European Rates Weekly

Moving towards an LTRO

- **ECB – some thoughts on a new LTRO:** We continue to investigate the relationship between Eurosystem excess liquidity and the EGB market. Following a series of articles, we now look at the regional components of excess liquidity, the differences between FED's tapering and ECB's balance sheet reduction as well as the chances and the design of a theoretical new LTRO.

- **Gilts and Treasuries in sync:** Our latest medium-term forecasts suggest gilts will underperform Bunds but track Treasuries closely. We have also revised higher our front-end yield forecasts from mid-2014 to reflect the change in the Citi policy rate view. However, on a more tactical basis, we remain long the very front-end.

- **EUR derivatives - options for a steeper 2s10s:** We believe the current level of EUR 2s10s forwards are too flat relative to spot. We recommend a long position on a 2yr single look EUR CMS 2s10s ATMF cap or buying EUR 2s10s ATMF conditional bear-steepeners with a 2yr expiry.

- **Moody's lifts Irelands Outlook to "Stable":** Moody's has recently revised its Ba1 rating Outlook of Ireland from "Negative" to "Stable". This reflects recent progress in its Troika programme and evidence of market access.

- **Technical outlook:** Bunds and gilts show signs of potential reversal after the recent sell-off. Bunds have formed an inverse Head and Shoulders pattern, gilts have broken out of their downward channel and both show positive crossover in DMIs. .

- **Renewed market conviction in SSAs:** The return of supply following the summer lull should continue to spur interest in the SSA market. We see little evidence that spreads should materially underperform due to the pick-up in issuance.

- **Covered bonds:** Moody's plans to modify its covered bond rating methodology and has asked for comments. The proposal introduces flexibility at the anchor point for covered bond ratings and, as a consequence, should lead to certain upgrades.

- **Relative value trades:** We highlight a number of relative value opportunities in the 5-10yr sector of the Dutch, Spanish and Italian yield curves.

- **Supply:** Within Europe, next week's bond supply comes from Germany (€5bn), Spain (~€3bn) and France (~ €8bn). The UK DMO will issue £4bn of a 10yr gilt. There will be £1.9bn of gilt buybacks by the BoE next week.

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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). In the UK, the Short-sterling red pack remains volatile but has richened since the last jobless report. We think there is further to go.	Long EUR 1y1y vs USD Long Short-sterling red pack 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. 10s30s in the UK remains directional but we think it has a greater propensity to bear flatten than to bull steepen.	UKT 2s10s steepeners Sell 10yr OATs vs 5yr and 30yr
Cross-market	The recent FOMC meeting - combined with short covering - has driven UST lower and narrowed the spread to Bunds. 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 further over the medium-term. Gilt-USTs are likely to remain highly correlated.	Sell EUR 2y cross-ccy basis Long Bunds vs both UST and gilts over the medium-term (add on corrections)
EMU Spreads	We are once again cautious on BTPs and see increased likelihood of underperformance vs Bonos given ongoing political risks. 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 along with our expectation of reduced Bund supply in 2014 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 Hold 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	We expect the forward EUR 2s10s curve to move up to spot based on our expectation that bund yields will be stable over the next year and more LTROs will pin the front-end. The current level of EUR 2y2y & 5y5y implied skews are too steep when compared to previous levels of implied volatility for a range of underlying rates. We prefer short EUR collar positions hedged with USD longs, instead of outright shorts	Long 2yr EUR single ook CMS 2s10s ATMF cap 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.	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

Duration Scorecard

Figure 2. Bund Weekly Cheat Sheet: 27th September – 3rd October

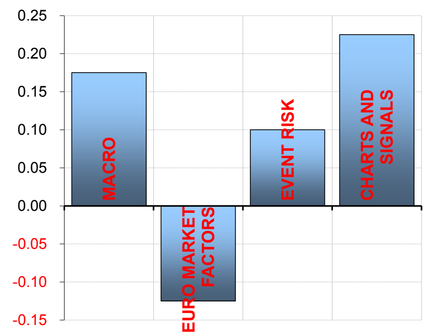
Bund Directional Scorecard (1wk horizon)

RECOMMENDATION	Long	RXZ3 (EOD Thurs) = #N/A Requesting Data...
Conviction level	19%	#VALUE!

	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	Fed relatively dovish	7.5%
Inflation	1	September flash inflation print likely to be mild	5.0%
Growth related data	0	Stronger than expected PMI likely to be confirmed	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	Supply from Italy, Spain & France. Cash flows from Belgium & Italy.	5.0%
Risk appetite	0	GRAMI points to very low levels of risk aversion	7.5%
Positioning	0	Positioning cleaner post FOMC	2.5%
Equity	-1	Eurostoxx50 near 2 year high	5.0%
Sovereign credit	-1	Peripheral spreads near tightest level in a year	5.0%
FX	-1	EUR effective exchange rate near 1yr high	2.5%
EVENT RISK	**0.1**		**Weight = 13%**
Politics	1	Political concerns again rising in Italy	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 forming inverse Head and Shoulder	7.5%
T-Note	1	Bias towards lower Treasury yields	5.0%
CFTC	1	Positioning short and getting squeezed	5.0%
ARTS	1	Long	5.0%

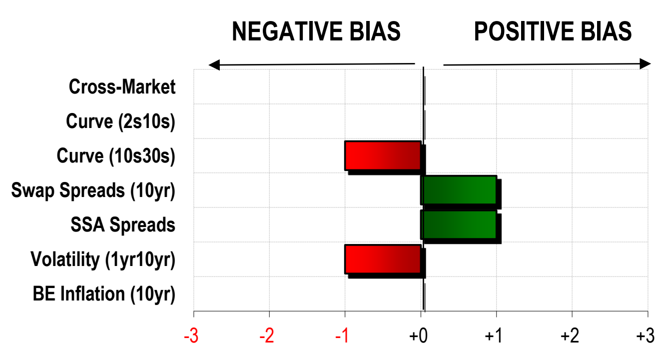
Source: Citi Research

Figure 3. Contribution to Bund Signals



Source: Citi Research

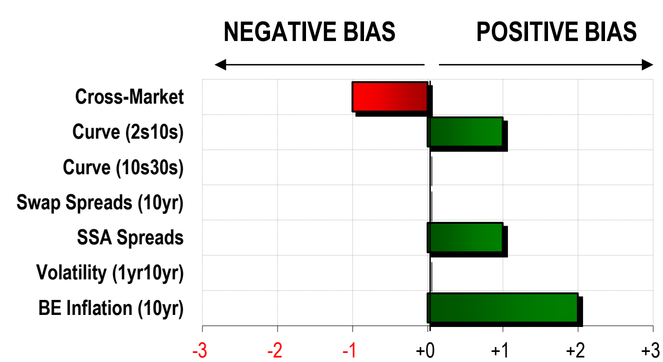
Figure 4. EURO AREA (Near-term Bias)



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)



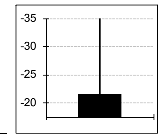
Source: Citi Research

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

Tradesheet

Record of Our Closed Trades

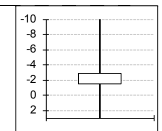
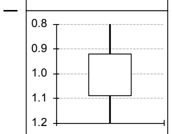
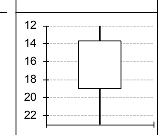
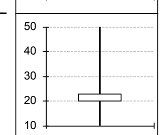
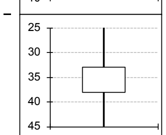
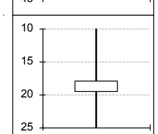
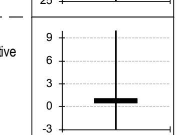
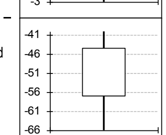
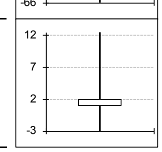
Figure 6. Record of our Closed Trades

Region	Trade	Levels		Rationale	
Europe / US	**Sell EUR 2y cross-ccy basis**	Open	-21.5bp		
		Current	-17.5bp	Hit Stop 19 September 2013.	
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*	

Source: Citi Research

Record of Our Open Trades

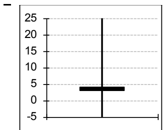
Figure 7. Record of our Open Trades

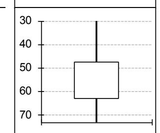
Region	Trade	Levels		Rationale + Publication Date	
EUR	**Buy 30yr Bund vs swaps (YYS)**	Open	-1.5bp		
		Current	-2.9bp	Technical levels, supply projections and upcoming cash flows	
Swap Spread	Buy Bund 2.5% Jul44 vs swaps (YYS) at -1.5bp	**P&L**	**1.4bp**		
		Target	-10bp		
		Stop	3bp	*European Rates Weekly, 19 September 2013*	
UK	**Long Short-sterling red-pack**	Open	1.09%	The rate-hike expectations have been brought forward more than warranted, in our view.	
		Current	0.92%		
Futures	Long Short-sterling red-pack at 1.09%	**P&L**	**0.17%**		
		Target	0.8%	*UK Rates Strategy, 11 September 2013*	
		Original Stop	1.2%	*Revised Stop: European Rates Weekly, 26 September 2013*	
		Revised Stop	1.0%		
UK	**Buy IL gilt Mar24 vs Nov22 and Nov27**	Open	19bp		
		Current	14bp	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**	**5bp**		
	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*	
UK	**Sell 30yr gilt swap spreads vs 10yr**	Open	20bp		
		Current	23bp	Fiscal risks, supply pressures and the absence of QE to put steepening pressure on the gilt curve.	
Swap spread	Sell gilt 3.25% Jan44 ASW at 20bp	**P&L**	**3bp**		
	Buy gilt 1.75% Sep22 ASW at 0bp	Target	50bp		
		Stop	10bp	*UK Rates Strategy, 30 July 2013*	
Europe	**Sell OATei24 break-even vs Bundei23**	Open	38bp		
		Current	33bp	Relative outperformance of 10yr OATei break-evens is overdone, especially now that the 25 July coupons have been paid.	
Inflation	Sell OATei24 break-even at 168bp	**P&L**	**5bp**		
	Buy Bundei23 break-even at 130bp	Target	25bp	*European Rates Weekly, 25 July 2013*	
		Stop	45bp		
Europe	**Buy 5yr Belgium vs France**	Open	19.5bp		
		Current	18bp	Tactical long supported by upcoming cash flows.	
Cross Market	Buy OLO 4% Mar18 at 1.15%	**P&L**	**2bp**		
	Sell OAT 4% Apr18 at 0.95%	Target	10bp		
		Stop	25bp	*Euro Rates Strategy, 24 July 2013*	
Europe	**Buy 2yr Netherlands vs Austria**	Open	1bp		
		Current	0bp	Attractive entry level to move up the credit curve. Relative value is also supportive.	
Cross Market	Buy DSL 0.75% Apr15 at 16bp	**P&L**	**-1bp**		
	Sell RAGB 3.5% Jul15 at 17bp	Target	10bp		
		Stop	-3bp	*The Morning Call, 17 July 2013*	
Europe	**Buy Boblei18 break-even vs 5yr HICPxT swap**	Open	-57bp		
		Current	-44.5bp	Euro break-evens should be supported by rally in oil and upcoming coupon payments.	
Inflation	Buy Boblei18 break-even at 98bp	**P&L**	**12bp**		
	Sell 5yr HICPxT swap at 155bp	Target	-40bp		
		Stop	-66bp	*The Morning Call, 16 July 2013*	
Europe	**Buy ERZ3 1x2 call spread**	Open	1c		
		Current	2c	Dec Euribor has cheapened 30/35c since May ECB rate cut. However, a cut to the deposit rate would be required for a signifcant rally.	
Money Market	Buy ERZ3 99.750/.875 1x2 call spread at 1c	**P&L**	**1c**		
		Target	12.5c		
		Stop	-3c	*Euribor, 24 June 2013*	

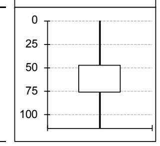
Source: Citi Research

Figure 8. Record of our Open Trades (continued)

Europe	**Receive EUR 10y2y vs 12y3y**	Open	4bp	Cheapness of the sector due to legacy ASW positions. The trade offers a positive roll-down for relatively low volatility
		Current	3bp	
Curve	Receive EUR 10y2y at 3.1%	**P&L**	**-1bp**	
	Pay EUR 12y3y at 3.14%	Target	25bp	
		Stop	-5bp	*The Morning Call, 23 January 2013*
Europe	**Sell EUR 1y3yF ATMF straddle and buy ATMF-25 receiver**	Open	63bp	Fwd levels in front-end EUR swaps are too high when additional policy measures by the ECB are likely to be undertaken
		Current	47bp	
Volatility	Sell EUR 1y3yF ATMF (=1.36%) straddle for 98bp	**P&L**	**16bp**	
	Buy EUR 1y3yF ATMF-25 receiver for 35bp	Target	30bp	
		Stop	73bp	*IIRS 9 August 2012*
UK	**Sell GBP 2y2y ATMF straddle**	Open	76bp	The fundamental backdrop in the UK supports selling GBP 2y2y vol
		Current	47bp	
Volatility	Sell GBP 2y2y ATMF (1.04%) straddle at 76bps	**P&L**	**29bp**	
		Target	0bp	
		Stop	114bp	*IIRS 12 July 2012*







Source: Citi Research

European Rates Strategy Yield Outlook

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Full details can be found in the latest *Global Economic Outlook and Strategy*.

EMU – growth & inflation outlook continue to point to low core yields

We have made no material changes to our Bund forecasts. We anticipate 10yrs to range trade around 1.80% in coming quarters. The ECB is likely to keep monetary policy loose for the foreseeable future and we expect the refi rate to remain at 0.5% in the quarters ahead. Our economists expect the first ECB hike in Q4 2016. The growth and inflation outlook remain subdued despite recent improvements in the data, and the German election is unlikely to herald any radical policy changes.

Italian and Spanish yields have converged with Bonos having traded narrowly tighter than BTPs. Going forward, BTP and Bono spreads may rise again early next year given the onset of supply and the prospect of fresh elections in Italy. Such drivers may also see Italy underperform Spain once more. Separately however, a new LTRO by the ECB has gained attention, especially given recent comments by Draghi. In a scenario of new ECB liquidity provision, the profile for Bono and BTP spreads would likely be tighter largely due to the demand stimulus a fresh LTRO would provide to better address the supply-demand imbalance next year.

UK – gilts to underperform Bunds

The revisions to our yield forecasts this month have mainly been driven by the change in our economist's policy rate view. With the first rate hike now forecast for 2015, rather than 2017, we expect 2yr gilt yields to reach 1% by 1Q15 (vs 0.4% previously) and 10yr gilts to move 10-15bps higher per quarter next year. We expect bear steepening to eventually give way to bear flattening in late-2014. The rate outlook for the UK looks increasingly aligned with the US rather than Europe.

