stemming from a fire sale in case of hard bullet covered bonds can be avoided by switching to pass-through covered bonds. On the other hand, investors should be aware of the higher extension risk. Indeed, mismatch risk within the cover pool is transferred to the investors as extension risk. The base prospectus states that the extension period can be up to 32 years per bond series which switched to pass-through. That said, the longest maturing loans are not allowed to be longer than 30 years. However, we expect that investors would have to wait for a shorter period of time as the orderly wind-down of the cover pool decreases losses on the collateral. A further negative factor in our opinion is the lack of liquidity buffer within the structure. Although minimum OC of 15% is committed on a legal basis – which is clearly a positive – this doesn't mean that a liquidity line/buffer wouldn't be a further positive tool within the covered bond structure. The ability to rely on tools like this would, in our eyes, extend the pre-pass-through period. However, we are aware that several covered bond segments also lack any kind of liquidity buffers, meaning additional risk to covered bond holders after an event of default.

Conclusion

The fragmentation of the covered bond market is ongoing

In general, it seems as if a fragmentation of the covered bond market is unstoppable. The half-life period of innovations seems to decrease in recent times. Although we see the merits of such structures from an issuer perspective, we fear that investors will struggle to recognize the specific risks that are attached to the respective covered/collateralized bond structures. Although senior secured bonds as well as SME structured secured bonds should stay a niche product and are special in the hybrid nature of such products, there is no doubt that NIBC's partial pass through bond is a covered bond. However, if copied – and we expect this to happen given the preferential treatment by rating agencies – a very diverse universe of pass-through structures might be the consequence. This obviously doesn't facilitate due diligence, credit line availability and investment decisions. Consequently, it is a necessity for the issuers to be as transparent as possible. Ultimately we think that fragmentation will again be negative for secondary market liquidity, but it should also be stated that the new covered/collateralized bond configurations would not attract such attention if the traditional benchmark covered bond market wasn't about to shrink as substantially as it does at current stages. As our medium-term prospect on net issuance of covered bonds is rather pessimistic, it might be the case that investors don't get around to accepting the broadening of the structural/collateral universe of covered bonds.

But the new structure makes sense – especially for issuers

In the case of NIBC, it has impressively shown that by optimizing payment structures, issuers have the option to breast the general rating pressure while simultaneously reducing costs (lower expected funding levels, lower necessary OC). For investors who are willing to accept higher extension risk, we think that the bonds can be an attractive highly rated alternative, presumably offering a yield premium to the traditional AAA rated covered bonds.

End-September EGBI Projection

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This is a summary of our recent analysis. Click *here* for the full note.

We project the EGBI to extend by 0.07 at the end of September. This is an above average change over the 5 year history. At the EGBI level, the changes should be supportive for the 10yr and 30yr sectors and put flattening pressure on 2s10s.

Projected changes supportive for semi-core

Projected changes relatively supportive for semi-core

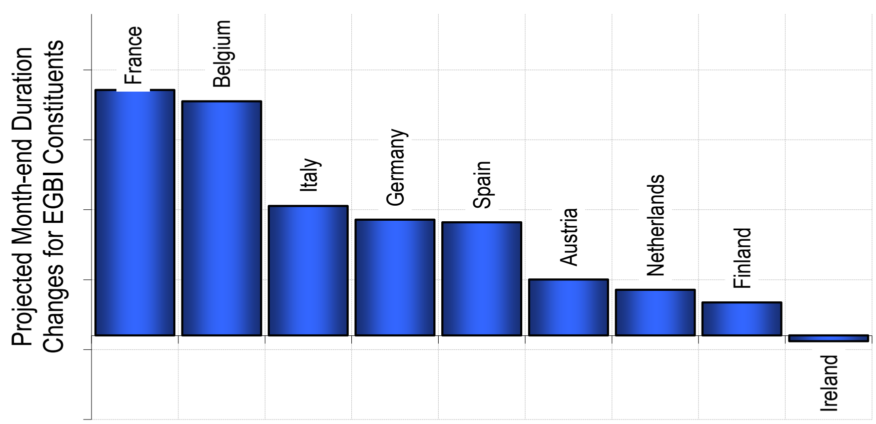
- Within the EGBI, we expect France and Belgium to benefit the most from the projected index extensions (Figure 35). This should provide impetus to the ongoing tightening of semi-core vs the core.

Belgium to extend by its largest amount in 5 years (in both weighted and unweighted terms)

Finland projected to extend by its second-largest amount in a year

- At a country level, we expect the Belgian index to extend by its largest amount in 5 years, in both weighted and unweighted terms. Finland should also extend by its second largest amount in a year. This might result in domestic portfolios being left short duration at the end of the month and prompt curve extension trades. Month-end could, therefore, put flattening pressure on the Belgian and Finnish curves.

Figure 35. Semi-core to benefit the most from end-September changes (weighted duration)



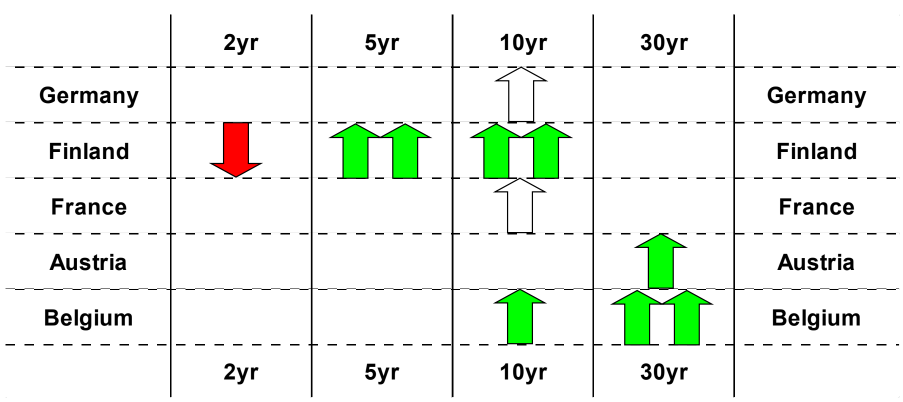
Source: Citi Research

Support for long-end Belgium (and Austria) and belly of Finnish curve

Flattening pressure on 2s5s Finland

- **Support on individual curves:** Figure 36 shows pressures on individual country curves from the projected index changes (price terms). From the curve split, we expect index changes to be supportive for 10-30yr Belgium and 5-10yr Finland.

Figure 36. Summary of price pressures on individual domestic curves



Source: Citi Research

EMU Relative Value

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We highlight a number of relative value opportunities in the 2-10yr sector of the French, Dutch, Finnish and Spanish yield curves.

France: fade the richness of Oct18s

Sell Oct18s vs surrounding issues

- Sell 4.25% Oct18 vs 1% Jul17 and 2.5% Oct20 (3m carry: -0.8bp) - Figure 37

Netherlands: fade the richness of Jul18s

Sell Jul18s vs surrounding issues

- Sell 4% Jul18 vs 2.5% Jan17 and 3.25% Jul21 (3m carry: -1.6bp) – Figure 38
- Sell 4% Jul18 vs 2.5% Jan17 and 3.5% Jul20 (3m carry: -1.3bp) – Figure 39

Figure 37. France: 1% Jul17, 4.25% Oct18, 2.5% Oct20 microfly (bp)

Source: Citi Research

Figure 38. Netherlands: 2.5% Jan17, 4% Jul18, 3.25% Jul21 microfly (bp)

Source: Citi Research

Figure 39. Netherlands: 2.5% Jan17, 4% Jul18, 3.5% Jul20 microfly (bp)

Source: Citi Research

Finland: 8s9s flattener

Switch into Sep22s

Switch from 3.5% Apr21 to 1.625% Sep22 for 28bp (3m carry: -1.6bp) – Figure 40

Spain: 2s4s, 3s4s steepeners

Switch into Jan16s

- Switch from 3.8% Jan17 to 3.15% Jan16 at 42bp (3m carry: +5.7bp) – Figure 41

Switch into Oct15s

- Switch from 3.8% Jan17 to 3.75% Oct15 at 50bp (3m carry: +9bp) – Figure 42

Figure 40. Finland: 1.625% Sep22 – 3.5% Apr21 yield spread (bp)

Source: Citi Research

Figure 41. Spain: 3.8% Jan17 – 3.15% Jan16 yield spread (bp)

Source: Citi Research

Figure 42. Spain: 3.8% Jan17 – 3.75% Oct15 yield spread (bp)

Source: Citi Research

Relative value tables

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

For example, Figure 43 shows the five cheapest and richest bonds in Germany relative to a fitted yield curve (shown on the left half of the page) and to the euro swap curve (right half of page). The table identifies benchmarks and CTDs and also gives the amount outstanding and initial issue date.

