Developed Market Rates

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International Interest Rate Strategist

What is driving the risk rally?

Mark Schofield
+44-20-7986-9224
mark.schofield@citi.com

- **Overview:** We have seen a huge rally in peripheral EMU markets. We examine the drivers of these moves and conclude that easier financing conditions and reduced regulatory pressures remain supportive for the 3-5yr sector, but that longer duration issuance will be a challenge for the longer end of these markets

- **EMU curve trades:** We provide several trade curve trade ideas across Belgium, the Netherlands and Spain.

- **US-Europe:** For investors with a short-term horizon, we would consider a long 10yr US Treasury vs 10yr Bund trade. This is based on net cash requirements, the relative performance of Economic Surprise Indices and positioning.

- **Sovereign spreads and ratings changes:** We quantify the short term impact of ratings events on spreads, and provide a summary of our outlook on individual sovereign ratings. We highlight curve, cross-market and swap spread trades in Spain, Belgium, Germany and the Netherlands.

- **Gilts, it's as easy as 1, 2, 3:** In the last week, 5yr gilts briefly dipped below 1%, 10yr gilts have fallen just below 2% and, perhaps most significantly, 30yr gilts have breached the psychological hurdle of 3%. Record lows for gilt yields are likely to be a regular occurrence in 2012 as QE is further expanded.

- **EMU bond market statistics:** We provide a breakdown of Euro Area government debt ownership, the amount of debt outstanding and the long-term financing requirements of each country.

- **Month-end index projections:** Projections of month-end EGBI changes point to support for Germany and also Tier 2. We also look at the impact of Portugal falling out of the index, how far we expect Ireland is from being excluded, and potential pressures on individual domestic Euro curves. We suggest trades to take advantage of the main projected EGBI changes.

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

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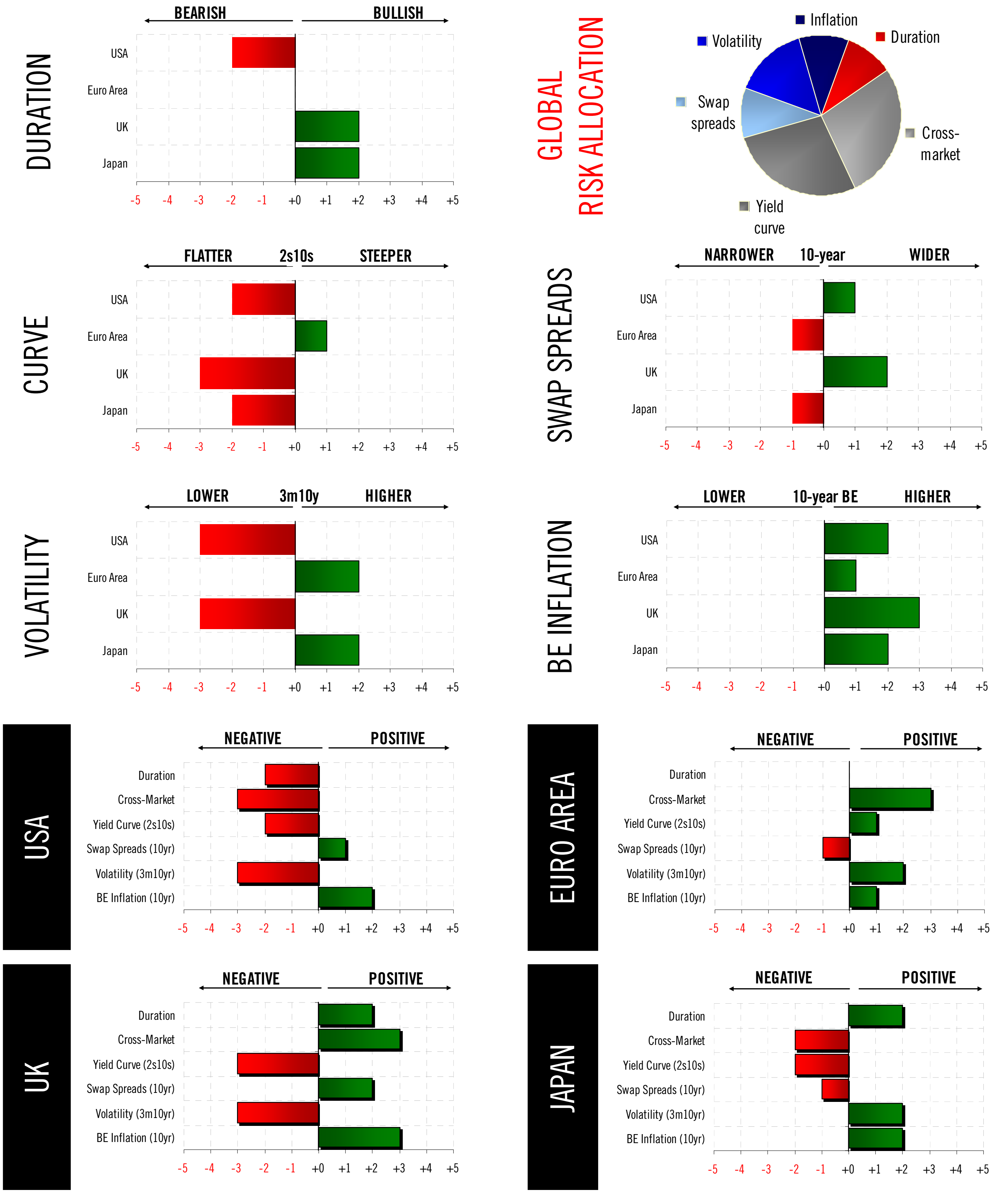
Figure 1. Strategy Summary Table

GLOBAL	View	Strategies
Direction	Equities continue to rally and US data remains encouraging but abundant liquidity has ensured that bond markets remain well supported too. We expect yields to remain low through the first half of the year and think carry and roll trades will pay off	Neutral at current levels but look to buy duration on dips. Favoured sectors are 2-5yr EUR and long-end Gilts
Yield Curve	We continue to favour long-end led flattening in Gilts on the back of further QE expectations. Diminishing growth expectations in the Euro area should see the middle of the curve outperform. On a cross-market basis, we favour a 10s30s steepener in Bunds boxed against a flattener in gilts.	Box 10s30s steepeners in Bunds vs gilts. 2s10s30s Bund fly. DBR 5s30s flattener vs EUR 5s30s steepener
Cross-market	We continue to believe that economic divergence will lead to Bunds outperforming USTs over the longer-term. However, on a tactical basis, we prefer to go long 10yr UST vs Bunds given relative net cashflow dynamics in February and current positioning. Consistent with this, we are also taking profits on a previous recommendation to receive 5yr EUR vs USD.	Long 10yr UST vs Bunds. Buy 30yr Gilts versus 30yr DBR, consider hedging by paying GBP2yr2yr vs EUR 2yr2yr. Take profit on 5yr receiving EUR vs USD.
EMU Spreads	EMU spreads have shrugged off the ratings action from S&P, but the threat of downgrades from the other agencies still looms. The LTRO has clearly benefited the front-end, but periphery curves are beginning to look very steep. Spreads between Germany and the AAA markets have tightened considerably, in line with our expectations.	Keep EMU spread risk extremely light. For those contemplating rising euro break-up risks, consider buying a basket of 2yr AAA-rated bonds (excluding Germany) vs paying 2yr swaps.
Swap Spreads	UST and UKT swap spreads likely to be supported in the long end by QE purchases. Bund swap spreads are hostage to changes in risk appetite and broader uncertainty. Fair value is no longer a relevant concept in these market conditions.	Consider a 5s30s swap spread convergence trade in either US Treasuries or Bunds. Any EMU fiscal transfer would reverse the widening in 5-10yr sector while 30s could benefit if the banking crisis worsens. Long 30yr Gilt swap spreads.
Inflation	If Moody's match the recent two-notch downgrade of Italy by S&P, then BTPei will be removed from a major inflation index. This is likely to trigger significant selling flows from passive accounts and prompt strong demand for OATei/i. We may already be seeing the beginning of this given the spike in OATei/i break-evens this week.	The rally in OATei/I break-evens probably has further to run. Long-term investors should consider widening positions in short-dated UK break-evens.
Volatility	Volatility has continued to decline, as anticipated, driven by QE and lower short rates. With the risk-reward of short gamma positions no longer asymmetric we would start to cover short positions.	Take profits on EUR calendar trades: 3m10yr vs 1yr10yr & 1y10yr vs 5yr10yr.
Risk Allocation	We remain in a spiral of growth/debt/growth concerns in Europe that threatens to destabilise the economic recovery elsewhere. Keep risk low for now.	

Source: Citi Investment Research and Analysis

Figure 2. Global Summary



Source: Citi Investment Research and Analysis

Tradesheet

New Trades

1. Long 10yr UST vs Bunds

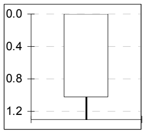
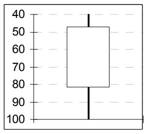
Sell RXH2 at 139.42

Buy TYH2 at 131.25

Open 817c. Target 600c. Stop 875c. Current 838c.

Record of Closed Trades

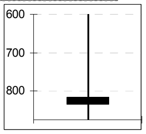
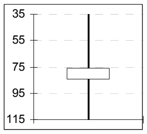
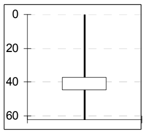
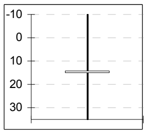
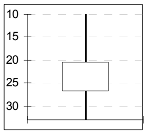
Figure 3. Record of Closed Trades

Country	Trade	Levels		Rationale	
Europe	**Sell EUR 6m2yr straddle (delta hedged)**	Open	1.03%		
		Current	0%	Expired 13 January 2012	
Volatility	Sell EUR 6m2yr straddle at 1.03% (delta hedged)	**P&L**	**1.03%**		
		Target	0%	*EMU Crisis Update: Crossing the Rubicon*	
		Stop	1.3%	*13-Jul-11*	
US / EUR	**Receive 5yr EUR vs USD**	Open	82bp		
	Receive 5yr EUR at 2.00%	Current	47bp	Taking Profit	
Cross Market	Pay 5yr USD at 1.18%	**P&L**	**35bp**		
		Target	40bp		
		Stop	100bp	*International Rate Strategy Update 8 Sep 2011*	

Source: Citi Investment Research and Analysis

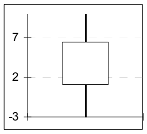
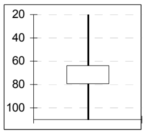
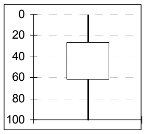
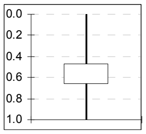
Record of our Open Trades

Figure 4. Record of our Open Trades

Country	Trade	Levels		Rationale + Publication Date	
US / Germany	**Long 10yr UST vs Bunds**	Open	817c	A turn in Citi Economic Surprise Indices and favourable net cashflow dynamics may see UST outperform bunds in February	
	Sell RXH2 at 139.42	Current	838c		
Cross Market	Buy TYH2 at 131.25	**P&L**	**-21c**		
		Target	600c		
		Stop	875bp	*The Morning Call 19 January 2012*	
UK / EUR	**Receive GBP 20yr 10yr fwd vs EUR**	Open	85bp		
	Receive GBP 20yr 10yr fwd at 3.5%	Current	76bp	Steepening of GBP curve relative to USD and	
Cross Market	Pay EUR 20yr 10yr fwd at 2.65%	**P&L**	**9bp**	EUR looks unsustainable with the BoE likely	
		Target	35bp	to increase the size of its QE program	
		Stop	115bp	*Convergence in Rates Markets 9 January 2012*	
UK / Germany	**Bund 10s30s Steepener vs UK Gilts**	Open	45bp		
	Bund 10s30s Steepener at 60bps	Current	37bp	Bund 10s30s should converge with gilt and	
Cross Market	Gilt 10s30s flattener at 105bps	**P&L**	**8bp**	treasury counterparts as 2s10s have	
		Target	0bp		
		Stop	62bp	*Convergence in Rates Markets 9 January 2012*	
UK	**UK Real Yield Flatteners**	Open	15.5bp	We expect long end supply pressures to provide	
		Current	14bp	an opportunity to overweight the very long end	
Inflation	Sell UKTI 2027 and buy UKTI 2047 at 15.5bp	**P&L**	**1bp**	of the real yield curve & set up real yield flatteners	
		Target	-10bp		
		Stop	35bp	*Morning Call 25 October 2011*	
UK	**Buy Gilt 4.25% 2039 vs 4.25% 2027 (MMS)**	Open	27bp	20yr sector has richened after the APF	
	Buy Gilt 4.25% 2039 vs MMS at +14.5bp	Current	20bp	announcement, but we don't expect this	
QE Trade	Sell Gilt 4.25% 2027 vs MMS at -12.5bp	**P&L**	**7bp**	dislocation to persist	
		Target	10bp		
		Stop	33bp	*The Morning Call 12 October 2011*	

Source: Citi Investment Research and Analysis

Figure 5. Record of our Open Trades (continued)

UK	**Sell Gilt 4% Mar22 vs 3.75% Sep21**	Open	1bp	Net basis of Sep21 should trade relatively low	
	Sell Gilt 4% Mar22	Current	7bp	and free-float profile suggests possible	
QE Trade	Buy Gilt 3.75% Sep21	**P&L**	**6bp**	cheapening of II CTD vs the first.	
		Target	10bp		
		Stop	-3bp	*Ad-hoc Note: Long Gilt Futures Contract 12 October 2011*	
UK/Europe	**Long 30yr UK vs Germany with a 2y2y hedge**	Open	80bp	Different policies in the UK and Eurozone favour	
		Current	64bp	buying 30yr UK Gilts vs Bunds. We think it is wise	
Cross Market	Buy UKT 30yr vs DBR 30yr at +58bp	**P&L**	**16bp**	to hedge the risk of a rebound in relative UK	
	Pay 2yr2fwd GBP vs EUR at +22bp	Target	20bp	growth prospects by paying GBP 2y2y fwd vs EUR	
		Stop	110bp	*IIRS 6 October 2011*	
UK / Germany	**Bund 5s30s steepener vs gilts flattener**	Open	62bp	Free-float profile suggests support to UK long	
	UKT 5s30s flattener at 234bp	Current	26bp	end by QE, hedged by EUR steepener against	
Cross Market	DBR 5s30s steepener at 172bp	**P&L**	**36bp**	EUR driven risk of mid-curve repricing	
		Target	0bp		
		Stop	100bp	*Interest Rate Strategy Focus on QE 14 Sep2011*	
EUR / USD	**Sell EUR 6m2y straddle vs 6m2y USD straddle**	Open	67%		
		Current	47%	Convergence in a stable policy rate world	
Volatility	Sell 6m2yr EUR straddle at 1.15%	**P&L**	**0.2%**		
	Buy 6m2yr USD straddle at 0.48%	Target	0%		
		Stop	1%	*IIRS 1 Sep 2011*	

Source: Citi Investment Research and Analysis

Global Economic Outlook and Strategy

Following the latest *Global Economic Outlook and Strategy* January 2012 publication from our global economists and market strategists, we highlight Citi's key views.

Global

GDP (YoY) 2012F 2.3%
CPI 2012F 2.9%

Our economists continue to expect a sizeable slowdown in global economic growth in 2012, with recession in the euro area, growth of roughly 2% in the US, and slowing – albeit still strong – growth in Asia. Within the broad outlook, Citi is again making more forecast downgrades than upgrades and expects that overall global growth will slow from 3% in 2011 to 2.3% in 2012. Aggregate advanced economic growth is likely to be below 1% YoY.

US

GDP (YoY) 2012F 1.9%
CPI 2012F 1.7%
Rates on hold at 0.25% in 2012

The reversal of temporary drags has boosted US growth, but lingering imbalances, financial instability and unresolved policy questions will weigh on expansion. Enhanced monetary accommodation is focusing on extending rate guidance but renewed balance sheet expansion is likely if the outlook worsens. Short-term fiscal support is likely to be renewed, but the balance of risks is tilted toward greater medium term restraint.

Euro Area

GDP (YoY) 2012F -1.5%
CPI 2012F 2.2%
ECB to cut rates to 0.5% in mid-2012

Largely due to additional fiscal tightening measures (mainly in Italy and Spain), our economists are cutting GDP forecast for the euro area to -1.5% for 2012 and -0.4% for 2013. After the downgrade of several euro area countries' sovereign ratings, the EFSF's functioning is likely to suffer and the planned introduction of the ESM looks ambitious. We expect the ECB to expand liquidity and to cut rates to 0.5% in 2Q.

UK

GDP (YoY) 2012F 0.2%
CPI 2012F 2.6%
Rates on hold at 0.5% in 2012

The UK is near recession, and the MPC are likely to expand QE markedly further in coming months. Citi now expects GDP growth of only 0.2% in 2012 and 1.0% in 2013, down 0.3% and 0.2% respectively from the previous forecast. Economic growth will be roughly flat in the next few quarters, and indeed partial data suggest that real GDP may even have fallen in Q4 2011. Private spending is weak, public spending is falling, while exports are being hit by the euro area slowdown.

Japan

GDP (YoY) 2012F 1.0%
CPI 2012F -0.4%
Rates on hold at 0.1% in 2012

Debates about Japan's consumption tax hike will be a key focus in 2012. PM Noda plans to propose the consumption tax bill calling for the tax rate hike from 5% now to 8% in April 2014 and to 10% in October 2015. However, there remain significant political hurdles for this bill to be officially approved and implemented, leaving major uncertainties over fiscal prospects.

China

GDP (YoY) 2012F 8.4%
CPI 2012F 3.5%
Rates to rise and remain at 3.75% in 2012

With domestic property market correction and euro area recession, growth is slowing in early 2012 and may drop to below 8% YoY in Q1. As inflation concerns recede, Citi expects further policy easing to limit downside risks. Monetary policy should remain prudent with an easing bias. Fiscal policy is likely to be more active than 2011. Our economists do not expect a hard landing and project growth of about 8.4% in 2012.

Figure 6. Interest Rate and Bond Market Forecasts (End of Period), as of 18 January 2012

		Forecast End Period					
	Current	1Q 12	2Q 12	3Q 12	4Q 12	1Q 13	2Q 13
US							
Policy Rate (Fed Funds) End Quarter	0.25	0.25	0.25	0.25	0.25	0.25	0.25
3-Month Libor	0.57	0.57	0.60	0.65	0.70	0.75	0.80
2 Year Treasury Yield	0.22	0.27	0.30	0.35	0.45	0.55	0.70
5 Year Treasury Yield	0.79	0.90	1.00	1.10	1.25	1.40	1.55
10 Year Treasury Yield	1.85	2.00	2.10	2.25	2.45	2.55	2.70
30 Year Treasury Yield	2.91	3.10	3.25	3.40	3.55	3.65	3.70
2-10 Year Treasury Curve	163	173	180	190	200	200	200
2 Year Swap Spread (Swap Less Govt.), bp	35	40	45	40	35	35	35
10 Year Swap Spread (Swap Less Govt.), bp	15	18	20	22	25	25	25
30 Year Swap Spread (Swap Less Govt.), bp	-5	-30	-35	-40	-50	-50	-50
30 Year Mortgage Yield	3.91	4.00	4.05	4.10	4.25	4.50	4.70
10 Year Breakeven Inflation	202	210	220	230	235	240	240
Euro Area							
Policy Rate	1.00	1.00	0.50	0.50	0.50	0.50	0.50
Overnight Rate (EONIA)	0.38	0.32	0.15	0.15	0.15	0.15	0.15
3-Month Libor	1.17	1.25	1.00	0.50	0.50	0.50	0.50
2 Year Treasury Yield	0.16	0.25	0.25	0.25	0.35	0.35	0.35
5 Year Treasury Yield	0.78	0.80	0.70	0.60	0.75	0.75	0.75
10 Year Treasury Yield	1.77	1.75	1.50	1.25	1.50	1.50	1.50
30 Year Treasury Yield	2.39	2.50	2.40	2.25	2.40	2.40	2.35
2-10 Year Treasury Curve	161	150	125	100	115	115	115
10 Year BTP-Bund Spread	479	550	600	550	450	400	350
10 Year Swap Spread (Swap Less Govt.), bp	44	50	65	65	50	45	35
10 Year Breakeven Inflation	158	150	125	125	150	165	175
Japan							
Policy Rate	0.10	0.10	0.10	0.10	0.10	0.10	0.10
3-Month CD	0.15	0.15	0.15	0.15	0.15	0.15	0.15
2 Year Treasury Yield	0.13	0.15	0.10	0.15	0.20	0.20	0.25
5 Year Treasury Yield	0.34	0.45	0.35	0.40	0.55	0.60	0.70
10 Year Treasury Yield	0.97	1.20	1.05	1.10	1.30	1.40	1.50
30 Year Treasury Yield	1.92	2.10	2.00	2.05	2.20	2.25	2.35
2-10 Year Treasury Curve	84	105	95	95	110	120	125
2 Year Swap Spread (Swap Less Govt.), bp	25	25	22	23	25	25	27
10 Year Swap Spread (Swap Less Govt.), bp	2	5	1	3	7	8	10
10 Year Breakeven Inflation	NA	NA	NA	NA	NA	NA	NA
UK							
Policy Rate	0.50	0.50	0.50	0.50	0.50	0.50	0.50
3-Month Libor	1.09	1.00	0.90	0.75	0.75	0.75	0.75
2 Year Treasury Yield	0.39	0.40	0.35	0.35	0.35	0.35	0.35
5 Year Treasury Yield	1.01	1.00	0.90	0.65	0.75	0.75	0.75
10 Year Treasury Yield	1.94	2.00	1.85	1.50	1.60	1.60	1.60
30 Year Treasury Yield	3.05	2.85	2.65	2.35	2.35	2.30	2.20
2-10 Year Treasury Curve	155	160	150	115	125	125	125
10 Year Swap Spread (Swap Less Govt.), bp	26	35	40	50	55	55	55
10 Year Breakeven Inflation	270	250	240	220	230	235	240
Australia							
Policy Rate	4.25	4.00	4.00	4.00	4.00	4.25	4.50
3-Month Libor	4.41	4.20	4.25	4.30	4.40	4.60	4.80
2 Year Treasury Yield	3.28	3.00	3.10	3.30	3.60	3.80	4.15
5 Year Treasury Yield	3.44	3.30	3.45	3.60	3.80	4.10	4.40
10 Year Treasury Yield	3.86	3.70	3.60	3.90	4.20	4.50	4.80
2-10 Year Treasury Curve	58	70	50	60	60	70	65
10 Year Swap Spread (Swap Less Govt.), bp	86	80	75	65	60	55	50

Source: Citi Investment Research and Analysis

What is driving the risk rally?

Mark Schofield
+44 207 986 9224
mark.schofield@citi.com

There has been a remarkable rally in risk assets over the past two months. Whilst it is important to stress that a great deal of the move in late November and early December was a reversal of an equally impressive bear move in October and early December, the rally in peripheral spreads and in equity markets that we have seen since the end of the first week in January is taking us into new territory. 5yr Spanish yields have fallen 90bp since the 6th January and now stand at their lowest level since November 2010, similarly EMU yields in all but the hard core have declined sharply. Equity markets have also performed extremely well; the S&P, the FTSE and the DAX are all up over 15% since September 2011, and even Spanish and Italian indices are up over 10% from their lows. Despite this, there has been no reaction whatsoever in so-called safe-haven assets; 5yr yields in US Treasuries, Bunds and UK Gilts have all fallen slightly over the same period.

Figure 7. 5yr Yield Change Between 06 Jan and 18 Jan 2012 (Basis Points)

DEU	NLD	FIN	FRA	AUT	BEL	ESP	ITA	IRL	USA	GBR
-2.0	-19.8	-22.6	-35.3	-61.8	-74.4	-89.6	-88.8	-111.9	-8.0	-7.6

Source: Citi Investment Research and Analysis

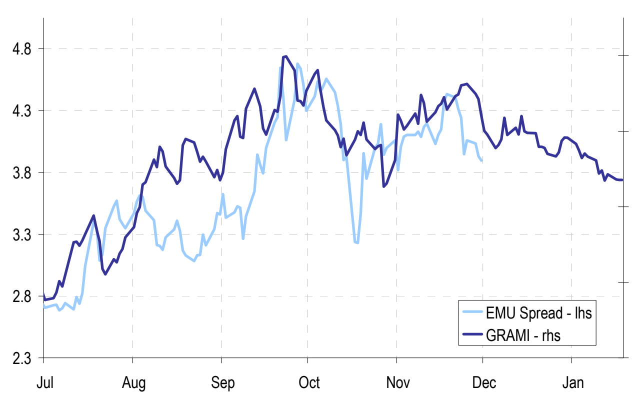
If risk appetite is driving the peripheral rally, why have safe-haven assets not reacted?

This begs two questions: If the moves are a reflection of a broadly more positive risk environment, why have safe-haven assets not reacted? And secondly, what is driving the move if it is not a reversal of risk aversion?

Why are safe haven assets not reacting?

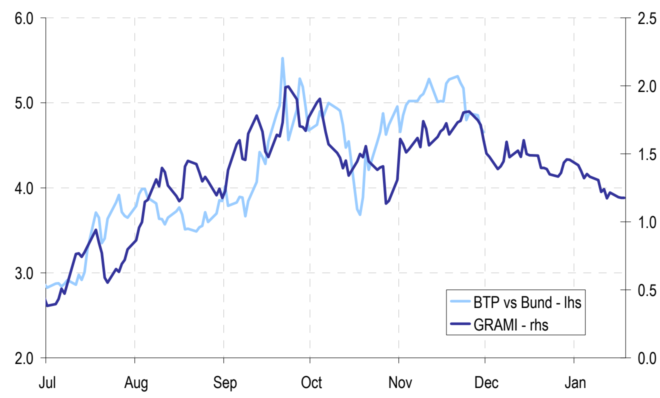
There is certainly support for the argument that the moves in EMU peripherals are simply a function of a broader increase in risk appetite. Our Global Macro Strategy team point out the strong correlation between their GRAMI index, lagged by 55 days, and EMU spreads (Figure 8 and Figure 9).

Figure 8. Citi Global Macro GRAMI Index and EMU Spread Index



Source: Citi Investment Research and Analysis

Figure 9. Citi Global Macro GRAMI Index and 10yr BTP-Bund Spread



Source: Citi Investment Research and Analysis

The GRAMI peaked in mid-September along with the lows in equity markets, and EMU spreads then followed suit in mid November. This certainly suggests that the renewed confidence in EMU spreads has followed the broader rise in risk appetite rather than the relationship being the other way around.

If, however, risk appetite is rising, perhaps fuelled by a combination of huge liquidity injections and economic data that continues to surpass (admittedly rather weak) expectations, why have core government bond markets not reacted?

Figure 10. Citi USD Economic Surprise Index and 10yr US Treasury Yield

Source: Citi Investment Research and Analysis

Slower policy transmission mechanisms and a growing collateral shortage may be reducing term premia

In our longer term outlook for rate markets we have argued that slow transmission mechanisms in the current policy stance and an increasing shortage of collateral have lowered the fair value level for bond yields. These two factors reinforce a central-bank rhetoric that suggests that policy rates are likely to remain at very low levels for a long time and this should ultimately reduce term premia significantly. A combination of reduced term-premia due to an extremely accommodative policy stance may, of course, reignite long-term inflation concerns; however this is reflected in long-end yield curve slopes that are steeper than the historical norm. The current policy stance is, in our view, relatively supportive for a broad range of assets across the risk spectrum and can continue to support a divergence between core bond and equity markets. This is not to say that US Treasuries, Bunds and Gilts can't correct by 30-40bp at some point over the next few weeks, but we doubt that we will see the huge apparent distortions between core bond yields and most macro-economic fair value models disappear any time soon.