Figure 9. Interest Rate and Bond Market Forecasts as of 25 September 2013

		Quarterly Average					
	Current	4Q 13	1Q 14	2Q 14	3Q 14	4Q 14	1Q 15
Euro Area							
Policy Rate	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Overnight Rate (EONIA)	0.08	0.10	0.15	0.20	0.20	0.25	0.40
3-Month (EURIBOR)	0.16	0.25	0.25	0.30	0.30	0.35	0.35
2 Year Schatz Yield	0.18	0.20	0.15	0.15	0.20	0.20	0.30
5 Year Bobl Yield	0.86	0.80	0.80	0.80	0.80	0.80	0.90
10 Year Bund Yield	1.88	1.80	1.80	1.80	1.80	1.90	2.00
30 Year Bund Yield	2.70	2.60	2.50	2.50	2.50	2.60	2.70
2-10 Year Bund Curve	170	160	165	165	160	170	170
10 Year BTP-Bund Spread	235	250	275	275	250	250	250
10 Year Bono-Bund Spread	236	250	275	250	250	250	250
2 Year BTP-Schatz Spread	150	150	170	150	125	125	125
2 Year Bono Schatz Spread	122	130	170	125	125	125	125
10 Year OAT-Bund Spread	51	60	70	80	80	80	80
10 Year Swap Spread (Swap Less Govt.), bp	33	35	35	30	30	25	25
10 Year Breakeven Inflation	164	165	170	170	170	180	190
UK							
Policy Rate	0.50	0.50	0.50	0.50	0.50	0.50	0.50
3-Month Libor	0.52	0.52	0.52	0.55	0.60	0.65	0.70
2 Year Treasury Yield	0.45	0.45	0.50	0.55	0.65	0.80	1.00
5 Year Treasury Yield	1.63	1.55	1.65	1.80	1.90	2.10	2.35
10 Year Treasury Yield	2.87	2.80	2.85	3.05	3.15	3.25	3.40
30 Year Treasury Yield	3.66	3.60	3.65	3.75	3.85	3.90	3.95
2-10 Year Treasury Curve	242	235	235	250	250	245	240
10 Year Swap Spread (Swap Less Govt.), bp	-5	5	5	5	5	10	15
10 Year Breakeven Inflation	287	290	295	310	315	330	350

Source: Citi Research

ECB: Some Thoughts on a New LTRO

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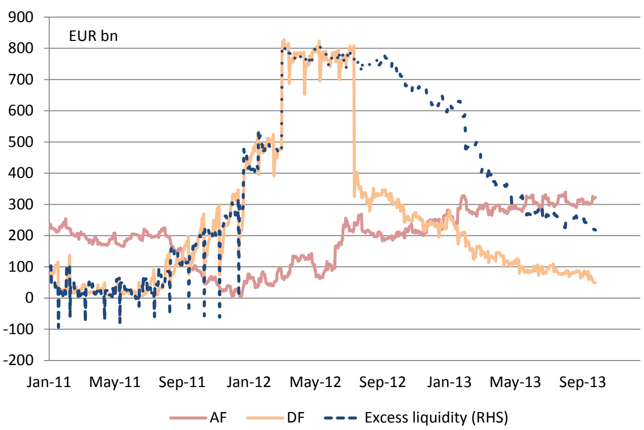
We continue to investigate the relationship between Eurosystem excess liquidity and the EGB market. Following a series of articles[1], we now look at the regional components of excess liquidity, the differences between FED's tapering and ECB's balance sheet reduction as well as the chances and the design of a theoretical new LTRO.

Factors likely to drive excess liquidity towards 200bn in the near-term

Excess liquidity has declined by EUR 597bn from the all-time high reached on 5 March 2012, a couple of days after the settlement of the second 3y tender. Several factors have contributed to this decline, including the exercise of EUR 338bn in pre-payment options as well as the EUR 300/325bn increase in autonomous factors since early 2012, which somewhat reflects an improvement in euro area activity and the associated growth in money supply (Figure 10). Furthermore, cutting the deposit rate to 0% in Jul-12 has greatly reduced usage of the deposit facility for carry trades (e.g. German banks lending to the ECB at 0.25%) as well as for precautionary reasons more in general (only about EUR 200bn have migrated to non-remunerated current accounts since the deposit rate cut).

Figure 10. Eurosystem liquidity data during the 3y LTRO period



Source: ECB, Citi Research

Figure 11. Estimates of regional LTRO repayments

ECB Repayment Analysis (EUR bn)								
Country	Dec-12			Jul/Aug-13			Repayment	
	MRO	LTRO	DF	MRO	LTRO	DF	EUR bn	%
Belgium	0	40	11	0	14	3	26	64%
France	5	174	74	2	91	26	83	48%
Germany	3	70	40	1	11	15	58	84%
Greece	17	2		61	2		0	23%
Ireland	8	63	2	8	36	2	27	43%
Italy	3	268	3	1	241	1	28	10%
Netherlands	148		158	77		96	71	48%
Portugal	4	49	4	6	45	0	4	8%
Spain	41	316	44	22	227	8	89	28%
Eurosystem	90	1036	262	97	693	71	342	33%
Core		*432*			*194*		*238*	*55%*
Non-core		*699*			*550*		*148*	*21%*
Total LTRO repayment (End August 2013)							317	

Source: ECB, Citi Research

Regional differences in LTRO prepayments

The top-down picture is one of a reduction in ECB's balance sheet from EUR 3trn in Mar-12 to a current level of 2.35trn[2] and of an overall reduced dependence of the banking sector on ECB liquidity. The regional picture tells a different story, though. The data compiled in Figure 11 shows the change in LTRO usage across EMU and compares current levels with levels before the first repayment option was exercised, as an estimate of regional repayments. According to our analysis, LTRO-usage has declined by 55% in core countries, while banks in periphery still use roughly EUR 550bn of ECB term-liquidity (i.e. they have repaid 21% so far).

Carry is carry…

Non-uniform usage of ECB liquidity does not constitute a problem per se and must not necessarily imply a fragmentation in wholesale funding conditions. It suggests that regional banking sectors – Italy and Spain imprimis – exploit the relatively profitable investment strategy of funding domestic carry trades via the ECB. Before the deposit rate was cut to 0%, German banks were creating liquidity via the repo market (at GC of 10-15bp) and lending up to EUR 275bn back to the ECB at 0.25%.

[1] For example "The other side of forward guidance" (20 September), https://ir.citi.com/0LEb6fNvkTGSmqlKBjPCXFDXY4ea98oNwyiAWOBdP%2BmbSqsqoQYhSg%3D%3D and "A new LTRO?" (12 September), https://ir.citi.com/X6HNN3eONH3DTKgo%2F1wGXobmy2sT%2B3dGZP%2F76Nk2ooUa1dTkuxaf6g%3D%3D

[2] http://www.ecb.europa.eu/press/pr/wfs/2013/html/fs130924.en.html

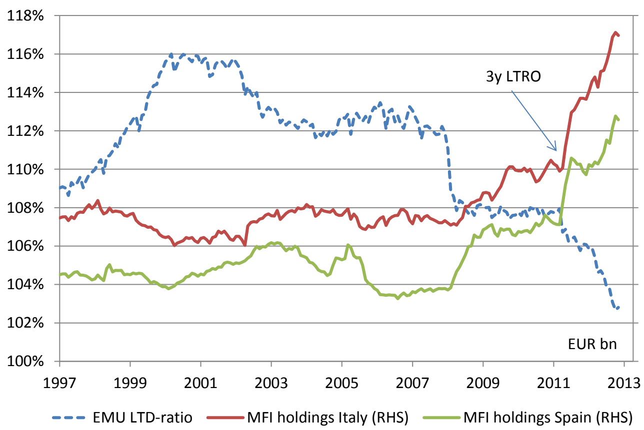
…but regional concentration matters

Our point is: There is little difference between lending to the ECB for carry or lending to the central government for carry. Nonetheless, a situation in which a new LTRO would meet exclusive demand from one member country might raise some questions and would likely create a renewed split within the governing council.

Everybody tapers, but in their own way

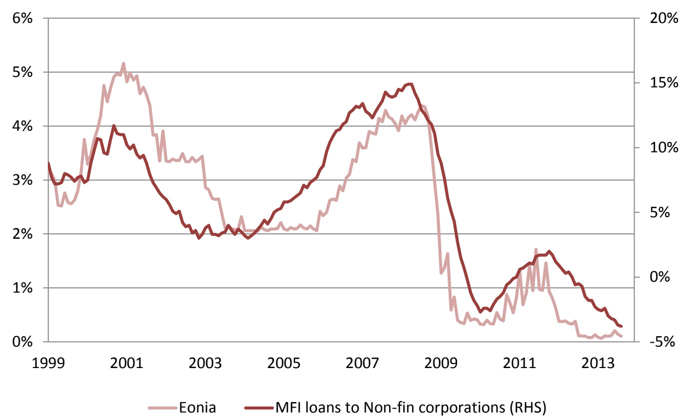
The decline in excess liquidity and the reduction in ECB's balance sheet differ from the reduction in FED's balance sheet that would result from a successful "tapering" operation. Not only is the composition of assets on ECB's and FED's balance sheet[3] reflective of different instruments and strategies chosen in time to achieve policy targets during the second phase of the crisis, but also there can be a significant time-lag between a collapse of Eurosystem excess liquidity below the 100bn threshold and the dynamics of banks' EGB holdings.

Figure 12. Banks' loans-to-deposit ratio and EGB holdings



Source: ECB, Citi Research

Figure 13. Severe contraction in lending



Source: ECB, Citi Research

Lending to the public sector is more profitable in periphery

Since the 1st 3y LTRO a process of asset substitution has characterized the balance sheet of euro area banks: From lending to the private, non-financial sector to lending to the public sector. This is especially true in Italy and Spain where banks have accumulated EUR 176bn and 135bn in EGBs, respectively (Figure 12), while growth rates of more traditional business like lending to NFCs have been anemic at best. Note how the ECB has responded by cheapening the price of liquidity (Figure 13). As far as euro zone's periphery is concerned, this process is unlikely to be "tapered" before the natural expiry of the two 3y tenders[4] and there are more than sound arguments for an extension of this process even after LTRO expiry:

Why a new LTRO?

- Smoothing of the LTRO "redemption profile": Eurozone banks have increased their EGB holdings by a total of EUR 373bn since the announcement of the 3y LTRO program. To be on the safe side of the risk distribution, we can assume that these bonds are primarily matched-to-maturity non-core EGBs. This means that they will mature in Q1 2015, thus creating both a sudden EGB demand deficit and net interest income shortfall.

- Absorbing net supply in EGB periphery: Investors will most likely face a non-negative net EGB supply from non-core issuers in 2014 and 2015. This may create additional supply pressure to the (assumed) stable rollover demand. Again

[3] http://www.europarl.europa.eu/document/activities/cont/201207/20120702ATT48168/20120702ATT48168EN.pdf

[4] 29 January 2015 and 26 February 2015.

this is particularly worrying in Italy and Spain, where the ECB has directly or indirectly[5] bought something like 61% of the gross supply in BTPs and Bonos since 2011.

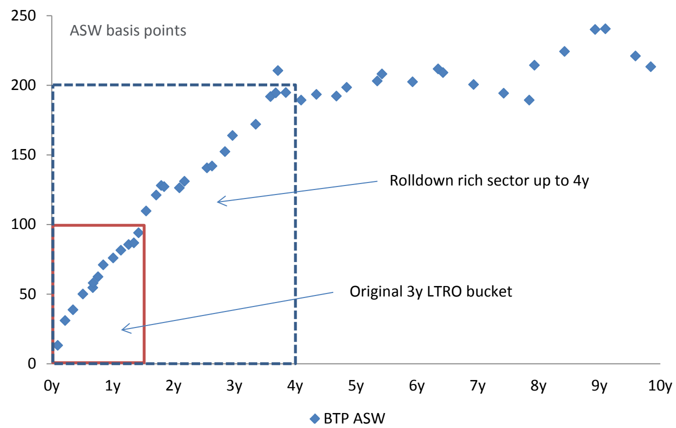
Figure 14. Supply and domestic demand in Italy and Spain (EUR bn)

BTP							
Year	Gross	Redemp	Coupon	NCR	Banks	ECB	Domestic
2011	146	88	47	58	5	99	104
2012	148	120	51	28	105		105
2013	153	117	54	36	67		67
Total	447	325	152	122			276
%domestic	62%						

Bono							
Year	Gross	Redemp	Coupon	NCR	Banks	ECB	Domestic
2011	97	45	22	75	35	44	79
2012	98	41	25	73	52		52
2013	117	60	27	90	58		58
Total	312	146	74	238			189
%domestic	61%						

Source: Citi Research

Figure 15. New LTRO? 4y maturity would make sense



Source: Citi Research

Timing of a new LTRO

Assuming a new LTRO makes some sense, when and in what format will it be announced? The timing aspect needs to consider sovereign funding requirements in 2014, the smoothing of 2015 LTRO redemptions, the potential jump in money market fixing should excess liquidity drop below EUR 100bn, as well as potential negative signals coming from the much awaited AQR[6]. One possibility would be announcing at the 5 December ECB meeting — perhaps coupled with a "low" HICP estimate for 2015 in the staff projections — with settlement in January.

Designing a new LTRO

Designing a new LTRO is an exercise in estimating demand for carry: The tender should be designed in such a way to be attractive also for core banks. The parameters that can be changed to boost the carry are: Maturity date (at least 18 months to smooth the Q1 2015 LTRO redemption), auction type (fixed rate in arrears or in advance), auction rate (main refinancing rate cut, 0.50% or 0.25%), eligible collateral and haircut on eligible collateral. Looking at the BTP ASW-space (Figure 15), we notice how the carry-rich region extends up to the 4y point, after which pure carry-related demand may not be as strong. With regards to a core curves, we think the auction rate parameter might be more important than the maturity date given where German 4y yields are (Jan-18 @0.55%).

Trade Recommendations

EGB spreads compression and renaissance of "low-for-longer" carry trades in case of new LTRO

The irony of this crisis is that the LTRO has become much more a long-term refinancing operation for sovereigns than for the banking sector. Should the ECB announce a new LTRO and should the terms be attractive relative to the outstanding 3y tenders, then it would be a very strong buy signal for all EGBs that trade at spread to Bunds, especially in case of an ex-ante fixed auction rate and especially for peripheral EGBs. As a side effect, we would also witness a bull-flattening of 2/5s back to low 30s (live 69bp) as well as a general renaissance of "low-for-longer" carry trades (e.g. Eonia 1y1y, EUR 3y1y, EUR 5/30s etc).

5 Directly via SMP and indirectly via LTROs.

6 Joerg Asmussen has mentioned that result will be available by "fall 2014".

UK Rates – Guidance, what is it good for?

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While strong demand for the long-end is an ongoing theme in the sterling market — as illustrated by this week's bumper IL68 syndication — the front-end still holds the key to the outlook for outright yields, curve shape and cross-market spreads. In this context, we review the outlook for the front-end over both the near- and medium-term, taking into account our economists' recent change in policy rate view.

Guidance vs economic uncertainties

Forward guidance hasn't helped to pin down when the first rate hike will be

The medium-term outlook for the front-end remains highly uncertain. Forward guidance has reinforced the message that rate hikes aren't imminent despite the rapid improvement in UK economic prospects. It has also helped to clarify the MPC's reaction function and the conditions required before a rate hike is even considered. But guidance hasn't helped to pin down when the first hike will be. The economic outlook is just too uncertain, especially with regard to productivity, spare capacity and just how quickly the unemployment rate will fall.

Productivity is the greatest uncertainty

As Carney and the MPC have warned several times, including in the latest MPC minutes, *"relatively small changes in assumptions regarding the future evolution of, for instance, productivity growth or labour market participation would have significant effects on when unemployment would be expected to reach the 7% threshold."*

Citi now expect the first rate hike in 2015 compared with 2017 previously

Indeed, our economists at Citi have significantly upgraded their UK growth forecasts and changed their view on productivity (see *UK Economics Weekly*, 20 September). While there remains great uncertainty, Citi now expects the first rate hike in 2015 compared with 2017 previously. Consequently, we have made some substantial changes to our yield forecasts this month in the back quarters.

Medium-term view – Gilts/USTs to de-couple from Bunds

We have raised our front-end yield forecasts for back quarters

A full set of our latest European rates forecasts can be found on page 8 and the latest global forecasts can be found in the just published *Global Economic Outlook and Strategy*. The table below shows the forecasts for gilt yields, curves and cross-market spreads. The greatest revision to our forecasts is, unsurprisingly, in the front-end. We now expect 2yr gilt yields to reach 1% by 1Q15 compared with our previous forecast of 0.4%. We still expect 2s10s to bear steepen in the near quarters but then give way to bear flattening in late-2014.

Gilts likely to underperform Bunds significantly, but closely match Treasuries

The rate outlook for the UK looks increasingly more aligned with that of the US rather than the euro area. We no longer expect gilts to outperform Treasuries by much over the medium-term. Rather, we expect the 10yr gilt-Treasury spread to remain positive, but close to flat over the coming quarters. In contrast, we anticipate significant underperformance of gilts vs Bunds with the 10yr spread forecast to eventually widen towards 140bp (currently 100bp).