Figure 43. Yield Spread and CAS to Fitted Relative Value Curve (6m History)

GERMANY

Versus Govt Curve (CAS)

	Rank		ZScore	Issued	Size (€bn)
Richest	1	**4.25 Jul18 (OE)**	-3.22	May08	21
	2	**4.25 Jul17**	-2.80	May07	19
	3	**4.00 Jan18**	-2.67	Nov07	20
	4	**1.75 Jul22 (RX)**	-2.31	Apr12	24
	5	**3.00 Jul20**	-2.20	Apr10	22
	5	**2.75 Apr16**	**0.17**	Apr11	18
	4	**2.50 Jul44 (30y)**	0.43	Apr12	14
	3	**1.75 Oct15**	0.59	Sep10	16
	2	**2.00 Feb16**	0.69	Jan11	16
Cheapest	1	**1.00 Oct18 (5y)**	1.10	Sep13	5

Versus Swap Curve (CAS)

	Rank		ZScore	Issued	Size (€bn)
Richest	1	**2.00 Aug23 (10y)**	-2.03	Aug13	5
	2	**2.25 Sep21**	-0.74	Aug11	16
	3	**1.75 Jul22 (RX)**	-0.72	Apr12	24
	4	**3.25 Jul21**	-0.71	Apr11	19
	5	**1.50 Sep22**	-0.70	Sep12	18
	5	**1.75 Oct15**	1.39	Sep10	16
	4	**4.00 Jan37**	**1.53**	Jan05	23
	3	**3.25 Jul42**	**1.69**	Jul10	15
	2	**4.75 Jul40**	**1.82**	Jul08	16
Cheapest	1	**4.25 Jul39 (UB)**	**1.84**	Jan07	14

Source: Citi Research

Figure 44 (overleaf) looks at bonds of all maturities. For investors with maturity restrictions we have also provided another set of summary tables (Figure 45 and Figure 47) which looks at bonds shorter than 12 years and longer than 8 years, and uses the same criteria as Figure 44 to highlight the richest and cheapest bonds in these narrower maturity spectrums.

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

EMU relative value table – all maturities

Figure 44. Coupon Adjusted Spread to Fitted Curve and Swap Curve by Country (6m History); All bonds on each curve

Versus Govt Curve (CAS)

GERMANY

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.25 Jul18 (OE)	-3.22	May08	21
	2	4.25 Jul17	-2.80	May07	19
	3	4.00 Jan18	-2.67	Nov07	20
	4	1.75 Jul22 (RX)	-2.31	Apr12	24
	5	3.00 Jul20	-2.20	Apr10	22
	5	2.75 Apr16	0.17	Apr11	18
	4	2.50 Jul44 (30y)	0.43	Apr12	14
	3	1.75 Oct15	0.59	Sep10	16
	2	2.00 Feb16	0.69	Jan11	16
Cheapest	1	1.00 Oct18 (5y)	1.10	Sep13	5

FRANCE

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	5.00 Oct16	-1.83	Oct00	29
	2	3.00 Apr22	-1.65	Feb12	33
	3	2.25 Oct22	-1.41	Oct11	24
	4	3.25 Apr16	-1.32	Apr05	29
	5	4.00 Oct38	-1.31	Oct05	24
	5	4.25 Oct23 (OAT)	1.50	Oct06	33
	4	3.50 Apr20	1.66	Feb10	36
	3	3.75 Oct19	2.23	Oct08	32
	2	2.50 Oct20	2.31	Oct09	33
Cheapest	1	1.00 Jul17	2.33	Jul11	18

ITALY

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.75 Aug23	-1.52	Feb08	25
	2	4.50 May23 (10y)	-1.40	Mar13	18
	3	2.75 Nov16	-1.39	Sep13	5
	4	4.50 Mar24	-1.31	Aug13	8
	5	4.50 Mar26	-1.05	Sep10	21
	5	4.75 May17	1.09	Feb12	14
	4	4.75 Sep28	1.12	Jan13	13
	3	3.50 Dec18	1.18	Sep13	4
	2	4.25 Feb19	1.53	Feb03	25
Cheapest	1	3.50 Nov17	1.77	Nov12	17

N'LANDS

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.00 Jul18	-2.42	Feb08	15
	2	2.50 Jan17	-1.70	Jun11	16
	3	1.25 Jan19 (5y)	-1.07	Jun13	6
	4	4.00 Jul16	-1.05	Jul06	13
	5	0.00 Apr16	-1.03	Jan13	10
	5	3.50 Jul20	0.40	Feb10	15
	4	4.00 Jan37	0.90	Apr05	13
	3	3.25 Jul21	1.04	Mar11	16
	2	4.50 Jul17	1.35	Jul07	15
Cheapest	1	1.25 Jan18	2.20	Jul12	15

SPAIN

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.80 Jan17	-1.64	Oct06	21
	2	4.25 Oct16	-1.59	Sep11	21
	3	4.80 Jan24	-1.58	Sep08	15
	4	5.50 Jul17	-1.54	Mar02	20
	5	4.50 Jan18	-1.13	Nov12	18
	5	4.90 Jul40	1.00	Jun07	13
	4	5.85 Jan22 (FBB)	1.01	Nov11	19
	3	5.50 Apr21	1.02	Jan11	24
	2	4.30 Oct19	1.04	Jun09	19
Cheapest	1	3.15 Jan16	1.24	Sep05	21

BELGIUM

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.25 Mar41 (30y)	-4.62	Apr10	12
	2	1.25 Jun18 (5y)	-2.16	Feb13	12
	3	3.75 Jun45	-0.81	Sep13	4
	4	3.75 Sep15	-0.69	Mar05	11
	5	4.25 Sep21	-0.53	Jan11	15
	5	3.00 Sep19	1.06	Apr12	9
	4	5.50 Sep17	1.18	Jun02	8
	3	4.00 Mar22	1.47	May06	14
	2	3.25 Sep16	1.65	Jan06	13
Cheapest	1	4.00 Mar19	1.99	Jan09	11

Versus Swap Curve (CAS)

GERMANY

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.00 Aug23 (10y)	-2.03	Aug13	5
	2	2.25 Sep21	-0.74	Aug11	16
	3	1.75 Jul22 (RX)	-0.72	Apr12	24
	4	3.25 Jul21	-0.71	Apr11	19
	5	1.50 Sep22	-0.70	Sep12	18
	5	1.75 Oct15	1.39	Sep10	16
	4	4.00 Jan37	1.53	Jan05	23
	3	3.25 Jul42	1.69	Jul10	15
	2	4.75 Jul40	1.82	Jul08	16
Cheapest	1	4.25 Jul39 (UB)	1.84	Jan07	14

FRANCE

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.00 Apr22	-1.40	Feb12	33
	2	3.75 Apr21	-1.38	Apr05	34
	3	2.25 Oct22	-1.26	Oct11	24
	4	3.25 Oct21	-1.25	Oct10	35
	5	4.25 Oct18 (BTA)	-1.22	Oct07	28
	5	4.00 Apr60	0.11	Apr09	9
	4	4.00 Apr55	0.18	Apr04	15
	3	4.50 Apr41	0.27	Apr09	24
	2	3.25 May45 (30y)	0.56	May12	7
Cheapest	1	0.25 Nov15 (2y)	0.68	Nov12	18

ITALY

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.75 Nov16	-1.42	Sep13	5
	2	3.75 Mar21	-1.37	Sep10	24
	3	3.75 Aug21	-1.31	Feb06	28
	4	4.75 Aug23	-1.31	Feb08	25
	5	4.50 Mar26	-1.29	Sep10	21
	5	2.75 Dec15	-0.84	Dec12	16
	4	3.00 Nov15	-0.80	Nov10	17
	3	2.25 May16	-0.79	Apr13	15
	2	3.75 Apr16 (BTS)	-0.78	Apr11	16
Cheapest	1	4.50 Mar24	-0.67	Aug13	8