What is driving the appetite for peripheral debt?

Negative money-market rates suggest a structural shift in demand patterns

Not withstanding the improvement in risk appetite, the demand for EMU peripheral debt in recent weeks has been impressive. In late 2011 governments seemingly could not give their debt away (the emergence of negative yields in money-markets suggests that this statement is not hyperbole). Most notably, demand for non-core debt coming from domestic banks dried up as funding markets became increasingly strained and banks sought to build up reserves of cash ahead of a heavy refinancing schedule for their own debt and the implementation of the European Banking Authority (EBA) Recommendation related to banks' recapitalization needs on 20th January.

Since late November, however, the markets have turned dramatically and the results of auctions in Italy and particularly Spain so far this year suggest a huge turn around in risk appetite. Confusingly, however, the ECB's 3yr LTRO, which has been widely advocated as a potential source of funding for carry trades into short dated government bonds, appears to have largely found its way back to the ECB.

Several factors may have contributed to rising demand for Spain and Italy…

It is always tempting to look for a single trigger factor to explain large market moves, but realistically we suspect that this is not the case. Rather we think a series of events and developments have conspired to turn the demand pattern around in the tier-two EMU markets:

…cheaper funding via USD swap lines

First, it is notable that the reversal in peripheral spreads coincided with the reduction in the rates charged by central banks on USD swap lines on 30th November. We suspect that this move reduced the near-term need for banks to build up large cash reserves. With the LTRO following closely behind it may actually have allowed them to run these down, knowing that they could be quickly replenished.

…rising domestic deposit bases

Secondly we note that the European banks have increased the rates they pay on deposits in order to improve the quality of their short-term funding. This has lead to a significant flow out of the wholesale money-markets. Fitch Ratings commented on the increase in the deposit base of the French banks on 18th January. Our economics team estimate that the 16.6% average household savings ratio for the last four quarters in France represents a total of about €220bn in new savings. Similar patterns are being seen in other European countries.

…reduced burden from EBA capital buffer recommendations

Thirdly, we think that the dynamics of how the banks and national authorities deal with the EBA recommendations on capital buffers for sovereign debt may have changed for the following reasons.

i. The EBA recommendations are not legally binding but rather they are provided on a “comply or explain” basis.

ii. The implied buffer calculated on Hold to Maturity (HTM) portfolios is calculated using data as of September 2011. This means that the acquisition of bonds at higher yields than the September 2011 levels could effectively form part of the provision against the implied mark-to-market on these portfolios while the shift in the mark-to-market levels on Assets For Sale (AFS) portfolios would also presumably be permissible as a part of the required plan.

iii. The January 20th deadline for national authorities only requires that a plan for the provision of the buffers is submitted, the target date for the actual creation of that buffer is 30 June 2012. However the buffer is only expected to be maintained until the EFSF capacity is boosted sufficiently to support the markets. With growing expectations of an earlier introduction date for the ESM, the significance of the EBA proposals will have been reduced.

The combination of easier funding conditions and a lowering of regulatory pressures will likely have significantly increased the appeal of curve trades that offer as much as 100bp per annum in break-even carry and roll in certain sectors.

…lower market implied probability of an EMU break-up

A final additional factor that has potentially been fuelling the rally is the reduction in perceived foreign exchange risk that has been priced into spreads.

We examined this issue in our 17 November and 5 January IIRS publications. During the final quarter of 2011 the probability of an EMU breakup, as implied by our fiscal Risk Index framework, rose from about 5% in September to a high of about 38% in mid November. We think that this was way too high. It has now fallen back to about 20%, a move which would explain some of the recent tightening in spreads.

How far can peripheral yields go?

There are a number of factors that will determine how far the rally can run:

Longer duration issuance in Italy and Spain will provide a sterner test of demand

First of all it should be noted that we have not, until today, had any long-dated issuance in Italy and Spain. Issuance has been focused on the short end of the curve where the breakeven carry and roll is at its greatest. The issuance of longer duration debt with lower credit ratings and lower yields will be a crucial test of true demand.

Secondly yields in Spain are now below the September level that the EBA is using to calculate refinancing requirements. In Italy yields are now getting close to that level. Adding further sovereign duration exposure to portfolios at levels below the implicit mark-to-market level being used to calculate the capital buffers for such assets will not sit well with the "comply or explain" requirement.

Breakeven levels on carry trades are no-longer so attractive

Finally, the breakeven levels on carry and roll trades are now well within the scope of recent trading ranges.

Figure 11. 3yr Spain Government Bond Yield and 1yr Horizon Break-even

Source: Citi Investment Research and Analysis

Easier financing conditions may be supportive for EU spreads but considerable risks remain

In mid November the one-year break-even yield on a 3yr Spanish bond was just below 8%, a level at which we think the policy response to the EMU crisis would surely have moved onto a new footing, with immediate and aggressive action from the ECB (via the SMP) and possibly the EU. At the time of writing, the breakeven on the 3yr Spanish bond stands at 4.25% a level above which the yield has traded several times (See Figure 11) in the past year.

It is hard to say just how far the move can go, given that it can become self-perpetuating: France, for example, can currently fund for 10 years at over 100bp below its post EMU average and just 50bp above its all-time lows. Weaker rated markets, on the other hand, still face significant challenges with 10yr yields in Spain and Italy above their post EMU averages and that with a much larger funding requirement.

We consequently expect some re-widening of longer dated spreads between the core markets (in this we include France and Austria) and the tier-two markets, notably Spain and Italy, as supply pressures build. Italy may receive partial support from redemption flows in February and March but Q2 will bring a much sterner test.

We continue to expect reasonable demand for 3-5yr paper from domestic banks and this should help the sector outperform

We do, however, expect the somewhat diminished funding pressures in the banking sector to continue to support demand for paper in the 3-5yr sector. This should flatten the front end of the curve and probably steepen the curve from the 5yr sector out. In many of the weaker core and tier two markets the front-end of the curve remains steep relative to the overall curve slope which makes barbell trades out of 2s and 10s into the 5yr sector attractive. This is most notable in Italy, Austria and Belgium and to some degree France.

Trade

Buy BTP 4.00% Feb 2017 at 5.43%
Sell BTP 3.75% Dec 2013 at 3.95%
Sell BTP 5.0% Mar 2022 at 6.45%

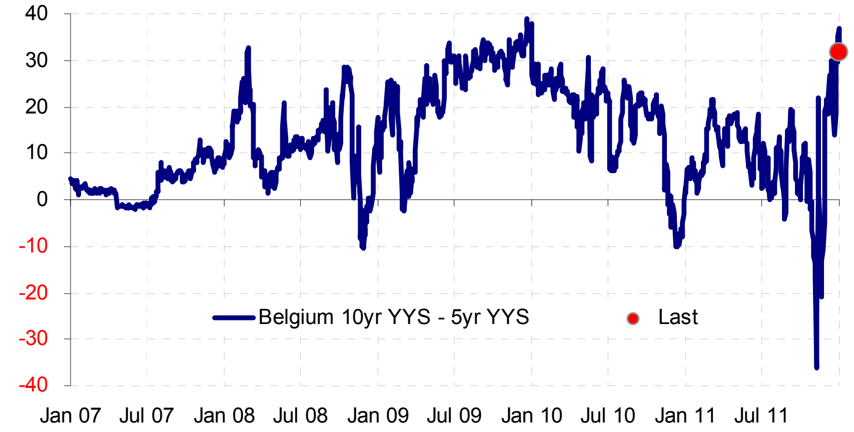
Entry level +23bp
Target level -10bp
Stop-loss +40bp

EMU Curve Trades

Selling 5yr Belgium

The spread between 5 and 10yr swap spreads in Belgium has just bounced off levels it only touched at the end of 2009 (Figure 12).

Figure 12. Belgium: 10yr Swap Spread – 5yr Swap Spread



Source: Citi Investment Research and Analysis

This points to switching any existing 5yr holdings to 10s, or looking at a swap spread flattener, buying 10yr bonds vs swaps and doing the opposite in 5s. This would be one way of expressing the view outlined in the Overview.

Buying 10yr (and 2yr) Netherlands out of 5s

The outperformance of 5s has driven the 2s5s10s fly down to the bottom of the range it has been in for the last two years.

Figure 13. 2s5s10s Netherlands Fly

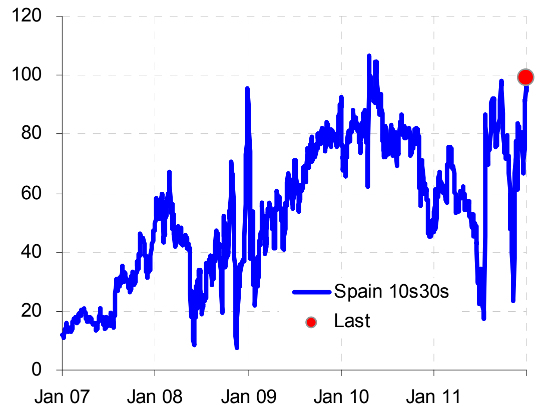
Source: Citi Investment Research and Analysis

Although shorter maturities may receive support from the increased liquidity, the history points to the richness of the 5yr point and relative attractiveness of 2s and 10s.

Ways to sell 10yr Spain

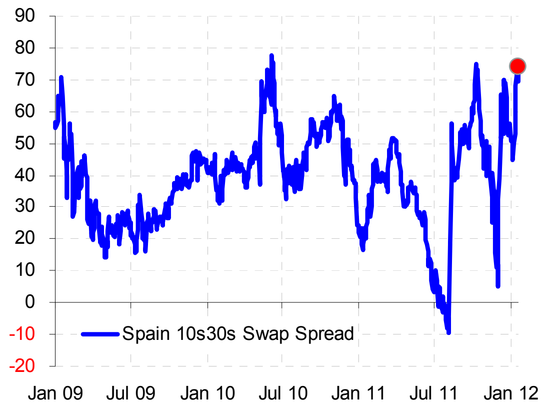
The recent rally in Spain has pushed the 10s30s curve to very close to its highs (Figure 14). The historical richness of 10s versus 30s is also borne out by the spread of swap spreads (Figure 15).

Figure 14. Spain 10s30s



Source: Citi Investment Research and Analysis

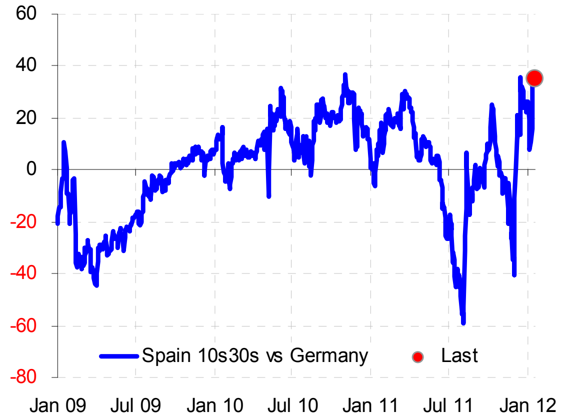
Figure 15. Spain 10s30s Swap Spread



Source: Citi Investment Research and Analysis

10s30s in Spain is also steep versus Germany (Figure 16). In other words, the 10yr cross-market spread is historically tight relative to the 30yr spread. There is €3bn of 30yr Bund supply coming on 25 January. We don't expect any long end Spanish issuance in February. Given the steepness of 10s30s it would make more sense for Spain to carry on issuing shorter maturities rather than 30yrs. Adherents of technical analysis will also point to Bono yields being at the bottom of the range they have inhabited over the last year (Figure 17).

Figure 16. Spain 10s30s vs Germany 10s30s



Source: Citi Investment Research and Analysis

Figure 17. Spain 10yr Yield

Source: Citi Investment Research and Analysis

Demand for Spanish auctions has been very strong and the current mood is optimistic. However we would highlight how far spreads have tightened (and how much this affects the risk/reward balance of being long here), and that the Euro Area's problems are far from over. Time and time again we have seen bubbles of optimism blown up and pricked. Although we are progressing in the right direction, and the ECB's steps have undoubtedly helped stabilize the situation, for now, and reduce the pessimism, the market still seems to be getting a little ahead of itself in our view. Things could go further of course but 10s30s flatteners in Spain look historically attractive, outright, versus swaps, or boxed against Germany.

US Europe

Mark Schofield
+44 207 986 9224
mark.schofield@citi.com

Tactical long 10yr UST vs Bunds

Regular readers of our research will be familiar with our strongly held view that economic divergence will persist throughout 2012 and consequently that the major bond markets will also see divergence in yields. Our economics team expects recession in the Eurozone, flat growth in the UK in 2012 while our forecast for the US sees 2-2.5% GDP growth[1]. The 3.5-4% gap between YoY GDP growth in the US and the Eurozone is likely to be the highest seen in decades and this is the base for our divergent 2012 bond market forecasts which see 10yr US Treasury yields rising to about 2.5% while 10yr Bund yields are expected to fall to about 1.5%.

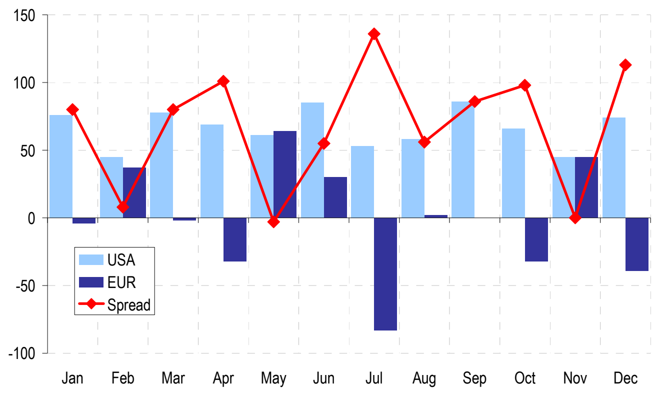
We recommend taking profits on long Europe versus US spreads as momentum is waning and carry is negative

In the current environment of uncertainty, however, we doubt that the underperformance of the US Treasury market against Bunds will be linear and we suspect that after a 40bp contraction in the 10yr yield spread since the spike in late November a correction may be due. We are therefore going to close out our 5yr swap recommendation receiving EUR and paying USD, initiated on 8 September, at its current level of 47bp. The spread is close to our target level, it appears to have lost momentum and the carry and roll on the trade are now negative.

A turn in Citi's Economic Surprise indices and favourable net cashflow dynamics may see UST outperform Bunds in February

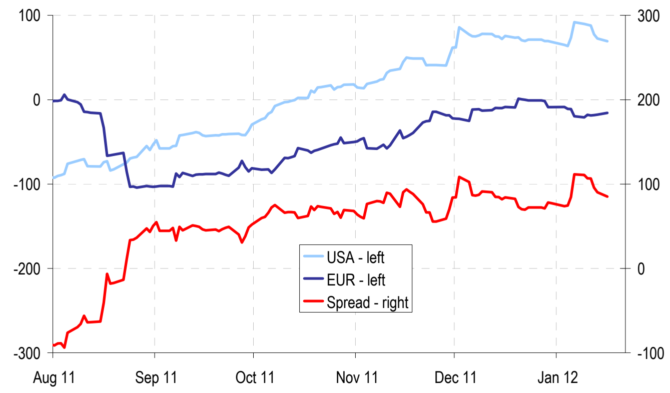
For traders or investors with a shorter-term horizon, we would even go so far as recommending a long 10yr US Treasury versus 10yr Bund trade either in cash or in futures. First of all we think that long Bunds versus US Treasuries has become a congested trade. Secondly we note that in February the net cash requirement in the US is the lowest of the year, while in Europe it is the third highest. Finally, we note that the momentum in the spread between the USD and EUR Economic Surprise Indices appears to be on the turn.

Figure 18. Net Cash Requirement (Local Currency bn)



Source: Citi Investment Research and Analysis

Figure 19. Citi Economic Surprise Indices

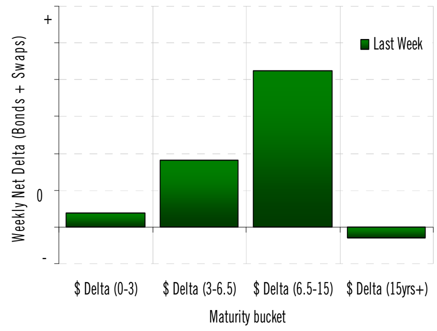


Source: Citi Investment Research and Analysis

In addition, there are perhaps already supportive signs for this short-term trade idea from recent flow data. Our latest Global Flow Monitor indicates buying of 10s in the US last week and selling of 10s in Europe.

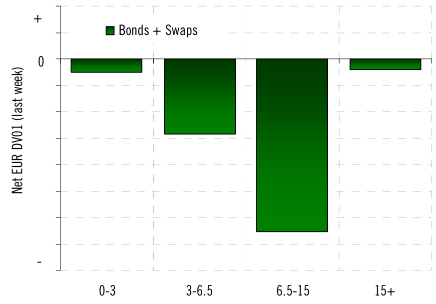
[1] *Global Economic Outlook and Strategy*, January 2012

Figure 20. USD: Net Demand by Maturity Last Week (Bonds + Swaps)



Source: Citi Investment Research and Analysis

Figure 21. EUR: Net Demand by Maturity Last Week (Bonds + Swaps)



Source: Citi Investment Research and Analysis

We recommend the following trades for investors with a short-term horizon.

Trade:

Sell RXH2 at 139.42
Buy TYH2 at 131-08 (131.25)

Entry level 817c price spread.
Target 600c spread.
Stop-loss 875c spread

Conditional variant

One of the key risks to this view is an environment in which the European markets stabilize and US data continues to surprise on the upside. For that reason investors may wish to consider the trade conditional on lower rates. There is a small volatility premium to do the trade in 3m receivers, about 1.5bp at the time of writing, but this is more than offset by the 3bp of carry in the forward strikes.

Trade:

Sell 3m10yr ATMF EUR receiver for 1.67% (18.0bp)
Buy 3m10yr ATMF USD receiver for 1.48% (16.5bp)

Entry level +1.5bp spread cost
Target level +15bp spread
Stop loss -5bp spread

Sovereign Ratings Outlook

We outline our expectations for likely changes in rating for global sovereigns over the short and long term. In conjunction with Citi economists, these represent our judgments over the ratings outlook, rather than mechanically model-determined recommendations. Full details can be found in our ***Sovereign Ratings Outlook***.

Key Takeaways

Upgrade risk

- We do not expect any ratings upgrades among advanced economies over the next 2-3 years.

Downgrade risk

- We see downgrade risk (measured from current ratings by S&P and/or Moody's) in the next 2 quarters for Italy, Spain, Portugal and Greece.

Global Overview for Sovereign Ratings

Figure 22. Advanced Economies — Sovereign Long-Term Debt Ratings and Citi Ratings Forecasts

	S&P Ratings				Moody's Ratings			
Country	Current Rating	Current Outlook	Citi Nearterm (Up to 6 Months) Forecast Rating	Citi Longterm (Next 2-3 Years) Forecast Rating & Outlook	Current Rating	Current Outlook	Citi Nearterm (Up to 6 Months) Forecast Rating	Citi Longterm (Next 2-3 Years) Forecast Rating & Outlook
US	AA+	Neg	AA+ (Neg)	AA ↓	Aaa	Neg	Aaa (Neg)	Aa1 ↓
Canada	AAA	Stable	AAA	AAA	Aaa	Stable	Aaa	Aaa
Japan	AA-	Neg	AA- (Neg)	A+ ↓	Aa3	Stable	Aa3	A1 ↓
Germany	AAA	Stable	AAA	AAA (Neg)	Aaa	Stable	Aaa	Aaa (Neg)
France	AA+	Neg	AA+ (Neg)	AA ↓	Aaa	Stable	Aaa (Neg)	Aa1 ↓
Italy	BBB+	Neg	BBB+ (Neg)	BBB- ↓↓	A2	Neg	Baa1 ↓↓	Baa3 ↓↓↓↓
Spain	A	Neg	A (Neg)	BBB+ ↓↓	A1	Neg	A2 ↓	Baa1 ↓↓↓
Austria	AA+	Neg	AA+ (Neg)	AA ↓	Aaa	Stable	Aaa (Neg)	Aa1 ↓
Belgium	AA	Neg	AA (Neg)	AA- ↓	Aa3	Neg	Aa3 (Neg)	Aa3
Finland	AAA	Neg	AAA (Neg)	AA+ ↓	Aaa	Stable	Aaa	Aaa (Neg)
Greece	CC	Neg	SD ↓↓	CC/C	Ca	Developing	C ↓	Ca
Ireland	BBB+	Neg	BBB+(Neg)	BBB- ↓↓	Ba1	Neg	Ba1 (Neg)	Ba2 ↓
Netherlands	AAA	Neg	AAA (Neg)	AA+ ↓	Aaa	Stable	Aaa	Aaa (Neg)
Portugal	BB	Neg	BB (Neg)	CC/C ↓↓↓↓↓	Ba2	Neg	Ba3 ↓	Ca ↓↓↓↓↓
UK	AAA	Stable	AAA	AAA (Neg)	Aaa	Stable	Aaa	Aaa (Neg)
Switzerland	AAA	Stable	AAA	AAA	Aaa	Stable	Aaa	Aaa
Sweden	AAA	Stable	AAA	AAA	Aaa	Stable	Aaa	Aaa
Denmark	AAA	Stable	AAA	AAA	Aaa	Stable	Aaa	Aaa
Norway	AAA	Stable	AAA	AAA	Aaa	Stable	Aaa	Aaa
EFSF	AA+	Developing	AA+	AA+	(P) Aaa	Stable	Aa1 ↓	Aa1 ↓

Note: Arrows denote expected ratings changes from the current rating. (Neg) denotes negative outlook. (Neg W) denotes negative watch. SD means Selective Default. (P) means Provisional. The number of arrows denotes the expected change in ratings notches from the current level. We show a maximum of five arrows even for countries where we expect more than five notches of ratings change. In the outlook we have not included an extension of the actual EFSF lending beyond the now targeted €440bn maximum capacity. In the event that a substantial extension of the EFSF takes place and is likely to incur sizeable fiscal costs, various Euro Area countries may be at risk of downgrade. NA Not available.

Sources: Moody's, S&P and Citi Investment Research and Analysis

Sovereign Spreads and Rating Changes

Robert Crossley
+44 20 7986 9255
robert.crossley@citi.com

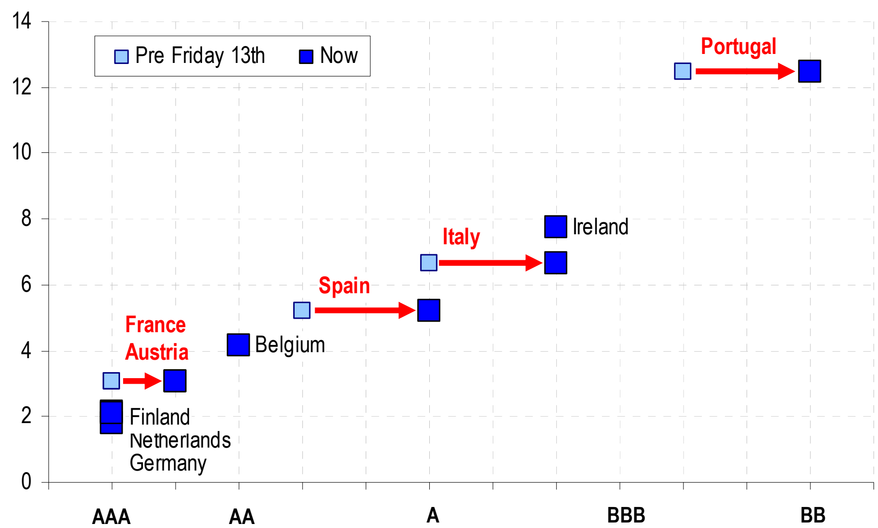
Aman Bansal
+91 22 4277 5021
aman1.bansal@citi.com

Italy and Spain remain focal points for the crisis. In the aftermath of the S&P ratings actions on Friday 13th January we examine the historical impact of credit events on BTP/Bund and BTP/Bono spreads. In addition to considering the immediate absolute spread change, we also looked at moves in the BTP/Bono spread in the week after a downgrade. For comparison we then repeated this analysis for Ireland, Portugal and Greece for their descents from AA+, AA- and A- respectively. We go on to provide a summary of our expectations for the evolution of ratings taken from our January Sovereign Ratings Outlook.

Historical impact of ratings changes for non-AAAs

S&P's downgrades on Friday are shown below for reference.

Figure 23. 10yr Sovereign Yields vs S&P Rating



Source: Citi Investment Research and Analysis, S&P

Of most interest to investors however is not the past, but whether current market reactions are in line with what has happened previously and what the future might hold. Please see our 16 January Euro Rates Strategy - Implications of S&P's Sovereign Downgrades for a full discussion of the ramifications of the downgrades for the market. Below we present an analysis of short term spread changes and also outline our expectations for future ratings changes from our January Sovereign Ratings Outlook.

Market reactions to ratings changes vary significantly

The analysis shows market reactions to ratings changes vary enormously. Most are obviously not a shock and represent the rating catching up with the market pricing. Intuitively it is also important whether the rating change forces the country out of an index or puts it in danger of ejection. The ratings agencies also have different followings, with Fitch tending to be more important in Europe for example. Isolating the effect of a downgrade is extremely difficult as other factors are always at play and vary in their strength. However, the analysis does give some idea of the magnitude of spread changes immediately following a downgrade. These are both smaller and more variable than one might intuitively expect[2].

[2] The other result we found is that short term average relative and absolute spread moves have generally tended to persist over the week.

Figure 24. Average 2-day Widening of Spread to Germany Following a Downgrade or Other Credit Event (Negative Watch)

Avg 2 day spread widening vs Germany per notch downgrade

	Moody's	S&P	Fitch
Italy	-8	12	4
Spain	-1	11	1
Ireland	19	13	5
Portugal	28	16	28
Greece	18	9	11

Source: Citi Investment Research and Analysis, Moody's, S&P, Fitch

Figure 25. Average 2-day Widening of Spread to Germany Over and Above Peer Group[3] Following a Downgrade or Other Credit Event (Negative Watch)

Avg 2 day spread widening vs Germany - relative to peers - per notch downgrade

	Moody's	S&P	Fitch
Italy	1	5	9
Spain	-1	3	-5
Ireland	7	1	4
Portugal	19	12	23
Greece	16	5	-1

Source: Citi Investment Research and Analysis, Moody's, S&P, Fitch

Figure 26 shows a history of credit ratings for Italy and Spain. Ratings and dates in red and bold denote being put on negative watch. AAA ratings are shaded in green. Ratings changes over 10 years ago are in grey and excluded from the above spread change analysis.