Figure 16. Gilt yield, curve and cross-market forecasts

UK	Current	4Q 13	1Q 14	2Q 14	3Q 14	4Q 14	1Q 15
2yr	0.45	0.45	0.50	0.55	0.65	0.80	1.00
5yr	1.63	1.55	1.65	1.80	1.90	2.10	2.35
10yr	2.87	2.80	2.85	3.05	3.15	3.25	3.40
30yr	3.66	3.60	3.65	3.75	3.85	3.90	3.95
2s10s	242	235	235	250	250	245	240
10s30s	79	80	80	70	70	65	55
10yr gilt-Bund	98	100	105	125	135	135	140
10yr gilt-Treasury	18	10	7	7	0	0	0

Source: Citi Research

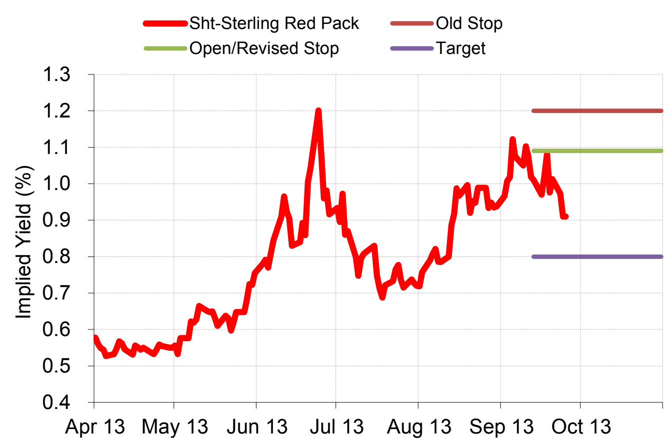
Near-term view – scope for a modest front-end rally

The correction already underway in the front-end may have further to run

While the change in the Citi policy rate view inevitably changes our back quarter forecasts for yields and curve shape (as the turn in the rate cycle approaches), it has less impact on our near-term tactical views. This was discussed in a recent note, *Reexamining the GBP front-end* of 23 September. In the note, we argued that longs in the very front-end of the curve should be kept. Specifically, we suggested maintaining a long position in Short-sterling futures contracts (Sep14-Jun15) targeting a move down to an average level of 0.80% (vs 0.92% currently, see *Tradesheet*). However, the change in policy rate view prompted us to tighten the stop to the opening level of 1.09% and today we are tightening it further to 1%. Reasons we still like front-end longs on a tactical basis include:

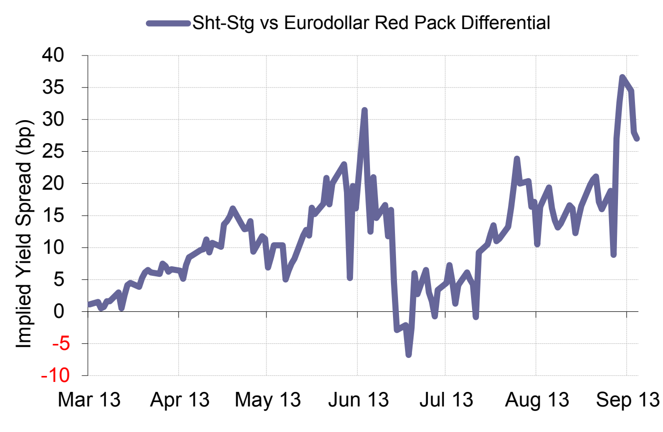
- Positioning in the front-end is now much more balanced, possibly slightly short
- The UK front-end already reflects the economic uncertainties discussed above and the possibility that the jobless rate falls quickly
- The MPC are likely to increasingly stress that 7% is a threshold, not a trigger, as the jobless rate falls. This was referred to in the latest MPC minutes.
- The UK front-end looks very cheap relative to the US front-end (Figure 18)
- The Fed's latest communication may prevent global front-end yields from rising much further. The Fed expects policy rates to rise only very slowly and expressed concern over the recent tightening of financial conditions. Both have parallels with the UK outlook. The eventual tightening cycle in the UK is likely to be very shallow. The MPC are also likely to react if there is a sharp rise in yields that threatens the sustainability of the recovery.

Figure 17. Correction underway in Short-sterling



Source: Citi Research, Bloomberg.

Figure 18. Short-sterling has cheapened sharply vs Eurodollars



Source: Citi Research, Bloomberg.

Strategy summary – near- vs medium-term outlook

A moderately bearish outlook for gilts

Our latest medium-term forecast revisions paint a bearish outlook for gilts. We expect long-end yields to drift higher over the coming quarters with the front-end following from mid-2014. On a cross-market basis, our forecasts suggest gilts will underperform Bunds significantly but track Treasuries closely.

Stay long the very front-end

On a more tactical basis, we are maintaining our long recommendation in the very front-end (Short-sterling red-pack) for now.

EUR Derivatives: Options for a steeper 2s10s

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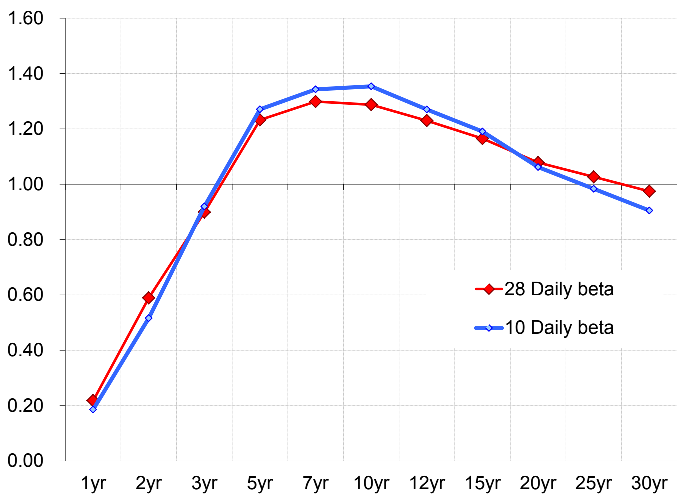
We believe the current level of EUR 2s10s forwards are too flat relative to spot. We outline our reasons below and recommend a long position on a 2yr single look EUR CMS 2s10s ATMF cap or buying EUR 2s10s ATMF conditional bear-steepeners with a 2yr expiry.

Curve Betas & Outlook

Betas: The current profile of curve betas[7] shows that the 7-10yr point exhibits the highest beta on the euro curve. Thus, 7-10yrs outperform surrounding points in rallies and underperform in sell-offs. As shown in Figure 20, EUR 2s10s have largely been directional over the past year (a result of ECB policy rates expected to remain low for an extended period).

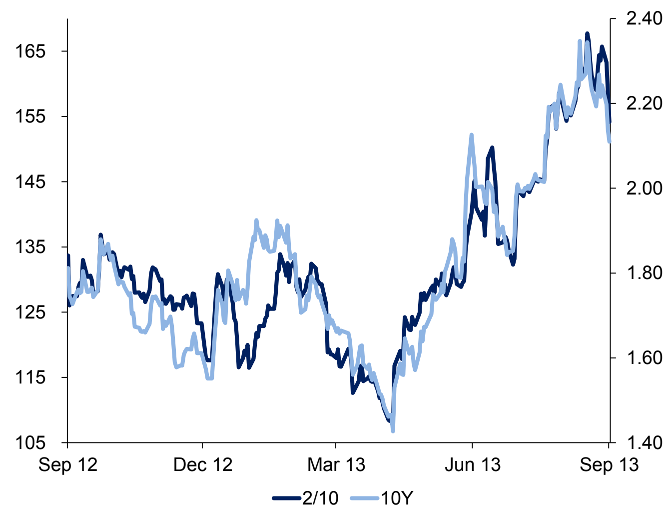
Outlook: Our economics team expects the ECB to keep policy rates on hold until 4Q16 and believes that the ECB will probably offer another LTRO by year-end (partly as a tool to reinforce the "extended period" commitment on policy rates and partly a tool to help support periphery banks).

Figure 19. EUR Curve Beta (using 10 & 28 daily changes)



Source: Citi Research

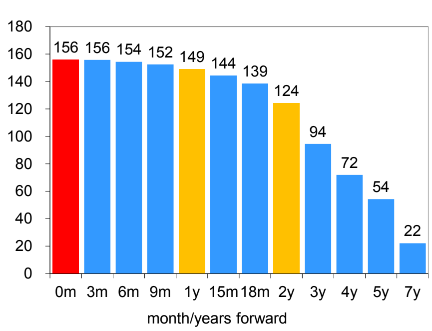
Figure 20. EUR 2s10s continue to be directional



Source: Citi Research

CMS over conditional curve trades

Figure 21. EUR 2s10s spot and forward levels



Source: Citi Research

Reasons for a steeper EUR 2s10s forward: Based on our expectation of another LTRO in the coming quarters, we think there is a good chance that the curve will bull steepen upon the announcement. In the event that an LTRO is not announced, we still expect policy rates to remain on hold until 4Q16 and expect the forward 2s10s curve to roll up to spot as both 2yr and 10yr bund yields remain fairly stable to 2Q15 (the last quarter in our forecasting period). We therefore view the current level of EUR 2s10s forwards as too low and recommend fading this move. Our preferred strategy is to use CMS single look options or conditional bear steepeners (we highlight our reasons below).

Why we are nervous about conditional bull steepeners? As shown in Figure 22, if we compare historical observations for EUR 2s10s and the current level of break-evens on a EUR 2yr ATMF 2s10s conditional bull steepener, we can see that a large proportion of historical observations fall in an area where the trade loses money. Further, the risk of the curve bull-flattening (as evidenced by 10s having a

[7] i.e. the sensitivity of each point on the euro curve to changes in yields

higher beta than 2s) cannot be ruled out. The sizeable loss potential if the curve bull-flattens makes us nervous about putting on conditional bull steepeners.

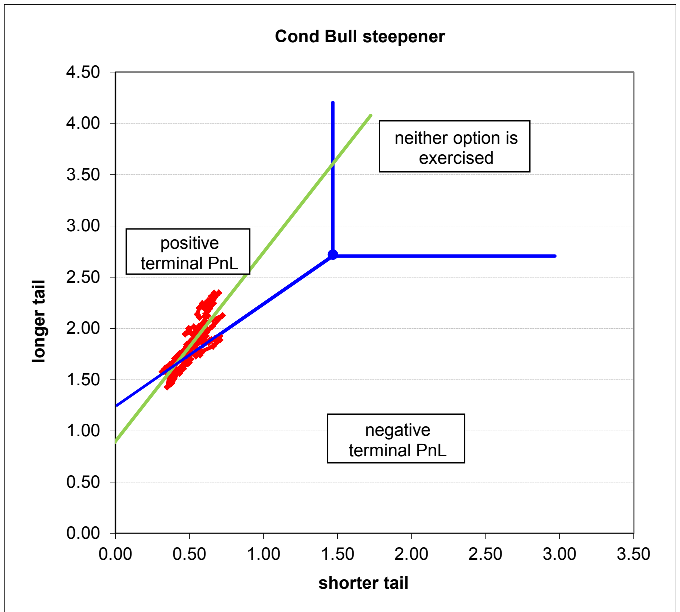
Trade:
We see good value in EUR 2s10s ATMF conditional bear steepeners with a 2yr expiry

Conditional bear steepeners look attractive: Optically, putting on conditional bear-steepeners looks attractive given that historical observations have been outside the area where the trade would lose money.

A risk to this trade would be if the curve bear flattens. This could be a result of excess liquidity in the Euro Area moves sharply below €200bn and market expectations of another LTRO diminishing. In turn, this is likely to result in the front-end of the curve temporarily spike higher (exasperated by positioning in the front end of the curve, which is currently biased towards longs, in our view).

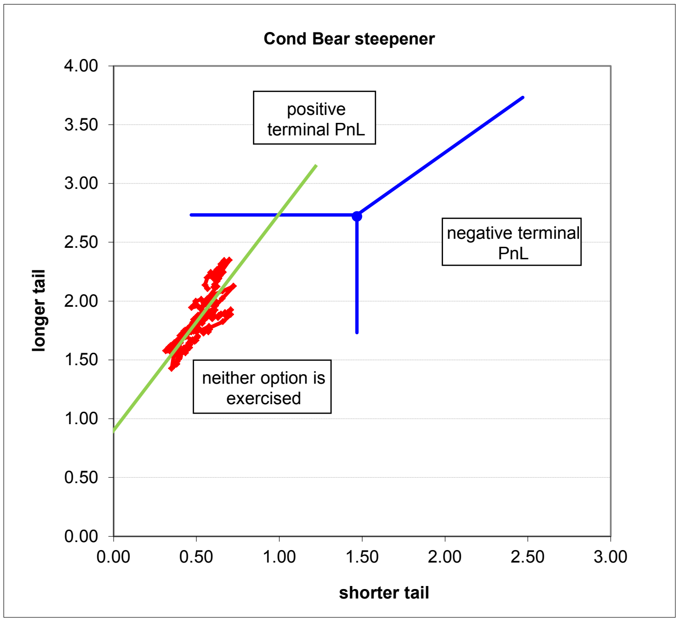
Although this risk remains a possibility, the current level of 2yr forwards for EUR 2s10s is considerably flatter than spot (~32bp, Figure 21). We therefore feel the cushion provided by this trade is sufficient.

Figure 22. EUR 2y 2s10s conditional bull-steepener: terminal PnL for Forward DV01 neutral trade construction



Source: Citi Research

Figure 23. EUR 2y 2s10s conditional bear-steepener: terminal PnL for Forward DV01 neutral trade construction



Source: Citi Research

Trading strategy & indicative pricing

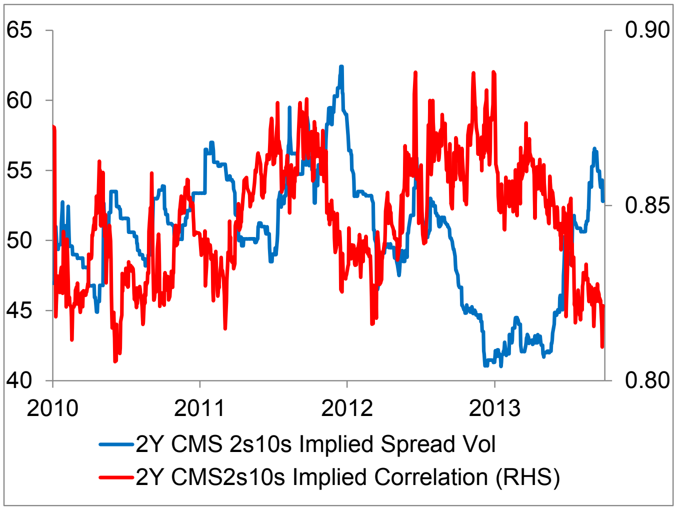
Trade:
We recommend a long position on a 2yr single look EUR CMS 2s10s ATMF cap

Spread options: Alternatively, investors can express a steepening view via spread options. The edge from such position is that the trade performs both in a bull steepening and bear steepening scenario.

Figure 6 plots the evolution of 2y CMS10s30s implied spread volatility and implied correlation: rather unsurprisingly, an anchored front-end has pushed down implied correlation thereby increasing implied spread volatility. At the same time, the late correction in realized and implied vol has helped decrease the convexity adjustment close to the one-year historical minimum (Figure 25).

While 2s10s is currently hovering around 1.54%, at present a long position on the 2Y single look ATMF CMS 2s10s Cap has an indicative cost of 29 cents, which in turn corresponds to a terminal break-even rate of 1.58%.

Figure 24. An anchored front-end and the demand/supply imbalance has pushed down implied correlation …



Source: Citi Research

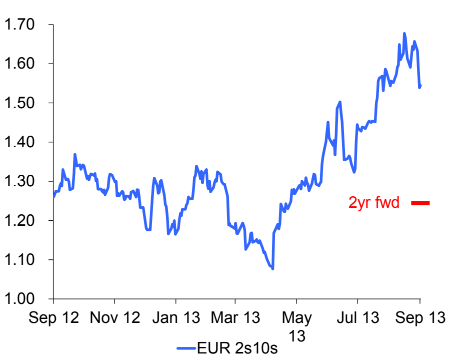
Figure 25. … whereas the late correction in realized vol has cheapened the 2Y CMS2s10s Convexity Adjustment

Source: Citi Research

Attractive roll down: As shown in Figure 27, the evolution of the total roll-down of the position implies that it is optimal to initially assume one year investment horizon over which the investors should expect a roll-down PnL around 20% of the upfront paid premium.