N'LANDS

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.00 Jul18	-0.78	Feb08	15
	2	1.25 Jan19 (5y)	-0.41	Jun13	6
	3	4.00 Jul19	-0.20	Feb09	14
	4	2.50 Jan17	-0.08	Jun11	16
	5	1.25 Jan18	0.12	Jul12	15
	5	2.25 Jul22	0.43	Feb12	15
	4	4.50 Jul17	0.50	Jul07	15
	3	0.00 Apr16	0.51	Jan13	10
	2	4.00 Jan37	0.82	Apr05	13
Cheapest	1	3.75 Jan42 (30y)	1.13	May10	14

SPAIN

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	5.50 Jul17	-2.09	Mar02	20
	2	4.50 Jan18	-2.04	Nov12	18
	3	3.80 Jan17	-2.04	Oct06	21
	4	4.10 Jul18	-1.97	Feb08	19
	5	4.60 Jul19	-1.94	Feb09	18
	5	3.75 Oct18 (5y)	-1.56	Jul13	9
	4	4.20 Jan37	-1.44	Jan05	16
	3	4.70 Jul41 (30y)	-1.36	Sep09	12
	2	4.90 Jul40	-1.33	Jun07	13
Cheapest	1	5.15 Oct28	-0.96	Jul13	4

BELGIUM

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.75 Jun45	-0.94	Sep13	4
	2	1.25 Jun18 (5y)	-0.01	Feb13	12
	3	2.25 Jun23 (10y)	0.05	Jan13	12
	4	4.25 Sep21	0.06	Jan11	15
	5	4.25 Sep22	0.09	Jan12	15
	5	3.75 Sep15	0.61	Mar05	11
	4	4.00 Mar32	0.62	Mar12	8
	3	3.25 Sep16	0.68	Jan06	13
	2	5.00 Mar35	0.78	May04	18
Cheapest	1	4.25 Mar41 (30y)	0.82	Apr10	12

Source: Citi Research

EMU relative value table – max 12yr maturity

Figure 45. Coupon Adjusted Spread to Fitted Curve and Swap Curve by Country (6m History); Bonds with a Maximum Maturity of 12yrs

GERMANY

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.25 Jul18 (OE)	-3.22	May08	21
	2	4.25 Jul17	-2.80	May07	19
	3	4.00 Jan18	-2.67	Nov07	20
	4	1.75 Jul22 (RX)	-2.31	Apr12	24
	5	3.00 Jul20	-2.20	Apr10	22
	5	0.25 Apr18	0.03	Apr13	17
	4	2.75 Apr16	0.17	Apr11	18
	3	1.75 Oct15	0.59	Sep10	16
	2	2.00 Feb16	0.69	Jan11	16
Cheapest	1	1.00 Oct18 (5y)	1.10	Sep13	5

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.00 Aug23 (10y)	-2.03	Aug13	5
	2	2.25 Sep21	-0.74	Aug11	16
	3	1.75 Jul22 (RX)	-0.72	Apr12	24
	4	3.25 Jul21	-0.71	Apr11	19
	5	1.50 Sep22	-0.70	Sep12	18
	5	1.00 Oct18 (5y)	0.77	Sep13	5
	4	3.50 Jan16	1.01	Nov05	23
	3	2.75 Apr16	1.08	Apr11	18
	2	2.00 Feb16	1.24	Jan11	16
Cheapest	1	1.75 Oct15	1.39	Sep10	16

FRANCE

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	5.00 Oct16	-1.83	Oct00	29
	2	3.00 Apr22	-1.64	Feb12	33
	3	2.25 Oct22	-1.41	Oct11	24
	4	3.25 Apr16	-1.32	Apr05	29
	5	3.00 Oct15	-1.17	Oct04	33
	5	4.25 Oct23 (OAT)	1.50	Oct06	33
	4	3.50 Apr20	1.65	Feb10	36
	3	3.75 Oct19	2.21	Oct08	32
	2	2.50 Oct20	2.29	Oct09	33
Cheapest	1	1.00 Jul17	2.30	Jul11	18

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.00 Apr22	-1.40	Feb12	33
	2	3.75 Apr21	-1.38	Apr05	34
	3	2.25 Oct22	-1.26	Oct11	24
	4	3.25 Oct21	-1.25	Oct10	35
	5	4.25 Oct18 (BTA)	-1.23	Oct07	28
	5	3.75 Apr17	-0.47	Apr06	35
	4	1.75 Feb17	-0.46	Feb11	20
	3	3.00 Oct15	-0.15	Oct04	33
	2	2.25 Feb16	-0.13	Feb10	24
Cheapest	1	0.25 Nov15 (2y)	0.68	Nov12	18

ITALY

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.75 Aug23	-1.52	Feb08	25
	2	4.50 May23 (10y)	-1.40	Mar13	18
	3	2.75 Nov16	-1.39	Sep13	5
	4	4.50 Mar24	-1.31	Aug13	8
	5	2.75 Dec15	-1.04	Dec12	16
	5	4.50 Feb18	1.05	Aug07	25
	4	4.75 May17	1.09	Feb12	14
	3	3.50 Dec18	1.18	Sep13	4
	2	4.25 Feb19	1.53	Feb03	25
Cheapest	1	3.50 Nov17	1.77	Nov12	17

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.75 Nov16	-1.42	Sep13	5
	2	3.75 Mar21	-1.37	Sep10	24
	3	3.75 Aug21	-1.31	Feb06	28
	4	4.75 Aug23	-1.31	Feb08	25
	5	4.00 Sep20	-1.24	Mar10	25
	5	2.75 Dec15	-0.84	Dec12	16
	4	3.00 Nov15	-0.80	Nov10	17
	3	2.25 May16	-0.79	Apr13	15
	2	3.75 Apr16 (BTS)	-0.78	Apr11	16
Cheapest	1	4.50 Mar24	-0.67	Aug13	8

N'LANDS

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.00 Jul18	-2.44	Feb08	15
	2	2.50 Jan17	-1.73	Jun11	16
	3	1.25 Jan19 (5y)	-1.09	Jun13	6
	4	4.00 Jul16	-1.06	Jul06	13
	5	0.00 Apr16	-1.05	Jan13	10
	5	3.75 Jan23	-0.08	Jan06	11
	4	3.50 Jul20	0.42	Feb10	15
	3	3.25 Jul21	1.09	Mar11	16
	2	4.50 Jul17	1.33	Jul07	15
Cheapest	1	1.25 Jan18	2.17	Jul12	15

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.00 Jul18	-0.78	Feb08	15
	2	1.25 Jan19 (5y)	-0.41	Jun13	6
	3	4.00 Jul19	-0.20	Feb09	14
	4	2.50 Jan17	-0.08	Jun11	16
	5	1.25 Jan18	0.12	Jul12	15
	5	3.25 Jul21	0.38	Mar11	16
	4	3.75 Jan23	0.40	Jan06	11
	3	2.25 Jul22	0.43	Feb12	15
	2	4.50 Jul17	0.50	Jul07	15
Cheapest	1	0.00 Apr16	0.51	Jan13	10

SPAIN

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.80 Jan17	-1.64	Oct06	21
	2	4.25 Oct16	-1.59	Sep11	21
	3	4.80 Jan24	-1.58	Sep08	15
	4	5.50 Jul17	-1.54	Mar02	20
	5	4.50 Jan18	-1.13	Nov12	18
	5	4.00 Apr20	0.96	Jan10	20
	4	5.85 Jan22 (FBB)	1.01	Nov11	19
	3	5.50 Apr21	1.02	Jan11	24
	2	4.30 Oct19	1.04	Jun09	19
Cheapest	1	3.15 Jan16	1.25	Sep05	21

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	5.50 Jul17	-2.09	Mar02	20
	2	4.50 Jan18	-2.04	Nov12	18
	3	3.80 Jan17	-2.04	Oct06	21
	4	4.10 Jul18	-1.97	Feb08	19
	5	4.60 Jul19	-1.94	Feb09	18
	5	4.40 Oct23 (10y)	-1.67	May13	14
	4	5.50 Apr21	-1.66	Jan11	24
	3	4.65 Jul25	-1.59	Feb10	14
	2	5.85 Jan22 (FBB)	-1.59	Nov11	19
Cheapest	1	3.75 Oct18 (5y)	-1.56	Jul13	9