Figure 26. Ratings Change History for Italy and Spain (2-day Spread Change to Germany)

Italy	Date	Final Rating	Spread Change
Moody's	04 Oct 11	A2	-24
	17 Jun 11	**Aa2**	**-10**
	15 May 02	Aa2	-1
	03 Jul 96	Aa3	
	01 May 96	A1	
	02 Nov 93	A1	

Italy	Date	Final Rating	Spread Change
S&P	**05 Dec 11**	**A**	**-70**
	19 Sep 11	A	34
	17 Feb 11	A+	13
	19 Oct 06	A+	2
	07 Jul 04	AA-	0
	06 May 98	AA	
	15 Feb 95	AAA	

Italy	Date	Final Rating	Spread Change
Fitch	07 Oct 11	A+	6
	19 Oct 06	AA-	2
	25 May 06	AA	0
	17 Jun 02	AA	1
	14 Jul 98	AA-	
	26 Oct 95	AAA	

Spain	Date	Final Rating	Spread Change
Moody's	18 Oct 11	A1	28
	29 Jul 11	**Aa2**	**49**
	10 Mar 11	Aa2	-16
	15 Dec 10	**Aa1**	**-0**
	30 Sep 10	Aa1	-16
	30 Jun 10	**Aaa**	**-10**
	13 Dec 01	Aaa	-7
	31 Jan 97	Aa2	

Spain	Date	Final Rating	Spread Change
S&P	**05 Dec 11**	**AA-**	**-19**
	13 Oct 11	AA-	29
	28 Apr 10	AA	-2
	19 Jan 09	AA+	6
	12 Jan 09	**AAA**	**19**
	13 Dec 04	AAA	-0
	31 Mar 99	AA+	
	06 May 98	AA	
	11 Dec 92	AAA	

Spain	Date	Final Rating	Spread Change
Fitch	07 Oct 11	AA-	-11
	28 May 10	AA+	13
	10 Dec 03	AAA	-1
	01 Sep 99	AA+	
	14 Jul 98	AA	
	26 Oct 95	AAA	

Source: Moody's, S&P, Fitch, Citi Investment Research and Analysis

For comparison, Figure 27 below shows a history of credit ratings for Ireland, Portugal and Greece which started out at similar ratings to where Italy and Spain are now. Ratings/dates in bold and red designate negative watch. AAA ratings are shaded in green. Non-investment grade ratings are shaded in pale blue.

[3] For Italy, spread to Germany changes vs Spain. For Spain, spread to Germany changes vs Italy. For Ireland, Portugal and Greece the spread change is that over and above the average change in the spread of the other two members in the peer group.

Figure 27. Ratings Change History for Italy and Spain (2-day Spread Change to Germany)

Ireland	Date	Final Rating	Spread Change
Moody's	12 Jul 11	Ba1	76
	15 Apr 11	Baa3	60
	17 Dec 10	Baa1	69
	05 Oct 10	Aa2	24
	19 Jul 10	Aa2	-6
	02 Jul 09	Aa1	-10
	17 Apr 09	Aaa	4
	13 Feb 97	Aaa	
	27 Jan 97	Aaa	
	04 Sep 92	Aaa	

Ireland	Date	Final Rating	Spread Change
S&P	05 Dec 11	BBB+	-21
	01 Apr 11	BBB+	-49
	02 Feb 11	A-	-20
	23 Nov 10	A	98
	24 Aug 10	AA-	47
	08 Jun 09	AA	5
	30 Mar 09	AA+	9
	03 Oct 01	AAA	
	06 May 98	AA+	
	21 Jan 93	AAA	

Ireland	Date	Final Rating	Spread Change
Fitch	14 Apr 11	BBB+	89
	01 Apr 11	BBB+	-49
	09 Dec 10	BBB+	10
	06 Oct 10	A+	12
	04 Nov 09	AA-	-6
	08 Apr 09	AA+	15
	06 Mar 09	AAA	9
	16 Dec 98	AAA	
	14 Jul 98	AA+	
	26 Oct 95	AAA	

Portugal	Date	Final Rating	Spread Change
Moody's	05 Jul 11	Ba2	231
	05 Apr 11	Baa1	-8
	15 Mar 11	A3	18
	21 Dec 10	A1	18
	13 Jul 10	A1	9
	05 May 10	Aa2	99
	18 Nov 86	Aa2	

Portugal	Date	Final Rating	Spread Change
S&P	05 Dec 11	BBB-	-96
	29 Mar 11	BBB-	52
	24 Mar 11	BBB	25
	30 Nov 10	A-	-98
	27 Apr 10	A-	24
	21 Jan 09	A+	12
	13 Jan 09	AA-	24
	27 Jun 05	AA-	1
	15 Dec 98	AA	
	06 May 98	AA-	
	26 May 93	AAA	

Portugal	Date	Final Rating	Spread Change
Fitch	24 Nov 11	BB+	195
	01 Apr 11	BBB-	6
	24 Mar 11	A-	25
	23 Dec 10	A+	8
	24 Mar 10	AA-	-10
	14 Jul 98	AA	
	26 Oct 95	AAA	

Greece	Date	Final Rating	Spread Change
Moody's	25 Jul 11	Ca	39
	01 Jun 11	Caa1	-14
	09 May 11	B1	1
	07 Mar 11	B1	61
	16 Dec 10	Ba1	5
	14 Jun 10	Ba1	96
	22 Apr 10	A3	147
	22 Dec 09	A2	-31
	29 Oct 09	A1	3
	04 Nov 02	A1	
	07 May 98	A2	
	20 Feb 98	A2	
	28 Jan 97	A2	

Greece	Date	Final Rating	Spread Change
S&P	27 Jul 11	CC	29
	13 Jun 11	CCC	100
	09 May 11	B	1
	29 Mar 11	BB-	16
	02 Dec 10	BB+	-31
	27 Apr 10	BB+	-41
	16 Mar 10	BBB+	10
	16 Dec 09	BBB+	16
	07 Dec 09	A-	73
	14 Jan 09	A-	13
	09 Jan 09	A	27
	17 Nov 04	A	0
	10 Jun 03	A+	-1
	13 Mar 01	A	
	26 Mar 97	A-	

Greece	Date	Final Rating	Spread Change
Fitch	13 Jul 11	CCC	71
	20 May 11	B+	84
	14 Jan 11	BB+	3
	21 Dec 10	BBB-	30
	21 Dec 10	BBB-	30
	09 Apr 10	BBB+	-56
	22 Oct 09	A-	3
	16 Dec 04	A	0
	28 Sep 04	A+	0
	20 Oct 03	A+	-1
	20 Jun 01	A	
	27 Jul 00	A-	
	13 Mar 00	A-	
	25 Oct 99	A-	

Source: Citi Investment Research and Analysis

It is also interesting to compare the 2-day and 5-day changes. Figure 28 and Figure 29 show the absolute spread changes to Germany.

Figure 28. Average 2-day Widening of Spread to Germany Following a Downgrade or Other Credit Event (Negative Watch)

Avg 2 day spread widening vs Germany per notch downgrade

	Moody's	S&P	Fitch
Italy	-8	12	4
Spain	-1	11	1
Ireland	19	13	5
Portugal	28	16	28
Greece	18	9	11

Source: Citi Investment Research and Analysis

Figure 29. Average 5-day Widening of Spread to Germany Following a Downgrade or Other Credit Event (Negative Watch)

Avg 5 day spread widening vs Germany per notch downgrade

	Moody's	S&P	Fitch
Italy	-6	7	5
Spain	-2	25	14
Ireland	19	2	4
Portugal	21	23	36
Greece	16	11	11

Source: Citi Investment Research and Analysis

Figure 30 and Figure 31 show the spread changes to Germany, relative to the relevant peer group. One group is Italy and Spain[4]. The other is Ireland, Portugal and Greece.

Figure 30. Average 2-day Widening of Spread to Germany Over and Above Peer Group Following a Downgrade or Other Credit Event (Negative Watch)

Avg 2 day spread widening vs Germany - relative to peers - per notch downgrade

	Moody's	S&P	Fitch
Italy	1	5	9
Spain	-1	3	-5
Ireland	7	1	4
Portugal	19	12	23
Greece	16	5	-1

Source: Citi Investment Research and Analysis, Moody's, S&P, Fitch

Figure 31. Average 5-day Widening of Spread to Germany Over and Above Peer Group Following a Downgrade or Other Credit Event (Negative Watch)

Avg 5 day spread widening vs Germany - relative to peers - per notch downgrade

	Moody's	S&P	Fitch
Italy	6	9	5
Spain	1	3	2
Ireland	2	-7	11
Portugal	5	23	29
Greece	12	4	7

Source: Citi Investment Research and Analysis, Moody's, S&P, Fitch

Average relative and absolute spread moves have largely tended to persist over the week.

Conclusion of analysis of historical market reaction

Market reactions to ratings changes vary significantly

Market reactions of non-AAA spreads to ratings changes are not reliably consistent. Historical analysis of the magnitude of spread changes immediately following a downgrade shows that these are both smaller and more variable than one might intuitively expect. As we highlighted above, most are obviously not a shock and represent the rating catching up with the market pricing, rather than vice versa. Intuitively it is also important whether the rating change forces the country out of an index or puts it in danger of ejection[5]. Isolating the effect of a downgrade is extremely difficult as other factors are always at play and vary in their strength. However, the analysis does give some idea of the magnitude of spread changes immediately following a downgrade. These are both smaller and more variable than one might intuitively expect[6].

Trading rating changes

While not quite a case of buy the rumour, sell the fact, trading actual rating changes is an uncertain business. Trading the overshoots in sentiment on the way to the credit event, and being aware of the direction of the prevailing economic wind is probably the most pragmatic approach in our view. With this in mind, it is important to be aware of the medium term economics and how this translates into an outlook for ratings. We present a summary of this on the following page.

[4] So the spread change is effectively Italy/Spain

[5] The ratings agencies also have different followings, with Fitch tending to be more important in Europe for example.

[6] The other result we found is that short term average relative and absolute spread moves have generally tended to persist over the week.

An excerpt from our January *Sovereign Ratings Outlook*

Although S&Ps Friday the 13th sovereign downgrades were largely a case of ratings catching up with spreads, it is worth noting that the vast majority of Euro sovereigns are on Negative Outlook.

Figure 32. S&P Rating 13th January

	As at 12th Jan 2012		Post Fri 13th Statement	
	Rating	Outlook / Watch	Rating	Outlook / Watch
Austria	AAA	-ve Watch	**AA+ ↓**	**-ve Outlook**
Finland	AAA	-ve Watch	**AAA**	**-ve Outlook**
France	AAA	-ve Watch	**AA+ ↓**	**-ve Outlook**
Germany	AAA	-ve Watch	**AAA**	**Stable**
Netherlands	AAA	-ve Watch	**AAA**	**-ve Outlook**
Belgium	AA	-ve Watch	**AA**	**-ve Outlook**
Spain	AA -	-ve Watch	**A ↓↓**	**-ve Outlook**
Italy	A	-ve Watch	**BBB+ ↓↓**	**-ve Outlook**
Ireland	BBB+	-ve Watch	**BBB+**	**-ve Outlook**
Portugal	BBB -	-ve Watch	**BB ↓↓**	**-ve Outlook**
Greece	CC	-ve Outlook	**CC**	**-ve Outlook**

Source: Citi Investment Research and Analysis

No rating is safe

Further downgrades seem uncomfortably feasible if more action isn't taken or if the crisis escalates in our view.

Not Germany's…

As we highlight in our January Sovereign Ratings Outlook, if the sovereign debt crisis escalates further, the rating agencies are likely to put Germany's AAA rating on negative outlook in our view. The German sovereign balance sheet is likely to come under pressure from its contributions to the EFSF, the capital injections to the ESM, and from extra support to the banking system. Germany could lose its S&P AAA rating if the crisis escalates.

Not France's…

France's outlook, and ultimately rating, is also vulnerable to the probable need to provide extra support to contain the Euro area crisis, and also to a downward revision of S&P's optimistic Euro area 2012 growth forecast of +0.4% (vs Citi's -1.2%). If political and implementation risks materialise, S&P is also likely to take a dim view of the matter. Longer term, our forecast of debt to GDP ratio peaking at 96.1% by 2014 (from 85.4% in 2011) will probably not be consistent with a rating of AA+.

Not Italy's or Spain's…

A further downgrade of Italy is a distinct possibility despite substantial improvements since our last review. And fiscal slippage in Spain will also put upward pressure on debt to GDP. Austria remains vulnerable to an escalation of the crisis and Moody's putting the rating on Negative Outlook and a further downgrade from S&P is also possible over the longer term.

For more details…

Please see our 18 January Sovereign Ratings Outlook for detailed near and long term outlooks for individual countries' ratings.

The Gilt Market by Numbers

Gilts, it's as easy as 1, 2, 3…

Jamie Searle
+44-20-7986-9493
jamie.searle@citi.com

In the last week, 5yr gilts briefly dipped below 1%, 10yr gilts have fallen just below 2% and, perhaps most significantly, 30yr gilts have breached the psychological hurdle of 3%. The gilt market may be as easy as 1%, 2%, 3% (Figure 33), but it might not be for much longer in our view.

QE likely to be extended significantly

As we have long argued, record lows for gilt yields are likely to be a regular occurrence in 2012. The current round of QE will soon come to an end but, as our economists argue, there is a very high probability that it will be extended in February (the MPC meeting is 8-9 February). The Citi base case scenario is that cumulative QE will ultimately reach £600bn (from £275bn currently), but it could be even more if the economic outlook deteriorates further.

By end-Q3 2012, we expect 5yr gilts to yield 0.65%, 10s 1.5% and 30s 2.35%

QE is likely to continue to drive gilt yields lower, especially in the very long-end of the curve. The very front-end of the gilt curve, which already trades below the 0.5% policy rate, is likely to remain anchored (Figure 34). But longer-dated yields are likely to fall significantly in 2012. By end-Q3, we expect 5yr gilts to yield around 0.65%, 10s 1.5% and 30s 2.35% (see page 9 for a full set of our bond yield forecasts). As a side effect, real yields are likely to follow nominal yields lower and move deeper into negative territory (see *UK Inflation Strategy* of 9 January 2012).

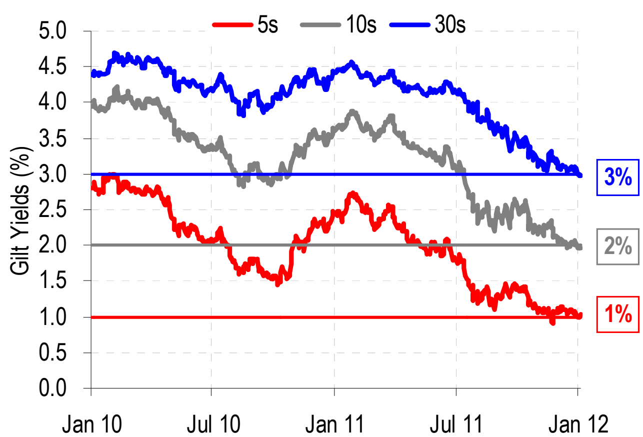
The underlying fundamentals are unlikely to change quickly

Of course, we are unlikely to reach these yield targets in a straight line and there are likely to be periods in which gilts come under pressure. This may transpire, for example, through bouts of optimism regarding the euro sovereign debt crisis or the temporary impact of issuance (in this regard, we note that next week's supply is particularly heavy). But the underlying fundamentals are unlikely to change quickly. The growth outlook continues to deteriorate and our economics team now forecast GDP growth of just 0.2% in 2012 and 1.0% in 2013 (see the January *Global Economic Outlook and Strategy*). Moreover, policy rates are likely to be on hold for at least the next three-years.

Trades: stay long gilts, 10s30s flatteners and 30yr gilt swap spreads

Against this backdrop, the established bull-flattening trend is unlikely to be disrupted for long and our message is clear: stay long gilts and 10s30s flatteners.

Figure 33. 5-, 10- and 30-yr Gilt Yields



Source: Citi Investment Research and Analysis, Bloomberg.

Figure 34. 2yr Gilts vs Base Rates

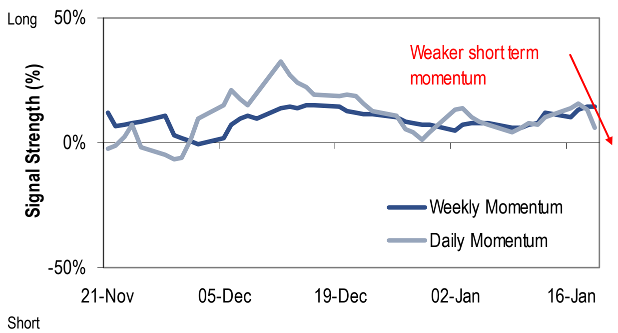
Source: Citi Investment Research and Analysis, Bloomberg.

Current ARTS Trading Signal

David Bieber
+44 207 986 4976
david.bieber@citi.com

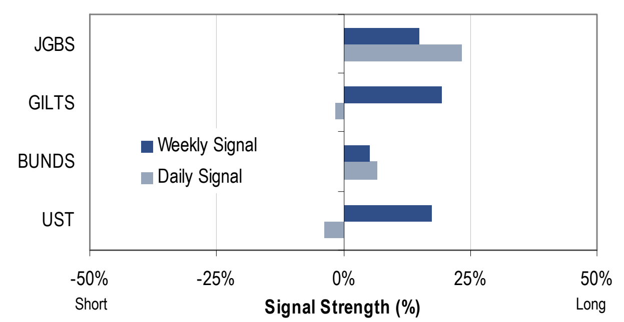
This week the daily and weekly algorithmic rates trading signals[7] (DARTS / ARTS) have both decreased their long duration position (to 4% / 6% respectively) driven by weaker short term momentum (see Figure 35) and decreasing long term risk aversion (see Figure 37). In contrast the short and long fundamentals signals have not changed from last week and continue to be fairly priced for both the long and short term signals (see Figure 39). As a result the net positions have no strong directional bias (with the exception of JGB). However the one theme to emerge is the short term out performance of Bund and Gilts against UST given their weaker fundamentals and stronger momentum dynamics.

Figure 35. Breakdown of current daily and weekly momentum signals



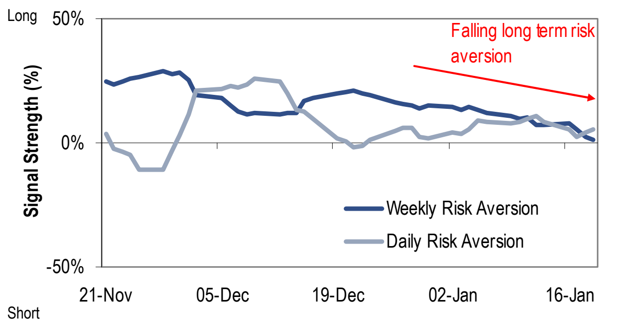
Source: CIRA, Bloomberg

Figure 36. Evolution history of the daily / weekly 10y momentum signal



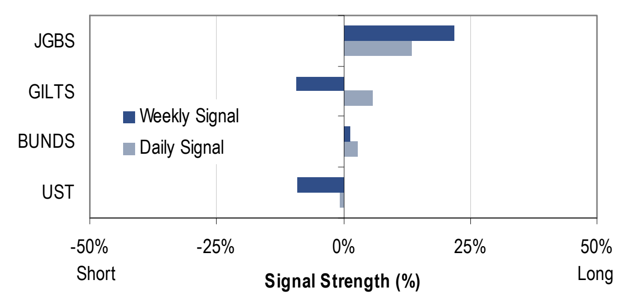
Source: CIRA, Bloomberg

Figure 37. Breakdown of current daily and weekly risk aversion signals



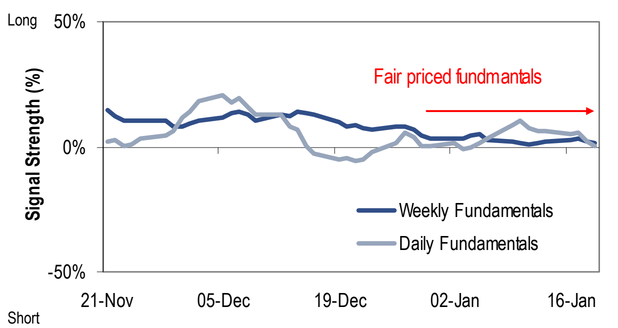
Source: Citi Investment Research and Analysis

Figure 38. Evolution history of the daily / weekly 10y risk aversion signal



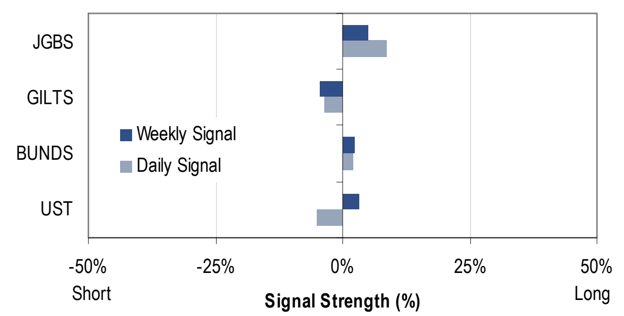
Source: CIRA, Bloomberg

Figure 39. Breakdown of current daily and weekly fundamental signals



Source: CIRA, Bloomberg

Figure 40. Evolution history of the daily / weekly 10y fundamental signal



Source: CIRA, Bloomberg

[7] The current signals are calibrated as of market close 18th January 2012.

European Sovereign Bond Market Statistics

Nishay Patel
+44-20-7986-1007
nishay.patel@citi.com

(1) How much EA Government Debt is Outstanding?

Figure 41 below shows the amount of gross general government debt in €bn and as a percentage of a member's GDP.

Figure 42 shows the amount of fixed rate euro government bonds and index-linked notes by maturity. This is a subset of the data used in Figure 41

Figure 41. Euro Area Government Debt Outstanding (2012F)

	General government gross debt €bn 2012F	% of GDP 2012F
Euro area	8714	90
Austria	231	74
Belgium	367	94
Cyprus	12	66
Estonia	1	6
Finland	102	50
France	1830	89
Germany	2151	82
Greece	411	189
Ireland	186	115
Italy	1967	121
Luxembourg	10	22
Malta	5	66
Netherlands	416	67
Portugal	191	112
Slovak Republic	34	47
Slovenia	18	47
Spain	783	70

Source: International Monetary Fund, World Economic Outlook Database, September 2011

Figure 42. Bond Market Size (EUR fixed and index-linked bonds), €bn

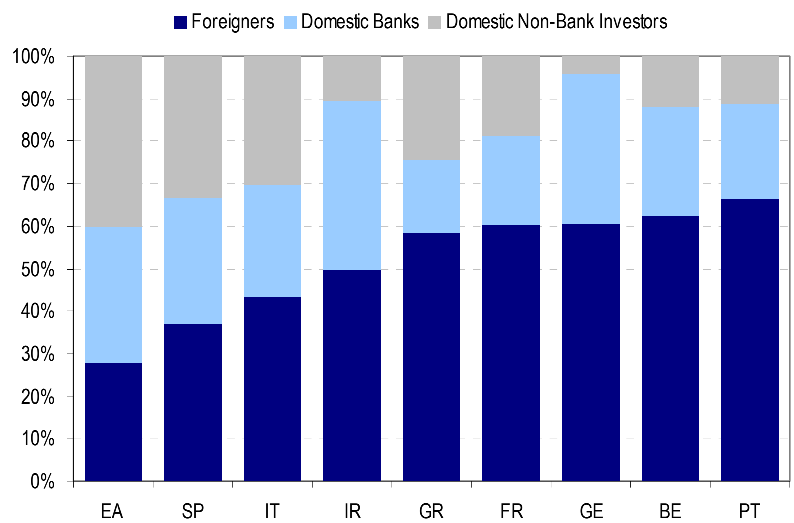
	Size of bond market (fixed rate bonds and linkers) 2yr	5yr	10yr	15yr	30yr	Total
Germany	393	298	169	63	85	**1008**
France	331	316	268	76	124	**1113**
Italy	465	351	303	132	120	**1372**
Spain	161	123	91	53	54	**481**
Netherlands	91	66	59	12	23	**251**
Belgium	80	87	56	20	28	**269**
Greece	76	50	38	32	17	**212**
Austria	45	50	45	15	12	**168**
Finland	19	22	18	6	0	**64**
Portugal	34	32	31	0	7	**104**
Ireland	23	19	34	8	0	**85**

Source: Citi Investment Research and Analysis

(2) What is the proportion of domestic ownership?

The composition of ownership of government debt (domestic vs non-domestic) is shown in Figure 43 below.

Figure 43. Selected EA Countries – Composition of Ownership of Government Debt (as of 1Q11)



Note: Domestic bank holdings of government debt include bank loans to the general government.
Source: World Bank, Eurostat, ECB, National Central Banks , Citi Economics, CIRA

(3) What are the long-term financing requirements?

Figure 44 shows total financing requirements for selected sovereigns out to 2014.

Figure 44. General Government Gross Financing requirements (EUR bn), 2012–14F

Country Group	2012	2013	2014	2012-2013 Q2	2012-2014 Q2
Austria	29.1	24.8	32.5	36.3	61.4
Belgium	73.9	40.4	34.3	92.5	132.1
Cyprus	4.9	3.0	1.6	6.8	8.6
Finland	13.9	5.6	6.1	13.6	19.3
Greece	65.6	41.9	38.3	92.8	127.7
Ireland	14.0	10.7	14.4	22.3	37.8
Italy	373.4	202.5	171.9	466.6	650.8
Netherlands	76.5	45.7	42.0	98.8	143.5
Spain	216.8	138.2	123.3	288.6	413.1
Portugal	34.4	18.3	22.2	38.8	62.9
France	356.6	202.1	156.3	442.7	640.2
Germany	319.2	258.8	194.7	466.6	682.6
GR+IR+PO	114.0	71.0	74.9	153.9	228.5
SP+IT	590.2	340.7	295.1	755.2	1063.9
GR+IR+PO+IT+BE+ SP+FR+AU+NE+FI	1259.1	733.3	642.9	1599.8	2297.5

Source: Budget deficit (IMF forecasts for Ireland, Austria, Finland, Citi forecasts for all others) plus bond and bill redemptions. Greek/EFSF programmes are not reflected.
Source: Bloomberg, CIRA, *Global Economic Outlook and Strategy*, 28 November 2011

Fixed Rate EUR Bonds + Index-linked notes

We display our gross government bond issuance forecasts for non-bailout EMU countries in Figure 45 below[8]. This is a subset of the data used Figure 44.

Figure 45. Gross issuance forecasts for (EUR fixed rate government bonds & index-linked notes)

Gross Supply (€bn)	2012	Tickers used in our supply estimates
Germany	178	Schatz, Bobl, Bund, Bundei, Boblei
France	188	OAT,BTAN,BTANi,OATi,OATei
Italy	208	BTP, BTPei
Spain	87	SPGB
Netherlands	60	DSL
Belgium	26	OLO
Austria	23	RAGB
Finland	11	RFGB
Total	**780**	

Source: Source: CIRA estimates

[8] Also included in the *Global Supply Monitor* section of this publication

Global Supply Monitor

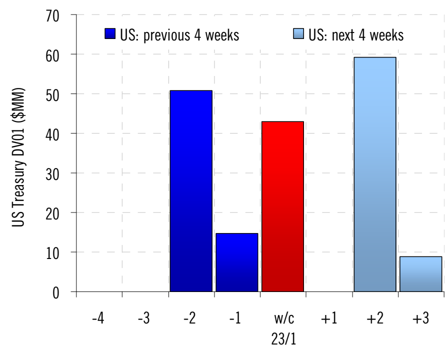
Aman Bansal
+91 22 4277 5021
aman1.bansal@citi.com

Nishay Patel
+44 20 7986 1007
nishay.patel@citi.com

Historical and projected DV01 of USD, EUR and GBP issuance (weekly)

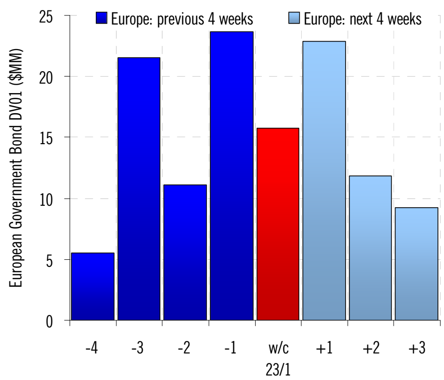
Figure 46 to Figure 48 show the $DV01 of projected issuance over the next four weeks and the previous four weeks. The DV01 of issuance in the week commencing 23 January is shown in red.