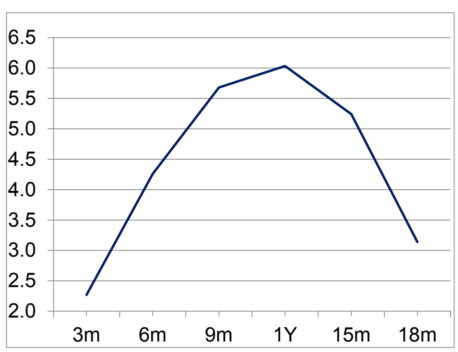
Last, Figure 28 plots the current skew on the 2Y CMS 10s30s implied volatility point. The downward slope owes to the legacy position of dealers who as a result of swapping transactions of leveraged steepeners have been left with short positions on 2s10s floors struck at zero. Hence, an aggressive investor may wish to consider selling expensive 2s10s floors to help financing the long position on the 2s10s cap.

Figure 26. EUR 2s10s spot and 2yr fwd (%)



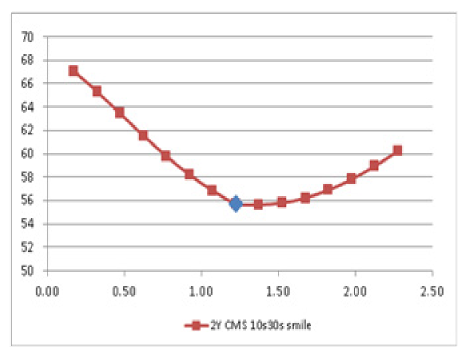
Source: Citi Research

Figure 27. Rolldown in cents of the2yr long SL CMS 2s10s ATMF cap: it is positive and increasing up to one year-horizon



Source: Citi Research

Figure 28. 2Y SL CMS 2s10s smile



Source: Citi Research

Summary of trade recommendations

- Buy a 2yr single look EUR CMS 2s10s ATMF cap

Or

- Consider a EUR 2s10s ATMF conditional bear-steepener with a 2yr expiry

Ireland – the road back to Investment Grade?

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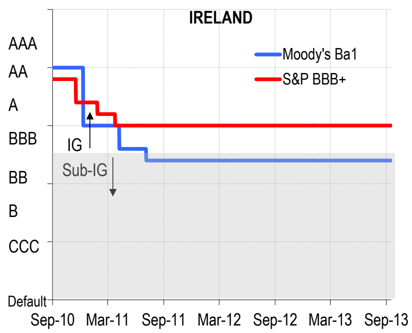
In this quick note, we detail the latest drivers behind Moody's decision to revise its Ba1 rating outlook on Ireland from "negative" to "stable". This reflects recent progress in its Troika programme commitments and evidence of market access. Immediate implications are probably limited, but this could be a stepping stone for Ireland ultimately to regain Investment Grade status. This would provide a further boost to demand and benefit the bond market more broadly in our view.

Figure 29. Ireland's Rating History



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

Moody's revises its Outlook on Ireland to "Stable"

In their rating action of 20th September, Moody's revised its Ba1 rating Outlook of Ireland from "Negative" to "Stable". The drivers behind the Outlook changes were largely a function of:[8]

- Progress in restoring solvency to its public finances
- Diminished susceptibility to renewed loss of financial market access and Ireland's improved liquidity position

The first driver relates to Ireland's debt metrics. Specifically, Moody's expects "*the government to re-establish debt-stabilising primary surpluses in 2014 and for those surpluses to expand subsequently, resulting in declines in the government's headline debt-to-GDP ratios as well as improving the affordability of its debt*". In its subsequent Credit Opinion[9], Moody's details that in 2014, it expects real GDP growth of 2.3%, a general government primary balance of 0.5% and general government debt to GDP of 119.5%. In terms of growth, Ireland's open economy should also benefit from the rebound in economic activity in trading partners such as the UK, the euro area and the US.

The second driver pertains to funding and market access. We had noted that Ireland's successful bond issuance earlier this year was likely to be seen favourably by Moody's (*European Rates Weekly – Improving prospects for Ireland, 23rd May 2013*). Note that Ireland has issued €7.5bn so far this year (a 5yr syndication of €2.5bn in January and a new 10yr of €5bn in March). Such issuance was met with good demand when looking at metrics such as the size of the order books and the interest from international investors. For Moody's this is a "positive sign". Furthermore, Moody's views improved "market perceptions" as another positive, and that such issuance progress "*implies greater insulation from further shocks to investor confidence arising from events elsewhere in the euro area*".

Bond market implications

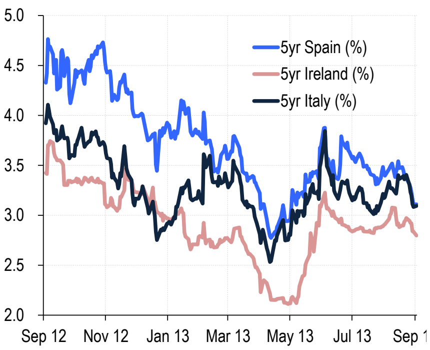
In itself, a return to a "Stable" outlook should have limited near-term implications. It reflects much of what the market knows already. Note S&P, placed its BBB+ rating of Ireland on "Positive Outlook" back in mid-July.

In our assessment, recent data on Ireland have been mixed. The economy exited recession in Q2, but the gain (0.4% QoQ) was disappointing (our economists expected 1%). House prices and the PMIs have showed gains, but industrial production slipped back in July after a strong Q2. Our economists expect public debt to GDP to peak this year or next and then decline slowly, albeit uncertainties remain around this projection (*Global Economic Outlook and Strategy*).

[8] Moody's Investor Services: "*Rating Action: Moody's changes outlook on Ireland's Ba1 rating to stable from negative*" 20th September.

[9] Moody's Investor Services: "*Credit Opinion: Ireland, Government of*" 20th September

Figure 30. 5yr Ireland, Italy and Spain (%)



Source: Citi Research

Although this action by Moody's is likely to have limited impact for now, the greater significance probably lies further ahead. At Ba1, Ireland remains sub-Investment Grade and hence ineligible for various benchmark indices (although, since Ireland is rated IG by S&P, it remains in Citi's EGBI). A rating change from a "stable outlook" is statistically not very likely. However, it does remove the prospect of further downgrade pressure and is perhaps a stepping stone for a "positive" outlook over the medium term. Ultimately, a rating upgrade to Baa3 or above would restore Ireland's IG stats by both Moody's and S&P and hence restore certain investment opportunities. This would help galvanise demand to the benefit of its bond market more broadly.

What could make the rating go up/down?

This begs the question: what could now drive a rating change. Here, Moody's criteria are clear:

- ***Upward pressure*** *would develop on Ireland's government ratings and/or rating outlook if the government continued to comply with its fiscal consolidation targets, and growth were to resume at a pace that, together with consistent primary government budget surpluses, would be sufficient to firmly position the government debt metrics on a downward path and ensure debt sustainability over the medium to long term.*

- ***Downward pressure*** *would develop on Ireland's government rating and/or rating outlook if the country's fiscal consolidation process were to falter to the extent that Moody's projected that government net debt metrics will increase significantly above their current level of roughly 100% of GDP. Additional drivers of downward credit pressure would be an increased risk of contagion to stress elsewhere in the euro area, or an increase in losses in the banking system that were expected to be transferred to the government's balance sheet.*

Conclusion – medium-term implications are positive

The improvement in Ireland's fundamentals and Moody's decision to remove its "Negative Outlook" on its Ba1 rating is welcome. We believe that further rating actions are skewed "upwards" rather than "downwards" and as detailed in *Global Economic Outlook and Strategy*, we continue to look for Moody's to upgrade Ireland's rating by one-notch over the coming quarters. This would restore its Investment Grade rating and prove a positive boost to bond market demand.

Technical update: potential reversal signals

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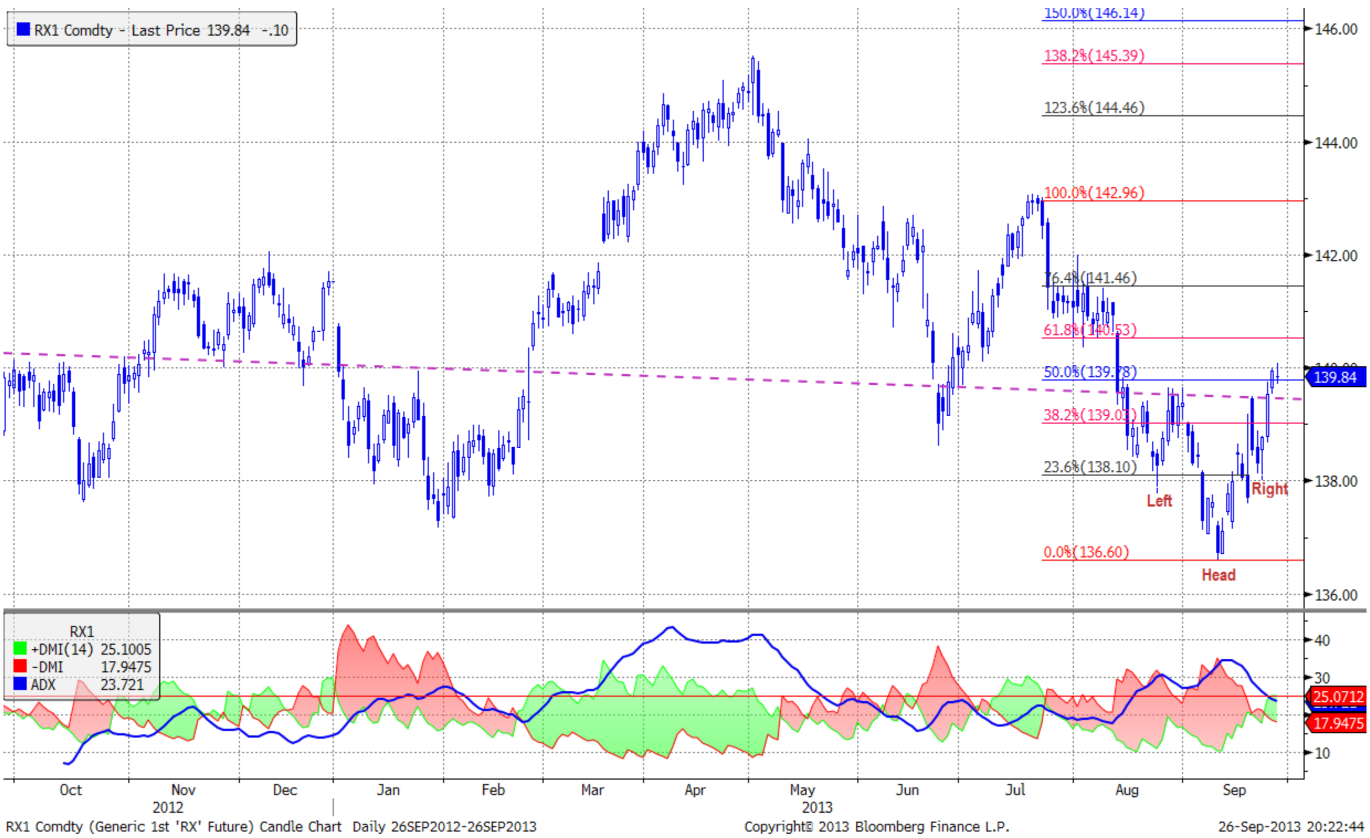
Bunds

Figure 31 shows a daily candlestick chart of continuous 10yr Bund futures. A white candle indicates that the closing level is above the opening level, and a blue candle indicates that the closing level is below the opening level. Wicks (or shadows) on both ends indicate intraday range.

Bunds have formed the reversal pattern of inverse Head and Shoulders. The neckline was broken on 24 September and +DMI registered a positive crossover above –DMI the same day. This indicates potential signs of reversal in the bear market of the last 2 months. The inverse Head and Shoulders can potentially drive Bunds up to 142.3, however we would keep an eye on developments in technical indicators to revise the target.

Figure 31. 10yr continuous Bund futures with Fibonacci levels and 14 day ADX (Inverse H&S neckline indicated by the dotted purple line)



Source: Bloomberg

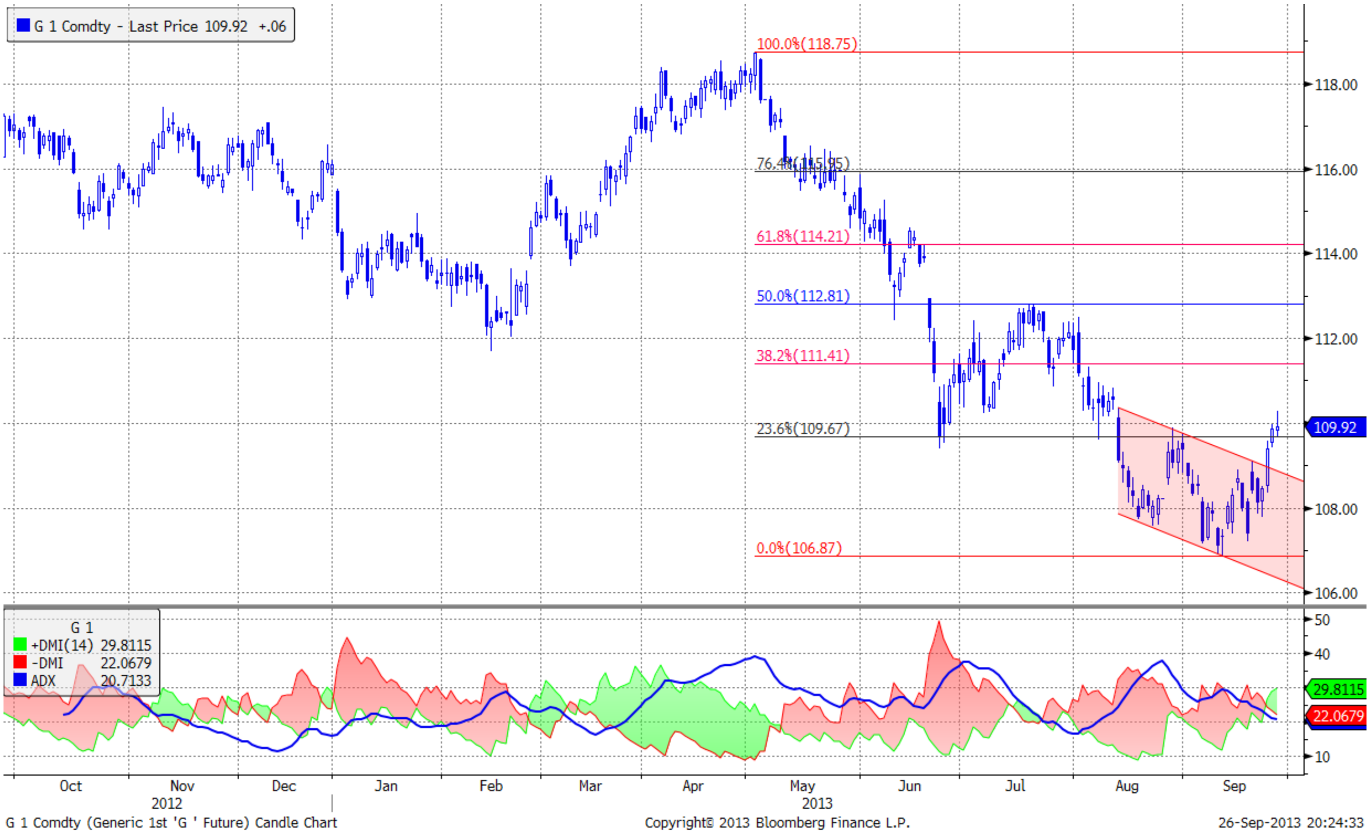
This hypothesis will be invalidated if the pattern is not followed and Bunds fall below the 139 level, which is also the 38.2% Fibonacci retracement and is a support. In that case, the next support will be in the 138.1 region, which is the 23.6% Fibonacci retracement of the July–September sell-off.

Resistance level: The first resistance is in the 140.6 region, which is the initial target of the inverse Head and Shoulders pattern and is the 61.8% retracement level. The next resistance is around 141.5, which is the 76.4% retracement level and has acted as a resistance in the past.

Gilts

Following the significant rally over the last 4 trading sessions, gilts have broken upwards from their downward channel (Figure 32). The +DMI has also crossed over –DMI breaking the resistance at 109.67 in the process. This is confirmed on a weekly chart, where there are early indications of a Bollinger Bounce. This might be the end of the bear market for the near-term.