BELGIUM

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	1.25 Jun18 (5y)	-2.21	Feb13	12
	2	3.75 Sep15	-0.69	Mar05	11
	3	4.25 Sep21	-0.57	Jan11	15
	4	2.75 Mar16	-0.55	Mar10	10
	5	4.25 Sep22	-0.22	Jan12	15
	5	3.00 Sep19	1.05	Apr12	9
	4	5.50 Sep17	1.17	Jun02	8
	3	4.00 Mar22	1.42	May06	14
	2	3.25 Sep16	1.65	Jan06	13
Cheapest	1	4.00 Mar19	1.98	Jan09	11

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	1.25 Jun18 (5y)	-0.01	Feb13	12
	2	2.25 Jun23 (10y)	0.05	Jan13	12
	3	4.25 Sep21	0.06	Jan11	15
	4	4.25 Sep22	0.08	Jan12	15
	5	3.75 Sep20	0.11	Jan10	18
	5	4.00 Mar17	0.32	Jan07	11
	4	2.75 Mar16	0.40	Mar10	10
	3	5.50 Sep17	0.42	Jun02	8
	2	3.75 Sep15	0.61	Mar05	11
Cheapest	1	3.25 Sep16	0.68	Jan06	13

Source: Citi Research

EMU relative value table – min 8yr maturity

Figure 46. Coupon Adjusted Spread to Fitted Curve and Swap Curve by Country (6m History); Bonds with a Minimum Maturity of 8yrs

GERMANY

	Versus Govt Curve (CAS) Rank		ZScore	Issued	Size (€bn)		Versus Swap Curve (CAS) Rank		ZScore	Issued	Size (€bn)
Richest	1	1.75 Jul22 (RX)	-2.31	Apr12	24	Richest	1	2.00 Aug23 (10y)	-2.03	Aug13	5
	2	1.50 Sep22	-2.04	Sep12	18		2	1.75 Jul22 (RX)	-0.72	Apr12	24
	3	4.00 Jan37	-1.69	Jan05	23		3	1.50 Sep22	-0.70	Sep12	18
	4	4.75 Jul34	-1.48	Jan03	20		4	2.00 Jan22	-0.60	Nov11	20
	5	2.00 Jan22	-1.20	Nov11	20		5	1.50 Feb23	-0.43	Jan13	18
	5	4.25 Jul39 (UB)	-0.26	Jan07	14		5	2.50 Jul44 (30y)	1.33	Apr12	14
	4	2.00 Aug23 (10y)	-0.19	Aug13	5		4	4.00 Jan37	1.53	Jan05	23
	3	1.50 Feb23	-0.14	Jan13	18		3	3.25 Jul42	1.69	Jul10	15
	2	4.75 Jul40	0.13	Jul08	16		2	4.75 Jul40	1.82	Jul08	16
Cheapest	1	2.50 Jul44 (30y)	0.43	Apr12	14	Cheapest	1	4.25 Jul39 (UB)	1.84	Jan07	14

FRANCE

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	3.00 Apr22	-1.64	Feb12	33	Richest	1	3.00 Apr22	-1.40	Feb12	33
	2	2.25 Oct22	-1.41	Oct11	24		2	2.25 Oct22	-1.26	Oct11	24
	3	4.00 Oct38	-1.30	Oct05	24		3	3.25 Oct21	-1.25	Oct10	35
	4	4.75 Apr35	-0.92	Apr03	21		4	1.75 May23 (10y)	-0.99	May12	20
	5	4.00 Apr60	-0.67	Apr09	9		5	3.50 Apr26	-0.51	Apr10	30
	5	3.25 Oct21	-0.13	Oct10	35		5	4.00 Oct38	0.00	Oct05	24
	4	4.50 Apr41	0.31	Apr09	24		4	4.00 Apr60	0.11	Apr09	9
	3	3.50 Apr26	0.45	Apr10	30		3	4.00 Apr55	0.18	Apr04	15
	2	3.25 May45 (30y)	0.70	May12	7		2	4.50 Apr41	0.27	Apr09	24
Cheapest	1	4.25 Oct23 (OAT)	1.50	Oct06	33	Cheapest	1	3.25 May45 (30y)	0.56	May12	7

ITALY

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	4.75 Aug23	-1.52	Feb08	25	Richest	1	4.75 Aug23	-1.31	Feb08	25
	2	4.50 May23 (10y)	-1.38	Mar13	18		2	4.50 Mar26	-1.29	Sep10	21
	3	4.50 Mar24	-1.28	Aug13	8		3	4.00 Feb37	-1.28	Aug05	25
	4	4.50 Mar26	-1.05	Sep10	21		4	4.50 May23 (10y)	-1.21	Mar13	18
	5	4.00 Feb37	-0.97	Aug05	25		5	5.00 Aug34	-1.21	Aug03	21
	5	4.75 Sep44 (30y)	0.28	Mar13	7		5	4.75 Sep28	-1.08	Jan13	13
	4	5.00 Mar22	0.52	Sep11	18		4	5.50 Nov22 (IK)	-1.07	May12	21
	3	5.50 Nov22 (IK)	0.74	May12	21		3	5.50 Sep22	-1.07	Mar12	20
	2	5.50 Sep22	1.04	Mar12	20		2	5.75 Feb33	-1.05	Feb02	15
Cheapest	1	4.75 Sep28	1.08	Jan13	13	Cheapest	1	4.50 Mar24	-0.67	Aug13	8

N'LANDS

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	2.50 Jan33	-1.32	Mar12	10	Richest	1	2.50 Jan33	0.31	Mar12	10
	2	3.75 Jan42 (30y)	-0.26	May10	14		2	1.75 Jul23 (10y)	0.32	Mar13	14
	3	2.25 Jul22	-0.22	Feb12	15		3	3.75 Jan23	0.40	Jan06	11
	3	1.75 Jul23 (10y)	-0.16	Mar13	14		3	2.25 Jul22	0.43	Feb12	15
	2	3.75 Jan23	-0.09	Jan06	11		2	4.00 Jan37	0.82	Apr05	13
Cheapest	1	4.00 Jan37	0.82	Apr05	13	Cheapest	1	3.75 Jan42 (30y)	1.13	May10	14

SPAIN

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	4.80 Jan24	-1.59	Sep08	15	Richest	1	4.80 Jan24	-1.70	Sep08	15
	2	5.75 Jul32	-0.99	Jan01	15		2	5.40 Jan23	-1.67	Jan13	17
	3	5.90 Jul26	-0.69	Mar11	10		3	4.40 Oct23 (10y)	-1.67	May13	14
	4	4.20 Jan37	-0.59	Jan05	16		4	5.75 Jul32	-1.63	Jan01	15
	5	4.65 Jul25	-0.45	Feb10	14		5	5.90 Jul26	-1.62	Mar11	10
	5	4.70 Jul41 (30y)	0.01	Sep09	12		5	5.85 Jan22 (FBB)	-1.59	Nov11	19
	4	5.40 Jan23	0.33	Jan13	17		4	4.20 Jan37	-1.44	Jan05	16
	3	5.15 Oct28	0.92	Jul13	4		3	4.70 Jul41 (30y)	-1.36	Sep09	12
	2	4.90 Jul40	0.99	Jun07	13		2	4.90 Jul40	-1.33	Jun07	13
Cheapest	1	5.85 Jan22 (FBB)	1.00	Nov11	19	Cheapest	1	5.15 Oct28	-0.96	Jul13	4

BELGIUM

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	4.25 Mar41 (30y)	-6.20	Apr10	12	Richest	1	3.75 Jun45	-0.95	Sep13	4
	2	3.75 Jun45	-0.85	Sep13	4		2	2.25 Jun23 (10y)	0.05	Jan13	12
	3	4.50 Mar26	-0.79	Jun11	8		3	4.25 Sep21	0.06	Jan11	15
	4	4.25 Sep21	-0.77	Jan11	15		4	4.25 Sep22	0.08	Jan12	15
	4	2.25 Jun23 (10y)	-0.36	Jan13	12		4	4.00 Mar22	0.17	May06	14
	3	4.00 Mar32	-0.20	Mar12	8		3	4.00 Mar32	0.61	Mar12	8
	2	5.00 Mar35	0.65	May04	18		2	5.00 Mar35	0.78	May04	18
Cheapest	1	4.00 Mar22	1.20	May06	14	Cheapest	1	4.25 Mar41 (30y)	0.82	Apr10	12