Figure 46. Estimated $DV01 of US Treasury Issuance (Previous 4 and Next 4 Weeks)



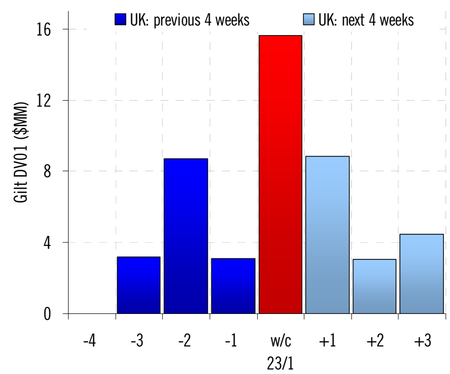
Source: US Treasury, Citi estimates

Figure 47. Estimated $DV01 of Euro Bond Issuance (Previous 4 and Next 4 Weeks)



Source: DMOs, Citi estimates

Figure 48. Estimated $DV01 of UK Gilt Issuance (Previous 4 and Next 4 Weeks)



Source: DMO, Citi estimates

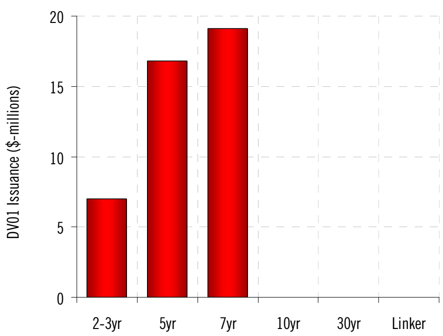
DV01 of expected USD, EUR and GBP issuance split by maturity (week beginning 23 January)

Next week's UST issuance is split between 2-, 5- and 7-year bonds. The 7-year issuance accounts for 44% of total DV01 of issuance at $19million/bp (Figure 49).

In Europe, the 30-year sector accounts for 93% of total issuance at €11million/bp (Figure 50).

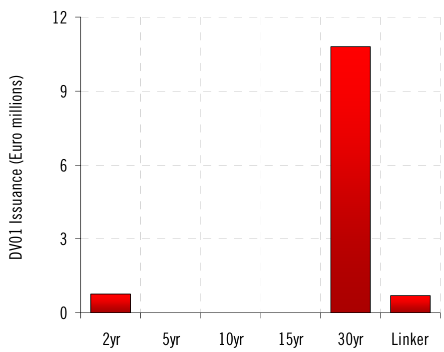
The only gilt issue next week will be a reopening of the 3.75% 2052 gilt for approximately £10million/bp (Figure 51).

Figure 49. USD DV01 Split by Maturity (23 Jan – 29 Jan)



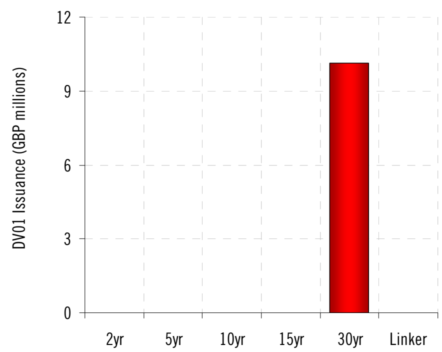
Source: US Treasury, CIRA estimates

Figure 50. EUR DV01 Split by Maturity (23 Jan – 29 Jan)



Source: DMOs, CIRA estimates

Figure 51. GBP DV01 Split by Maturity (23 Jan – 29 Jan)

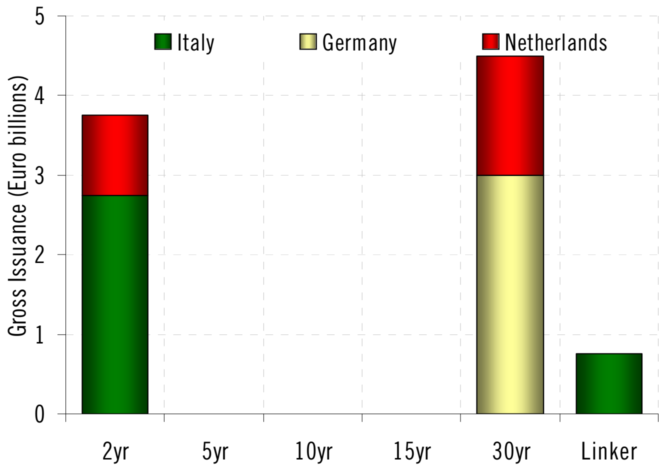


Source: DMO, CIRA estimates

Expected euro gross and DV01 split by country and maturity (week beginning 23 January)

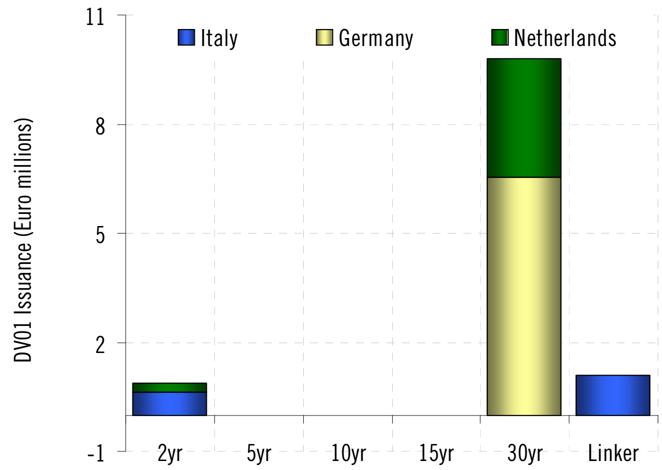
In Europe, issuance comes from Italy (€3.75bn), Germany (€3bn) and the Netherlands (€2.5bn) - Figure 52. In DV01 terms, 83% of next week's issuance is expected to come from 30yr Netherlands and Germany (Figure 53).

Figure 52. Euro Gross Issuance next week



Source: DMOs, CIRA estimates, Bloomberg

Figure 53. Euro DV01 Issuance next week



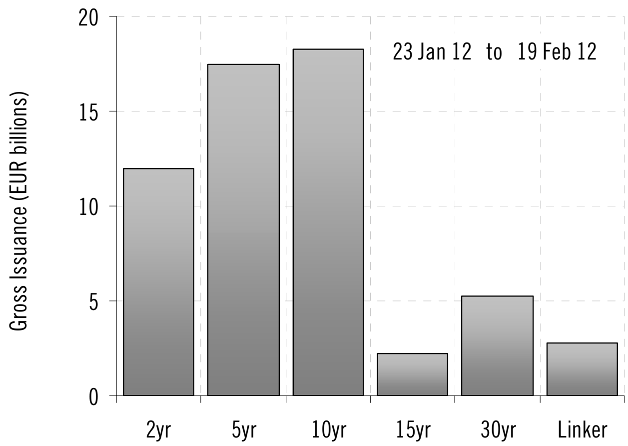
Source: DMOs, CIRA estimates, Bloomberg

Expected euro issuance (gross and DV01) by maturity for the next four-weeks (23 January – 19 February)

Over the next four weeks, 62% of total issuance comes from the 5- and 10-year sectors at €35bn (Figure 54).

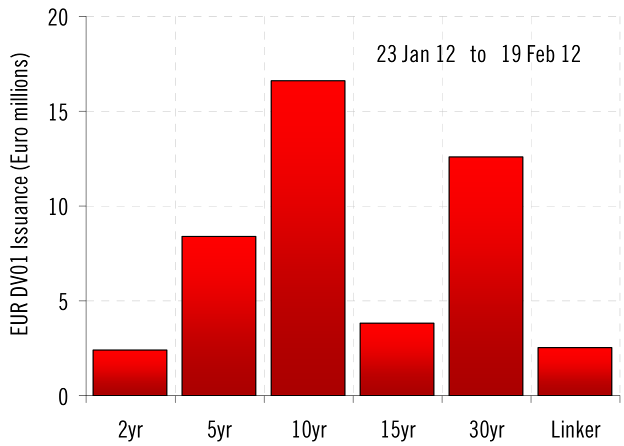
In DV01 terms, the 10year sector accounts for 36% of the total issuance at around €17million/bp (Figure 55).

Figure 54. Euro Gross Issuance over the Next Four Weeks



Source: DMOs, CIRA estimates, Bloomberg

Figure 55. Euro DV01 Issuance over the Next Four Weeks



Source: DMOs, CIRA estimates, Bloomberg

US coupons for the next four weeks – maturity split

There are sizeable UST coupon payments in the week beginning 13 February ($22bn). In this week, 32% of total coupon payments fall in the 30yr sector ($6.9bn) - Figure 56.

Figure 56. Maturity Split of UST Coupon Payments over the Next Four Weeks (USD-Billions)*

Week Commencing	2-3yr	5yr	7yr	10yr	30yr	Linker	Total
23 Jan							
30 Jan	2.2	1.9	0.4				**4.5**
06 Feb							
13 Feb	3.9	2.6	2.3	6.2	6.9		**21.9**
Total	**6.2**	**4.4**	**2.7**	**6.2**	**6.9**		**26.4**

Source: CIRA, Bloomberg *This table is on a trade-date basis*

Euro coupons for the next four weeks – maturity split

There are significant Euro coupon payments from Italy (€9.9bn) and Spain (€6.2bn) in the week beginning 23 January. Coupon payments are light in the following three weeks (Figure 57).

Figure 57. Maturity Split of Euro Coupon Payments over the Next Four Weeks (EUR-Billions)*

Week Commencing	2yr	5yr	10yr	15yr	30yr	Linker	Total
23 Jan	3.7	5.6	2.3	1.8	2.6		**16.1**
30 Jan							
06 Feb		0.2					**0.2**
13 Feb		0.3					**0.3**
Total	**3.7**	**6.1**	**2.3**	**1.8**	**2.6**		**16.6**

Source: CIRA, Bloomberg *This table is on a trade-date basis*

UK coupons for the next four weeks

There are minimal gilt coupon payments over the next four weeks (Figure 58).

Figure 58. Maturity Split of Gilt Coupon Payments over the Next Four Weeks (GBP-Billions)*

Week Commencing	2yr	5yr	10yr	15yr	30yr	Linker	Total
23 Jan						0.4	**0.4**
30 Jan							
06 Feb							
13 Feb						0.3	**0.3**
Total						**0.7**	**0.7**

Source: CIRA, Bloomberg *This table is on a trade-date basis*

Euro coupons and redemptions split by maturity and country

Figure 59 below shows a weekly breakdown of euro coupons and redemptions, split by sector and country for the next four weeks.

Figure 59. Euro Coupons and Redemptions by Maturity and Country for the Next 4 weeks (EUR Billions)

	Week Beginning 23 Jan (Mon)		Coupons	Redemptions
		Austria		
		Belgium		
		Germany		
		Finland		
	Coupons	France		
2yr	**3.7**	Greece		
5yr	**5.6**	Ireland		
10yr	**2.3**	Italy	**9.9**	**25.8**
15yr	**1.8**	Netherlands		
30yr	**2.6**	Portugal		
Linker		Spain	**6.2**	
	16.1		16.1	25.8

	Week Beginning 30 Jan (Mon)		Coupons	Redemptions
		Austria		
		Belgium		
		Germany		
		Finland		
	Coupons	France		
2yr		Greece		
5yr		Ireland		
10yr		Italy		
15yr		Netherlands		
30yr		Portugal		
Linker		Spain		
	0.0		0.0	0.0

	Week Beginning 06 Feb (Mon)		Coupons	Redemptions
		Austria		
		Belgium		
		Germany		
		Finland		
	Coupons	France		
2yr		Greece		
5yr	**0.2**	Ireland		
10yr		Italy		
15yr		Netherlands		
30yr		Portugal	**0.2**	
Linker		Spain		
	0.2		0.2	0.0

	Week Beginning 13 Feb (Mon)		Coupons	Redemptions
		Austria	0.3	
		Belgium		
		Germany		
		Finland		
	Coupons	France		
2yr		Greece		
5yr	0.3	Ireland		
10yr		Italy		
15yr		Netherlands		
30yr		Portugal		
Linker		Spain		
	0.3		0.3	0.0

Source: CIRA, Bloomberg

**This table is on a trade-date basis*

Provisional auction calendar for the next four weeks

Figure 60. Provisional Auction Calendar for the Next Four Weeks, Gross Issuance (Billions), DV01 (USD Millions)

Auction Date	Country Issuing	Estimated Size (Local Ccy)	Issue Details (Estimated)	DV01 $million/bp	Approx. Number 10yr Futures TYH2 (UST)	G H2 (Gilt)	RXH2 (Bund)
23 Jan (Mon)	UK	3.9	Syndicated re-opening of 3¾% Treasury Gilt 2052 in w/c 23 Jan (issue and			105k	
23 Jan (Mon)	US	1.5 - 2	Outright Treasury Coupon Purchases: 15/8/2022 - 15/2/2031				
23 Jan (Mon)	UK	1.5	Gilt APF Buyback: 3-10yrs				
24 Jan (Tue)	Netherlands	2.5	DSL Jan13 and Jan42 (issue confirmed, size 1.5 - 2.5bn)				34k
24 Jan (Tue)	US	35.0	2-Year		87k		
24 Jan (Tue)	US	4.25 - 5	Outright Treasury Coupon Purchases: 31/1/2018 - 15/11/2019				
24 Jan (Tue)	UK	1.4	Gilt APF Buyback: 25yrs+				
25 Jan (Wed)	Germany	3.0	Bund 3.25% Jul42 reopening (issue and size confirmed)				64k
25 Jan (Wed)	US	35.0	5-Year		208k		
25 Jan (Wed)	UK	1.4	Gilt APF Buyback: 10-25yrs				
26 Jan (Thu)	Italy	2.8	CTZ (estimated size)				5k
26 Jan (Thu)	Italy	0.8	BTPei (estimated size)				6k
26 Jan (Thu)	US	29.0	7-Year		237k		
26 Jan (Thu)	US	2.25 - 2.75	Outright Treasury Coupon Purchases: 15/2/2036 - 15/11/2041				
27 Jan (Fri)	US	8 - 8.75	Outright Treasury Coupon Sales : 15/3/2014 - 15/1/2015		30k		
			Weekly $DV01 of Issuance	**53.6**			
			Total Number of Futures Contracts		**420k**	**26k**	**109k**

Auction Date	Country Issuing	Estimated Size (Local Ccy)	Issue Details (Estimated)	DV01 $million/bp	Approx. Number 10yr Futures TYH2 (UST)	G H2 (Gilt)	RXH2 (Bund)
30 Jan (Mon)	Italy	7.0	BTP 5yr and 10yr (estimated size)				43k
30 Jan (Mon)	US	4.25 - 5	Outright Treasury Coupon Purchases: 15/2/2020 - 15/11/2021				
30 Jan (Mon)	UK	1.5	Gilt APF Buyback: 3-10yrs				
31 Jan (Tue)	US	2.25 - 2.75	Outright Treasury Coupon Purchases : 15/2/2036 - 15/11/2041				
31 Jan (Tue)	UK	1.4	Gilt APF Buyback: 25yrs+				
01 Feb (Wed)	Germany	5.0	Bund 2% Jan22 reopening (issue and size confirmed)				40k
01 Feb (Wed)	UK	3.0	5% Treasury Stock 2025			41k	
01 Feb (Wed)	UK	1.4	Gilt APF Buyback: 10-25yrs				
02 Feb (Thu)	France	7.9	OAT 5yr, 10yr and 15yr (estimated size)				74k
02 Feb (Thu)	UK	1.0	01/8% Index-linked Treasury Gilt 2029			18k	
			Weekly $DV01 of Issuance	**10.6**			
			Total Number of Futures Contracts		**-116k**	**-19k**	**158k**

Auction Date	Country Issuing	Estimated Size (Local Ccy)	Issue Details (Estimated)	DV01 $million/bp	Approx. Number 10yr Futures TYH2 (UST)	G H2 (Gilt)	RXH2 (Bund)
07 Feb (Tue)	Netherlands	5.5	New 10yr DSL (Jul22) via DDA (issue confirmed, estimated size)				45k
07 Feb (Tue)	Austria	1.8	RAGB 5yr and 30yr (estimated size and tenor)				20k
07 Feb (Tue)	UK	4.0	1¾% Treasury Gilt 2017			21k	
07 Feb (Tue)	US	32.0	3-Year		79k		
08 Feb (Wed)	Germany	4.0	Bobl Feb17 reopening (issue and size confirmed)				17k
08 Feb (Wed)	US	24.0	10-Year		265k		
09 Feb (Thu)	US	16.0	30-year		391k		
			Weekly $DV01 of Issuance	**74.2**			
			Total Number of Futures Contracts		**735k**	**21k**	**82k**

Auction Date	Country Issuing	Estimated Size (Local Ccy)	Issue Details (Estimated)	DV01 $million/bp	Approx. Number 10yr Futures TYH2 (UST)	G H2 (Gilt)	RXH2 (Bund)
14 Feb (Tue)	Italy	4.8	BTP 3yr and 5yr (estimated tenor and size)				11k
14 Feb (Tue)	Netherlands	2.5	DSL Jan17 reopening (issue confirmed, size 3 - 4bn)				11k
16 Feb (Thu)	France	10.6	BTAN/Index-linked OAT (estimated size)				42k
16 Feb (Thu)	UK	1.5	4½% Treasury Gilt 2034			30k	
16 Feb (Thu)	US	9.0	30-Year TIPS		109k		
			Weekly $DV01 of Issuance	**22.5**			
			Total Number of Futures Contracts		**109k**	**30k**	**64k**

Additional Issues Expected in January

► Finland 5yr (€2bn)

These are not included in the cashflow tables and gross supply charts

[1] The next release of the approximate purchase and sale amounts and tentative outright Treasury operation schedule will be at 1400 (NY Time) on 31 January 2012

Source: DMOs, CIRA estimates

The three figures on this page show the upcoming profile gross and net supply, coupons and redemptions, and the resultant NCR, for each of the next four weeks.

These are calculated on a *settlement date* basis.

US net cash-requirements (NCR) over the next four weeks

The US NCR moves sharply from negative (-$11bn) to positive ($53bn) in the week beginning 30 January. Over the four week period as a whole, coupon payments, redemptions and buybacks account for 77% of total gross supply (Figure 61).

Figure 61. US Weekly Cash Flow Profile for Next Four weeks, USD Billions

Settling in Week Commencing	A Gross Supply	B Coupons	A - B Net Supply	C Redemptions	D Buybacks	A - B - C - D NCR
23 Jan					11	-11
30 Jan	114	4.5	109	58	-1.3	53
06 Feb					-1.3	1.3
13 Feb	72	21.9	50	50	-1.3	2
Total	**186**	**26.4**	**160**	**107**	**10**	**42**
Average	47	6.6	40	27	5	8
YTD Average	55	1.9	53	31		22

Source: US Treasury, Citi estimates, Bloomberg

Euro cash-flow profile over the next four weeks

The week commencing 30 January is the only week with a negative net cash requirement over the next four weeks. Over the four week period as a whole, the net cash requirement is strongly positive at €25bn (Figure 62).

Figure 62. Estimated Euro Weekly Cash Flow Profile for Next Four weeks, EUR Billions

Settling in Week Commencing	A Gross Supply	B Coupons	A - B Net Supply	C Redemptions	A - B - C NCR
23 Jan	22.6		22.6		22.6
30 Jan	13.5	16.1	-2.6	25.8	-28.4
06 Feb	20.1		20.1		20.1
13 Feb	11.3	0.2	11.0		11.0
Total	**67.4**	**16.3**	**51.2**	**25.8**	**25.4**
Average	16.9	4.1	12.8	6.5	6.3
YTD Average	16.4	7.2	9.2	18.1	-8.9

Source: DMOs, Citi estimates, Bloomberg

Gilt cash-flow profile over the next four weeks

The UK NCR is negative in three of the next four weeks at -£4bn (Figure 63). Coupon payments and redemptions are very light over the next four weeks. The last APF buyback will be on 1 February, we expect the BoE to announce additional QE at the 9 February policy rate meeting.

Figure 63. Estimated UK Weekly Cash Flow Profile for Next Four weeks, GBP Billions

Settling in Week Commencing	A Gross Supply	B Coupons	A - B Net Supply	C Redemptions	D Buybacks	A - B - C - D NCR
23 Jan	3.9	1.9	2.0		5	-3.1
30 Jan	4.0		4.0		5	-1.1
06 Feb	4.0		4.0			4.0
13 Feb	1.5	0.3	1.2		5	-3.9
Total	**13.4**	**2.2**	**11.2**		**15**	**-4.1**
Average	3.4	0.6	2.8		5	-1.0
YTD Average	4.0	0.1	4.0			4.0

Source: DMO, Citi estimates, Bloomberg

JGB settlement cash-flow profile over the next four weeks

Figure 64 shows the profile of JGB gross and net supply, coupons and redemptions, and the resultant NCR, for each of the next four weeks. The NCR is positive until the week commencing 13 February which sees ¥2.7trillion redemptions easily offset ¥0.7trillion of gross supply.

Figure 64. Estimated JGB Weekly Cash Flow Profile for Next Four weeks (JPY-Trillions) *

Settling in week commencing	A Gross Supply	B Coupons	A - B Net Supply	C Redemptions	A - B - C Net Cash Requirement
23 Jan	3.2		3.2		3.2
30 Jan	1.4		1.4		1.4
06 Feb	4.9		4.9		4.9
13 Feb	0.7	0.01	0.7	2.7	-2.0
Total	**10.2**	**0.01**	**10.2**	**2.7**	**7.5**
Average	2.6		2.5	0.7	1.9
YTD Average		0.01	-0.0	0.9	-0.9

Source: CIRA estimates, Bloomberg, BoJ *This table is on a settlement-date basis*

Explanation of trade-date and settlement-date:

Throughout the *Supply Monitor* section coupons and redemption payments are allocated on a trade date basis *except in the cash flow tables* shown above. In these cash flow tables; gross supply, coupons and redemptions are on a settlement date basis. This is to keep everything in line with US supply settling during the middle or end of the month instead of just T+3 as in Europe for example.

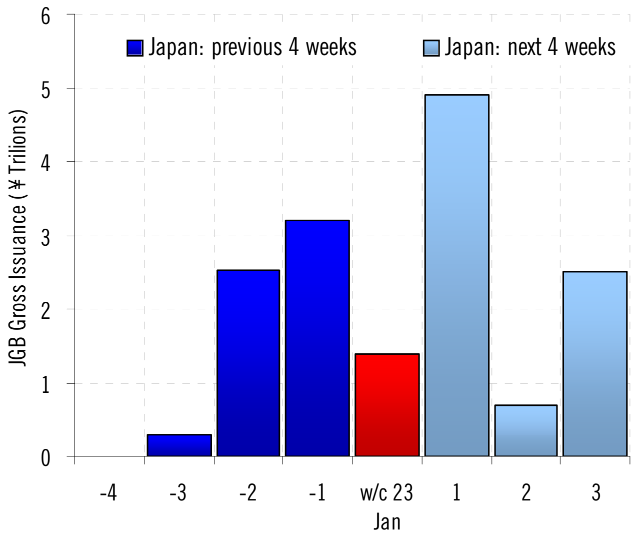
Trade date basis: In Europe if the coupon payment falls on Monday 5st March, for example, it would be allocated to the previous week (the week commencing 27 February) as that would be when you would trade to use the money you know is coming in on Monday 5st March. In other words, you don't wait for the money to hit your account to use it. Since we are trying to account for the impact of those payments we allocate them on a trade date basis, rather than settlement date.

Settlement date basis: The net cash requirement tables (Figure 61, Figure 62, Figure 63 and Figure 64) are on a settlement basis. In the US, conventional supply settles either during the middle of the month or at the end of the month. (If there is a Treasury auction during the last week of the month it will settle in the following week). Consequently, if you participate in the UST 3-year auction on 7 February the money would leave your account during the w/c 15 February. In addition, TIPS often settle during a different week from conventional supply.

Historical and projected DV01 of JGB issuance (weekly)

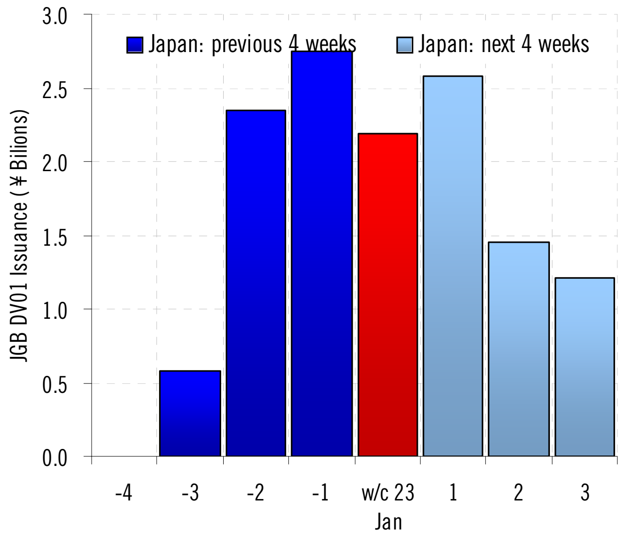
Figure 65 and Figure 66 show projected JGB gross and ¥DV01 of issuance over the next four weeks and the previous four weeks. Next week sees issuance in the 10- and 20-year sectors for ¥150 billion and ¥1250 billion respectively (Figure 65). In DV01 terms, this is equivalent to around ¥2.2billion/bp (Figure 66).

Figure 65. Estimated Gross JGB Issuance (Previous 4 and Next 4 weeks)



Source: CIRA estimates, BoJ, MoF

Figure 66. Estimated ¥DV01 of JGB Issuance (Previous 4 and Next 4 weeks)



Source: CIRA estimates, BoJ, MoF

JGB coupons for the next four weeks – maturity split

There are minimal JGB coupon payments over the next four weeks (Figure 67).

Figure 67. Maturity Split of JGB Coupon Payments over the Next Four weeks (JPY-Billions)*

Week commencing	2yr	5yr	10yr	20yr	30yr	TOTAL
23 Jan						
30 Jan						
06 Feb	6					**6**
13 Feb			5	4		**9**
Total	**6**		**5**	**4**		**15**

Source: CIRA estimates, Bloomberg *This table is on a trade-date basis

JGB auction calendar for the next four weeks

Figure 68 shows our JGB issuance expectations for the next four weeks and weekly $DV01.

Figure 68. Provisional Auction Calendar for the Next Four Weeks, Gross Issuance (Billions), DV01 (JPY Millions).