Figure 32. 10yr continuous gilt futures with Fibonacci levels and 14 day ADX



Source: Bloomberg

Resistance: The first resistance level is given by the weekly chart around 110.5. The next Fibonacci level is 111.4, but that is not a major resistance. The next major resistance is seen in the 112.7 region, which is also the 50% retracement level of the May – August sell-off.

Support: There is a strong weekly support at 107.9. If this level is broken, the next support is in the 107 region, which is the lowest closing level of the year.

This hypothesis will be invalidated if a sell-off brings gilts back in the downward channel.

Euro SSA Strategy

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The return of supply and market conviction

As with credit markets more broadly, the SSA sector is benefiting from improved conviction following the surprise decision by the Fed not to taper its QE programme in September. We remain broadly constructive on spread markets in the current environment. The recovery in sentiment has helped galvanise activity in the primary market, which typically picks up in September in any case. This week alone saw benchmark issuance from EIB (€3bn) and FADE (€2bn) and we continue to recommend seeking out such liquidity and new issue premia in the primary market as an effective yield enhancing strategy.

EIB issues in the 20yr sector

The resilience of SSA markets in the face of supply continues to point to a strong technical backdrop. Spreads are a little softer, but have not widened dramatically (Figure 34). EIB provides a case in point with its recent successful €3bn 20yr issue. This longer-dated bond came with a 3% coupon and proved attractive for insurance companies (which took 48% of the issue). It is also EIB's fourth placement in its EARN programme (Euro Area Reference Notes) this year and follows other benchmark issues in the 5yr, 7yr and 10yr sector (Figure 33).

Figure 33. EIB EARN issuance in 2013

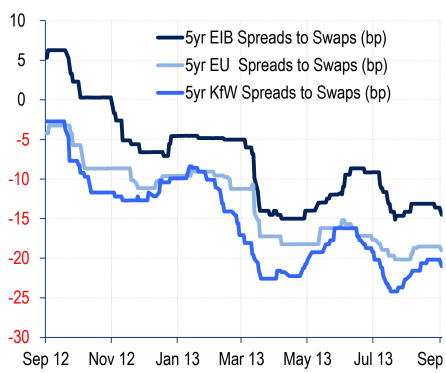
Issued	Bond	Maturity	MS issue level (bp)	Volume (€bn)
17-Jan-13	EIB 1% Jul18s	5yr	-1	5
06-Mar-13	EIB 1.5% Jul20s	7yr	16	4
04-Jun-13	EIB 2% Apr23s	10yr	25	3
24-Sep-13	EIB 3% Oct33s	20yr	34	3

Source: Citi Research, EIB

Supranationals making good issuance progress

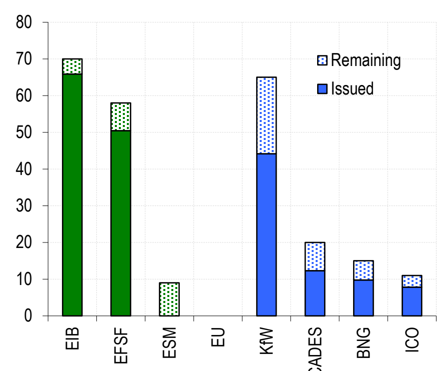
Supranationals continue to make an important contribution to the overall supply structure of the European SSA market. This latest batch of EIB issuance has put total gross supply by EIB at around €66bn. With total funding for the year at €70bn, EIB has now issued around 94% of its expected 2013 supply. The EFSF has issued €44bn YTD out of a total 2013 funding programme of €58bn (87%). The next major event in this space will be the inaugural issuance by the ESM, which we expect sometime in October. The ESM has indicated a preliminary funding need of €9bn for 2013 (*Euro SSA Strategy - ESM Bond Supply Is Nearly Here*). Going forward, we expect issuance from the agency sector to pick up in order to fulfill 2013 supply programmes.

Figure 34. 5yr SSA spreads to swaps (bp)



Source: Citi Research

Figure 35. Key Supra and Agency 2013 issuance progress data (€bn)



Source: Citi Research

Conclusion – market to remain buoyant

The return of supply following the summer lull should continue to spur interest in the European SSA market. We see little evidence that spreads should materially underperform as a result of the pick-up in issuance. On the contrary, appetite for high-quality paper looks set to remain firm, especially when new issue premia highlights the spread pick-ups that are achievable relative to government bonds.

Covered Bond Strategy

Moody's reacts on upcoming bail-in procedures

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Moody's plans to modify its covered bond rating methodology and has asked for comments. The proposal introduces flexibility at the anchor point for covered bond ratings and, as a consequence, should lead to upgrades by up to two notches for several covered bonds.

Moody's adjusts its methods to the new reality

In our recent publications, we have detailed at several times the changes regarding bail-in procedures at the European level and how they are likely to affect covered bond rating methodologies, especially that of Moody's. S&P mentioned that they still see too much leeway for the national regulators to react on bailing out senior bondholders and hence do not expect rating pressure on senior ratings. This would eventually mean that covered bond ratings would not come under pressure. Fitch on the other side doesn't link the covered bond rating to the senior rating but to the issuer default rating (IDR) and therefore doesn't see need for method changes. We think that at current stages IDR and senior ratings are still too often the same. But this can change in the future. Moody's however links the covered bond ratings to the senior unsecured rating. That's why we argued several months ago that amendments need to be necessary. Last week, Moody's published a request for comments for the approach to determine the issuer anchor point for covered bonds. For the next months comments can be sent to the rating agency, thereafter the potential changes should be implemented.

Two options for the anchor point for covered bond ratings

Moody's plans to make one main amendment.[10] The covered bond anchor point before collateral which is taken into account — so far the it's the senior unsecured rating (SUR) — will be modified in the sense that the higher of a) the adjusted BCA[11] plus up to two notches or b) the senior unsecured rating plus up to one notch (with certain exceptions) should be the new starting point. From this point, the traditional uplift that is mostly determined by the Timely Payment Indicator (TPI) which among others relies on the cover pool quality continues to apply. With this, the potential benefits from the new regulatory scheme are brought into the method. However, the choice of the new anchor point will depend on the amount of bail-in-able debt. Furthermore, Moody's plans to take into consideration the state support for issuers when choosing the new anchor point. Obviously, the new method should first be implemented for European (and Norwegian) issuers before it will be spanned to other countries if same regulatory measures applied there. The twofold nature of the newly proposed method should also take into account that the implementation process of the resolution regime will take several years while Moody's wants to concretise its method.

The configuration

No changes to the TPI

To get more into detail, the most important development would be that covered bond anchor point can now be higher than SUR. Moody's will maintain a link between covered bond ratings and SUR but will also include a linkage to the adjusted BCA and a degree of potential uplift over both reference points. Hence, the new anchor point is the higher of a) the adjusted BCA plus an uplift of up to two notches and b) the SUR plus an uplift of up to one notch. Up to now SUR had two impacts on the covered bond rating:

[10] All sources Moody's if not stated otherwise

[11] The BCA (Baseline Credit Assessment) reflects Moody's opinion of a bank's intrinsic, or standalone, financial strength relative to all other rated banks globally. The *adjusted BCA* incorporates support from a parent (operating company or family group).

- The probability of the issuer failing to make payments to covered bondholders, and therefore covered bondholders having to rely on support from sources other than the issuer under Moody's expected loss analysis (Moody's EL Model).
- The anchor rating that determines, in conjunction with the assigned Timely Payment Indicator (TPI), the maximum achievable covered bond rating.

Baseline Credit Assessment comes into play

Now, under the new proposal, some subjects are considered to decide if SUR+[0,1] or adjusted BCA+[0,2] is higher and hence builds the new anchor point. In the end the ratio of senior and subordinated debt relative to total liabilities determines the uplift over the adjusted BCA or SUR. This ratio determines the amount of loss-absorbing liabilities whereas equity buffers are excluded. Practically, Moody's will take the following decision pattern:

- If (Unsecured senior and subordinated debt)/Total liabilities < 5% then BCA+0; this means the anchor point is the higher of BCA+0 and SUR+0
- If (Unsecured senior and subordinated debt)/Total liabilities between 5-10% then BCA+1; this means the anchor point is the higher of BCA+1 and SUR+1
- If (Unsecured senior and subordinated debt)/Total liabilities > 10% then BCA+2; this means the anchor point is the higher of BCA+2 and SUR+1

An evolving method for an evolving regulation

Moody's however still sees some further qualitative measure it has to consider when locating the anchor point:

- The danger of disorderly default and bankruptcy cannot be ruled out, even under the new resolution framework. Hence a complete de-linkage from covered bond ratings and the issuers' credit strength would not be appropriate
- Apart from the fact above SUR should still play a role as it might be higher than BCA+[0,2] as Moody's continues to believe governmental support will be given for senior bondholders of certain banks. This support can outweigh the additional uplift for covered bonds under the new resolution regime (one notch if the ratio exceeds 5%).
- The uncertainty on the resolution implementation over the next five years has to lead to a qualitative adjustment on the linkage between issuer and covered bond ratings.
- The adjusted BCA is the best measure of the probability of a resolution event occurring in relation to the issuer. The potential uplift for covered bonds should give credit of the possibility of going concern of the covered bond program.
- The treatment and the amount of uninsured deposits is a further uncertainty Moody's has to include into its considerations to see the amount of bail-in-able debt.

The amount of bail-in-able debt will be the main factor for the anchor rating

At current stages, the bail-in absorption capacity (i.e. the ratio mentioned above) is 16% on average for European banks, according to Moody's. Hence, Moody's expects that most of the European covered bond issuers would have uplift over adjusted BCA+2. This sounds positive but has some caveats. Some covered bonds will still not be able to come over certain ceilings. This is obviously Aaa but also the country ceilings which potentially limit the covered bond ratings of Irish, Italian, Portuguese and Spanish issuers that are rated in line with the country ceilings. However, most of the other banks might see their covered bond ratings being uplifted. In certain cases, according to Moody's, uplift might be even higher when higher excess OC is provided by the issuer.

Conclusion

The amendments are welcomed

We welcome the new approach in general. Moody's is trying to adjust cautiously to the new regulatory framework. We think that this cautiousness is necessary as there are still too many obscurities on a supranational level and a high potential of a less harmonized dealing of banks by the national regulators. At the current stage, we think Moody's could also think about granting even higher uplift (adjusted BCA+3) given the "high" share of bail-in absorption capacity. We suspect that this might even happen in the longer term. As Moody's mentions the bail-in-ability of uninsured depositors can increase the bail-in absorption capacity significantly. Hence, following its logic, an even higher ratio might lead to a further uplift for covered bond ratings. However, for this, Moody's needs more legal clarity on this matter. The ambiguous consequence however would be that covered bonds of deposit-taking entities might see a relatively higher uplift.

More clarity on the resolution regime can support covered bond ratings further

A further support which might come into play in the future when regulatory uncertainties decrease is governmental support. As mentioned in ECOFIN, there should be the possibility of governmental support after at least 8% of the bank's liabilities have been bailed in. Although this shouldn't affect adjusted BCA, it might positively affect SUR and hence provide higher ratings for covered bonds as well. It would also imply that irrespective of SUR or BCA, the higher the amount of senior unsecured debt and subordinated debt in relation to total liabilities, the higher the covered bond ratings might be. For this, however, issuers would have to provide more transparency on their funding composition.

Covered bonds of latest downgraded Italian banks should profit

For most of the covered bonds where the issuer has been downgraded recently by Moody's (especially Tier 2 Italian banks), the newly proposed amendments mean that there's no direct rating pressure as Moody's mentioned that it was going to step back from covered bond rating actions when a potential uplift is possible. Only in the case of Banca Carige, where BCA and SUR were downgraded, a downgrade of covered bonds would seem to be probable.

EMU Relative value trades

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

Netherlands: fade the richness of Jul18s

Sell Jul18s vs surrounding issues

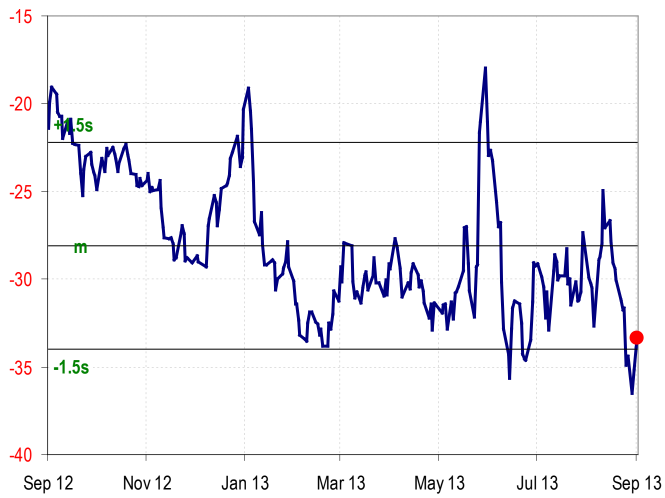
- Sell 4% Jul18 vs 2.5% Jan17 and 3.25% Jul21 (3m carry: -1.8bp) - Figure 36

Spain: 8s10s flattener

Switch into Jan23s

- Switch from 5.5% Apr21 to 5.4% Jan23 for 41bp (3m carry: -2.1bp) - Figure 37

Figure 36. Netherlands: 2.5% Jan17, 4% Jul18, 3.25% Jul21 microfly (bp)



Source: Citi Research

Figure 37. Spain: 5.4% Jan23 – 5.5% Apr21 yield spread (bp)

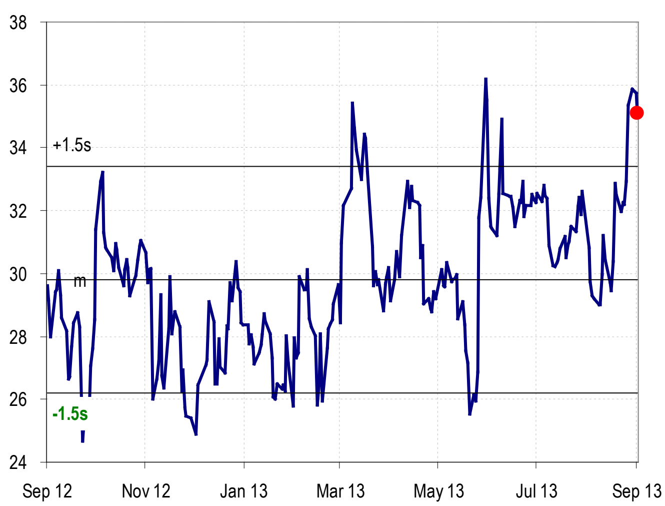
Source: Citi Research

Italy: take advantage of cheapness of Aug17s

Buy Aug17s vs surrounding issues

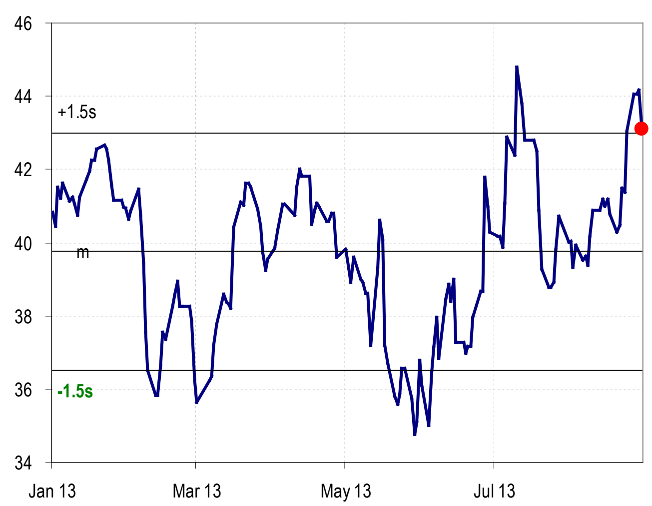
- Buy 5.25% Aug17 vs 4.75% Sep16 and 3.5% Nov17 (3m carry: -1.7bp) - Figure 38
- Buy 5.25% Aug17 vs 4.75% Sep16 and 4.5% Feb18 (3m carry: -0.7bp) - Figure 39

Figure 38. Italy: 4.75% Sep16, 5.25% Aug17, 3.5% Nov17 microfly (bp)



Source: Citi Research

Figure 39. Italy: 4.75% Sep16, 5.25% Aug17, 4.5% Feb18 microfly (bp)



Source: Citi Research

Relative value tables

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

For example, Figure 40 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 40. Yield Spread and CAS to Fitted Relative Value Curve (6m History)