Source: Citi Research

UK relative value table

Figure 47. Coupon Adjusted Spread to Fitted Curve and Swap Curve by Country (6m History)

ALL

	Versus Govt Curve (CAS)						Versus Swap Curve (CAS)				
	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	2.25 Mar14	-2.40	Mar09	35	Richest	1	1.00 Sep17	-0.60	Mar12	31
	2	2.00 Jan16	-2.09	Nov10	32		2	4.00 Sep16	-0.24	Mar06	35
	3	4.00 Mar22	-1.72	Feb09	37		3	1.25 Jul18 (5y)	-0.05	Feb13	24
	4	4.25 Dec49	-1.49	Sep08	19		4	1.75 Jan17	-0.04	Aug11	27
	5	4.25 Dec40	-1.28	Jun10	24		5	2.00 Jan16	-0.02	Nov10	32
	5	4.50 Mar19	1.99	Sep08	35		5	4.50 Mar19	1.51	Sep08	35
	4	3.75 Jul52	2.04	Sep11	20		4	4.50 Sep34	1.53	Jun09	26
	3	3.75 Sep19	2.12	Jul09	28		3	4.25 Jun32	1.61	May00	35
	2	5.00 Sep14	2.71	Jul02	41		2	4.75 Dec30	1.65	Oct07	29
Cheapest	1	3.50 Jul68	3.81	Jun13	5	Cheapest	1	4.25 Mar36	1.68	Feb03	23

2yr - 7yr

	Versus Govt Curve (CAS)						Versus Swap Curve (CAS)				
	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	2.00 Jan16	-1.97	Nov10	32	Richest	1	1.00 Sep17	-0.56	Mar12	31
	2	1.00 Sep17	-0.73	Mar12	31		2	4.00 Sep16	-0.21	Mar06	35
	3	1.25 Jul18 (5y)	-0.35	Feb13	24		3	1.75 Jan17	-0.01	Aug11	27
	4	4.00 Sep16	-0.14	Mar06	35		4	1.25 Jul18 (5y)	-0.01	Feb13	24
	5	3.75 Sep20	-0.12	Jun10	24		5	2.00 Jan16	0.01	Nov10	32
	5	4.75 Mar20	0.74	Mar05	33		5	5.00 Mar18 (WX)	0.22	May07	34
	4	5.00 Mar18 (WX)	1.16	May07	34		4	3.75 Sep20	0.37	Jun10	24
	3	4.50 Mar19	2.05	Sep08	35		3	4.75 Mar20	0.60	Mar05	33
	2	1.75 Jan17	2.18	Aug11	27		2	3.75 Sep19	1.17	Jul09	28
Cheapest	1	3.75 Sep19	2.23	Jul09	28	Cheapest	1	4.50 Mar19	1.55	Sep08	35

7yr - 15yr

	Versus Govt Curve (CAS)						Versus Swap Curve (CAS)				
	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	4.00 Mar22	-1.60	Feb09	37	Richest	1	3.75 Sep21	0.18	Mar11	28
	2	3.75 Sep21	-1.04	Mar11	28		2	4.00 Mar22	0.19	Feb09	37
	3	4.25 Dec27	-0.96	Sep06	29		3	1.75 Sep22	0.97	Jun12	28
	4						4				
	5						5				
	5						5				
	4						4				
	3	2.25 Sep23 (10y)	-0.01	Jun13	12		3	2.25 Sep23 (10y)	1.12	Jun13	12
	2	5.00 Mar25 (G)	0.14	Sep01	33		2	5.00 Mar25 (G)	1.37	Sep01	33
Cheapest	1	1.75 Sep22	0.31	Jun12	28	Cheapest	1	4.25 Dec27	1.46	Sep06	29

>15yr

	Versus Govt Curve (CAS)						Versus Swap Curve (CAS)				
	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	4.25 Dec49	-1.32	Sep08	19	Richest	1	4.25 Dec55	0.48	May05	23
	2	4.25 Dec40	-0.99	Jun10	24		2	3.50 Jul68	0.54	Jun13	5
	3	4.50 Dec42	-0.92	Jun07	26		3	4.25 Dec49	0.56	Sep08	19
	4	4.25 Dec55	-0.52	May05	23		4	3.75 Jul52	0.58	Sep11	20
	5	4.25 Dec46	-0.51	May06	21		5	4.00 Jan60	0.77	Oct09	19
	5	4.25 Jun32	1.47	May00	35		5	4.75 Dec38	1.46	Apr04	25
	4	3.25 Jan44 (30y)	1.83	Oct12	19		4	4.50 Sep34	1.55	Jun09	26
	3	4.25 Mar36	2.00	Feb03	23		3	4.25 Jun32	1.63	May00	35
	2	3.75 Jul52	3.11	Sep11	20		2	4.75 Dec30	1.67	Oct07	29
Cheapest	1	3.50 Jul68	6.38	Jun13	5	Cheapest	1	4.25 Mar36	1.71	Feb03	23

Source: Citi Research

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

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

Figure 48. Provisional Auction Calendar for the Next Four Weeks, Gross Issuance (Billions), DV01 (USD Millions)

Date	Country	Nominal Size (Local Ccy, bn)	Issue Details	DV01 $million/bp	Approx. Number 10yr Futures		
					TYZ3 (UST)	G Z3 (Gilt)	RXZ3 (Bund)
23 Sep (Mon)	US	3 - 4	Outright Treasury Coupon Purchases: 30/6/2019 - 31/8/2020		-23k		
24 Sep (Tue)	Netherlands	2.5	DSL Apr16 reopening (issue confirmed, size €2-3bn)				4k
24 Sep (Tue)	UK	4.2	Syndication of new 01/8% index-linked 2068 (week commencing 23 September 2013, estimated size)			230k	
24 Sep (Tue)	US	33.0	2-Year		81k		
24 Sep (Tue)	US	1.25 - 1.75	Outright Treasury Coupon Purchases: 15/2/2036 - 15/8/2043		-31k		
25 Sep (Wed)	Italy	3.0	CTZ (estimated size)				5k
25 Sep (Wed)	Italy	1.0	BTPei (estimated size)				8k
25 Sep (Wed)	US	35.0	5-Year		207k		
25 Sep (Wed)	US	2.75 - 3.5	Outright Treasury Coupon Purchases: 15/11/2020 - 15/8/2023		-29k		
26 Sep (Thu)	US	29.0	7-Year		235k		
26 Sep (Thu)	US	1.25 - 1.75	Outright Treasury Coupon Purchases: 15/2/2036 - 15/8/2043		-31k		
27 Sep (Fri)	Italy	6.5	BTP 5yr and 10yr (estimated tenor and size)				39k
27 Sep (Fri)	US	4.75 - 5.75	Outright Treasury Coupon Purchases: 30/6/2018 - 31/5/2019		-30k		
			Weekly $DV01 of Issuance	**75.9**			
			Total Number of Futures Contracts		**378k**	**230k**	**57k**

Date	Country	Nominal Size (Local Ccy, bn)	Issue Details	DV01 $million/bp	Approx. Number 10yr Futures		
					TYZ3 (UST)	G Z3 (Gilt)	RXZ3 (Bund)
30 Sep (Mon)	US	1.25 - 1.75	Outright Treasury Coupon Purchases : 15/2/2036 - 15/8/2043		-31k		
01 Oct (Tue)	Austria	1.7	RAGB 10yr and 30yr (estimated size and tenors)				24k
03 Oct (Thu)	Spain	3.0	Bono 2yr, 5yr and 30yr (estimated tenors and size)				22k
03 Oct (Thu)	France	8.0	OAT 5yr, 10yr and 15yr (estimated tenors and size including the post auction facility)				69k
03 Oct (Thu)	UK	3.8	2¼% Treasury Gilt 2023 (issue confirmed, estimated size)			35k	
			Weekly $DV01 of Issuance	**20.6**			
			Total Number of Futures Contracts		**-31k**	**35k**	**116k**