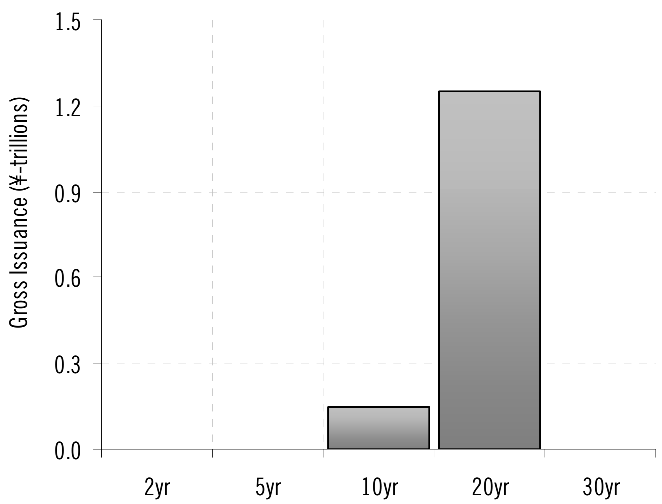
Auction Date	Country Issuing	Estimated Size (Local Ccy)	Issue Details (Estimated)	Weekly DV01 ¥ millions	Weekly DV01 $ millions
23 Jan (Mon)	JPY	300	AEL (10-20 years)	386	5
26 Jan (Thu)	JPY	1100	20year	1804	24
			Weekly DV01 of Issuance	**¥2190**	**$29**
31 Jan (Tue)	JPY	2700	2year	535	7
02 Feb (Thu)	JPY	2200	10year	2046	27
			Weekly DV01 of Issuance	**¥2581**	**$34**
07 Feb (Tue)	JPY	300	AEL (20-30 years)	576	8
09 Feb (Thu)	JPY	400	40year	880	12
			Weekly DV01 of Issuance	**¥1456**	**$19**
16 Feb (Thu)	JPY	2500	5year	1213	16
			Weekly DV01 of Issuance	**¥1212**	**$16**

Source: CIRA estimates, BoJ, MoF

Expected JGB gross and DV01 issuance by maturity (week beginning 23 January)

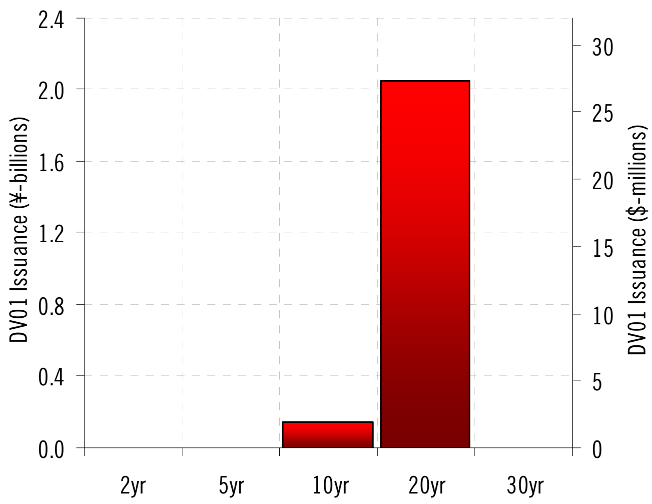
Figure 69 and Figure 70 show a split of next week's JGB issuance by maturity.

Figure 69. JGB Gross Split by Maturity (Week Beginning 23 January)



Source: CIRA , Bloomberg

Figure 70. JGB DV01 Split by Maturity (Week Beginning 23 January)



Source: CIRA, Bloomberg

Appendix – global supply forecasts

Figure 71. UK, US and EMU-11 Gross Supply – Citi forecasts

2012 Cashflow Tables

Nominal Gross Supply (£bn)

	Auctions				Syndications			A	B	C = A - B	D	E	F = C - D - E
UK	Shorts	Mediums	Longs	Linkers	Long	Linker	Mini Tender	Gross Supply	Coupons	Net Supply	Redemptions	Buybacks	NCR
Jan-12	8	4		1	4			17	2	15	0	20	-5
Feb-12	4	3	2	1		3	1	13	1	13			13
Mar-12	4	3	2	2			1	11	11	1	27		-26
Apr-12	5	4	2	2				17		17			17
May-12	5	4	2	2	5	3	1	16	1	15			15
Jun-12	5	4	2	1				16	7	8	26		-17
Jul-12	5	4	2	1				16	2	14			14
Aug-12	5		2	2	5	4	1	13	1	12			12
Sep-12	5	3		1				13	10	3			3
Oct-12	5	4	2	1				15		15			15
Nov-12	4		2	1	0	7	1	10	1	9			9
Dec-12	4	7	2	1				16	7	10			10
Total	61	39	20	18	14	17	5	173	42	130	53		57

	Gross Supply							A	B	C	D = A - B - C	E	F = D -E
US	2yr	3yr	5yr	7yr	10yr	30yr	TIPS	Gross Supply	Coupons	Fed Purchases	Net Supply	Redemptions	NCR
Jan-12	35	32	35	29	21	13	15	180	11	0	169	93	76
Feb-12	35	32	35	29	24	16	9	180	25		155	110	45
Mar-12	35	32	35	29	21	13	11	176	8		168	90	78
Apr-12	34	31	35	29	21	13	14	177	5		172	103	69
May-12	35	31	35	29	24	16	11	180	27		153	94	58
Jun-12	35	31	35	29	21	13	7	170	3		167	82	85
Jul-12	35	31	34	28	21	13	13	174	12		162	112	49
Aug-12	35	31	34	28	24	16	12	179	26		153	98	55
Sep-12	34	31	34	28	21	13	11	172	3		169	83	86
Oct-12	33	30	33	28	21	13	7	165	9		156	91	66
Nov-12	33	30	33	28	24	16	11	175	22		153	110	43
Dec-12	33	30	33	28	21	13	12	170	7		163	90	73
Total	408	372	411	342	264	168	133	2098	160		1938	1156	783

Gross issuance forecasts for 2012 to 2013

(for fixed rate governmnent bonds and index-linked notes)

Gross Supply	2012	2013
EMU-11 (€bn) - excluding GRC, IRE and PRT	780	691

Gross Supply	2012	2013
US ($bn)	2098	2035

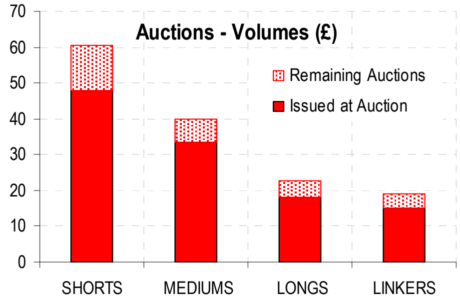
Gross Supply *	11/12	12/13
UK (£bn)	154	126

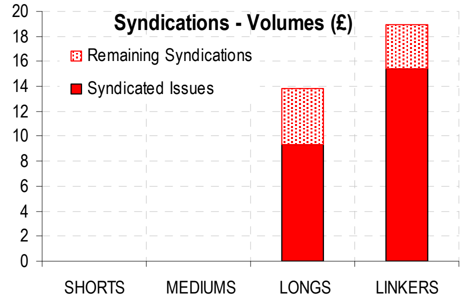
*UK supply forecasts on financial year basis

Gross Supply (€bn)	2012	2013	Tickers used in our supply estimates
Germany	178	166	Schatz, Bobl, Bund, Bundei, Boblei
France	188	179	OAT,BTAN,BTANi,OATi,OATei
Italy	208	139	BTP, BTPei
Spain	87	101	SPGB
Netherlands	60	44	DSL
Belgium	26	38	OLO
Austria	23	15	RAGB
Finland	11	8	RFGB
Total	780	691	

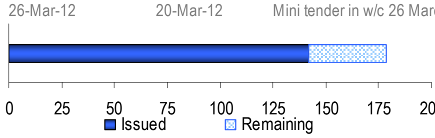
Source: DMOs, Citi estimates, Bloomberg

Figure 72. UK Gilt Remit and Progress for FY2011/12 (Issued volumes include the Post Auction Facility)





Operation Date	Details Announced	Gilt	Estimated (Nominal)	Cash Amt Issued	Method
05-Apr-11	29-Mar-10	3¾% Treasury Gilt 2021		3.8	Auction
06-Apr-11	29-Mar-10	1 1/8% Index-linked Treasury Gilt 2037		1.2	Auction
13-Apr-11	05-Apr-10	2% Treasury Gilt 2016		4.9	Auction
14-Apr-11	05-Apr-10	4¼% Treasury Gilt 2040		2.0	Auction
19-Apr-11	12-Apr-10	0½% Index-linked Treasury Gilt 2050		1.0	Auction
04-May-11	26-Apr-10	5% Treasury Stock 2025		3.7	Auction
10-May-11	03-May-10	1 7/8% Index-linked Treasury Gilt 2022		1.7	Auction
12-May-11	03-May-10	4¼% Treasury Gilt 2040		2.2	Auction
19-May-11	10-May-10	2¼% Treasury Gilt 2014		5.1	Auction
24-May-11	24-May-10	New Index-linked gilt 2034		3.5	Syndication
02-Jun-11	24-May-10	3¾% Treasury Gilt 2021		3.7	Auction
07-Jun-11	31-May-10	0.625% Index-linked Treasury Gilt 2040		1.1	Auction
15-Jun-11	07-Jun-10	4¼% Treasury Gilt 2027		2.5	Auction
21-Jun-11	14-Jun-10	2% Treasury Gilt 2016		4.8	Auction
23-Jun-11	21-Jun-11	Mini-tender: 2050 Index-linked Gilt.		0.5	Mini-tender
27-Jun-11	21-Jun-11	4% Treasury Gilt 2060		4.8	Syndication
05-Jul-11	28-Jun-11	3¾% Treasury Gilt 2021		3.6	Auction
06-Jul-11	28-Jun-11	1¼% Index-linked Treasury Gilt 2027		1.5	Auction
14-Jul-11	05-Jul-11	4¼% Treasury Gilt 2040		2.2	Auction
19-Jul-11	12-Jul-11	2% Treasury Gilt 2016		5.1	Auction
26-Jul-11	26-Jul-11	Re-opening of 0.75% Index-Linked Gilt 2034		4.1	Syndication
02-Aug-11	26-Jul-11	4½% Treasury Gilt 2034		2.2	Auction
11-Aug-11	02-Aug-11	0 5/8% Index-linked Gilt 2042		1.0	Auction
18-Aug-11	09-Aug-11	New gilt maturing 22 Jan 17		4.8	Auction
23-Aug-11	16-Aug-11	1 7/8% Index-linked Gilt 2022		1.5	Auction
01-Sep-11	23-Aug-11	3¾% Treasury Gilt 2021		3.3	Auction
06-Sep-11	03-Sep-11	4¾% Treasury Gilt 2030		1.2	Mini-tender
15-Sep-11	06-Sep-11	0¾% Index-linked Treasury Gilt 2047		1.1	Auction
22-Sep-11	13-Sep-11	Re-opening of the new Jan17s		5.0	Auction
27-Sep-11	27-Sep-11	New Treasury Gilt 2052		4.5	Syndication
04-Oct-11	27-Sep-11	3¾% Treasury Gilt 2021		4.1	Auction
11-Oct-11	04-Oct-11	1⅛% Index-linked Gilt 2037		1.3	Auction
13-Oct-11	04-Oct-11	4¼% Treasury Gilt 2039		2.5	Auction
20-Oct-11	11-Oct-11	1¾% Treasury Gilt 2017		4.9	Auction
25-Oct-11	18-Oct-11	New 0.375% IL Gilt 2062		4.3	Syndication
03-Nov-11	25-Oct-11	4¼% Treasury Stock 2032		2.3	Auction
08-Nov-11	01-Nov-11	0⅝% Index-linked Gilt 2040		1.2	Auction
17-Nov-11	08-Nov-11	5% Treasury Gilt 2018		4.9	Auction
22-Nov-11	17-Nov-11	0.125% Index-linked Gilt 2029		3.5	Syndication
01-Dec-11	22-Nov-11	3¾% Treasury Gilt 2021		3.7	Auction
06-Dec-11	29-Nov-11	4¼% Treasury Gilt 2040		2.3	Auction
07-Dec-11	29-Nov-11	1¼% Index-linked Gilt 2032		1.3	Auction
14-Dec-11	06-Dec-11	4% Treasury Gilt 2022		3.8	Auction
15-Dec-11	06-Dec-11	1¾% Treasury Gilt 2017		4.1	Auction
20-Dec-11	18-Dec-11	4.25% Treasury Gilt 2027		0.9	Mini-tender
04-Jan-12	28-Dec-11	1¾% Treasury Gilt 2017		4.3	Auction
10-Jan-12	03-Jan-12	0¾% Index-linked Treasury Gilt 2047		1.1	Auction
11-Jan-12	03-Jan-12	3¾% Treasury Gilt 2021		3.8	Auction
19-Jan-12	10-Jan-12	4% Treasury Gilt 2016			Auction
23-Jan-12	17-Jan-12	Re-opening of 3¾% Treasury Gilt 2052	3.9		Syndication
01-Feb-12	24-Jan-12	5% Treasury Stock 2025	3		Auction
02-Feb-12	24-Jan-12	01/8% Index-linked Treasury Gilt 2029	1		Auction
07-Feb-12	31-Jan-12	1¾% Treasury Gilt 2017	4		Auction
16-Feb-12	07-Feb-12	4½% Treasury Gilt 2034	1.5		Auction
20-Feb-12	14-Feb-12	Re-opening of 0.375% Index Linked 2062	3		Syndication
27-Feb-12	21-Feb-12	Mini tender in w/c 27 Feb	0.85		Mini-tender
01-Mar-12	21-Feb-12	4% Treasury Gilt 2022	3		Auction
06-Mar-12	28-Feb-12	0¾% Index-linked Treasury Gilt 2034	1		Auction
07-Mar-12	28-Feb-12	New conventional maturing on 7 Sep 2017	4		Auction
15-Mar-12	06-Mar-12	4½% Treasury Gilt 2042	1.5		Auction
22-Mar-12	13-Mar-12	0 5/8% Index-linked Treasury Gilt 2042	1		Auction
26-Mar-12	20-Mar-12	Mini tender in w/c 26 March	0.8		Mini-tender



TOTAL ISSUED	141.7
PLANNED ISSUANCE	178.9
% Completed	**79%**

Source: Citi Investment Research and Analysis

Figure 73. 2012 Euro Government Bond Supply – Citi Forecasts (Euro in Billions)

EMU-11	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	25.5	23.3	27.9	1.2	7.9	2.3	88	28	60	54	6
Feb	17.0	26.3	33.8	2.8		4.8	85	12	73	38	35
Mar	16.3	25.0	10.8	10.8	0.8	2.8	66	18	49	71	-23
Apr	17.0	20.5	17.0	6.5	7.0	2.5	71	29	42	75	-33
May	19.3	24.0	20.5	5.8	2.3	5.5	77	6	72	8	64
Jun	19.8	17.0	17.0	6.5	1.8	3.5	66	5	60	30	30
Jul	18.8	14.3	21.0	4.5	3.8	5.5	68	40	28	112	-84
Aug	13.3	10.5	8.0				32	11	21	19	2
Sep	17.3	24.8	23.3	1.5	4.0	3.0	74	16	58	60	-2
Oct	17.0	18.8	18.0	3.8	4.5	3.5	66	27	38	69	-31
Nov	15.3	26.0	17.0	1.0		3.5	63	4	58	13	45
Dec	10.3	6.8	8.0	1.5			27	3	23	63	-40
Total	206	237	222	46	32	37	780	198	582	612	-30

GERMANY	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	4.0	4.0	5.0		3.0		16	13	3	25	-22
Feb	5.0	4.0	9.0			2.0	20	1	19		19
Mar	5.0	4.0					9		9	19	-10
Apr	5.0	3.0	5.0		3.0		16	3	13	16	-3
May	5.0	5.0	5.0			2.0	17		17		17
Jun	5.0	4.0	5.0				14	1	13	19	-6
Jul	5.0	4.0	4.0		2.0	2.0	17	13	4	27	-23
Aug	5.0	4.0	4.0				13		13		13
Sep	5.0	5.0	9.0				19	1	18	18	
Oct	5.0	4.0	4.0		2.0		15	2	13	16	-3
Nov	5.0	7.0	4.0			2.0	18		18		18
Dec	4.0						4		4	17	-13
Total	58.0	48.0	54.0		10.0	8.0	178	34	144	157	-13

FRANCE	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	3.0	5.0	4.8	1.2	2.4	1.5	18	3	15	15	
Feb	4.5	5.5	4.3	2.3		2.0	19		18		18
Mar	5.0	6.0	3.3	2.3		1.8	18		18		18
Apr	3.0	6.5	4.0	3.5	1.8	1.5	20	16	4	20	-15
May	4.0	4.5	5.5	2.0	1.8	2.0	20		20		20
Jun	3.5	3.5	6.5	2.0		2.0	18		18		18
Jul	4.5	3.3	6.5	2.0		2.0	18	7	11	29	-18
Aug											
Sep	4.5	7.5	4.0		1.8	1.5	19		19	12	6
Oct	4.0	7.0	4.0			2.0	17	15	2	20	-18
Nov	2.5	6.5	2.5	1.0		1.5	14		14		14
Dec		2.5	3.0	1.5			7		7	5	1
Total	38.5	57.8	48.3	17.7	7.6	17.8	188	42	146	102	44

ITALY	CTZ/3yr	5yr/CCT	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	9.7	4.6	3.5			0.8	18	1	17		17
Feb	5.5	10.8	6.5			0.8	24	10	14	36	-23
Mar	6.3	3.5	3.5			1.0	14	7	7	27	-20
Apr	5.5	5.0	4.0	1.0		1.0	17	2	14	27	-13
May	9.3	11.0	4.0	1.0		1.5	27	4	22		22
Jun	6.3	3.5	3.5		1.0	1.5	16	2	14		14
Jul	6.8	3.5	3.5	1.5		1.5	17	1	16	17	-1
Aug	5.8	5.0	4.0				15	9	6	12	-6
Sep	4.8	4.0	6.0	1.5		1.5	18	7	11	10	
Oct	4.3	4.0	6.0		1.5	1.5	17	2	15	18	-3
Nov	4.3	9.0	3.0				16	4	12	13	-2
Dec	3.8	3.5	2.5				10	2	8	31	-23
Total	71.9	67.3	50.0	5.0	2.5	11.0	208	52	156	192	-37

Source: DMOs, Citi estimates, Bloomberg

Figure 74. 2012 Euro Government Bond Supply – Citi Forecasts (Euro in Billions)

SPAIN	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	4.3	7.0	5.3				17	6	10		10
Feb	2.0	1.5	5.0				9		8	1	7
Mar		3.0	3.0	3.5			10		10		10
Apr		2.5	2.5	1.0			6	4	2	12	-10
May		2.5	2.5		0.5		6		6		6
Jun	2.5	1.0	1.0	1.5			6		6		6
Jul	1.5	1.5	1.5	1.0			6	7	-2	13	-15
Aug	2.5	1.5					4		4		4
Sep		3.5	3.0		1.0		8		8		8
Oct	2.5	1.0	2.5		1.0		7	3	4	15	-11
Nov	1.5	1.8	2.5				6		6		6
Dec	2.5		2.5				5		5		5
Total	19.3	26.8	31.3	7.0	2.5		87	21	66	41	25

NETHERLANDS	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan	4.6				1.5		6	4	2	14	-12
Feb		2.5	5.5				8		8		8
Mar		3.0		5.0			8		8		8
Apr	2.5	1.5			1.5		6		5		5
May			3.0	1.3			4		4		4
Jun	2.5	5.0					8		8		8
Jul		1.5	2.8		1.3		6	6		15	-16
Aug											
Sep	2.5	2.0					5		5		5
Oct	0.8	1.5	0.8	3.0			6		6		6
Nov	2.0		2.8				5		5		5
Dec											
Total	14.8	17.0	14.8	9.3	4.3		60	10	51	30	21

BELGIUM	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan			4.5				5		5		5
Feb		1.0	1.0	0.5			3		3		3
Mar		4.5					5	6	-2	5	-7
Apr	1.0		0.5		0.8		2		2		2
May	1.0		0.5	0.8			2		2		2
Jun				3.0			3		3		3
Jul		0.5	0.8		0.5		2		2		2
Aug											
Sep	0.5		1.3		0.5		2	4	-2	13	-15
Oct	0.5	0.5	0.8				2		2		2
Nov		0.5	0.8				1		1		1
Dec								1	-1	8	-8
Total	3.0	7.0	10.0	4.3	1.8		26	12	14	26	-11

GREECE	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan											
Feb											
Mar								1	-1	14	-16
Apr											
May								1	-1	8	-9
Jun										1	-1
Jul								3	-3		-3
Aug								2	-2	8	-9
Sep								1	-1		-1
Oct								1	-1		-1
Nov											
Dec										2	-2
Total								10	-10	33	-43

Source: DMOs, Citi estimates, Bloomberg

Figure 75. 2012 Euro Government Bond Supply – Citi Forecasts (Euro in Billions)

AUSTRIA	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan		0.7	4.7		1.0		6	1	6		6
Feb		1.0					1		1		1
Mar		1.0	1.0		0.8		3	1	1		1
Apr		1.0	1.0				2		2		2
May		1.0		0.8			2		2		2
Jun			1.0		0.8		2		2		2
Jul	1.0		1.0				2	2		10	-11
Aug											
Sep		0.8			0.8		2	1			
Oct		0.8		0.8			2	1	1		1
Nov		0.8	1.0				2		2		2
Dec		0.8					1		1		1
Total	1.0	7.7	9.7	1.5	3.3		23	7	16	10	6

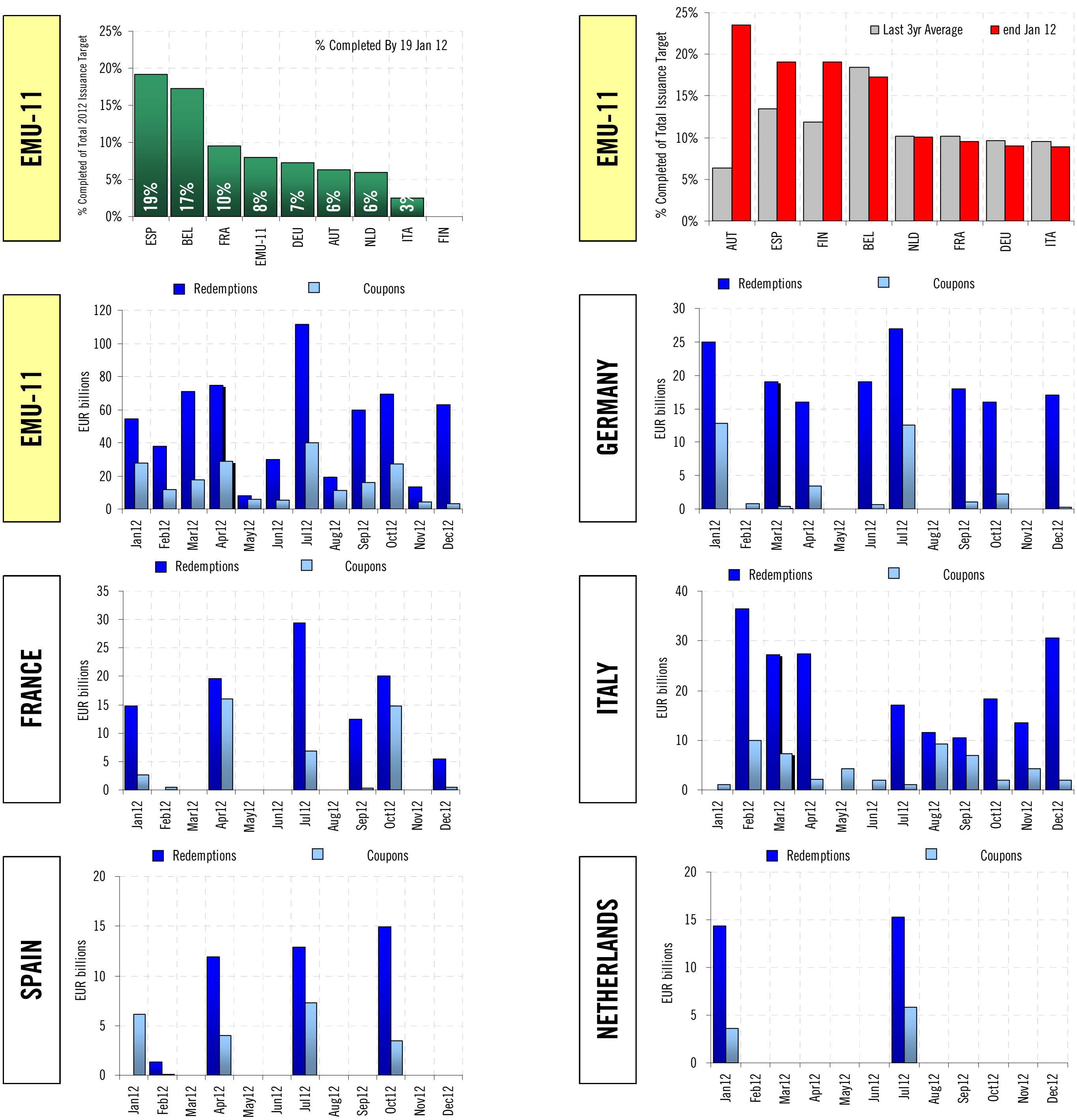
FINLAND	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan		2.0					2		2		2
Feb			2.5				3		3		3
Mar											
Apr		1.0		1.0			2	1	1		1
May											
Jun											
Jul			1.0				1	1			
Aug											
Sep		2.0					2	1	1	6	-5
Oct											
Nov		0.5	0.5				1		1		1
Dec											
Total		5.5	4.0	1.0			11	2	8	6	2

PORTUGAL	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan											
Feb											
Mar											
Apr								1	-1		-1
May											
Jun								2	-2	10	-12
Jul											
Aug											
Sep								1	-1		-1
Oct								1	-1		-1
Nov											
Dec											
Total								5	-5	10	-15

IRELAND	2yr/3yr	5yr	10yr	15yr	30yr	Linkers	Gross Supply	Coupons	Net Supply	Redemptions	NCR
Jan											
Feb											
Mar								1	-1	6	-6
Apr								1	-1		-1
May											
Jun											
Jul											
Aug											
Sep											
Oct								1	-1		-1
Nov											
Dec											
Total								4	-4	6	-10

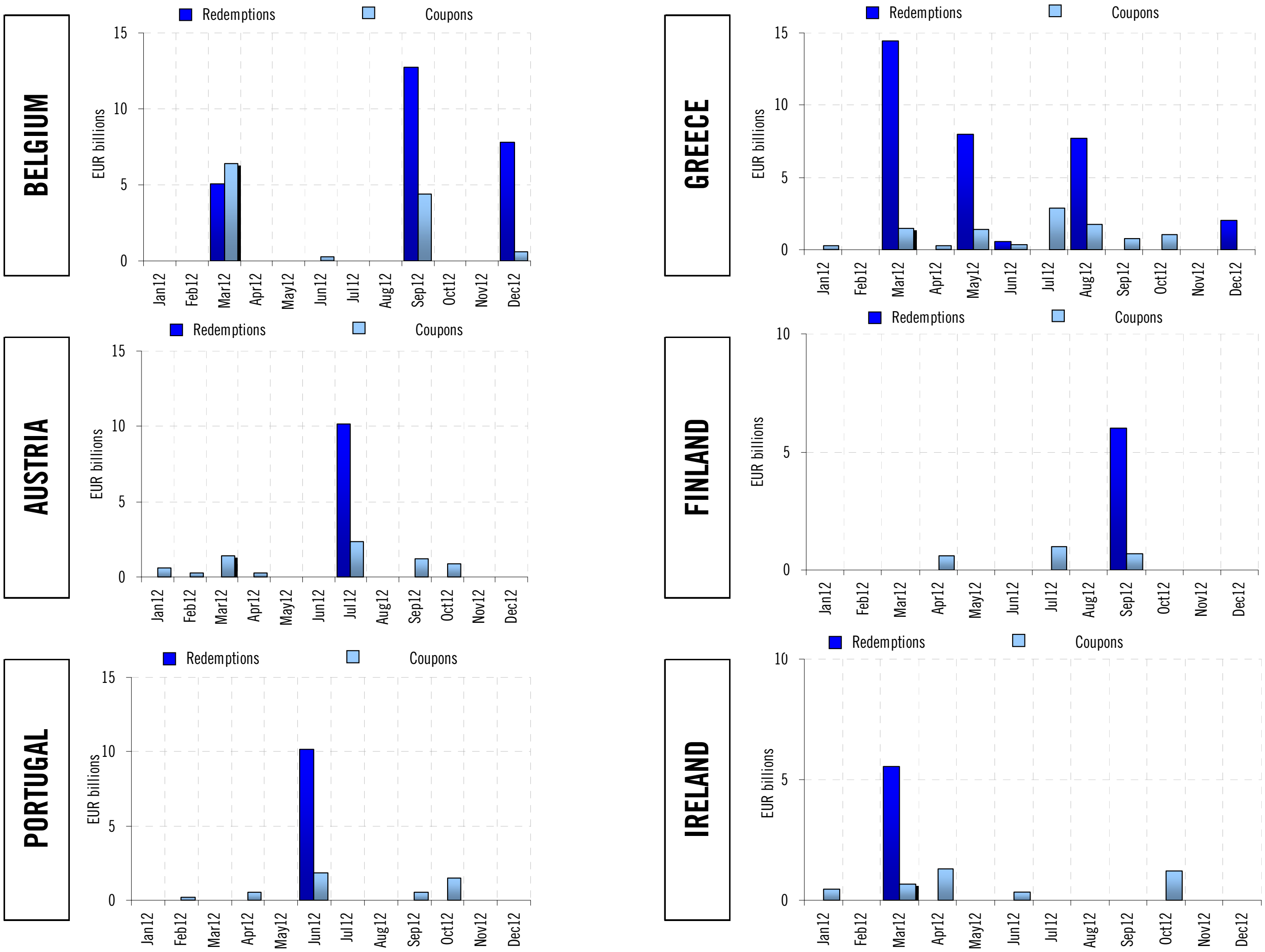
Source: DMOs, Citi estimates, Bloomberg

Figure 76. 2012 EMU Issuance Progress and Cash flow profile – Citi Forecasts (Euro in Billions)