GERMANY

Versus Govt Curve (CAS)

	Rank		ZScore	Issued	Size (€bn)
Richest	1	4.00 Jan18	-3.15	Nov07	20
	2	4.25 Jul18 (OE)	-3.12	May08	21
	3	0.50 Oct17	-3.03	Sep12	16
	4	4.25 Jul17	-2.58	May07	19
	5	3.75 Jan17	-2.52	Nov06	20
	5	1.00 Oct18 (5y)	0.99	Sep13	5
	4	1.75 Oct15	1.16	Sep10	16
	3	2.50 Jan21	1.52	Nov10	19
	2	2.50 Jul44 (30y)	1.55	Apr12	14
Cheapest	1	2.00 Aug23 (10y)	2.15	Aug13	5

Versus Swap Curve (CAS)

	Rank		ZScore	Issued	Size (€bn)
Richest	1	2.00 Aug23 (10y)	-1.20	Aug13	5
	2	2.25 Sep21	-1.10	Aug11	16
	3	1.75 Jul22 (RX)	-1.08	Apr12	24
	4	1.50 Sep22	-1.06	Sep12	18
	5	3.25 Jul21	-1.06	Apr11	19
	5	2.00 Feb16	1.16	Jan11	16
	4	4.75 Jul40	1.18	Jul08	16
	3	4.25 Jul39 (UB)	1.21	Jan07	14
	2	4.00 Jan37	1.24	Jan05	23
Cheapest	1	1.75 Oct15	1.42	Sep10	16

Source: Citi Research

Figure 41 (overleaf) looks at bonds of all maturities. For investors with maturity restrictions we have also provided another set of summary tables (Figure 42 and Figure 44) which looks at bonds shorter than 12 years and longer than 8 years, and uses the same criteria as Figure 41 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 41. Coupon Adjusted Spread to Fitted Curve and Swap Curve by Country (6m History); All bonds on each curve

GERMANY

	Versus Govt Curve (CAS) Rank		ZScore	Issued	Size (€bn)		Versus Swap Curve (CAS) Rank		ZScore	Issued	Size (€bn)
Richest	1	4.00 Jan18	-3.15	Nov07	20	Richest	1	2.00 Aug23 (10y)	-1.20	Aug13	5
	2	4.25 Jul18 (OE)	-3.12	May08	21		2	2.25 Sep21	-1.10	Aug11	16
	3	0.50 Oct17	-3.03	Sep12	16		3	1.75 Jul22 (RX)	-1.08	Apr12	24
	4	4.25 Jul17	-2.58	May07	19		4	1.50 Sep22	-1.06	Sep12	18
	5	3.75 Jan17	-2.52	Nov06	20		5	3.25 Jul21	-1.06	Apr11	19
	5	1.00 Oct18 (5y)	0.99	Sep13	5		5	2.00 Feb16	1.16	Jan11	16
	4	1.75 Oct15	1.16	Sep10	16		4	4.75 Jul40	1.18	Jul08	16
	3	2.50 Jan21	1.52	Nov10	19		3	4.25 Jul39 (UB)	1.21	Jan07	14
	2	2.50 Jul44 (30y)	1.55	Apr12	14		2	4.00 Jan37	1.24	Jan05	23
Cheapest	1	2.00 Aug23 (10y)	2.15	Aug13	5	Cheapest	1	1.75 Oct15	1.42	Sep10	16

FRANCE

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	2.25 Oct22	-1.57	Oct11	24	Richest	1	3.00 Apr22	-0.78	Feb12	33
	2	5.00 Oct16	-1.46	Oct00	29		2	2.25 Oct22	-0.75	Oct11	24
	3	3.00 Apr22	-1.28	Feb12	33		3	4.25 Oct17	-0.52	Oct06	28
	4	4.25 Oct17	-1.17	Oct06	28		4	1.00 May18	-0.51	May12	21
	5	4.75 Apr35	-1.16	Apr03	21		5	3.75 Apr21	-0.51	Apr05	34
	5	3.75 Oct19	1.03	Oct08	32		5	4.00 Oct38	0.09	Oct05	24
	4	3.75 Apr21	1.13	Apr05	34		4	3.00 Oct15	0.23	Oct04	33
	3	3.50 Apr20	1.32	Feb10	36		3	4.50 Apr41	0.27	Apr09	24
	2	3.25 Oct21	1.44	Oct10	35		2	0.25 Nov15 (2y)	0.36	Nov12	21
Cheapest	1	2.50 Oct20	1.73	Oct09	33	Cheapest	1	3.25 May45 (30y)	0.43	May12	7

ITALY

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	4.50 May23 (10y)	-2.02	Mar13	18	Richest	1	4.75 Sep16	-0.91	Sep11	16
	2	4.75 Aug23	-1.49	Feb08	25		2	3.75 Aug16	-0.89	Feb06	27
	3	2.75 Nov16	-1.18	Sep13	5		3	4.75 Aug23	-0.87	Feb08	25
	4	4.50 Mar26	-0.78	Sep10	21		4	2.25 May16	-0.86	Apr13	15
	5	5.00 Aug39	-0.66	Aug07	19		5	2.75 Dec15	-0.86	Dec12	16
	5	4.50 Feb18	0.90	Aug07	25		5	4.25 Feb19	-0.57	Feb03	25
	4	4.75 May17	1.12	Feb12	14		4	4.75 Sep44 (30y)	-0.48	Mar13	7
	3	3.50 Dec18	1.30	Sep13	4		3	2.75 Nov16	-0.41	Sep13	5
	2	4.25 Feb19	1.35	Feb03	25		2	4.50 Mar24	0.40	Aug13	8
Cheapest	1	3.50 Nov17	1.86	Nov12	17	Cheapest	1	3.50 Dec18	0.56	Sep13	4

N'LANDS

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	4.00 Jul18	-1.54	Feb08	15	Richest	1	2.50 Jan33	0.28	Mar12	10
	2	4.00 Jul16	-1.22	Jul06	13		2	4.00 Jan37	0.42	Apr05	13
	3	0.00 Apr16	-1.14	Jan13	13		3	3.75 Jan42 (30y)	0.64	May10	14
	4	4.00 Jul19	-1.10	Feb09	14		4	4.00 Jul18	0.96	Feb08	15
	5	2.50 Jan17	-1.05	Jun11	16		5	4.00 Jul16	0.99	Jul06	13
	5	3.50 Jul20	0.28	Feb10	15		5	4.50 Jul17	1.58	Jul07	15
	4	3.75 Jan42 (30y)	0.48	May10	14		4	3.50 Jul20	1.66	Feb10	15
	3	4.50 Jul17	0.91	Jul07	15		3	3.75 Jan23	1.73	Jan06	11
	2	3.25 Jul21	0.92	Mar11	16		2	2.25 Jul22	1.77	Feb12	15
Cheapest	1	1.25 Jan18	1.51	Jul12	15	Cheapest	1	3.25 Jul21	1.79	Mar11	16

SPAIN

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	4.65 Jul25	-1.98	Feb10	14	Richest	1	3.75 Oct15	-1.77	Sep12	15
	2	4.80 Jan24	-1.59	Sep08	15		2	3.25 Apr16	-1.70	Nov10	21
	3	3.25 Apr16	-1.44	Nov10	21		3	3.15 Jan16	-1.69	Sep05	21
	4	3.75 Oct15	-1.14	Sep12	15		4	3.80 Jan17	-1.61	Oct06	21
	5	4.20 Jan37	-1.10	Jan05	16		5	4.50 Jan18	-1.59	Nov12	18
	5	5.85 Jan22 (FBB)	0.98	Nov11	19		5	4.20 Jan37	-1.06	Jan05	16
	4	5.15 Oct28	1.07	Jul13	5		4	3.75 Oct18 (5y)	-1.04	Jul13	9
	3	4.90 Jul40	1.09	Jun07	13		3	4.70 Jul41 (30y)	-0.93	Sep09	12
	2	4.60 Jul19	1.37	Feb09	18		2	4.90 Jul40	-0.91	Jun07	13
Cheapest	1	4.30 Oct19	1.93	Jun09	19	Cheapest	1	5.15 Oct28	-0.48	Jul13	5

BELGIUM

	Rank		ZScore	Issued	Size (€bn)		Rank		ZScore	Issued	Size (€bn)
Richest	1	4.25 Mar41	-4.56	Apr10	12	Richest	1	3.75 Jun45 (30y)	-0.94	Sep13	4
	2	1.25 Jun18 (5y)	-2.90	Feb13	12		2	4.50 Mar26	-0.03	Jun11	8
	3	3.75 Sep15	-2.38	Mar05	11		3	2.25 Jun23 (10y)	0.01	Jan13	12
	4	3.75 Sep20	-0.66	Jan10	18		4	4.25 Sep22	0.16	Jan12	15
	5	4.50 Mar26	-0.59	Jun11	8		5	1.25 Jun18 (5y)	0.20	Feb13	12
	5	3.50 Jun17	0.96	Mar11	13		5	5.00 Mar35	0.58	May04	18
	4	5.50 Sep17	1.15	Jun02	8		4	3.50 Jun17	0.60	Mar11	13
	3	3.25 Sep16	1.16	Jan06	13		3	5.50 Sep17	0.64	Jun02	8
	2	4.00 Mar19	1.56	Jan09	11		2	2.75 Mar16	0.78	Mar10	10
Cheapest	1	3.00 Sep19	2.15	Apr12	9	Cheapest	1	3.25 Sep16	0.93	Jan06	13

Source: Citi Research

EMU relative value table – max 12yr maturity

Figure 42. 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	4.00 Jan18	-3.15	Nov07	20
	2	4.25 Jul18 (OE)	-3.12	May08	21
	3	0.50 Oct17	-3.03	Sep12	16
	4	4.25 Jul17	-2.58	May07	19
	5	3.75 Jan17	-2.52	Nov06	20
	5	0.25 Apr18	0.58	Apr13	17
	4	1.00 Oct18 (5y)	0.99	Sep13	5
	3	1.75 Oct15	1.16	Sep10	16
	2	2.50 Jan21	1.52	Nov10	19
Cheapest	1	2.00 Aug23 (10y)	2.15	Aug13	5

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.00 Aug23 (10y)	-1.20	Aug13	5
	2	2.25 Sep21	-1.10	Aug11	16
	3	1.75 Jul22 (RX)	-1.08	Apr12	24
	4	1.50 Sep22	-1.06	Sep12	18
	5	3.25 Jul21	-1.06	Apr11	19
	5	4.00 Jul16	0.67	May06	23
	4	3.50 Jan16	1.04	Nov05	23
	3	2.75 Apr16	1.16	Apr11	18
	2	2.00 Feb16	1.16	Jan11	16
Cheapest	1	1.75 Oct15	1.42	Sep10	16

FRANCE

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.25 Oct22	-1.57	Oct11	24
	2	5.00 Oct16	-1.46	Oct00	29
	3	3.00 Apr22	-1.28	Feb12	33
	4	4.25 Oct17	-1.17	Oct06	28
	5	2.50 Jul16	-0.98	Jul10	26
	5	3.75 Oct19	1.03	Oct08	32
	4	3.75 Apr21	1.13	Apr05	34
	3	3.50 Apr20	1.32	Feb10	36
	2	3.25 Oct21	1.44	Oct10	35
Cheapest	1	2.50 Oct20	1.73	Oct09	33

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.00 Apr22	-0.78	Feb12	33
	2	2.25 Oct22	-0.75	Oct11	24
	3	4.25 Oct17	-0.52	Oct06	28
	4	1.00 May18	-0.51	May12	21
	5	3.75 Apr21	-0.51	Apr05	34
	5	1.00 Jul17	-0.11	Jul11	18
	4	1.00 Nov18 (5y)	0.02	Nov12	12
	3	1.75 Feb17	0.09	Feb11	20
	2	3.00 Oct15	0.23	Oct04	33
Cheapest	1	0.25 Nov15 (2y)	0.36	Nov12	21

ITALY

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.50 May23 (10y)	-2.06	Mar13	18
	2	4.75 Aug23	-1.50	Feb08	25
	3	2.75 Nov16	-1.19	Sep13	5
	4	3.75 Aug16	-0.62	Feb06	27
	5	4.75 Sep16	-0.51	Sep11	16
	5	4.50 Feb18	0.87	Aug07	25
	4	4.75 May17	1.09	Feb12	14
	3	3.50 Dec18	1.26	Sep13	4
	2	4.25 Feb19	1.33	Feb03	25
Cheapest	1	3.50 Nov17	1.82	Nov12	17

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.75 Sep16	-0.91	Sep11	16
	2	3.75 Aug16	-0.89	Feb06	27
	3	4.75 Aug23	-0.87	Feb08	25
	4	2.25 May16	-0.86	Apr13	15
	5	2.75 Dec15	-0.86	Dec12	16
	5	3.75 Aug21	-0.59	Feb06	28
	4	4.25 Feb19	-0.57	Feb03	25
	3	2.75 Nov16	-0.41	Sep13	5
	2	4.50 Mar24	0.40	Aug13	8
Cheapest	1	3.50 Dec18	0.56	Sep13	4

N'LANDS

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.00 Jul18	-1.70	Feb08	15
	2	4.00 Jul19	-1.36	Feb09	14
	3	4.00 Jul16	-1.25	Jul06	13
	4	0.00 Apr16	-1.15	Jan13	13
	5	2.50 Jan17	-1.13	Jun11	16
	5	3.50 Jul20	0.10	Feb10	15
	4	1.75 Jul23 (10y)	0.12	Mar13	14
	3	3.25 Jul21	0.74	Mar11	16
	2	4.50 Jul17	0.84	Jul07	15
Cheapest	1	1.25 Jan18	1.29	Jul12	15

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.00 Jul18	0.96	Feb08	15
	2	4.00 Jul16	0.99	Jul06	13
	3	1.25 Jan19 (5y)	1.05	Jun13	6
	4	0.00 Apr16	1.07	Jan13	13
	5	2.50 Jan17	1.17	Jun11	16
	5	4.50 Jul17	1.58	Jul07	15
	4	3.50 Jul20	1.66	Feb10	15
	3	3.75 Jan23	1.73	Jan06	11
	2	2.25 Jul22	1.77	Feb12	15
Cheapest	1	3.25 Jul21	1.79	Mar11	16

SPAIN

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.65 Jul25	-1.98	Feb10	14
	2	4.80 Jan24	-1.60	Sep08	15
	3	3.25 Apr16	-1.44	Nov10	21
	4	3.75 Oct15	-1.14	Sep12	15
	5	4.50 Jan18	-0.95	Nov12	18
	5	5.40 Jan23	0.65	Jan13	17
	4	4.00 Apr20	0.68	Jan10	20
	3	5.85 Jan22 (FBB)	0.98	Nov11	19
	2	4.60 Jul19	1.37	Feb09	18
Cheapest	1	4.30 Oct19	1.93	Jun09	19

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.75 Oct15	-1.77	Sep12	15
	2	3.25 Apr16	-1.70	Nov10	21
	3	3.15 Jan16	-1.69	Sep05	21
	4	3.80 Jan17	-1.61	Oct06	21
	5	4.50 Jan18	-1.59	Nov12	18
	5	5.40 Jan23	-1.36	Jan13	17
	4	4.30 Oct19	-1.35	Jun09	19
	3	5.85 Jan22 (FBB)	-1.31	Nov11	19
	2	4.40 Oct23 (10y)	-1.26	May13	14
Cheapest	1	3.75 Oct18 (5y)	-1.04	Jul13	9

BELGIUM

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	1.25 Jun18 (5y)	-2.97	Feb13	12
	2	3.75 Sep15	-2.38	Mar05	11
	3	3.75 Sep20	-0.66	Jan10	18
	4	4.25 Sep22	-0.56	Jan12	15
	5	2.25 Jun23 (10y)	-0.51	Jan13	12
	5	3.50 Jun17	0.96	Mar11	13
	4	5.50 Sep17	1.15	Jun02	8
	3	3.25 Sep16	1.16	Jan06	13
	2	4.00 Mar19	1.56	Jan09	11
Cheapest	1	3.00 Sep19	2.16	Apr12	9