Date	Country	Nominal Size (Local Ccy, bn)	Issue Details	DV01 $million/bp	Approx. Number 10yr Futures		
					TYZ3 (UST)	G Z3 (Gilt)	RXZ3 (Bund)
08 Oct (Tue)	UK	1.4	01/8% Index-linked Treasury Gilt 2019 (issue confirmed, estimated size)			10k	
08 Oct (Tue)	US	30.0	3-Year		74k		
09 Oct (Wed)	US	21.0	10-Year (re-opening)		230k		
10 Oct (Thu)	US	13.0	30-year (re-opening)		297k		
11 Oct (Fri)	Italy	5.5	BTP 3yr, 5yr and 30yr (estimated tenors and size)				32k
11 Oct (Fri)	Italy	2.5	CCTeu (estimated size)				11k
			Weekly $DV01 of Issuance	**57.1**			
			Total Number of Futures Contracts		**601k**	**10k**	**43k**

Date	Country	Nominal Size (Local Ccy, bn)	Issue Details	DV01 $million/bp	Approx. Number 10yr Futures		
					TYZ3 (UST)	G Z3 (Gilt)	RXZ3 (Bund)
17 Oct (Thu)	Spain	3.0	Obligaciones 2yr, 5yr and 10yr (estimated tenors and size)				14k
17 Oct (Thu)	France	9.0	BTAN, OAT 2yr and 5yr / OATi (estimated tenors and size including the post auction facility)				37k
17 Oct (Thu)	UK	4.8	1¼% Treasury Gilt 2018 (issue confirmed, estimated size)			24k	
			Weekly $DV01 of Issuance	**11.6**			
			Total Number of Futures Contracts		**0k**	**24k**	**51k**

The next release of the tentative outright Treasury operation schedule will be at 3 p.m. on September 30, 2013. Therefore we have only provided details of Fed buybacks upto 30 September.
Additional issues expected in September: Ireland 5yr and 10yr (€1.2bn). This is not included in the cash flow tables and gross supply charts of this report as the timing of this supply event has not been announced.
The auction calendar above does not include auctions for Germany and the Netherlands after 30 September as their auction calendar for 3Q13 have not yet been announced.

Source: DMOs, Citi estimates

EUR: Coupons & Redemptions (next 3 mths)

Figure 49. EMU-10 Redemptions over the next three months (€bn)

	Redemptions = €160bn								
Redemptions	DEU 31	FRA 32	NLD 0	ITA 48	ESP 16	BEL 14	AUT 13	FIN 0	PRT 6
(Mon) 23-Sep-13									5.7
(Wed) 25-Sep-13		10.7							
(Sat) 28-Sep-13						13.5			
(Mon) 30-Sep-13				10.6					
(Fri) 11-Oct-13	16.0								
(Sun) 20-Oct-13							13.1		
(Fri) 25-Oct-13		21.1							
(Thu) 31-Oct-13					16.2				
(Fri) 01-Nov-13				17.8					
(Fri) 13-Dec-13	15.0								
(Sun) 15-Dec-13				20.0					

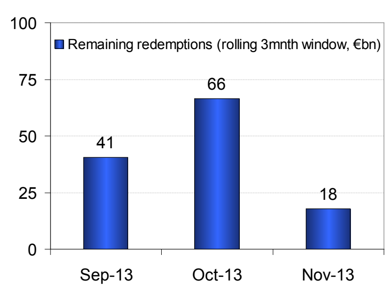
Source: DMOs, Bloomberg, Citi Research

Figure 50. EMU-10 Coupon Payments over the next three months (€bn)

	Coupons = €43bn								
Coupons	DEU 2	FRA 17	NLD 0	ITA 9	ESP 5	BEL 5	AUT 1	FIN 0	PRT 2
(Fri) 20-Sep-13	0.04								
(Mon) 23-Sep-13									0.3
(Wed) 25-Sep-13		0.3							
(Sat) 28-Sep-13						4.6			
(Tue) 01-Oct-13				0.2					
(Wed) 09-Oct-13	0.3								
(Thu) 10-Oct-13	0.4								
(Fri) 11-Oct-13	0.6								
(Sat) 12-Oct-13	0.1								
(Sun) 13-Oct-13	0.1								
(Mon) 14-Oct-13	0.2								
(Tue) 15-Oct-13				0.8					1.0
(Wed) 16-Oct-13									0.4
(Fri) 18-Oct-13									
(Sun) 20-Oct-13							1.0		
(Fri) 25-Oct-13		16.3							0.4
(Thu) 31-Oct-13					5.5				
(Fri) 01-Nov-13				5.5					
(Fri) 15-Nov-13				0.6					
(Fri) 22-Nov-13							0.3		
(Mon) 25-Nov-13		0.1							
(Sun) 01-Dec-13				1.4					
(Fri) 13-Dec-13	0.0								
(Sun) 15-Dec-13				0.9					

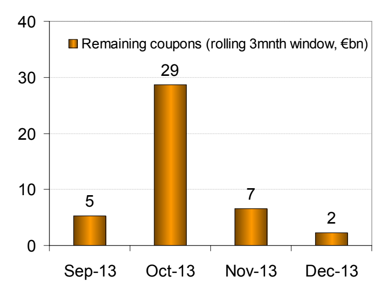
Source: DMOs, Bloomberg, Citi Research

Figure 51. EMU-10 remaining redemptions over the next 3months (€bn)



Source: DMOs, Bloomberg, Citi Research

Figure 52. EMU-10 remaining coupons over the next 3months (€bn)



Source: DMOs, Bloomberg, Citi Research

ESP and ITA Bill Issuance Projections

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

Auction calendar for the next four weeks

Figure 53. 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	24 Sep (Tue)	Spain	3month (13 Deccember 2013), 9month (20 June 2014) - tenors confirmed, estimated size	4
	26 Sep (Thu)	Italy	6 month (31 March 2014; issue confirmed, estimated size)	9.75
			Total Size in Week 1	**13.8**
Week 3	10 Oct (Thu)	Italy	12 month (14 October 2014; issue confrimed, estimated size)	8.5
			Total Size in Week 3	**8.5**
Week 4	15 Oct (Tue)	Spain	6month (16 April 2014) and 12month (new) - tenors confirmed, estiamted size	4.4
			Total Size in Week 4	**4.4**

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

Source: DMOs, Citi Research

2013 projections for bill supply

Figure 54. 2013 Italy and Spain Bill Supply – Citi Forecast (Euro Billion)

SPAIN	3m	6m	9m	12m	18m	Gross Supply	Redemptions	NCR
Jan	1.3	1.8		3.2	2.5	9	5	3
Feb	1.0	2.9	3.7	3.6		11	9	2
Mar	1.8	2.3	2.6	4.0		11	12	-2
Apr	0.9	1.3	2.2	4.6		9	8	1
May	0.9	1.2	2.6	3.3		8	6	2
Jun	1.1	1.1	2.6	4.0		9	10	-1
Jul	0.9	1.9	3.0	2.9		9	5	3
Aug	1.1	1.4	3.1	3.0		9	11	-3
Sep	1.0	1.4	3.0	3.1		9	8	1
Oct	1.0	1.4	2.6	3.0		8	8	
Nov	1.0	1.4	2.6	3.0		8	11	-3
Dec	1.0	1.4	2.6	3.0		8	9	-1
Total	**13.0**	**19.5**	**30.5**	**40.7**	**2.5**	**106**	**103**	**4**

ITALY	3m*	6m	9m	12m	Flexible BOT	Gross Supply	Redemptions	NCR
Jan		9.8		9.8		20	21	-2
Feb		10.1		9.7		20	19	
Mar		9.4		7.8		17	19	-2
Apr	3.0	9.2		8.9		21	18	3
May		9.2		7.0	3.0	19	16	4
Jun		9.2		7.0		16	16	
Jul		9.8		7.0	2.5	19	11	9
Aug		9.8		8.6		18	18	
Sep		9.8		8.5	3.0	21	20	1
Oct		9.8		8.5		18	17	1
Nov		9.8		8.5		18	16	3
Dec		10.0		8.5		19	25	-7
Total	**3.0**	**115.7**		**99.7**	**8.5**	**227**	**216**	**10**