Source: DMOs, Citi estimates, Bloomberg

Figure 77. 2012 EMU Issuance Progress and Cash flow profile – Citi Forecasts (Euro in Billions)



Size of bond market (fixed rate bonds and linkers)

	Sector					
	2yr	5yr	10yr	15yr	30yr	**Total**
Germany	397	302	174	63	85	1021
France	331	316	272	76	127	1122
Italy	473	343	307	132	120	1375
Spain	161	133	91	53	54	491
Netherlands	91	70	59	12	23	255
Belgium	80	87	56	20	28	270
Greece	76	50	38	32	17	212
Austria	45	51	46	15	12	170
Finland	19	22	18	6	0	64
Portugal	34	32	31	0	7	104
Ireland	23	19	34	8	0	85

Credit Rating (LT local currency)

	S&P		Moody's		Fitch	
	Rating	Outlook	Rating	Outlook	Rating	Outlook
Germany	AAA	Stable	Aaa	Stable	AAA	Stable
France	AA+	-ve	Aaa	Stable	AAA	-ve
Italy	BBB+	-ve	A2	-ve	A+	
Spain	A	-ve	A1	-ve	AA-	
Netherlands	AAA	-ve	Aaa	Stable	AAA	Stable
Belgium	AA	-ve	Aa3	-ve	AA+	
Greece	CC	-ve	Ca	Developing	CCC	
Austria	AA+	-ve	Aaa	Stable	AAA	Stable
Finland	AAA	-ve	Aaa	Stable	AAA	Stable
Portugal	BB	-ve	Ba2	-ve	BB+	-ve
Ireland	BBB+	-ve	Ba1	-ve	BBB+	

Source: DMOs, Citi estimates, Bloomberg

EUR: Coupons & Redemptions (next 3mths)

Figure 78. EMU-11 Redemptions over the next three months (€bn)

Redemptions = €140bn	DEU 35	FRA 0	NLD 0	ITA 79	ESP 1	BEL 5	AUT 0	FIN 0	PRT 0	GRC 14	IRL 6
(Wed) 01-Feb-12				25.8							
(Tue) 28-Feb-12					1.3						
(Wed) 29-Feb-12				10.6							
(Thu) 01-Mar-12				27.1							
(Mon) 05-Mar-12											5.5
(Fri) 16-Mar-12	19.0										
(Tue) 20-Mar-12										14.4	
(Wed) 28-Mar-12						5.0					
(Fri) 13-Apr-12	16.0										
(Sun) 15-Apr-12				15.1							

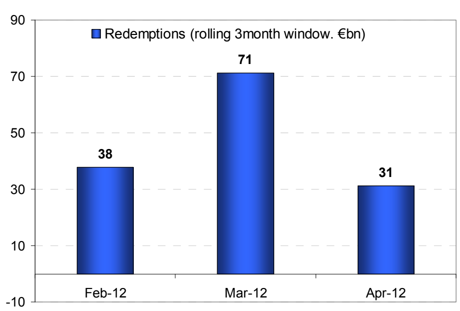
Source: DMOs, Bloomberg, Citi estimates

Figure 79. EMU-11 Coupon Payments over the next three months (€bn)

Coupons = €44bn	DEU 5	FRA 0	NLD 0	ITA 19	ESP 6	BEL 6	AUT 2	FIN 1	PRT 1	GRC 1	IRL 2
(Tue) 31-Jan-12					6.2						
(Wed) 01-Feb-12				9.9							
(Wed) 15-Feb-12									0.2		
(Mon) 20-Feb-12							0.3				
(Fri) 24-Feb-12	0.0										
(Sat) 25-Feb-12		0.5									
(Sun) 26-Feb-12	0.3										
(Mon) 27-Feb-12	0.4										
(Tue) 28-Feb-12					0.1						
(Thu) 01-Mar-12				5.6							
(Mon) 05-Mar-12											0.2
(Tue) 13-Mar-12											0.4
(Thu) 15-Mar-12	0.3			1.7			1.4				
(Fri) 16-Mar-12	0.2										
(Tue) 20-Mar-12										1.5	
(Wed) 28-Mar-12						6.4					
(Fri) 30-Mar-12											0.0
(Sun) 01-Apr-12				0.2							
(Sun) 08-Apr-12	0.5										
(Tue) 10-Apr-12	0.4										
(Wed) 11-Apr-12	0.4										
(Thu) 12-Apr-12	0.6										
(Fri) 13-Apr-12	0.6										
(Sun) 15-Apr-12	0.8		0.0	2.0				0.6	0.6		
(Wed) 18-Apr-12											1.3

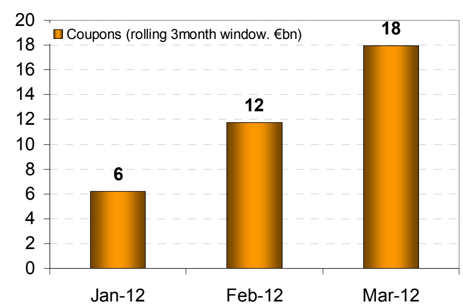
Source: DMOs, Bloomberg, Citi estimates

Figure 80. EMU-11 Redemptions over the next three months (€bn)



Source: DMOs, Bloomberg, Citi estimates

Figure 81. EMU-11 Coupon Payments over the next three months (€bn)



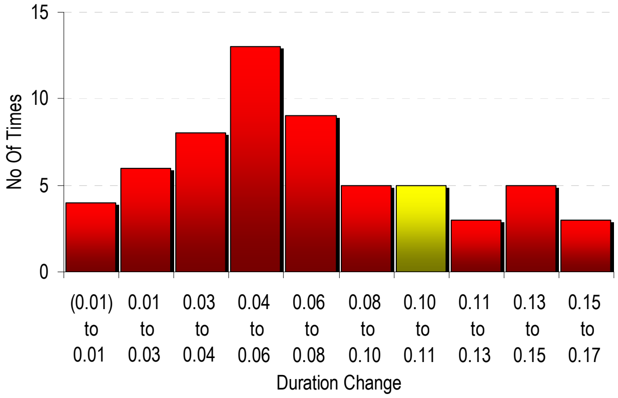
Source: DMOs, Bloomberg, Citi estimates

End-January EGBI Projections

End January extension above median

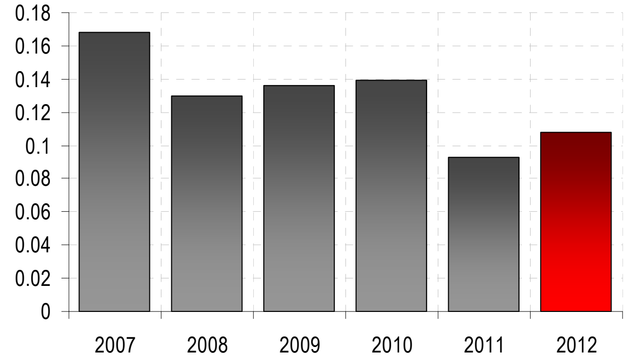
The effective duration of the EGBI should increase by 0.11 at the end of January[9]. This is the second largest change in a year; however, this change is on the smaller side for January changes in the last 6 years (Figure 83). Approximately 0.03 of this is due to Portugal dropping out.

Figure 82. Five Year Distribution of Month-End EGBI Duration Changes (Projected January Change Highlighted)



Source: Citi Investment Research and Analysis

Figure 83. EGBI: January Increases + 2012 Extension Projection



Source: Citi Investment Research and Analysis

Portugal and the EGBI

The downgrade of Portugal by S&P would result in its exclusion from the EGBI

Portugal was one of the nine European countries that S&P downgraded last Friday[10]. The rating requirement for inclusion in the WGBI/EGBI is investment grade by *either* Moody's (Baa3) *or* S&P (BBB-). With a credit rating of BB/Ba2 by S&P and Moody's, respectively, Portugal no longer meets these minimum credit criteria. If the credit ratings remain below investment-grade on January 24, 2012, the fixing date for the February Profile, Portugal's 13 bonds[11] will be removed from the WGBI at the end of January.

Although many customized indices already exclude program countries to the extent that investors reduce their exposure to Portuguese paper this should negatively impact Portuguese yields, as we have already seen. Even on the most optimistic interpretation the exclusion from investment grade indices does not represent a positive for Portuguese spreads.

The only program country now remaining in the EGBI is Ireland, which would require a 3-notch downgrade by S&P to be excluded from the index. We do not think that is likely in the near term.

Bonds dropping out of the EGBI at the end of January

Bonds dropping out of the EGBI at the end of January

Four bonds drop out of the EGBI in the end-of-month fixing[12] : Bund 4.5% Jan13 (€24bn), BTAN 3.75% Jan13 (€21.6bn) and DSL 1.75% Jan13 (€15bn).

[9] Please see the supply section of our weekly *International Interest Rate Strategist* for details of the estimated issuance on which this and related projections are based. Supply is the main driver of projections but other factors, e.g., yield level and curve shape, also affect the calculations and are subject to change.

[10] With the downgrades of France and Austria, the pool of AAA assets in the WGBI/EGBI contracted by $1264bn and $227bn respectively.

[11] These have a market value of US$78.98 billion and represent 0.40% of the WGBI.

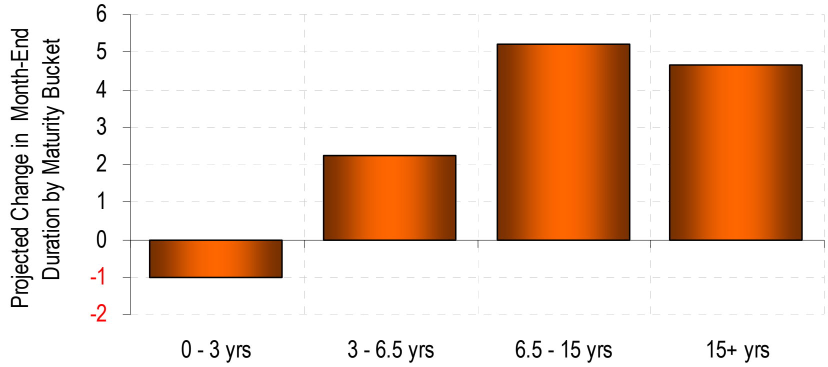
[12] For inclusion, bonds must have an average life of less than one year from the last calendar day of the month. The fixing period for this month is 22 December 2011 to 24 January 2012.

Curve breakdown of projected end-Jan EGBI changes

Flattening pressure on the yield curve

The curve breakdown of the weighted duration changes points to flattening pressure on the curve (Figure 84).

Figure 84. End-Jan Projected Index Changes by Curve Sector (Weighted Duration)



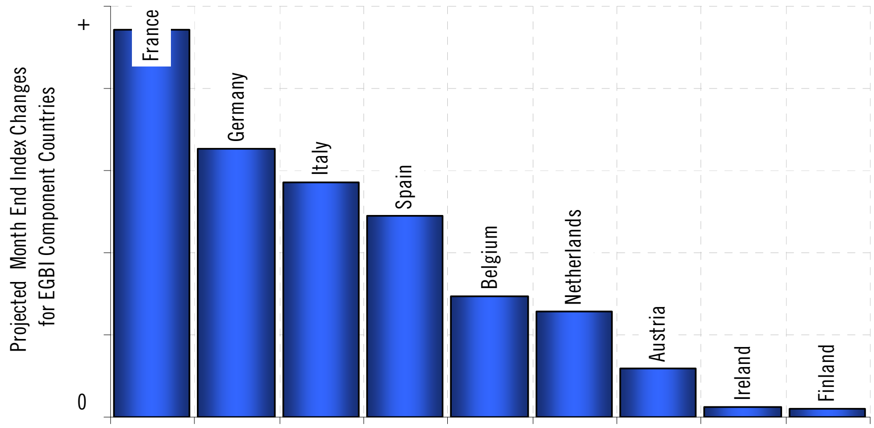
Source: Citi Investment Research and Analysis

Country breakdown of end-Jan EGBI projection

Support for Germany but France and Tier 2 countries may not benefit from the projected extension

Looking at a country level, the largest duration extension is in France, followed by Germany, Italy and Spain (Figure 85). While Germany should benefit from this index support, investors may be happy to reduce their positions in France and the Tier 2 countries. There might be some flows out of France because of the AAA mandate of some investors, but this is expected to be muted (please see *The Implications of S&P's Sovereign Downgrades* for details).

Figure 85. End-Jan Projected Index Changes by Country (Weighted Duration)



Source: Citi Investment Research and Analysis

Detailed breakdown of end-Jan EGBI projections

Figure 86 shows the detailed breakdown of projected end-Jan duration and index weight changes by country.

The Netherlands should have the largest duration extension in the EGBI, but France should extend the most in *weighted*-duration terms. Portugal had a weight of 1.6% in the EGBI. The main beneficiaries of Portugal dropping out should be Germany, France and Italy, in line with their dominant index weights. In the current environment however, to the extent that it is possible, it seems likely that Germany would attract more of this reallocation than Italy and France.

Figure 86. End-Jan EGBI Projections

17-Jan-12	End of Dec - Actual		End of Jan - Projected		Projected Change			Duration change range over last year (unweighted)			
	% weight in EGBI	Duration	% weight in Index	Duration	Weighted Dur Change X 100	Weight Change	Duration Change	-ve	+ve	Average Absolute Change	1yr Percentile
Germany	23.3	6.723	23.3	6.862	3.27	0.01	0.14	(0.03)	0.21	0.08	83
Italy	21.1	5.796	21.6	5.776	2.87	0.57	(0.02)	(0.02)	0.20	0.08	0
France	23.5	6.676	23.7	6.838	**4.72**	0.13	0.16	(0.03)	0.17	0.07	91
Spain	10.5	5.703	11.1	5.659	2.45	0.52	(0.04)	(0.08)	0.28	0.08	8
Belgium	6.2	6.144	6.4	6.191	1.47	0.19	0.05	(0.00)	0.33	0.09	58
Netherlands	6.5	6.638	6.4	7.013	1.29	(0.17)	**0.38**	(0.07)	0.40	0.09	91
Ireland	1.7	5.017	1.8	5.017	0.11	0.02	0.00	(0.01)	0.37	0.04	41
Austria	4.2	6.443	4.3	6.445	0.59	0.09	0.00	(0.05)	0.34	0.07	25
Finland	1.6	5.496	1.6	5.496	0.11	0.02	0.00	(0.02)	0.44	0.08	25
Portugal	1.4	4.156	0.0								

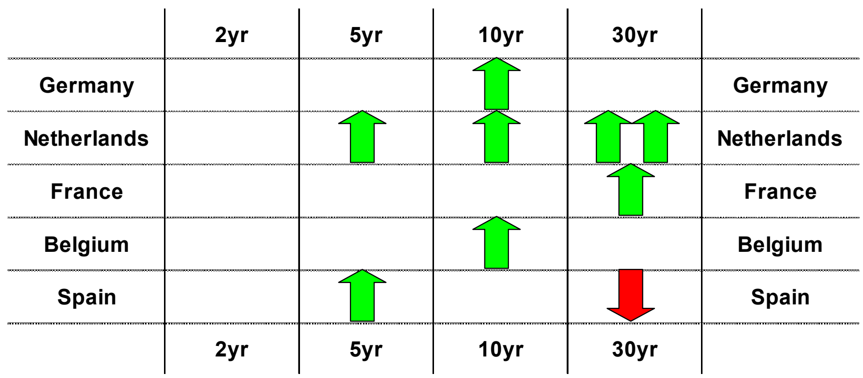
Source: Citi Investment Research and Analysis

Summary of pressures on individual country curves[13]

Summary of pressures on individual country curves from the projected index changes

Figure 87 summarises the pressures on individual country curves from the projected index changes. Green arrows indicate support for prices, and red arrows indicate downward pressure on prices, relative to other points on the domestic curve. Double arrows indicate strong pressure on that part of the domestic curve relative to other maturities. The underlying detail is shown in Figure 88 to Figure 99.

Figure 87. Summary of Pressure on Prices of Individual Country Curve Sectors



Source: Citi Investment Research and Analysis

Flattening pressure on German, French and Dutch curves

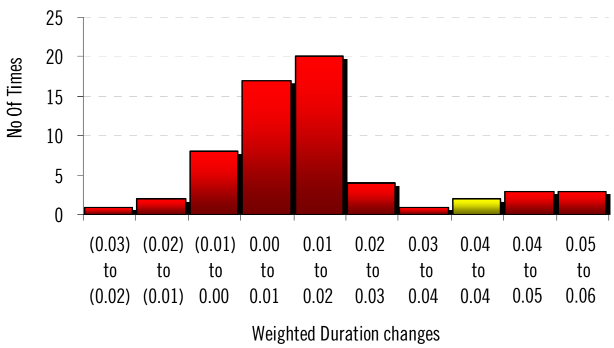
Projected index changes indicate strong support for the 30-year sector in the Netherlands. The changes should also be supportive for 10yr Germany and Belgium, 30yr France and 5yr Spain. The projected extensions in the long end should put flattening pressure on the French and Dutch curves.

[13] Note that all these changes are on the domestic curve only and should not be viewed as necessarily indicating cross-market opportunities.

Putting projected country changes in perspective

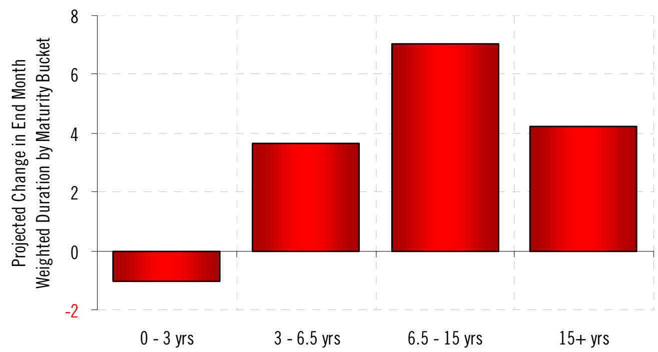
Below we show the distributions of weighted duration changes and the curve splits of the projected changes. The changes are mostly on the larger side historically, benefitting from Portugal's exclusion.

Figure 88. Germany: Distribution of Month-End Duration Changes Over The Last Five Years (Weighted Duration)



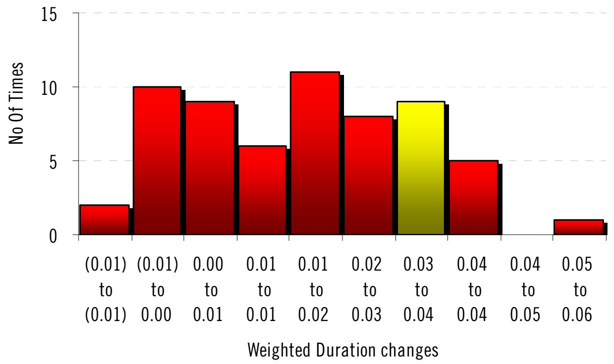
Source: Citi Investment Research and Analysis

Figure 89. Germany: End-Jan Projected Index Change by Maturity (Weighted Duration)



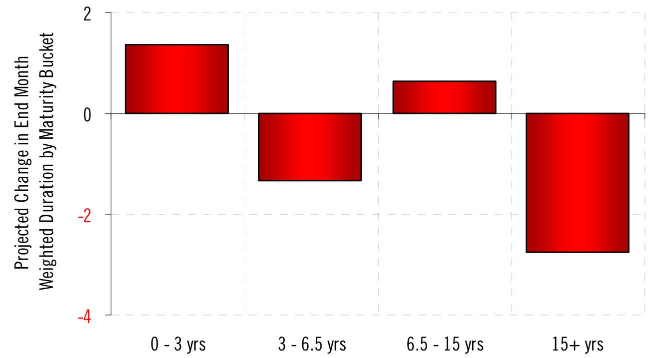
Source: Citi Investment Research and Analysis

Figure 90. Italy: Distribution of Month-End Duration Changes Over The Last Five Years (Weighted Duration)



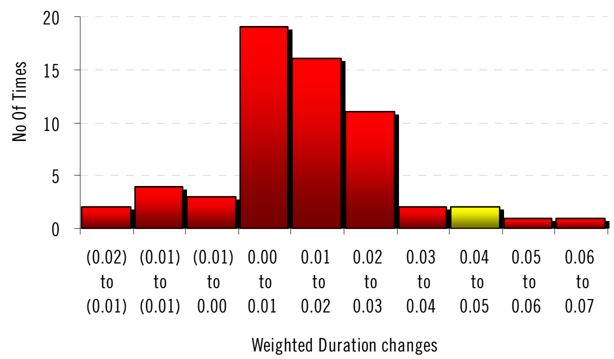
Source: Citi Investment Research and Analysis

Figure 91. Italy: End-Jan Projected Index Change by Maturity (Weighted Duration)



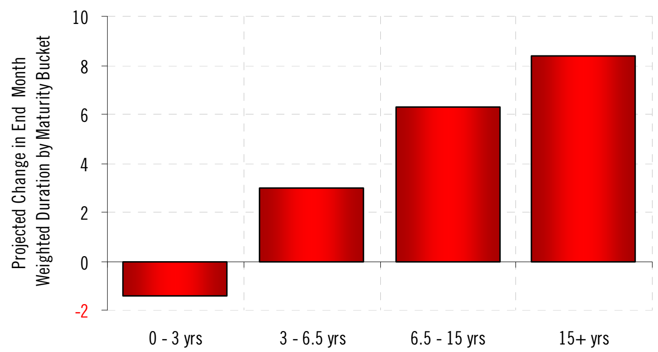
Source: Citi Investment Research and Analysis

Figure 92. France: Distribution of Month-End Duration Changes Over The Last Five Years (Weighted Duration)



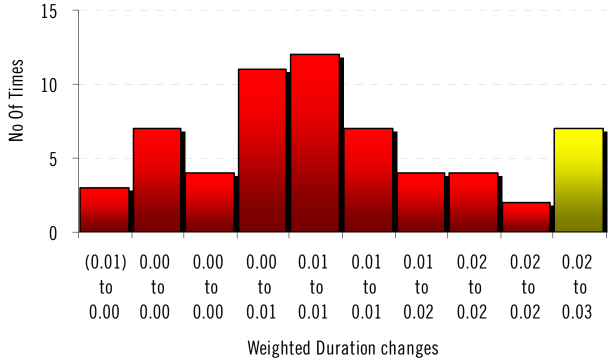
Source: Citi Investment Research and Analysis

Figure 93. France: End-Jan Projected Index Change by Maturity (Weighted Duration)



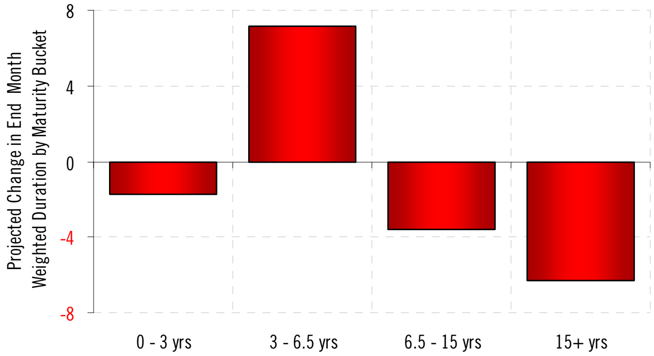
Source: Citi Investment Research and Analysis

Figure 94. Spain: Distribution of Month-End Duration Changes Over The Last Five Years (Weighted Duration)



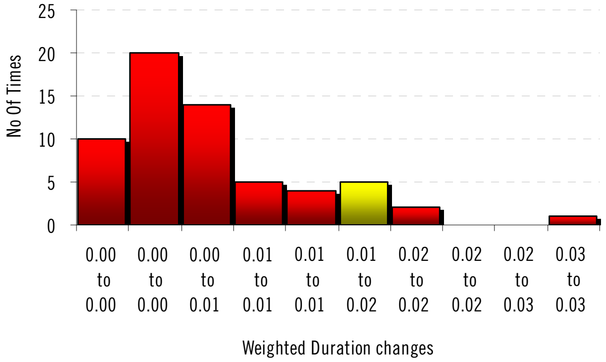
Source: Citi Investment Research and Analysis

Figure 95. Spain: End-Jan Projected Index Change by Maturity (Weighted Duration)



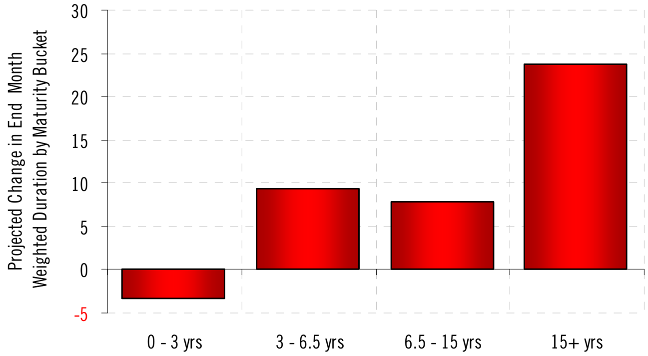
Source: Citi Investment Research and Analysis

Figure 96. Netherlands: Distribution of Month-End Duration Changes Over The Last Five Years (Weighted Duration)



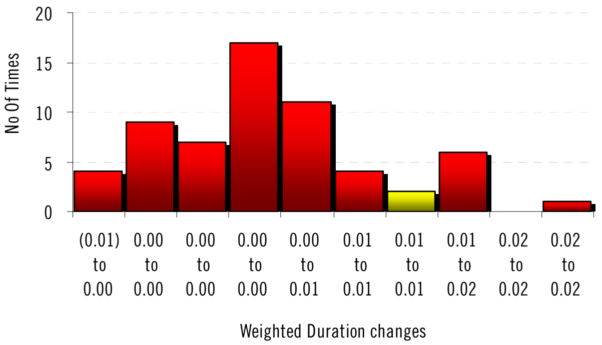
Source: Citi Investment Research and Analysis

Figure 97. Netherlands: End-Jan Projected Index Change by Maturity (Weighted Duration)



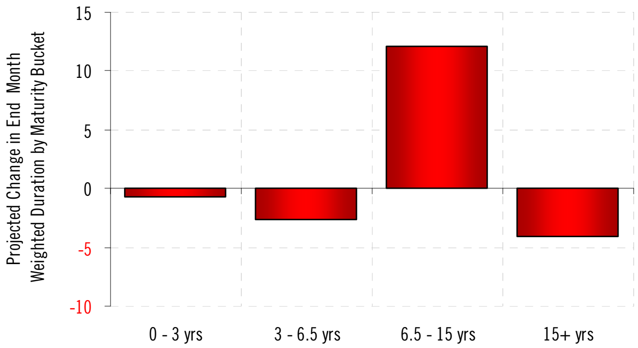
Source: Citi Investment Research and Analysis

Figure 98. Belgium: Distribution of Month-End Duration Changes Over The Last Five Years (Weighted Duration)



Source: Citi Investment Research and Analysis

Figure 99. Belgium: End-Jan Projected Index Change by Maturity (Weighted Duration)



Source: Citi Investment Research and Analysis

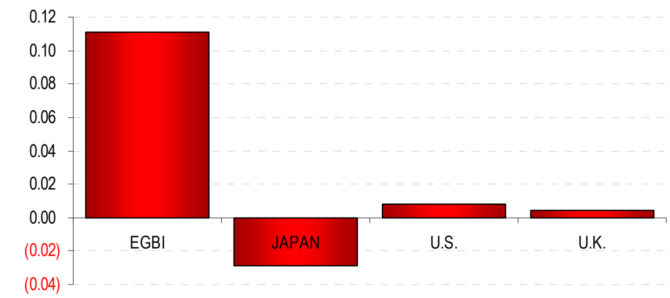
End-January WGBI Projections

Projected end-January WGBI changes

Figure 100 shows the projected end-January index changes for the Europe (EGBI), Japan, UK and US components of the WGBI, including the central bank operations in the US, UK and Japan[14].