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.25 Jun23 (10y)	0.01	Jan13	12
	2	4.25 Sep22	0.16	Jan12	15
	3	1.25 Jun18 (5y)	0.20	Feb13	12
	4	4.00 Mar22	0.28	May06	14
	5	4.25 Sep21	0.28	Jan11	15
	5	4.00 Mar17	0.56	Jan07	11
	4	3.50 Jun17	0.60	Mar11	13
	3	5.50 Sep17	0.64	Jun02	8
	2	2.75 Mar16	0.78	Mar10	10
Cheapest	1	3.25 Sep16	0.93	Jan06	13

Source: Citi Research

EMU relative value table – min 8yr maturity

Figure 43. Coupon Adjusted Spread to Fitted Curve and Swap Curve by Country (6m History); Bonds with a Minimum Maturity of 8yrs

GERMANY

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	1.75 Jul22 (RX)	-2.30	Apr12	24
	2	1.50 Sep22	-2.06	Sep12	18
	3	4.25 Jul39 (UB)	-1.72	Jan07	14
	4	2.00 Jan22	-1.71	Nov11	20
	5	4.00 Jan37	-1.54	Jan05	23
	5	4.75 Jul34	0.16	Jan03	20
	4	5.50 Jan31	0.19	Oct00	17
	3	6.25 Jan30	0.19	Jan00	9
	2	2.50 Jul44 (30y)	1.55	Apr12	14
Cheapest	1	2.00 Aug23 (10y)	2.15	Aug13	5

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.00 Aug23 (10y)	-1.20	Aug13	5
	2	1.75 Jul22 (RX)	-1.08	Apr12	24
	3	1.50 Sep22	-1.06	Sep12	18
	4	2.00 Jan22	-1.03	Nov11	20
	5	1.50 Feb23	-0.82	Jan13	18
	5	3.25 Jul42	1.04	Jul10	15
	4	4.75 Jul34	1.12	Jan03	20
	3	4.75 Jul40	1.18	Jul08	16
	2	4.25 Jul39 (UB)	1.21	Jan07	14
Cheapest	1	4.00 Jan37	1.24	Jan05	23

FRANCE

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.25 Oct22	-1.57	Oct11	24
	2	3.00 Apr22	-1.28	Feb12	33
	3	4.75 Apr35	-1.16	Apr03	21
	4	4.00 Oct38	-0.93	Oct05	24
	5	4.00 Apr55	-0.74	Apr04	15
	5	2.75 Oct27	0.27	Oct11	16
	4	4.25 Oct23 (OAT)	0.27	Oct06	33
	3	3.50 Apr26	0.41	Apr10	30
	2	3.25 May45 (30y)	0.75	May12	7
Cheapest	1	3.25 Oct21	1.44	Oct10	35

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.00 Apr22	-0.78	Feb12	33
	2	2.25 Oct22	-0.75	Oct11	24
	3	3.25 Oct21	-0.40	Oct10	35
	4	1.75 May23 (10y)	-0.39	May12	20
	5	4.25 Oct23 (OAT)	-0.31	Oct06	33
	5	4.00 Apr60	-0.04	Apr09	9
	4	4.00 Apr55	0.03	Apr04	15
	3	4.00 Oct38	0.09	Oct05	24
	2	4.50 Apr41	0.27	Apr09	24
Cheapest	1	3.25 May45 (30y)	0.43	May12	7

ITALY

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.50 May23 (10y)	-2.04	Mar13	18
	2	4.75 Aug23	-1.50	Feb08	25
	3	4.50 Mar26	-0.79	Sep10	21
	4	5.00 Aug39	-0.68	Aug07	19
	5	5.00 Sep40	-0.62	Sep09	21
	5	5.00 Mar25	0.09	Mar09	22
	4	5.75 Feb33	0.16	Feb02	15
	3	5.50 Sep22	0.16	Mar12	20
	2	5.00 Aug34	0.24	Aug03	21
Cheapest	1	4.75 Sep28	0.81	Jan13	13

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.75 Aug23	-0.87	Feb08	25
	2	4.50 Mar26	-0.81	Sep10	21
	3	4.50 May23 (10y)	-0.79	Mar13	18
	4	4.00 Feb37	-0.74	Aug05	25
	5	5.00 Aug39	-0.71	Aug07	19
	5	5.50 Sep22	-0.66	Mar12	20
	4	4.75 Sep28	-0.64	Jan13	13
	3	5.75 Feb33	-0.60	Feb02	15
	2	4.75 Sep44 (30y)	-0.48	Mar13	7
Cheapest	1	4.50 Mar24	0.40	Aug13	8

N'LANDS

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.50 Jan33	-0.86	Mar12	10
	2	2.25 Jul22	-0.76	Feb12	15
	3	3.75 Jan23	-0.31	Jan06	11
	3	4.00 Jan37	0.19	Apr05	13
	2	1.75 Jul23 (10y)	0.33	Mar13	14
Cheapest	1	3.75 Jan42 (30y)	0.42	May10	14

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.50 Jan33	0.30	Mar12	10
	2	4.00 Jan37	0.44	Apr05	13
	3	3.75 Jan42 (30y)	0.66	May10	14
	3	1.75 Jul23 (10y)	1.56	Mar13	14
	2	3.75 Jan23	1.76	Jan06	11
Cheapest	1	2.25 Jul22	1.80	Feb12	15

SPAIN

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.65 Jul25	-1.98	Feb10	14
	2	4.80 Jan24	-1.60	Sep08	15
	3	4.20 Jan37	-1.10	Jan05	16
	4	5.75 Jul32	-1.05	Jan01	15
	5	5.90 Jul26	-0.84	Mar11	10
	5	4.70 Jul41 (30y)	0.15	Sep09	12
	4	5.40 Jan23	0.65	Jan13	17
	3	5.85 Jan22 (FBB)	0.98	Nov11	19
	2	5.15 Oct28	1.07	Jul13	5
Cheapest	1	4.90 Jul40	1.09	Jun07	13

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.80 Jan24	-1.41	Sep08	15
	2	4.65 Jul25	-1.38	Feb10	14
	3	5.40 Jan23	-1.36	Jan13	17
	4	5.90 Jul26	-1.32	Mar11	10
	5	5.85 Jan22 (FBB)	-1.31	Nov11	19
	5	5.75 Jul32	-1.22	Jan01	15
	4	4.20 Jan37	-1.06	Jan05	16
	3	4.70 Jul41 (30y)	-0.93	Sep09	12
	2	4.90 Jul40	-0.91	Jun07	13
Cheapest	1	5.15 Oct28	-0.48	Jul13	5

BELGIUM

Versus Govt Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.25 Mar41	-4.63	Apr10	12
	2	4.50 Mar26	-0.60	Jun11	8
	3	4.25 Sep22	-0.59	Jan12	15
	4	3.75 Jun45 (30y)	-0.54	Sep13	4
	4	4.00 Mar32	-0.50	Mar12	8
	3	4.25 Sep21	-0.48	Jan11	15
	2	5.00 Mar35	0.82	May04	18
Cheapest	1	4.00 Mar22	0.84	May06	14

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.75 Jun45 (30y)	-0.94	Sep13	4
	2	4.50 Mar26	-0.03	Jun11	8
	3	2.25 Jun23 (10y)	0.01	Jan13	12
	4	4.25 Sep22	0.15	Jan12	15
	4	4.25 Sep21	0.28	Jan11	15
	3	4.00 Mar32	0.44	Mar12	8
	2	4.25 Mar41	0.54	Apr10	12
Cheapest	1	5.00 Mar35	0.58	May04	18

Source: Citi Research

UK relative value table

Figure 44. Coupon Adjusted Spread to Fitted Curve and Swap Curve by Country (6m History)

Versus Govt Curve (CAS) / Versus Swap Curve (CAS)

ALL

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.75 Sep21	-1.49	Mar11	28	Richest	1	1.00 Sep17	-1.21	Mar12	31
	2	4.25 Dec40	-1.44	Jun10	24		2	1.75 Jan17	-1.05	Aug11	27
	3	4.00 Mar22	-1.28	Feb09	37		3	4.00 Sep16	-0.79	Mar06	35
	4	4.25 Dec49	-1.16	Sep08	19		4	2.00 Jan16	-0.79	Nov10	32
	5	3.50 Jul68	-1.11	Jun13	5		5	4.75 Sep15 (2y-WB)	-0.48	Sep03	38
	5	4.75 Mar20	0.98	Mar05	33		5	4.25 Jun32	0.83	May00	35
	4	4.50 Mar19	1.06	Sep08	35		4	4.75 Dec30	0.97	Oct07	29
	3	3.25 Jan44 (30y)	1.14	Oct12	19		3	5.00 Sep14	0.97	Jul02	41
	2	4.25 Mar36	1.28	Feb03	23		2	4.25 Dec27	1.00	Sep06	29
Cheapest	1	5.00 Sep14	2.44	Jul02	41	Cheapest	1	5.00 Mar25 (G)	1.01	Sep01	33

2yr - 7yr

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	1.00 Sep17	-1.30	Mar12	31	Richest	1	1.00 Sep17	-1.28	Mar12	31
	2	2.00 Jan16	-0.86	Nov10	32		2	1.75 Jan17	-1.11	Aug11	27
	3	1.25 Jul18 (5y)	-0.37	Feb13	29		3	4.00 Sep16	-0.85	Mar06	35
	4	1.75 Jan17	-0.26	Aug11	27		4	2.00 Jan16	-0.84	Nov10	32
	5	3.75 Sep20	-0.23	Jun10	24		5	5.00 Mar18 (WX)	-0.55	May07	34
	5	4.00 Sep16	0.26	Mar06	35		5	1.25 Jul18 (5y)	-0.51	Feb13	29
	4	5.00 Mar18 (WX)	0.68	May07	34		4	3.75 Sep20	-0.24	Jun10	24
	3	3.75 Sep19	0.71	Jul09	28		3	4.75 Mar20	0.01	Mar05	33
	2	4.75 Mar20	0.72	Mar05	33		2	3.75 Sep19	0.07	Jul09	28
Cheapest	1	4.50 Mar19	0.94	Sep08	35	Cheapest	1	4.50 Mar19	0.37	Sep08	35

7yr - 15yr

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.75 Sep21	-1.87	Mar11	28	Richest	1	3.75 Sep21	-0.49	Mar11	28
	2	4.00 Mar22	-1.66	Feb09	37		2	4.00 Mar22	-0.20	Feb09	37
	3	4.25 Dec27	-1.07	Sep06	29		3	2.25 Sep23 (10y)	0.28	Jun13	12
	4						4				
	5						5				
	5						5				
	4						4				
	3	2.25 Sep23 (10y)	-0.92	Jun13	12		3	1.75 Sep22	0.54	Jun12	28
	2	1.75 Sep22	-0.01	Jun12	28		2	4.25 Dec27	0.94	Sep06	29
Cheapest	1	5.00 Mar25 (G)	0.02	Sep01	33	Cheapest	1	5.00 Mar25 (G)	0.96	Sep01	33

>15yr

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.50 Jul68	-7.75	Jun13	5	Richest	1	3.50 Jul68	-0.41	Jun13	5
	2	3.75 Jul52	-4.26	Sep11	20		2	4.25 Dec49	-0.20	Sep08	19
	3	4.25 Dec40	-2.47	Jun10	24		3	4.25 Dec55	-0.19	May05	23
	4	4.25 Dec55	-2.35	May05	23		4	3.75 Jul52	-0.17	Sep11	20
	5	4.25 Dec46	-2.06	May06	21		5	4.25 Dec46	0.05	May06	21
	5	4.50 Sep34	-0.42	Jun09	26		5	4.75 Dec38	0.46	Apr04	25
	4	4.25 Jun32	-0.27	May00	35		4	4.50 Sep34	0.63	Jun09	26
	3	4.75 Dec30	-0.01	Oct07	29		3	4.25 Mar36	0.71	Feb03	23
	2	3.25 Jan44 (30y)	0.01	Oct12	19		2	4.25 Jun32	0.76	May00	35
Cheapest	1	4.25 Mar36	0.06	Feb03	23	Cheapest	1	4.75 Dec30	0.90	Oct07	29

Source: Citi Research

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

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Nishay Patel

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 45. 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)
30 Sep (Mon)	US	1.25 - 1.75	Outright Treasury Coupon Purchases : 15/2/2036 - 15/8/2043		-32k		
30 Sep (Mon)	UK	0.7	Gilt APF Buyback: 3-7yrs			-3k	
01 Oct (Tue)	UK	0.7	Gilt APF Buyback: 15yrs+			-12k	
02 Oct (Wed)	Germany	5.0	Bund 2% Aug23 reopening (issue and size confirmed)				40k
03 Oct (Thu)	Spain	3.0	Bono 2yr, 5yr and 10yr (estimated tenors and size)				14k
03 Oct (Thu)	France	8.0	OAT 5yr, 10yr and 15yr (we expect a new 10yr OAT, estimated size including the post auction facility)				69k
03 Oct (Thu)	UK	4.0	2¼% Treasury Gilt 2023 (issue and size confirmed)			36k	
03 Oct (Thu)	UK	0.7	Gilt APF Buyback: 7-15yrs			-6k	
			Weekly $DV01 of Issuance	**18.7**			
			Total Number of Futures Contracts		**-32k**	**15k**	**123k**

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)			9k	
08 Oct (Tue)	US	30.0	3-Year		74k		
09 Oct (Wed)	Germany	4.0	Bobl 167-Oct18 reopening (issue and size confirmed)				17k
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	**59.5**			
			Total Number of Futures Contracts		**601k**	**9k**	**60k**

Date	Country	Nominal Size (Local Ccy, bn)	Issue Details	DV01 $million/bp	Approx. Number 10yr Futures TYZ3 (UST)	G Z3 (Gilt)	RXZ3 (Bund)
16 Oct (Wed)	Germany	5.0	Schatz 0.25% Sep15 reopening (issue and size confirmed)				9k
17 Oct (Thu)	Spain	3.0	Obligaciones 2yr, 5yr and 30yr (estimated tenors and size)				22k
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)			22k	
			Weekly $DV01 of Issuance	**13.9**			
			Total Number of Futures Contracts		**0k**	**22k**	**68k**

Date	Country	Nominal Size (Local Ccy, bn)	Issue Details	DV01 $million/bp	Approx. Number 10yr Futures TYZ3 (UST)	G Z3 (Gilt)	RXZ3 (Bund)
22 Oct (Tue)	UK	3.8	Syndicated re-opening of 3½% Treasury Gilt 2068 (second half of October, estimated size)			93k	
23 Oct (Wed)	Germany	2.0	Bund 2.5% Jul44 reopening (issue and size confirmed)				42k
24 Oct (Thu)	US	7.0	30-year TIPS (re-opening)		84k		
			Weekly $DV01 of Issuance	**28.2**			
			Total Number of Futures Contracts		**84k**	**93k**	**42k**

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 October: Ireland 5yr and 10yr (€1.2bn). Additional issues expected in October/November: Italy new 7yr BTP (around €3.5bn). These are not included in the cash flow tables and gross supply charts of this report as the timing of these supply events has not been announced.