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

Source: DMOs, Bloomberg, Citi estimates

Inflation Forecasts, Carry & Weekly Changes

Figure 55. Citi Inflation Forecasts

Month	EUR HICPxT Index Forecast	EUR HICPxT MoM Change	EUR HICPxT YoY Change	France CPIxT Index Forecast	France CPIxT MoM Change	France CPIxT YoY Change	UK RPI Index Forecast	UK RPI MoM Change	UK RPI YoY Change	US CPURNSA Index Forecast	US CPURNSA MoM Change	US CPURNSA YoY Change
Aug 13	116.53	0.1	1.2	125.90	0.4	0.7	251.00	0.5	3.3	233.88	0.1	1.5
Sep 13	117.35	0.7	1.2	125.55	-0.3	0.7	252.00	0.4	3.2	234.08	0.1	1.2
Oct 13	117.69	0.3	1.3	125.87	0.3	0.8	252.90	0.4	3.0	233.98	-0.0	1.1
Nov 13	117.64	-0.0	1.4	125.76	-0.1	0.9	253.10	0.1	3.1	233.68	-0.1	1.5
Dec 13	118.02	0.3	1.4	126.20	0.3	0.9	254.20	0.4	3.0	233.28	-0.2	1.6
Jan 14	116.68	-1.1	1.3	126.04	-0.1	1.4	252.70	-0.6	2.8	234.48	0.5	1.8

Source: Citi Research, Bloomberg

Shaded = Already released

Figure 56. US TIPS Inflation-linked Carry (based on forecasts above) – One week changes

Bond	RY (%)	Chg (bp)	Carry-adj chg	Carry: RY (bp) 1 Nov	Carry: RY (bp) 1 Dec	Carry: RY (bp) 1 Jan	Ref	BE (bp)	Chg (bp)	Carry-adj chg	Carry: BE (bp) ####	Carry: BE (bp) 1 Dec	Carry: BE (bp) 1 Jan	ZC Swap - BE Spread (bp)	Chg (bp)
Repo (%)				*0.09*	*0.09*	*0.10*									
TIPS 1/15	-1.17	-17	-17	-1	-2	-17	US-2.250-01/31/15	135	10	9	-2	-4	-19	13	-6
TIPS 4/15	-1.09	-18	-18	0	-1	-12	US-2.500-04/30/15	132	7	7	-1	-3	-15	8	-3
TIPS 7/15	-1.39	-22	-22	-2	-4	-16	US-4.250-08/15/15	171	9	8	-4	-7	-20	11	-4
TIPS 1/16	-1.12	-26	-26	0	-1	-8	US-2.625-02/29/16	158	10	9	-2	-4	-13	18	-3
TIPS 4/16	-1.01	-34	-34	0	0	-6	US-2.000-04/30/16	154	15	14	-2	-4	-11	19	-8
TIPS 7/16	-1.24	-42	-42	-1	-2	-8	US-4.875-08/15/16	188	21	20	-3	-6	-14	12	-13
TIPS 1/17	-0.97	-27	-27	0	0	-4	US-3.125-01/31/17	180	5	5	-2	-4	-11	16	3
TIPS 4/17	-0.81	-35	-35	1	1	-2	US-0.875-04/30/17	177	12	11	-2	-4	-10	16	-3
TIPS 7/17	-0.93	-35	-35	0	1	-3	US-4.750-08/15/17	197	11	11	-3	-5	-11	15	-2
TIPS 1/18	-0.69	-38	-38	1	2	-1	US-3.500-02/15/18	194	13	13	-2	-4	-10	17	-4
TIPS 4/18	-0.58	-38	-38	1	2	0	US-0.625-04/30/18	193	13	12	-2	-4	-9	17	-3
TIPS 7/18	-0.67	-48	-48	1	2	-1	US-4.000-08/15/18	204	22	21	-2	-4	-9	21	-12
TIPS 1/19	-0.44	-40	-40	1	2	1	US-2.750-02/15/19	204	15	14	-2	-4	-8	20	-4
TIPS 7/19	-0.41	-40	-40	1	2	1	US-3.625-08/15/19	216	15	15	-2	-4	-8	19	-4
TIPS 1/20	-0.17	-41	-41	2	3	2	US-3.625-02/15/20	204	16	16	-2	-3	-7	30	-4
TIPS 7/20	-0.13	-40	-40	2	3	2	US-2.625-08/15/20	217	16	15	-2	-3	-7	26	-3
TIPS 1/21	0.10	-38	-38	2	3	3	US-3.625-02/15/21	207	15	15	-2	-3	-7	35	-2
TIPS 7/21	0.13	-38	-38	2	3	3	US-2.125-08/15/21	223	15	15	-2	-3	-7	27	-1
TIPS 1/22	0.31	-37	-37	2	3	3	US-2.000-02/15/22	217	15	15	-2	-3	-6	32	-1
TIPS 7/22	0.34	-39	-39	2	3	3	US-1.625-08/15/22	226	19	18	-2	-3	-6	29	-4
TIPS 1/23	0.47	-34	-34	2	3	3	US-2.000-02/15/23	222	15	15	-2	-3	-6	32	-1
TIPS 7/23	0.47	-33	-33	2	3	3	US-2.500-08/15/23	225	15	15	-2	-3	-6	34	-1
TIPS 1/25	0.65	-29	-29	2	3	3	US-7.625-02/15/25	218	12	12	-2	-3	-6	44	1
TIPS 1/26	0.77	-24	-24	2	3	3	US-6.000-02/15/26	222	8	8	-2	-3	-6	42	4
TIPS 1/27	0.86	-26	-26	2	3	3	US-6.625-02/15/27	222	11	11	-2	-3	-5	44	-0
TIPS 1/28	0.94	-21	-21	2	3	3	US-6.125-11/15/27	222	7	6	-2	-3	-5	46	4
TIPS 4/28	0.91	-24	-24	2	3	4	US-5.500-08/15/28	233	11	11	-1	-3	-5	34	-1
TIPS 1/29	0.99	-19	-19	2	3	3	US-5.250-02/15/29	230	6	6	-1	-3	-5	39	4
TIPS 4/29	0.98	-18	-18	2	3	4	US-5.250-02/15/29	231	6	5	-1	-2	-5	37	4
TIPS 4/32	1.10	-19	-19	2	3	3	US-5.375-02/15/31	228	7	7	-1	-3	-5	46	0
TIPS 2/40	1.36	-11	-11	1	2	3	US-4.625-02/15/40	231	2	2	-1	-2	-4	48	3
TIPS 2/41	1.37	-17	-17	1	2	3	US-4.750-02/15/41	231	8	8	-1	-2	-4	48	-4
TIPS 2/42	1.42	-13	-13	1	2	2	US-3.125-02/15/42	235	6	6	-1	-2	-4	44	-1
TIPS 2/43	1.43	-14	-14	1	2	2	US-3.125-02/15/43	236	6	6	-1	-2	-4	43	-2

Source: Citi Research, Bloomberg

Figure 57. EUR Inflation-linked Carry (based on forecasts above) – One week changes