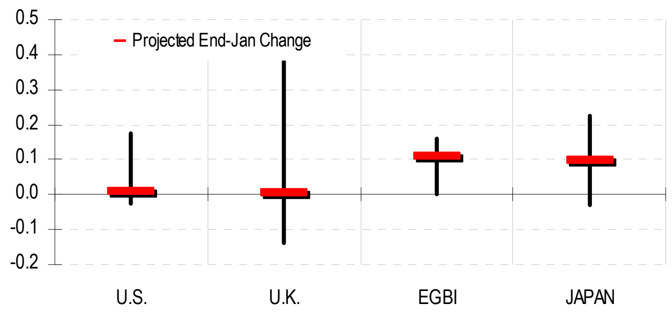
Figure 101 places the projected month-end changes in the context of their respective 12-month ranges.

Figure 100. Projected End-Jan Duration Changes for WGBI Components



Source: Citi Investment Research and Analysis

Figure 101. Projected Duration Changes vs 12-Month Range



Source: Citi Investment Research and Analysis

Central bank operations almost compensate for gilt and UST supply this month

Figure 102 shows the detailed breakdown of the projected changes, both with and without the central bank operations[15]. The US index is expected to extend a little, but is muted by central bank operations. The UK index should also remain more or less unchanged, central bank buybacks compensating for nearly all the supply[16].

Figure 102. End-Jan Projected Duration Changes for the Main Components of the WGBI

17-Jan-12	End of Dec - Actual		End of Jan - Projected		Projected Change						Duration change range over last year (unweighted)		
					Overall		due to compositional change		due to Central Bank Operations				
	% weight in WGBI	Duration	% weight in WGBI	Duration	Weight Change	**Duration Change**	Weight Change	Duration Change	Weight Change	Duration Change	-ve	+ve	Average Absolute Change
EGBI	26.7	6.272	26.4	6.383	(0.36)	**0.11**	(0.43)	0.11	0.07	0.00	0.00	0.16	0.07
JAPAN	33.2	7.851	33.5	7.822	0.23	**(0.03)**	0.23	(0.04)	(0.00)	0.01	(0.03)	0.22	0.10
U.S.	28.1	5.828	28.2	5.836	0.17	**0.01**	0.14	0.06	0.03	(0.05)	(0.03)	0.18	0.08
U.K.	5.8	10.145	5.8	10.149	(0.00)	**0.00**	0.11	0.00	(0.12)	0.00	(0.14)	0.38	0.11

Source: Citi Investment Research and Analysis

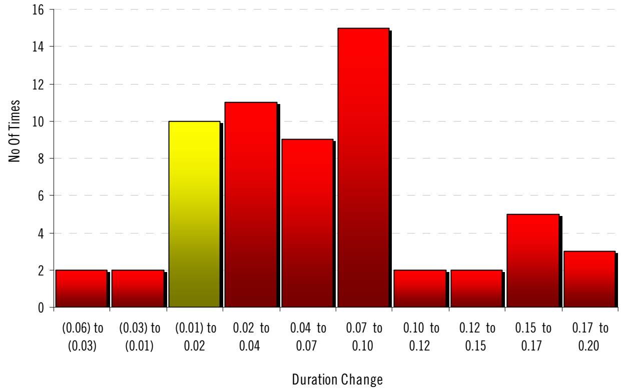
[14] BoJ buyback numbers are an estimate, so the actual index change may vary from the projections. Also, future operations by the BoE and Fed are quantified assuming that their impact will be similar to that of similar past operations.

[15] Operation Twist by the Fed, and APF programmes by the BoE and BoJ.

[16] We have included the scheduled Gilt 3.75% 2052 syndication in our calculation, assuming that it will take place by 24 January.

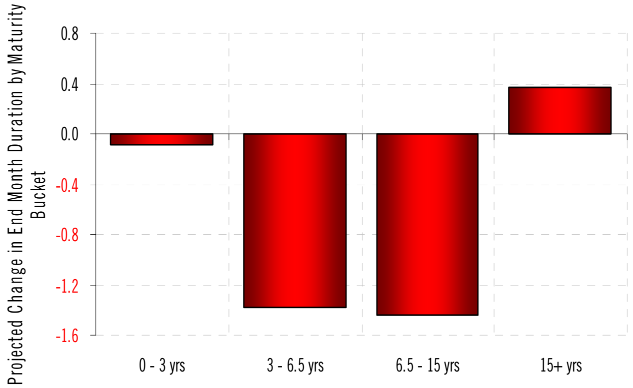
Figure 103 to Figure 108 below put the changes in various components in the WGBI in their historical perspective, and also show the weighted duration changes on the curve. The month-end index changes should put upward pressure on curvature on the Treasury curve (Figure 104) and be supportive for 5yr gilts (Figure 106).

Figure 103. US: Distribution of Month-End Duration Changes Over The Last Five Years



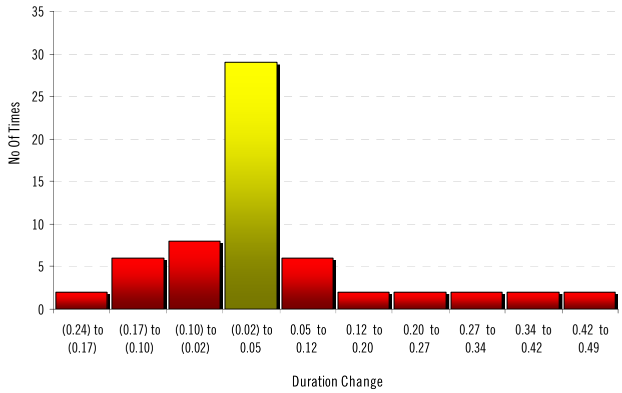
Source: Citi Investment Research and Analysis

Figure 104. US: End-Jan Projected Index Change by Maturity (Weighted Duration)



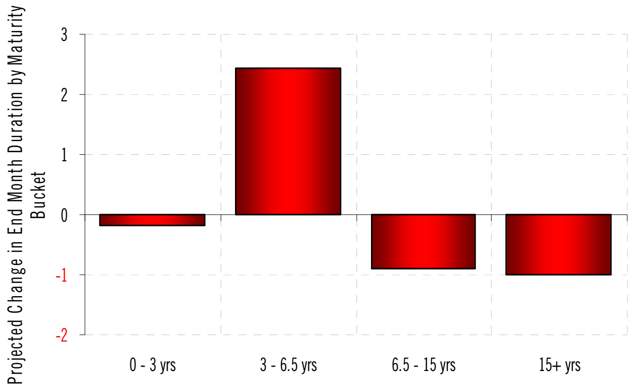
Source: Citi Investment Research and Analysis

Figure 105. UK: Distribution of Month-End Duration Changes Over The Last Five Years



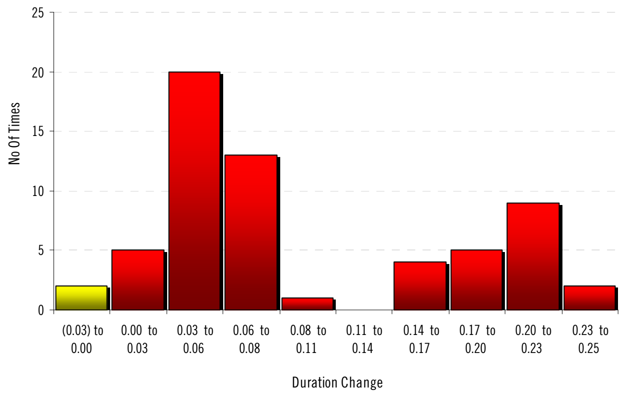
Source: Citi Investment Research and Analysis

Figure 106. UK: End-Jan Projected Index Change by Maturity (Weighted Duration)



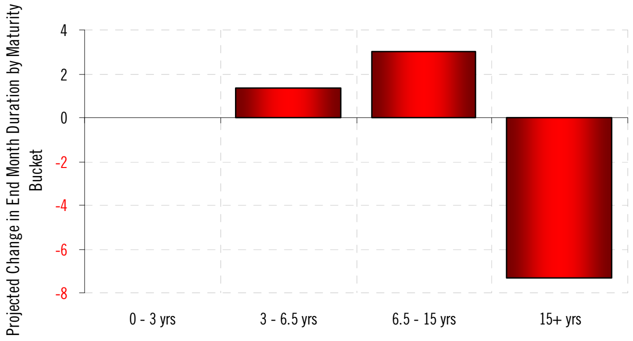
Source: Citi Investment Research and Analysis

Figure 107. Japan: Distribution of Month-End Duration Changes Over The Last Five Years



Source: Citi Investment Research and Analysis

Figure 108. Japan: End-Jan Projected Index Change by Maturity (Weighted Duration)



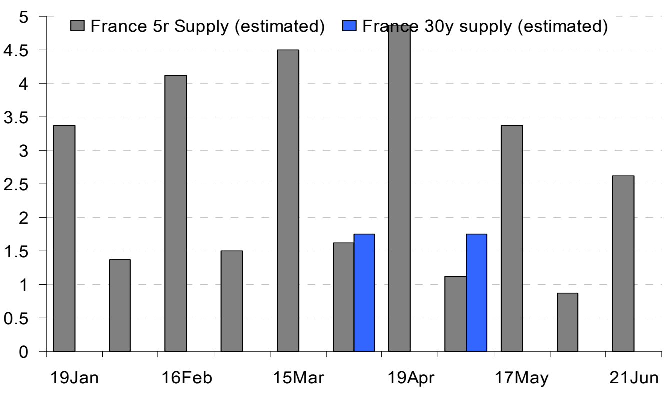
Source: Citi Investment Research and Analysis

Trade Focus

2. France 5s30s Flattener

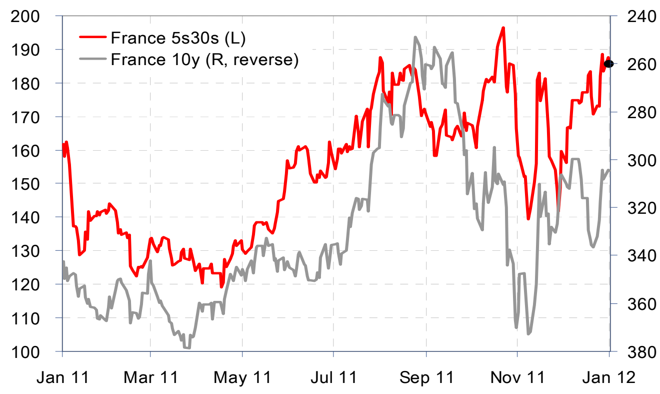
Rationale: The projected index changes should theoretically be most supportive of France. Furthermore, the index changes on the French curve point to flattening. As Figure 109 shows, there is a lot of supply expected in the 5yr sector in coming weeks, whereas 30yr OAT supply is not expected until April. The spread is close to the top of its range (Figure 110). Recent directionality suggests the flattener should work better in a bearish move.

Figure 109. France Supply Estimates in the 5- and 30-year sectors (€ bn)



Source: Citi Investment Research and Analysis

Figure 110. 5s30s: directionality with 10s

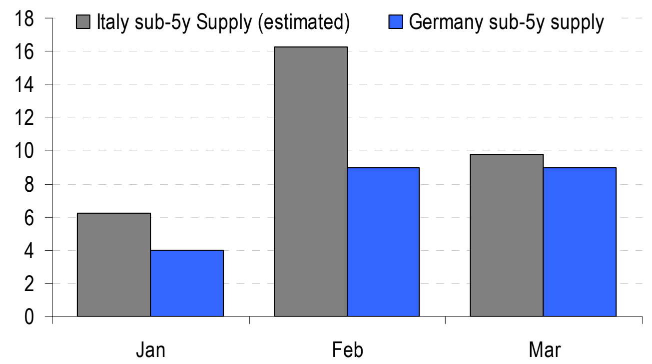


Source: Citi Investment Research and Analysis

3. Short 5yr Italy vs Germany

Rationale: While Germany and Italy should both benefit from the month-end index changes, Germany benefits more. On the curve, weighted duration of the 5yr sector on the Italian curve should fall at the month-end. There is also a heavy supply schedule for Italy, which we expect to be biased towards the short end (Figure 111). The impressive rally in BTP spreads has also shifted the risk/reward and a positioning-driven retracement may be overdue (Figure 112).

Figure 111. Q1 Supply Estimates: Italy vs Germany



Source: Citi Investment Research and Analysis

Figure 112. 5yr BTP spread to Germany (bp)

Source: Citi Investment Research and Analysis

4. UK 5s10s Steepener

Rationale: This is a purely tactical trade based on index changes and attractive historical levels. The trade has been attractively non-directional recently.

European Relative Value Tables

Regular readers will be familiar with the Relative Value Appendix showing individual bonds from the major EMU 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 113 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 113. Yield Spread and CAS to Fitted Relative Value Curve (6m History)

GERMANY

Versus Fitted Yield Curve

	Rank		ZScore	Issued	Size (€bn)
Richest	1	**2.50 Oct14**	**-3.11**	Sep09	17
	2	**3.75 Jan15**	**-2.10**	Nov04	23
	3	**4.00 Jan37 (UB)**	**-1.67**	Jan05	23
	4	**4.25 Jul14**	**-1.63**	May04	25
	5	**2.50 Feb15**	**-1.57**	Jan10	17
	5	**4.00 Jan18**	**0.87**	Nov07	20
	4	**2.25 Sep21**	**1.12**	Aug11	16
	3	**3.25 Jul42 (30y)**	**1.37**	Jul10	10
	2	**6.25 Jan30**	**1.53**	Jan00	9
Cheapest	1	**4.75 Jul40**	**1.66**	Jul08	16

Versus Swap Curve (CAS)

	Rank		ZScore	Issued	Size (€bn)
Richest	1	**2.50 Oct14**	-0.06	Sep09	17
	2	**2.25 Apr14**	0.06	Mar09	19
	3	**4.25 Jul14**	0.07	May04	25
	4	**3.75 Jan15**	0.20	Nov04	23
	5	**1.75 Oct15**	0.23	Sep10	16
	5	**3.25 Jul42 (30y)**	**1.32**	Jul10	10
	4	**3.25 Jul21**	**1.34**	Apr11	19
	3	**4.75 Jul40**	**1.36**	Jul08	16
	2	**2.25 Sep21**	**1.38**	Aug11	16
Cheapest	1	**6.25 Jan30**	**1.58**	Jan00	9

Source: Citi Investment Research and Analysis

Figure 114 (overleaf) looks at bonds of all maturities. For investors with maturity restrictions we have also provided another set of summary tables (Figure 115 and Figure 116) which looks at bonds shorter than 12 years and longer than 8 years, and uses the same criteria as Figure 114 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.

Relative Value Tables – All Maturities

Figure 114. Yield Spread and CAS to Fitted Relative Value Curve by Country (6m History); All bonds on each curve

GERMANY

	Versus Fitted Yield Curve Rank	Bond	ZScore	Issued	Size (€bn)		Versus Swap Curve (CAS) Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.50 Oct14	-3.11	Sep09	17	Richest	1	2.50 Oct14	-0.06	Sep09	17
	2	3.75 Jan15	-2.10	Nov04	23		2	2.25 Apr14	0.06	Mar09	19
	3	4.00 Jan37 (UB)	-1.67	Jan05	23		3	4.25 Jul14	0.07	May04	25
	4	4.25 Jul14	-1.63	May04	25		4	3.75 Jan15	0.20	Nov04	23
	5	2.50 Feb15	-1.57	Jan10	17		5	1.75 Oct15	0.23	Sep10	16
	5	4.00 Jan18	0.87	Nov07	20		5	3.25 Jul42 (30y)	1.32	Jul10	10
	4	2.25 Sep21	1.12	Aug11	16		4	3.25 Jul21	1.34	Apr11	19
	3	3.25 Jul42 (30y)	1.37	Jul10	10		3	4.75 Jul40	1.36	Jul08	16
	2	6.25 Jan30	1.53	Jan00	9		2	2.25 Sep21	1.38	Aug11	16
Cheapest	1	4.75 Jul40	1.66	Jul08	16	Cheapest	1	6.25 Jan30	1.58	Jan00	9

FRANCE

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.25 Feb16	-2.03	Feb10	19	Richest	1	4.00 Apr14	0.25	Apr03	20
	2	4.25 Oct23	-1.96	Oct06	31		2	3.00 Jul14	0.50	Jun09	21
	3	2.50 Jul16 (5y)	-1.52	Jul10	4		3	4.00 Oct14	0.58	Oct03	20
	4	5.00 Oct16	-1.33	Oct00	25		4	2.50 Jan15	0.70	Jan10	20
	5	3.50 Apr26	-1.24	Apr10	22		5	3.50 Apr15	0.86	Apr04	22
	5	3.00 Jul14	0.51	Jun09	21		5	4.50 Apr41 (30y)	1.39	Apr09	15
	4	2.00 Jul15	0.53	Jun10	21		4	3.25 Oct21 (10y)	1.40	Oct10	6
	3	3.75 Apr21	0.61	Apr05	31		3	3.75 Apr21	1.43	Apr05	31
	2	4.75 Apr35	0.67	Apr03	18		2	4.00 Apr55	1.44	Apr04	15
Cheapest	1	3.50 Apr15	0.96	Apr04	22	Cheapest	1	4.00 Apr60	1.51	Apr09	8

ITALY

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.50 Aug18	-2.12	Feb08	22	Richest	1	3.00 Apr14	-0.31	Apr11	15
	2	4.25 Feb19	-1.77	Feb03	23		2	4.75 Sep16 (5y)	-0.30	Sep11	9
	3	4.25 Aug14	-1.52	Feb04	27		3	4.25 Aug14	-0.25	Feb04	27
	4	3.75 Apr16	-1.33	Apr11	12		4	3.50 Jun14	-0.23	Jun09	19
	5	4.25 Feb15	-1.32	Aug04	21		5	4.25 Feb15	-0.08	Aug04	21
	5	5.75 Feb33	0.93	Feb02	15		5	5.75 Feb33	1.16	Feb02	15
	4	3.75 Aug15	1.15	Feb05	26		4	5.00 Aug34	1.19	Aug03	21
	3	5.00 Mar25	1.27	Mar09	20		3	5.00 Aug39	1.21	Aug07	19
	2	3.75 Aug21	1.58	Feb06	27		2	5.00 Sep40 (30y)	1.23	Sep09	20
Cheapest	1	4.00 Feb17	1.95	Aug06	23	Cheapest	1	4.00 Feb37	1.33	Aug05	25

N'LANDS

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.25 Jul21 (10y)	-1.08	Mar11	11	Richest	1	3.75 Jul14	-1.30	Mar04	14
	2	0.75 Apr15	-0.43	Jan12	3		2	0.75 Apr15	-1.13	Jan12	3
	3	3.25 Jul15	-0.16	Jun05	14		3	2.75 Jan15	-0.99	Jul09	13
	4	3.75 Jul14	0.02	Mar04	14		4	3.25 Jul15	-0.90	Jun05	14
	5	4.00 Jan37	0.16	Apr05	12		5	4.00 Jul16 (5y)	-0.32	Jul06	13
	5	4.00 Jul16 (5y)	0.50	Jul06	13		5	3.25 Jul21 (10y)	0.51	Mar11	11
	4	4.50 Jul17	0.66	Jul07	15		4	3.50 Jul20	0.60	Feb10	15
	3	4.00 Jul18	0.68	Feb08	15		3	3.75 Jan42 (30y)	0.86	May10	10
	2	4.00 Jul19	1.73	Feb09	13		2	3.75 Jan23	0.92	Jan06	10
Cheapest	1	3.50 Jul20	1.75	Feb10	15	Cheapest	1	4.00 Jan37	1.01	Apr05	12

SPAIN

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.30 Oct19	-4.62	Jun09	15	Richest	1	4.25 Jan14 (2y)	-0.85	Oct08	13
	2	5.75 Jul32	-4.51	Jan01	14		2	3.40 Apr14	-0.74	Apr11	7
	3	4.20 Jan37	-4.47	Jan05	16		3	4.25 Oct16 (5y)	-0.71	Sep11	7
	4	4.60 Jul19	-4.42	Feb09	13		4	3.00 Apr15	-0.66	Mar10	16
	5	4.10 Jul18	-3.56	Feb08	16		5	4.40 Jan15	-0.66	Jun04	18
	5	3.80 Jan17	2.20	Oct06	13		5	4.65 Jul25	0.79	Feb10	14
	4	4.90 Jul40	2.48	Jun07	13		4	4.70 Jul41 (30y)	0.80	Sep09	11
	3	4.70 Jul41 (30y)	3.32	Sep09	11		3	5.75 Jul32	0.80	Jan01	14
	2	4.65 Jul25	4.54	Feb10	14		2	4.20 Jan37	0.81	Jan05	16
Cheapest	1	4.80 Jan24	4.59	Sep08	15	Cheapest	1	4.90 Jul40	0.84	Jun07	13

BELGIUM

	Rank	Bond	ZScore	Issued	Size (€bn)		Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.00 Mar18	-2.08	Jan08	10	Richest	1	4.00 Mar14 (2y)	-0.48	Apr08	12
	2	4.25 Mar41 (30y)	-1.86	Apr10	6		2	4.25 Sep14	-0.44	Jan04	13
	3	3.50 Mar15	-1.34	Mar09	10		3	3.50 Mar15	-0.29	Mar09	10
	4	4.25 Sep14	-1.27	Jan04	13		4	3.75 Sep15	-0.21	Mar05	11
	5	3.75 Sep15	-1.02	Mar05	11		5	2.75 Mar16	-0.04	Mar10	10
	5	4.25 Sep21	-0.27	Jan11	8		5	3.75 Sep20	0.63	Jan10	18
	4	4.00 Mar17	0.03	Jan07	11		4	4.25 Sep21	0.64	Jan11	8
	3	3.75 Sep20	0.36	Jan10	18		3	5.00 Mar35	0.68	May04	14
	2	5.00 Mar35	1.07	May04	14		2	4.00 Mar22 (10y)	0.74	May06	14
Cheapest	1	4.00 Mar22 (10y)	1.26	May06	14	Cheapest	1	4.50 Mar26	0.80	Jun11	4

Source: Citi Investment Research and Analysis

Relative Value Tables – Max 12Yr Maturity

Figure 115. Yield Spread and CAS to Fitted Relative Value Curve by Country (6m History); Bonds with a Maximum Maturity of 12yrs

GERMANY

Versus Fitted Yield Curve

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.50 Oct14	-3.11	Sep09	17
	2	3.75 Jan15	-2.10	Nov04	23
	3	4.25 Jul14	-1.63	May04	25
	4	2.50 Feb15	-1.57	Jan10	17
	5	1.75 Oct15	-1.26	Sep10	16
	5	2.50 Jan21 (RX)	0.09	Nov10	19
	4	4.25 Jul17	0.41	May07	19
	3	3.25 Jul21	0.65	Apr11	19
	2	4.00 Jan18	0.87	Nov07	20
Cheapest	1	2.25 Sep21	1.12	Aug11	16

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.50 Oct14	-0.06	Sep09	17
	2	2.25 Apr14	0.06	Mar09	19
	3	4.25 Jul14	0.07	May04	25
	4	3.75 Jan15	0.20	Nov04	23
	5	1.75 Oct15	0.23	Sep10	16
	5	2.25 Sep20	1.08	Aug10	16
	4	3.00 Jul20	1.09	Apr10	22
	3	2.50 Jan21 (RX)	1.24	Nov10	19
	2	3.25 Jul21	1.34	Apr11	19
Cheapest	1	2.25 Sep21	1.38	Aug11	16

FRANCE

Versus Fitted Yield Curve

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	2.25 Feb16	-2.03	Feb10	19
	2	4.25 Oct23	-1.96	Oct06	31
	3	2.50 Jul16 (5y)	-1.52	Jul10	4
	4	5.00 Oct16	-1.33	Oct00	25
	5	2.50 Oct20	-1.18	Oct09	29
	5	4.00 Apr18	0.47	Apr07	24
	4	3.00 Jul14	0.51	Jun09	21
	3	2.00 Jul15	0.53	Jun10	21
	2	3.75 Apr21	0.61	Apr05	31
Cheapest	1	3.50 Apr15	0.96	Apr04	22

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.00 Apr14	0.25	Apr03	20
	2	3.00 Jul14	0.50	Jun09	21
	3	4.00 Oct14	0.58	Oct03	20
	4	2.50 Jan15	0.70	Jan10	20
	5	3.50 Apr15	0.86	Apr04	22
	5	4.25 Oct23	1.34	Oct06	31
	4	3.75 Oct19	1.34	Oct08	25
	3	2.50 Oct20	1.36	Oct09	29
	2	3.25 Oct21 (10y)	1.40	Oct10	6
Cheapest	1	3.75 Apr21	1.43	Apr05	31

ITALY

Versus Fitted Yield Curve

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.50 Aug18	-2.12	Feb08	22
	2	4.25 Feb19	-1.77	Feb03	23
	3	4.25 Aug14	-1.52	Feb04	27
	4	3.75 Apr16	-1.33	Apr11	12
	5	4.25 Feb15	-1.32	Aug04	21
	5	3.00 Jun15	0.65	Jun10	19
	4	3.75 Aug16	0.79	Feb06	27
	3	3.75 Aug15	1.15	Feb05	26
	2	3.75 Aug21	1.58	Feb06	27
Cheapest	1	4.00 Feb17	1.95	Aug06	23