Source: DMOs, Citi estimates

EUR: Coupons & Redemptions (next 3 mths)

Figure 46. EMU-10 Redemptions over the next three months (€bn)

	Redemptions = €143bn										
Redemptions	DEU 31	FRA 21	NLD 0	ITA 48	ESP 16	BEL 14	AUT 13	FIN 0	PRT 0	GRC 0	IRL 0
(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							

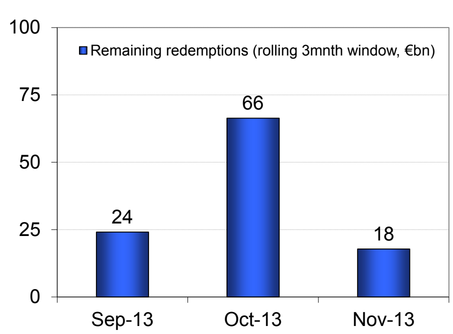
Source: DMOs, Bloomberg, Citi Research

Figure 47. EMU-10 Coupon Payments over the next three months (€bn)

	Coupons = €42bn										
Coupons	DEU 2	FRA 16	NLD 0	ITA 9	ESP 6	BEL 5	AUT 1	FIN 0	PRT 2	GRC 0	IRL 2
(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											1.6
(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				0.7							
(Fri) 22-Nov-13							0.3				
(Mon) 25-Nov-13		0.2									
(Sun) 01-Dec-13				1.4							
(Fri) 13-Dec-13	0.0										
(Sun) 15-Dec-13				0.9							

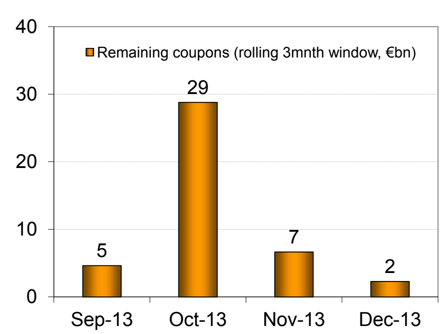
Source: DMOs, Bloomberg, Citi Research

Figure 48. EMU-10 remaining redemptions over the next 3months (€bn)



Source: DMOs, Bloomberg, Citi Research

Figure 49. 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 50. Provisional Bill Auction Calendar for the Next Four Weeks, Gross Issuance (Billions), DV01 (EUR Million/bp)

Week	Date	Country	Issue Details	Total Size (€bn)
Week 2	10 Oct (Thu)	Italy	12 month (14 October 2014; issue confrimed, estimated size)	8.5
			Total Size in Week 2	**8.5**
Week 3	15 Oct (Tue)	Spain	6month (16 April 2014) and 12month (new) - tenors confirmed, estiamted size	4.4
			Total Size in Week 3	**4.4**
Week 4	22 Oct (Tue)	Spain	3month (24 January 2014) and 9 month (18 July 2014) - tenors confirmed, estimated size	3.6
			Total Size in Week 4	**3.6**

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

Source: DMOs, Citi Research

2013 projections for bill supply

Figure 51. 2013 Italy and Spain Bill Supply – Citi Forecast (Euro Billion)

SPAIN	3m	6m	9m	12m	18m	Gross Supply	Redemptions	NCR
Jan	1.3	1.8		3.2	2.5	9	5	3
Feb	1.0	2.9	3.7	3.6		11	9	2
Mar	1.8	2.3	2.6	4.0		11	12	-2
Apr	0.9	1.3	2.2	4.6		9	8	1
May	0.9	1.2	2.6	3.3		8	6	2
Jun	1.1	1.1	2.6	4.0		9	10	-1
Jul	0.9	1.9	3.0	2.9		9	5	3
Aug	1.1	1.4	3.1	3.0		9	11	-3
Sep	0.8	1.7	2.8	3.8		9	8	1
Oct	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	10	-2
Total	12.8	19.8	30.3	41.4	2.5	107	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		8.5		8.5	3.0	20	20	
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	114.4		99.7	8.5	226	216	9

*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 52. 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	117.32	0.7	1.2	125.57	-0.3	0.7	252.00	0.4	3.2	234.08	0.1	1.2
Oct 13	117.65	0.3	1.2	125.90	0.3	0.9	252.90	0.4	3.0	233.98	-0.0	1.1
Nov 13	117.60	-0.0	1.4	125.80	-0.1	1.0	253.10	0.1	3.1	233.68	-0.1	1.5
Dec 13	117.99	0.3	1.4	126.24	0.4	1.0	254.20	0.4	3.0	233.28	-0.2	1.6
Jan 14	116.64	-1.1	1.3	126.09	-0.1	1.4	252.70	-0.6	2.8	234.48	0.5	1.8

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

Figure 53. US TIPS 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 Dec	1 Jan	ZC Swap - BE Spread (bp)	Chg (bp)
Repo (%)				*0.10*	*0.10*	*0.11*									
TIPS 1/15	-1.06	1	1	1	0	-13	*US-2.250-01/31/15*	125	-2	-3	1	-1	-15	10	-7
TIPS 4/15	-0.99	-0	-0	1	1	-9	*US-2.500-04/30/15*	124	0	-1	0	-1	-12	11	-1
TIPS 7/15	-1.27	2	2	0	-2	-13	*US-4.250-08/15/15*	159	-4	-5	-2	-4	-16	19	4
TIPS 1/16	-1.05	-2	-2	1	0	-7	*US-2.625-02/29/16*	151	0	-1	-1	-3	-11	20	-2
TIPS 4/16	-0.95	-10	-10	1	1	-5	*US-2.000-04/30/16*	147	7	6	-1	-2	-10	20	-9
TIPS 7/16	-1.17	-16	-16	0	-1	-7	*US-4.875-08/15/16*	180	12	12	-2	-4	-12	14	-14
TIPS 1/17	-0.92	0	0	1	1	-3	*US-3.125-01/31/17*	174	-4	-5	-1	-3	-10	12	-4
TIPS 4/17	-0.76	-6	-6	1	2	-2	*US-0.875-04/30/17*	169	0	-1	-1	-3	-9	17	-3
TIPS 7/17	-0.88	-3	-3	1	1	-3	*US-4.750-08/15/17*	189	-3	-4	-2	-4	-10	17	0
TIPS 1/18	-0.66	-4	-4	1	2	-1	*US-3.500-02/15/18*	188	-2	-3	-1	-3	-8	13	-5
TIPS 4/18	-0.54	-3	-3	1	2	0	*US-0.625-04/30/18*	184	-4	-5	-1	-3	-7	19	1
TIPS 7/18	-0.65	-15	-15	1	2	-1	*US-4.000-08/15/18*	198	7	7	-1	-3	-8	22	-10
TIPS 1/19	-0.41	-4	-4	2	2	1	*US-2.750-02/15/19*	195	-5	-6	-1	-3	-7	20	-2
TIPS 7/19	-0.40	-6	-6	1	2	1	*US-3.625-08/15/19*	209	-4	-5	-1	-3	-7	21	1
TIPS 1/20	-0.16	-6	-6	2	3	2	*US-3.625-02/15/20*	196	-3	-4	-1	-3	-6	31	0
TIPS 7/20	-0.13	-7	-7	2	3	2	*US-2.625-08/15/20*	210	-3	-4	-1	-3	-6	27	0
TIPS 1/21	0.08	-8	-8	2	3	2	*US-3.625-02/15/21*	201	-3	-4	-1	-2	-6	32	-2
TIPS 7/21	0.11	-7	-7	2	3	2	*US-2.125-08/15/21*	216	-4	-4	-1	-3	-6	28	1
TIPS 1/22	0.30	-7	-7	2	3	3	*US-2.000-02/15/22*	210	-4	-5	-1	-2	-5	30	-1
TIPS 7/22	0.33	-13	-13	2	3	3	*US-1.625-08/15/22*	219	2	1	-1	-2	-5	30	-4
TIPS 1/23	0.45	-7	-7	2	3	3	*US-2.000-02/15/23*	215	-3	-4	-1	-2	-5	31	-2
TIPS 7/23	0.46	-8	-8	2	3	3	*US-2.500-08/15/23*	219	-3	-3	-1	-2	-5	36	0
TIPS 1/25	0.61	-10	-10	2	3	3	*US-7.625-02/15/25*	213	-1	-1	-1	-3	-5	43	-3
TIPS 1/26	0.70	-10	-10	2	3	3	*US-6.000-02/15/26*	220	-1	-2	-1	-2	-5	39	-2
TIPS 1/27	0.78	-16	-16	2	3	3	*US-6.625-02/15/27*	221	4	4	-1	-2	-5	41	-7
TIPS 1/28	0.87	-12	-12	2	3	3	*US-6.125-11/15/27*	220	1	0	-1	-3	-5	46	-1
TIPS 4/28	0.84	-16	-16	2	3	3	*US-5.500-08/15/28*	231	4	4	-1	-2	-4	34	-5
TIPS 1/29	0.91	-13	-13	2	3	3	*US-5.250-02/15/29*	229	1	1	-1	-2	-4	38	-2
TIPS 4/29	0.89	-13	-13	2	3	3	*US-5.250-02/15/29*	230	1	1	-1	-2	-4	37	-1
TIPS 4/32	1.01	-15	-15	1	3	3	*US-5.375-02/15/31*	228	3	3	-1	-2	-4	46	-2
TIPS 2/40	1.30	-7	-7	1	2	2	*US-4.625-02/15/40*	228	-5	-5	-1	-2	-3	49	3
TIPS 2/41	1.32	-13	-13	1	2	2	*US-4.750-02/15/41*	228	1	1	-1	-2	-3	49	-3
TIPS 2/42	1.37	-11	-11	1	2	2	*US-3.125-02/15/42*	232	-1	-1	-1	-2	-3	45	-1
TIPS 2/43	1.37	-11	-11	1	2	2	*US-3.125-02/15/43*	233	-1	-1	-1	-2	-3	44	-1

Source: Citi Research, Bloomberg

Figure 54. 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 (%)				*0.10*	*0.10*	*0.10*									
OATei15	-1.20	-8	-7	1	35	48	*FFRG 4/15*	146	7	-3	0	33	45	23	0
BUNDei16	-0.71	-6	-6	2	28	39	*BUND 1/16*	92	5	-1	2	27	37	24	4
BTANi16	-0.92	-2	-2	13	0	7	*FFRG 4/16*	138	-0	-4	12	-2	3	32	1
BTPei16	1.36	-5	-5	8	38	54	*BTP 8/16*	92	4	-1	1	23	32	54	0
OATi17	-0.66	-2	-2	10	1	7	*FFRG 4/17*	144	-3	-6	8	-2	1	31	3
BTPei17	1.81	-1	-1	7	30	43	*BTP 8/17*	107	3	-2	0	16	22	44	-1
BOBLei18	-0.49	-8	-8	2	16	22	*BUND 1/18*	105	-0	-4	1	14	19	32	4
OATei18	-0.26	-3	-3	2	16	22	*FFRG 4/18*	129	-2	-5	0	12	16	34	3
BTPei18	2.13	-1	-1	6	25	36	*BTP 8/18*	107	6	3	0	13	17	52	-3
OATi19	-0.20	-2	-2	7	2	7	*FFRG 4/19*	151	-3	-5	5	-2	0	38	2
BTPei19	2.21	5	5	6	22	31	*BTP 9/19*	129	2	-1	0	10	13	34	1
BUNDei20	-0.23	-6	-6	2	12	17	*BUND 1/20*	125	-5	-7	0	9	12	28	6
OATei20	0.08	-6	-6	2	13	17	*FFRG 4/20*	150	-2	-4	0	8	11	22	2
OATI21	0.28	1	1	6	3	6	*FFRG 4/21*	156	-7	-8	4	-2	0	44	4
BTPei21	2.77	10	10	5	18	25	*BTP 9/21*	118	-4	-7	0	8	10	56	4
OATei22	0.46	-5	-5	2	10	14	*FFRG 4/21*	137	-1	-3	0	6	7	49	-0
BUNDei23	0.15	-5	-5	1	9	12	*BUND 1/22*	132	-6	-8	0	6	7	47	7
OATi23	0.55	1	1	5	3	6	*FFRG 10/23*	188	-9	-11	3	-2	-1	26	6
BTPei23	2.99	1	1	4	15	22	*BTP 8/23*	123	2	0	0	6	8	68	-2
OATei24	0.78	-5	-5	2	9	12	*FFRG 10/23*	165	-4	-5	-1	4	5	33	2
BTPei26	3.22	1	1	4	13	18	*BTP 3/26*	127	3	1	0	5	6	77	-3
OATei27	0.94	-4	-4	2	8	11	*FFRG 4/26*	183	-5	-6	-1	3	4	25	3
OATi29	0.84	-2	-2	4	2	5	*FFRG 4/29*	213	-6	-7	2	-2	-2	18	4
OATei32	1.12	-3	-3	1	7	9	*FFRG 10/32*	202	-5	-6	-1	3	3	12	3
BTPei35	3.15	-5	-5	2	8	11	*BTP 8/34*	181	8	7	-1	2	2	35	-10
OATei40	1.23	-4	-4	1	5	6	*FFRG 4/41*	217	-5	-6	-1	1	1	5	3
BTPei41	3.45	-3	-3	2	7	10	*BTP 9/40*	161	3	2	-1	2	2	62	-6

Source: Citi Research

Figure 55. 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	-2.03	-9	-10	2	3	5	*UKT 9/16*	280	0	0	0	1	1	44	-5
UKTi Nov17	-1.65	-10	-10	8	14	19	*UKT 3/18*	299	-3	-4	6	10	13	18	-14
UKTi Nov19	-1.09	-13	-13	6	11	15	*UKT 9/19*	289	-2	-3	4	6	8	33	-2
UKTi Apr20	-0.87	-11	-12	3	5	7	*UKT 3/20*	279	-4	-4	0	0	0	37	0
UKTi Nov22	-0.47	-12	-12	5	9	13	*UKT 3/22*	285	-4	-4	3	4	5	45	-0
UKTi Mar24	-0.18	-11	-10	4	8	11	*UKT 3/25*	301	-4	-5	2	3	4	28	0
UKTi Jul24	-0.20	-10	-11	2	4	6	*UKT 3/25*	304	-4	-4	0	-1	-1	33	1
UKTi Nov27	-0.03	-9	-8	4	6	9	*UKT 12/27*	313	-5	-5	1	2	2	35	1
UKTi Mar29	0.07	-5	-5	3	6	8	*UKT 12/30*	319	-6	-7	1	1	2	30	3
UKTi Jul30	0.02	-5	-5	2	3	5	*UKT 6/32*	331	-7	-7	0	-1	-1	25	-3
UKTi Nov32	0.06	-5	-5	3	5	7	*UKT 6/32*	327	-6	-6	1	1	1	34	3
UKTi Mar34	0.11	-4	-4	3	5	6	*UKT 9/34*	329	-7	-7	1	1	1	31	4
UKTi Jan35	0.10	-4	-4	1	3	4	*UKT 3/36*	332	-7	-7	-1	-1	-2	31	4
UKTi Nov37	0.09	-4	-4	2	4	6	*UKT 12/38*	336	-5	-6	0	1	0	32	3
UKTi Mar40	0.11	-5	-5	2	4	5	*UKT 9/39*	338	-4	-5	0	0	0	29	4
UKTi Nov42	0.08	-4	-4	2	3	4	*UKT 12/42*	344	-4	-5	0	0	0	27	1
UKTi Mar44	0.12	-5	-5	2	3	4	*UKT 1/44*	346	-3	-4	0	0	0	23	1
UKTi Nov47	0.09	-4	-4	2	3	4	*UKT 12/46*	345	-4	-4	0	0	-1	25	1
UKTi Mar50	0.09	-5	-5	1	3	4	*UKT 12/49*	344	-4	-4	0	0	-1	25	1
UKTi Mar52	0.10	-4	-4	1	2	3	*UKT 7/52*	344	-4	-4	0	0	-1	25	1
UKTi Nov55	0.07	-5	-5	1	2	3	*UKT 12/55*	344	-4	-4	0	0	0	26	2
UKTi Mar62	0.06	-4	-4	1	2	3	*UKT 1/60*	345	-4	-4	0	-1	-1	24	2
UKTi Mar68	0.05	-	-	1	2	2	*UKT 7/68*	348	-	-	0	-1	-1	20	-

Source: Citi Research

Summary of Recent Publications

Date	Publication	Topic	Page	Region
23-Sep-13	NOTE	UK Rates Strategy: Reexamining the GBP Front-end	-	UK
23-Sep-13	NOTE	European Flow Monitor: Diverging flows within the core	-	EUR
23-Sep-13	NOTE	Euro Rates Strategy: Ireland – The Road Back to Investment Grade?	-	EUR
20-Sep-13	NOTE	European Rates Strategy: The Other Side of Forward Guidance	-	EUR
19-Sep-13	European Weekly	ECB: The Other Side of Forward Guidance	8	EUR
		EUR Swaps: 30yr Bund ASW & EONIA 1Y1Y	10	EUR
		Portugal put on Watch Negative by S&P	11	EUR
		UK Rates – asymmetric risks for 10s30s	13	UK
		EUR: Long-End Forward Steepener Reload	15	EUR
		SSA Strategy – post-Fed opportunities	16	EUR
		Covered Bond Strategy	18	EUR
		End-September EGBI Projection	22	EUR
19-Sep-13	NOTE	Weekly Supply Monitor: Euro, UK and US Supply Outlook	-	Global
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
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11-Sep-13	NOTE	Euro Rates Strategy: Bund Technical Flash: Look for a turnaround in RSI	-	EUR
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