Bond	RY (%)	Chg (bp)	Carry-adj chg	Carry: RY (bp) 1 Nov	1 Dec	1 Jan	Ref	BE (bp)	Chg (bp)	Carry-adj chg	Carry: BE (bp) 1 Nov	1 Dec	1 Jan	ZC Swap - BE Spread (bp)	Chg (bp)
Repo (%)				*0.09*	*0.09*	*0.10*									
OATei15	-1.12	-10	-10	-8	28	41	*FFRG 4/15*	139	7	-2	-10	25	38	23	1
BUNDei16	-0.65	-11	-11	-4	23	34	*BUND 1/16*	87	7	1	-5	22	32	20	-1
BTANi16	-0.90	-9	-9	9	-4	2	*FFRG 4/16*	137	3	-1	8	-7	-2	31	-4
BTPei16	1.42	-17	-16	4	35	52	*BTP 8/16*	87	-9	-14	-4	19	27	54	14
OATi17	-0.65	-11	-11	8	-2	4	*FFRG 4/17*	146	2	-1	5	-6	-3	29	-2
BTPei17	1.83	-17	-17	5	28	41	*BTP 8/17*	104	-9	-13	-4	13	18	44	13
BOBLei18	-0.42	-11	-11	-2	14	20	*BUND 1/18*	105	2	-1	-3	11	16	29	1
OATei18	-0.24	-15	-15	-1	13	19	*FFRG 4/18*	131	2	-1	-4	9	13	32	1
BTPei18	2.15	-23	-23	4	24	35	*BTP 8/18*	100	-2	-5	-3	10	14	55	5
OATi19	-0.19	-13	-13	6	1	5	*FFRG 4/19*	154	-1	-3	3	-4	-2	36	-0
BTPei19	2.17	-27	-27	4	20	29	*BTP 9/19*	126	2	-1	-3	8	11	34	0
BUNDei20	-0.17	-9	-9	-1	10	15	*BUND 1/20*	129	0	-2	-3	7	10	23	2
OATei20	0.10	-15	-15	0	11	16	*FFRG 4/20*	153	3	1	-3	6	8	19	-0
OATI21	0.27	-10	-10	5	2	5	*FFRG 4/21*	162	-2	-4	2	-4	-3	41	0
BTPei21	2.68	-26	-26	4	17	24	*BTP 9/21*	122	3	1	-3	6	8	53	-1
OATei22	0.51	-10	-10	0	9	13	*FFRG 4/21*	138	-3	-5	-3	4	6	49	4
BUNDei23	0.19	-9	-9	0	8	11	*BUND 1/22*	138	1	-1	-2	4	5	41	1
OATi23	0.54	-11	-11	5	2	5	*FFRG 10/2*	197	-1	-2	1	-4	-3	19	-0
BTPei23	3.00	-26	-26	3	15	21	*BTP 8/23*	120	2	1	-2	5	7	70	-1
OATei24	0.83	-12	-12	1	8	11	*FFRG 10/2*	168	-0	-2	-3	2	3	31	2
BTPei26	3.22	-24	-24	3	12	18	*BTP 3/26*	124	3	1	-2	3	5	81	-1
OATei27	0.98	-14	-14	1	7	10	*FFRG 4/26*	186	1	-0	-2	2	3	24	0
OATi29	0.86	-13	-13	3	2	4	*FFRG 4/29*	218	0	-1	1	-3	-3	16	1
OATei32	1.15	-10	-10	1	6	9	*FFRG 10/3*	206	-1	-2	-2	1	2	10	3
BTPei35	3.21	-15	-15	2	8	11	*BTP 8/34*	173	-0	-1	-2	1	1	45	2
OATei40	1.27	-8	-8	0	4	6	*FFRG 4/41*	222	1	0	-2	0	0	3	0
BTPei41	3.48	-14	-14	2	7	10	*BTP 9/40*	157	-0	-1	-2	1	1	68	2

Source: Citi Research

Figure 58. UK Gilts Inflation-linked Carry (based on forecasts above) – One week changes

Bond	RY (%)	Chg (bp)	Carry-adj chg	Carry: RY (bp) 1 Nov	1 Dec	1 Jan	Ref	BE (bp)	Chg (bp)	Carry-adj chg	Carry: BE (bp) 1 Nov	1 Dec	1 Jan	ZC Swap - BE Spread (bp)	Chg (bp)
Repo (%)				*0.42*	*0.42*	*0.42*									
UKTi Jul16	-1.94	-3	-4	2	4	7	*UKT 9/16*	280	2	2	1	1	2	50	3
UKTi Nov17	-1.56	-13	-12	7	14	19	*UKT 3/18*	303	10	8	4	8	11	20	-18
UKTi Nov19	-0.96	-10	-10	6	11	15	*UKT 9/19*	292	7	6	3	5	6	35	-4
UKTi Apr20	-0.76	-5	-5	3	6	9	*UKT 3/20*	284	1	1	0	0	0	38	2
UKTi Nov22	-0.36	-8	-8	5	9	13	*UKT 3/22*	289	3	2	2	3	4	45	-2
UKTi Mar24	-0.08	-8	-8	4	8	11	*UKT 3/25*	306	4	3	1	2	3	28	-3
UKTi Jul24	-0.11	-4	-5	3	5	7	*UKT 3/25*	309	0	0	0	-1	-1	32	1
UKTi Nov27	0.05	-5	-5	4	7	9	*UKT 12/27*	319	2	1	1	1	2	33	-1
UKTi Mar29	0.13	-6	-6	3	6	8	*UKT 12/30*	325	1	1	0	1	1	27	-0
UKTi Jul30	0.06	-4	-4	2	4	6	*UKT 6/32*	338	-1	-1	0	-1	-1	22	-5
UKTi Nov32	0.12	-5	-5	3	5	7	*UKT 6/32*	333	0	-0	0	0	0	31	0
UKTi Mar34	0.15	-5	-5	3	5	6	*UKT 9/34*	336	1	0	0	0	0	28	0
UKTi Jan35	0.14	-2	-3	2	3	4	*UKT 3/36*	339	-1	-1	-1	-1	-2	28	2
UKTi Nov37	0.13	-3	-3	2	4	6	*UKT 12/38*	341	0	-0	0	0	0	29	1
UKTi Mar40	0.16	-3	-3	2	4	5	*UKT 9/39*	342	1	0	0	0	-1	28	2
UKTi Nov42	0.12	-3	-3	2	3	4	*UKT 12/42*	348	1	0	0	0	-1	26	0
UKTi Mar44	0.17	-3	-3	2	3	4	*UKT 1/44*	350	1	0	0	0	-1	23	0
UKTi Nov47	0.13	-3	-3	2	3	4	*UKT 12/46*	349	0	-0	0	-1	-1	24	1
UKTi Mar50	0.14	-2	-2	1	3	4	*UKT 12/49*	348	-1	-1	0	-1	-1	24	2
UKTi Mar52	0.15	-3	-3	1	2	3	*UKT 7/52*	348	-1	-1	0	-1	-1	24	2
UKTi Nov55	0.11	-3	-3	1	2	3	*UKT 12/55*	348	-1	-1	0	-1	-1	24	2
UKTi Mar62	0.10	-3	-3	1	2	3	*UKT 1/60*	349	-1	-1	-1	-1	-1	22	2

Source: Citi Research

Summary of Recent Publications

Date	Publication	Topic	Page	Region
18-Sep-13	NOTE	Euro Rates Strategy: Portugal Placed on Watch Negative by S&P - Implications	-	EUR
18-Sep-13	NOTE	EMU End-September Inflation-Linked Index Projection	-	EUR
17-Sep-13	NOTE	Month-end Index Projections: Projected EGBI changes supportive for semi-core	-	UK
16-Sep-13	NOTE	European Flow Monitor: Net demand for EMU core has started to rebound	-	EUR
12-Sep-13	European Weekly	Periphery: Demand and Supply in 2014	8	EUR
		German politics and market implications	9	EUR
		UK Rates – putting the 'un' in certainty	11	UK
		EUR & GBP Realised Volatility after guidance	13	Global
		Euro inflation: supply outlook to year-end	16	EUR
		Euro SSA Strategy	17	EUR
		Covered Bond Strategy	20	EUR
12-Sep-13	NOTE	Weekly Supply Monitor: Euro, UK and US Supply Outlook	-	Global
11-Sep-13	NOTE	Euro Rates Strategy: Bund Technical Flash: Look for a turnaround in RSI	-	EUR
11-Sep-13	NOTE	UK Rates Strategy: Gilts Pass the Jobless Test	-	UK
9-Sep-13	NOTE	European Flow Monitor: Net demand for EMU core is close to 20week lows	-	EUR
5-Sep-13	European Weekly	ECB - Dovish Draghi ignored by markets	8	EUR
		UK Rates – The Jobless Test	9	UK
		10yr Spain-Italy spreads nearing zero	11	EUR
		Euro inflation outlook & the return of supply	13	EUR
		Analysing & trading the EUR swaption skew	15	EUR
		SSA Strategy – Dutch agencies	20	EUR
		Covered Bond Strategy	22	EUR
		EMU-10: September Supply Outlook	25	EUR
5-Sep-13	NOTE	Weekly Supply Monitor: Euro, UK and US Supply Outlook	-	Global
5-Sep-13	NOTE	Euro Government Bonds: Analysing Demand and Supply in Equilibrium	-	EUR
4-Sep-13	NOTE	Euro Rates Strategy: Tomorrow's ECB Meeting: Strategy Views	-	EUR
2-Sep-13	NOTE	European Flow Monitor: Selling of the core gather speed	-	EUR
2-Sep-13	NOTE	Euro Rates Strategy: EUREX Calendar Rolls (U3/Z3): update of views	-	EUR
2-Sep-13	NOTE	Euro SSA and Covered Bond Monthly	-	EUR

Notes

Appendix A-1

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The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

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