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.00 Apr14	-0.31	Apr11	15
	2	4.75 Sep16 (5y)	-0.30	Sep11	9
	3	4.25 Aug14	-0.25	Feb04	27
	4	3.50 Jun14	-0.23	Jun09	19
	5	4.25 Feb15	-0.08	Aug04	21
	5	3.75 Mar21	0.72	Sep10	23
	4	4.00 Sep20	0.74	Mar10	22
	3	4.75 Aug23	0.83	Feb08	21
	2	4.75 Sep21	0.84	Mar11	22
Cheapest	1	3.75 Aug21	0.85	Feb06	27

N'LANDS

Versus Fitted Yield Curve

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.25 Jul21 (10y)	-1.08	Mar11	11
	2	0.75 Apr15	-0.43	Jan12	3
	3	3.25 Jul15	-0.16	Jun05	14
	4	3.75 Jul14	0.02	Mar04	14
	5	2.50 Jan17	0.40	Jun11	8
	5	4.00 Jul16 (5y)	0.50	Jul06	13
	4	4.50 Jul17	0.66	Jul07	15
	3	4.00 Jul18	0.68	Feb08	15
	2	4.00 Jul19	1.73	Feb09	13
Cheapest	1	3.50 Jul20	1.75	Feb10	15

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.75 Jul14	-1.30	Mar04	14
	2	0.75 Apr15	-1.13	Jan12	3
	3	2.75 Jan15	-0.99	Jul09	13
	4	3.25 Jul15	-0.90	Jun05	14
	5	4.00 Jul16 (5y)	-0.32	Jul06	13
	5	4.00 Jul18	0.30	Feb08	15
	4	4.00 Jul19	0.51	Feb09	13
	3	3.25 Jul21 (10y)	0.51	Mar11	11
	2	3.50 Jul20	0.60	Feb10	15
Cheapest	1	3.75 Jan23	0.92	Jan06	10

SPAIN

Versus Fitted Yield Curve

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.30 Oct19	-4.62	Jun09	15
	2	4.60 Jul19	-4.42	Feb09	13
	3	4.10 Jul18	-3.56	Feb08	16
	4	4.00 Apr20	-3.05	Jan10	16
	5	4.25 Jan14 (2y)	-1.27	Oct08	13
	5	4.00 Jul15	0.53	Jan12	4
	4	5.50 Jul17	0.85	Mar02	15
	3	3.15 Jan16	1.00	Sep05	16
	2	3.30 Oct14	1.52	Jul09	15
Cheapest	1	3.80 Jan17	2.20	Oct06	13

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.25 Jan14 (2y)	-0.85	Oct08	13
	2	3.40 Apr14	-0.74	Apr11	7
	3	4.25 Oct16 (5y)	-0.71	Sep11	7
	4	3.00 Apr15	-0.66	Mar10	16
	5	4.40 Jan15	-0.66	Jun04	18
	5	4.60 Jul19	-0.11	Feb09	13
	4	4.30 Oct19	-0.05	Jun09	15
	3	4.00 Apr20	0.08	Jan10	16
	2	4.85 Oct20	0.16	Jul10	16
Cheapest	1	5.50 Apr21 (10y)	0.18	Jan11	17

BELGIUM

Versus Fitted Yield Curve

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.00 Mar18	-2.08	Jan08	10
	2	3.50 Mar15	-1.34	Mar09	10
	3	4.25 Sep14	-1.27	Jan04	13
	4	3.75 Sep15	-1.02	Mar05	11
	5	4.00 Mar19	-0.62	Jan09	10
	5	2.75 Mar16	-0.35	Mar10	10
	4	4.25 Sep21	-0.27	Jan11	8
	3	4.00 Mar17	0.03	Jan07	11
	2	3.75 Sep20	0.36	Jan10	18
Cheapest	1	4.00 Mar22 (10y)	1.26	May06	14

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.00 Mar14 (2y)	-0.48	Apr08	12
	2	4.25 Sep14	-0.44	Jan04	13
	3	3.50 Mar15	-0.29	Mar09	10
	4	3.75 Sep15	-0.21	Mar05	11
	5	2.75 Mar16	-0.04	Mar10	10
	5	4.00 Mar18	0.32	Jan08	10
	4	4.00 Mar19	0.49	Jan09	10
	3	3.75 Sep20	0.63	Jan10	18
	2	4.25 Sep21	0.64	Jan11	8
Cheapest	1	4.00 Mar22 (10y)	0.74	May06	14

Source: Citi Investment Research and Analysis

Relative Value Tables – Min 8yr Maturity

Figure 116. Yield Spread and CAS to Fitted Relative Value Curve by Country (6m History); Bonds with a Minimum Maturity of 8yrs

GERMANY

Versus Fitted Yield Curve

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.00 Jan37 (UB)	-1.67	Jan05	23
	2	4.75 Jul34	-1.42	Jan03	20
	3	5.50 Jan31	-1.14	Oct00	17
	4	2.25 Sep20	-0.98	Aug10	16
	5	4.25 Jul39	-0.86	Jan07	14
	5	3.25 Jul21	0.65	Apr11	19
	4	2.25 Sep21	1.12	Aug11	16
	3	3.25 Jul42 (30y)	1.37	Jul10	10
	2	6.25 Jan30	1.53	Jan00	9
Cheapest	1	4.75 Jul40	1.66	Jul08	16

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.00 Jan37 (UB)	1.03	Jan05	23
	2	2.25 Sep20	1.08	Aug10	16
	3	3.00 Jul20	1.09	Apr10	22
	4	4.75 Jul34	1.12	Jan03	20
	5	4.25 Jul39	1.17	Jan07	14
	5	3.25 Jul42 (30y)	1.32	Jul10	10
	4	3.25 Jul21	1.34	Apr11	19
	3	4.75 Jul40	1.36	Jul08	16
	2	2.25 Sep21	1.38	Aug11	16
Cheapest	1	6.25 Jan30	1.58	Jan00	9

FRANCE

Versus Fitted Yield Curve

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.25 Oct23	-1.96	Oct06	31
	2	3.50 Apr26	-1.24	Apr10	22
	3	2.50 Oct20	-1.18	Oct09	29
	4	3.25 Oct21 (10y)	-1.13	Oct10	6
	5	3.50 Apr20	-0.87	Feb10	27
	5	4.50 Apr41 (30y)	-0.04	Apr09	15
	4	4.00 Apr60	0.26	Apr09	8
	3	4.00 Oct38	0.36	Oct05	24
	2	3.75 Apr21	0.61	Apr05	31
Cheapest	1	4.75 Apr35	0.67	Apr03	18

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.50 Apr26	1.29	Apr10	22
	2	5.75 Oct32	1.31	Oct00	23
	3	3.50 Apr20	1.32	Feb10	27
	4	4.25 Oct23	1.34	Oct06	31
	5	2.50 Oct20	1.36	Oct09	29
	5	4.50 Apr41 (30y)	1.39	Apr09	15
	4	3.25 Oct21 (10y)	1.40	Oct10	6
	3	3.75 Apr21	1.43	Apr05	31
	2	4.00 Apr55	1.44	Apr04	15
Cheapest	1	4.00 Apr60	1.51	Apr09	8

ITALY

Versus Fitted Yield Curve

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.75 Mar21	-0.93	Sep10	23
	2	5.00 Mar22 (10y-IK)	-0.71	Sep11	9
	3	4.25 Mar20	-0.63	Sep09	23
	4	4.50 Feb20	-0.61	Feb04	21
	5	4.50 Mar26	-0.49	Sep10	14
	5	5.00 Aug39	0.40	Aug07	19
	4	5.00 Aug34	0.80	Aug03	21
	3	5.75 Feb33	0.93	Feb02	15
	2	5.00 Mar25	1.27	Mar09	20
Cheapest	1	3.75 Aug21	1.58	Feb06	27

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	5.00 Mar22 (10y-IK)	0.46	Sep11	9
	2	4.50 Feb20	0.64	Feb04	21
	3	4.25 Mar20	0.68	Sep09	23
	4	3.75 Mar21	0.72	Sep10	23
	5	4.00 Sep20	0.74	Mar10	22
	5	5.75 Feb33	1.16	Feb02	15
	4	5.00 Aug34	1.19	Aug03	21
	3	5.00 Aug39	1.21	Aug07	19
	2	5.00 Sep40 (30y)	1.23	Sep09	20
Cheapest	1	4.00 Feb37	1.33	Aug05	25

N'LANDS

Versus Fitted Yield Curve

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.25 Jul21 (10y)	-1.08	Mar11	11
	2	4.00 Jan37	0.16	Apr05	12
	2	3.75 Jan42 (30y)	0.43	May10	10
Cheapest	1	3.50 Jul20	1.75	Feb10	15

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	3.25 Jul21 (10y)	0.51	Mar11	11
	2	3.50 Jul20	0.60	Feb10	15
	2	3.75 Jan23	0.92	Jan06	10
Cheapest	1	4.00 Jan37	1.01	Apr05	12

SPAIN

Versus Fitted Yield Curve

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	5.75 Jul32	-4.51	Jan01	14
	2	4.20 Jan37	-4.47	Jan05	16
	3	4.00 Apr20	-3.05	Jan10	16
	4	4.85 Oct20	-1.24	Jul10	16
	5	5.50 Apr21 (10y)	-1.12	Jan11	17
	5	5.90 Jul26	0.99	Mar11	6
	4	4.90 Jul40	2.48	Jun07	13
	3	4.70 Jul41 (30y)	3.32	Sep09	11
	2	4.65 Jul25	4.54	Feb10	14
Cheapest	1	4.80 Jan24	4.59	Sep08	15

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	5.85 Jan22	-0.62	Nov11	4
	2	4.00 Apr20	0.08	Jan10	16
	3	4.85 Oct20	0.16	Jul10	16
	4	5.50 Apr21 (10y)	0.18	Jan11	17
	5	5.90 Jul26	0.69	Mar11	6
	5	4.65 Jul25	0.79	Feb10	14
	4	4.70 Jul41 (30y)	0.80	Sep09	11
	3	5.75 Jul32	0.80	Jan01	14
	2	4.20 Jan37	0.81	Jan05	16
Cheapest	1	4.90 Jul40	0.84	Jun07	13

BELGIUM

Versus Fitted Yield Curve

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.25 Mar41 (30y)	-1.86	Apr10	6
	2	4.50 Mar26	-0.71	Jun11	4
	3	4.25 Sep21	-0.27	Jan11	8
	3	3.75 Sep20	0.36	Jan10	18
	2	5.00 Mar35	1.07	May04	14
Cheapest	1	4.00 Mar22 (10y)	1.26	May06	14

Versus Swap Curve (CAS)

	Rank	Bond	ZScore	Issued	Size (€bn)
Richest	1	4.25 Mar41 (30y)	0.55	Apr10	6
	2	3.75 Sep20	0.63	Jan10	18
	3	4.25 Sep21	0.64	Jan11	8
	3	5.00 Mar35	0.68	May04	14
	2	4.00 Mar22 (10y)	0.74	May06	14
Cheapest	1	4.50 Mar26	0.80	Jun11	4

Source: Citi Investment Research and Analysis

Figure 117. CIRA Inflation Forecasts

	EUR HICPxT			France CPIxT			UK RPI			US CPURNSA		
Month	Index Forecast	MoM Change	YoY Change	Index Forecast	MoM Change	YoY Change	Index Forecast	MoM Change	YoY Change	Index Forecast	MoM Change	YoY Change
Dec 11	113.91	0.3	2.7	123.51	0.4	2.4	239.40	0.4	4.8	225.67	-0.2	3.0
Jan 12	113.01	-0.8	2.6	123.40	-0.1	2.6	238.00	-0.6	3.9	226.27	0.3	2.7
Feb 12	113.33	0.3	2.5	123.88	0.4	2.5	238.90	0.4	3.3	226.47	0.1	2.3
Mar 12	114.19	0.8	1.9	124.66	0.6	2.3	239.40	0.2	3.0	227.67	0.5	1.9
Apr 12	114.83	0.6	1.8	124.87	0.2	2.1	240.90	0.6	2.8	228.27	0.3	1.5
May 12	115.13	0.3	2.1	125.10	0.2	2.2	241.80	0.4	2.8	228.97	0.3	1.3

Shaded = Already released

Source: Citi Investment Research and Analysis

Figure 118. US TIPS Inflation- Linked Carry (based on forecasts above) – One week changes

TIPS	RY (%)	Chg (bp)	Carry-adj chg	Carry: RY (bp) 1 Mar	1 Apr	1 May	Ref	BE (bp)	Chg (bp)	Carry-adj chg	Carry: BE (bp) 1 Mar	1 Apr	1 May	ZC Swap - BE Spread (bp)	Chg (bp)
Repo (%)				*0.09*	*0.09*	*0.09*									
TIPS 4/13	-1.19	-7	-7	-38	-26	-30	*US-3.125-04/30/13*	136	7	3	-38	-27	-32	22	1
TIPS 7/13	-1.46	-7	-7	-33	-25	-30	*US-4.250-08/15/13*	167	6	3	-34	-27	-33	30	-1
TIPS 1/14	-1.23	-7	-7	-23	-16	-18	*US-4.000-02/15/14*	148	7	4	-24	-17	-20	25	-3
TIPS 4/14	-1.16	-9	-9	-20	-13	-14	*US-1.875-04/30/14*	144	8	6	-21	-15	-17	21	-6
TIPS 7/14	-1.31	-7	-7	-19	-13	-15	*US-2.625-07/31/14*	162	6	4	-20	-15	-17	31	-3
TIPS 1/15	-1.14	-8	-8	-15	-9	-10	*US-2.250-01/31/15*	150	6	4	-16	-11	-13	35	-3
TIPS 4/15	-1.08	-6	-6	-13	-8	-9	*US-2.500-04/30/15*	150	4	2	-14	-10	-12	30	-1
TIPS 7/15	-1.17	-6	-6	-13	-8	-9	*US-4.250-08/15/15*	165	4	3	-14	-11	-12	34	-1
TIPS 1/16	-1.03	-6	-6	-11	-6	-7	*US-2.625-02/29/16*	165	5	3	-12	-9	-11	30	-1
TIPS 4/16	-1.01	-5	-5	-10	-6	-6	*US-2.000-04/30/16*	166	4	3	-11	-9	-10	25	-1
TIPS 7/16	-1.04	-5	-5	-10	-6	-6	*US-4.875-08/15/16*	175	4	2	-11	-9	-10	32	0
TIPS 1/17	-0.91	-6	-6	-8	-5	-5	*US-3.125-01/31/17*	175	4	3	-10	-8	-9	29	-0
TIPS 7/17	-0.89	-5	-5	-8	-4	-4	*US-4.750-08/15/17*	186	4	3	-10	-8	-9	29	-0
TIPS 1/18	-0.74	-5	-5	-7	-3	-3	*US-3.500-02/15/18*	185	3	2	-9	-7	-8	28	1
TIPS 7/18	-0.70	-4	-4	-6	-3	-2	*US-4.000-08/15/18*	191	3	2	-8	-7	-8	32	1
TIPS 1/19	-0.59	-6	-6	-5	-2	-2	*US-2.750-02/15/19*	193	4	3	-8	-6	-8	29	0
TIPS 7/19	-0.53	-5	-5	-5	-2	-1	*US-3.625-08/15/19*	198	4	3	-7	-6	-7	32	-0
TIPS 1/20	-0.40	-5	-5	-4	-1	-1	*US-3.625-02/15/20*	195	4	4	-7	-6	-7	34	-0
TIPS 7/20	-0.35	-4	-4	-4	-1	-1	*US-2.625-08/15/20*	203	4	3	-6	-5	-7	33	0
TIPS 1/21	-0.21	-4	-4	-4	-1	0	*US-3.625-02/15/21*	196	3	2	-6	-5	-6	38	1
TIPS 7/21	-0.17	-4	-4	-3	-1	0	*US-2.125-08/15/21*	205	3	2	-6	-5	-6	35	1
TIPS 1/25	0.20	-1	-1	-2	0	1	*US-7.625-02/15/25*	204	0	-0	-5	-5	-6	43	4
TIPS 1/26	0.29	-1	-1	-2	0	1	*US-6.000-02/15/26*	210	0	-1	-5	-4	-5	39	4
TIPS 1/27	0.33	-1	-1	-2	0	1	*US-6.625-02/15/27*	212	1	0	-4	-4	-5	39	3
TIPS 1/28	0.40	-0	-0	-2	0	1	*US-6.125-11/15/27*	210	1	0	-4	-4	-5	42	3
TIPS 4/28	0.46	0	0	-2	0	1	*US-5.500-08/15/28*	209	-0	-1	-4	-4	-5	42	4
TIPS 1/29	0.42	-0	-0	-2	0	1	*US-5.250-02/15/29*	216	0	-0	-4	-4	-5	38	3
TIPS 4/29	0.46	-1	-1	-2	0	1	*US-5.250-02/15/29*	212	1	1	-4	-4	-4	40	3
TIPS 4/32	0.51	-1	-1	-1	0	1	*US-5.375-02/15/31*	212	1	1	-4	-3	-4	43	2
TIPS 2/40	0.73	-0	-0	-1	0	1	*US-4.625-02/15/40*	219	1	1	-3	-3	-3	39	2
TIPS 2/41	0.74	-1	-1	-1	0	1	*US-4.750-02/15/41*	219	1	1	-3	-3	-3	39	2

Source: Citi Investment Research and Analysis

Figure 119. Eur Inflation- Linked Carry (based on forecasts above)- One week changes

IL	RY (%)	Chg (bp)	Carry-adj chg	Carry: RY (bp) 1 Mar	1 Apr	1 May	Ref	BE (bp)	Chg (bp)	Carry-adj chg	Carry: BE (bp) 1 Mar	1 Apr	1 May	ZC Swap - BE Spread (bp)	Chg (bp)
Repo (%)				*0.37*	*0.36*	*0.35*									
BOBLei13	-1.01	6	6	19	-68	-56	*BUND 1/13*	106	-5	-5	23	-61	-44	48	7
OATi13	-1.61	8	8	19	1	20	*FFRG 4/13*	212	6	7	18	-2	15	37	-7
BTPei14	4.14	0	0	31	11	38	*BTP 8/14*	13	-38	-38	13	-23	-12	191	41
OATei15	-0.11	-14	-14	9	-17	-9	*FFRG 4/15*	154	19	19	5	-24	-19	58	-15
BUNDei16	-0.80	-8	-8	6	-17	-12	*BUND 1/16*	135	9	9	5	-18	-14	51	-5
BTANi16	0.19	-16	-16	10	8	17	*FFRG 4/16*	161	17	17	7	1	7	71	-17
BTPei16	5.21	6	6	20	11	28	*BTP 8/16*	-4	-49	-49	8	-12	-6	206	54
OATi17	0.33	-26	-26	9	7	15	*FFRG 4/17*	180	24	25	5	0	4	53	-23
BTPei17	5.60	15	15	18	10	25	*BTP 8/17*	-3	-47	-47	6	-11	-6	207	53
BUNDei18	-0.50	-8	-8	4	-10	-7	*BUND 1/18*	153	6	6	3	-13	-10	42	0
OATi19	0.75	-18	-18	7	7	13	*FFRG 4/19*	196	21	21	3	-1	2	42	-17
BTPei19	5.58	25	25	13	8	19	*BTP 9/19*	32	-54	-54	4	-9	-6	182	62
BUNDei20	-0.28	-14	-14	4	-8	-5	*BUND 1/20*	174	10	10	2	-10	-9	36	-1
OATei20	0.96	-18	-18	5	-4	0	*FFRG 4/20*	198	26	26	2	-11	-10	26	-17
BTPei21	5.76	25	25	11	7	16	*BTP 9/20*	23	-51	-51	3	-9	-6	200	78
OATei22	1.10	-17	-17	4	-3	0	*FFRG 4/21*	201	26	25	1	-10	-10	28	-15
OATi23	1.05	-18	-18	5	5	10	*FFRG 10/23*	227	26	26	2	-1	1	17	-18
BTPei23	5.76	18	18	10	6	14	*BTP 8/23*	79	-36	-36	2	-8	-6	149	46
HELRei25	20.36	-13	-14	35	48	78	*HELR 3/24*	648	-30	-35	-25	-62	-76	-413	41
BTPei26	5.76	22	22	8	5	12	*BTP 3/26*	103	-28	-28	2	-7	-6	133	39
OATei27	1.34	-13	-13	3	-2	1	*FFRG 4/26*	220	21	21	0	-8	-7	19	-10
OATi29	1.44	-10	-10	4	4	8	*FFRG 4/29*	229	19	19	1	-1	0	15	-9
HELRei30	14.89	-46	-46	20	24	41	*HELR 3/26*	1194	-104	-114	-45	-94	-124	-952	115
OATei32	1.56	-4	-4	3	-1	1	*FFRG 10/32*	222	12	12	0	-6	-6	22	-2
BTPei35	4.71	8	8	5	2	6	*BTP 8/34*	236	-2	-3	-1	-8	-9	10	13
OATei40	1.46	-6	-6	2	-1	1	*FFRG 10/38*	236	15	15	0	-5	-5	19	-6
BTPei41	4.73	13	13	4	2	6	*BTP 9/40*	223	-7	-8	-1	-7	-8	32	16

Source: Citi Investment Research and Analysis

Figure 120. UK Gilts Inflation- Linked Carry (based on forecasts above)- One Week Changes

UKTi	RY (%)	Chg (bp)	Carry-adj chg	Carry: RY (bp) 1 Mar	1 Apr	1 May	Ref	BE (bp)	Chg (bp)	Carry-adj chg	Carry: BE (bp) 1 Mar	1 Apr	1 May	ZC Swap - BE Spread (bp)	Chg (bp)
Repo (%)				*0.51*	*0.50*	*0.50*									
UKTi'13	-2.11	8	8	3	5	7	*UKT 9/13*	254	-7	-7	3	6	9	31	10
UKTi'16	-1.59	4	3	2	4	6	*UKT 9/16*	249	-3	-2	1	2	3	52	-1
UKTi'17	-1.41	2	1	4	-9	-5	*UKT 3/18*	265	-1	-1	3	-12	-9	38	-3
UKTi'20	-0.89	-0	-0	2	4	6	*UKT 3/20*	260	-0	-0	0	1	1	48	-3
UKTi'22	-0.63	-0	-0	3	-4	-1	*UKT 3/25*	298	-1	-1	1	-7	-6	23	-30
UKTi'24	-0.45	1	1	2	4	5	*UKT 3/25*	281	-2	-2	0	0	0	45	-1
UKTi'27	-0.34	-0	-0	3	-2	0	*UKT 12/27*	290	-1	-1	1	-5	-5	41	-1
UKTi'29	-0.26	-3	-3	2	-2	0	*UKT 12/30*	298	-1	-1	0	-5	-5	32	-1
UKTi'30	-0.32	-2	-2	2	3	4	*UKT 6/32*	312	-2	-2	0	0	0	25	0
UKTi'32	-0.25	-3	-3	2	-1	0	*UKT 6/32*	305	-1	-1	0	-5	-4	33	0
UKTi'34	-0.19	-4	-4	2	-1	0	*UKT 9/34*	307	-0	-0	0	-4	-4	29	-1
UKTi'35	-0.25	-5	-5	1	2	3	*UKT 3/36*	315	-1	-1	0	-1	-1	24	-0
UKTi'37	-0.23	-6	-6	2	-1	0	*UKT 12/38*	317	-0	-1	0	-4	-4	24	-1
UKTi'40	-0.21	-7	-7	1	-1	0	*UKT 12/38*	315	1	0	0	-4	-4	26	3
UKTi'42	-0.21	-7	-7	1	-1	0	*UKT 9/39*	319	0	0	0	-4	-4	26	1
UKTi'47	-0.21	-8	-8	1	-1	0	*UKT 12/46*	322	0	-0	0	-3	-3	23	-2
UKTi'50	-0.19	-8	-8	1	-1	0	*UKT 12/46*	321	0	-0	0	-3	-3	23	-0
UKTi'55	-0.19	-8	-8	1	-1	0	*UKT 12/55*	321	-0	-1	0	-3	-3	26	-2
UKTi'62	-0.18	-9	-9	1	-1	0	*UKT 1/60*	319	0	-0	0	-3	-3	28	-3

Source: Citi Investment Research and Analysis

Summary of Recent Publications

Date	Publication	Topic	Page	Region
19-Jan-12	NOTE	UK Rates Strategy: Gilts, it's as easy as 1, 2, 3…	-	UK
18-Jan-12	NOTE	End-January 2012 EGBI and WGBI Projections	-	Global
17-Jan-12	NOTE	Global Flow Monitor: US and European Flow Analysis	-	Global
16-Jan-12	NOTE	Gilt/Bund Seasonality: Temporary headwinds for gilts	-	Global
16-Jan-12	NOTE	Euro Rates Strategy: The Implications of S&P's Sovereign Downgrades	-	EUR
12-Jan-12	IIRS	Core Convergence: Bund-Gilt 10s30s Box Trade	8	Global
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10-Jan-12	NOTE	Global Flow Monitor: US and European Flow Analysis	-	Global
09-Jan-12	NOTE	UK Inflation Strategy: The rally in UK real yields may not be over	-	UK
09-Jan-12	NOTE	Interest Rate Strategy Update: Convergence in Rates Markets	-	Global
05-Jan-12	IIRS	Overview: A sense of déjà-vu?	7	Global
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04-Jan-12	NOTE	January Euro Supply: Country and maturity breakdown	-	EUR
22-Dec-11	NOTE	2012 Global Supply Outlook	-	Global
15-Dec-11	IIRS	Overview: Trades and Themes for 2012	6	Global
		Close Your Eyes And Walk Away Trades	10	Global
		2012 Global Supply forecasts	14	Global
14-Dec-11	NOTE	End-December 2011 EGBI and WGBI Projections	-	Global
08-Dec-11	IIRS	Scope for Post-Summit Widening	8	EUR
		How Would Spreads React to Downgrades?	11	EUR
		Italy: Short-Term Funding Vulnerabilities	16	EUR
		Prospects for 30yr Gilts	18	UK

Global Rates Team

Figure 121. Citi Global Interest Rate Strategy Team, *For informational purposes only*

	Name	Office Number	Email Address
GLOBAL HEAD	Mark Schofield[1]	(44-20) 7986-9224	mark.schofield@citi.com
LONDON	**Rates Strategy**		
	Robert Crossley[1]	(44-20) 7986-9255	robert.crossley@citi.com
	Jamie Searle[1]	(44-20) 7986-9493	jamie.searle@citi.com
	Nishay Patel[1]	(44-20) 7986-1007	nishay.patel@citi.com
	Peter Goves[1]	(44-20) 7986-3215	peter.goves@citi.com
	Portfolio Strategy Group		
	David Bieber[1]	(44-20) 7986-4976	david.bieber@citi.com
MUMBAI	Aman Bansal[5]	(91 22) 4277 5021	aman1.bansal@citi.com
	Mohit Aggarwal[5]	(91 22) 4277 5022	mohit1.aggarwal@citi.com
NEW YORK	**Rates & MBS Strategy**		
	Brett Rose[2]	(1-212) 723-6439	brett.rose@citi.com
	Neela Gollapudi[2]	(1-212) 723-3075	neela.gollapudi@citi.com
	Inger Daniels[2]	(1-212) 723-3274	inger.daniels@citi.com
	Bond Portfolio Analysis		
	Rob Rowe[2]	(1-212) 723-1168	robert.rowe@citi.com
	Martin Bernstein[2]	(1-212) 723-6067	martin.bernstein@citi.com
	Rohit Thapliyal[2]	(1-212) 723-1696	rohit.thapliyal@citi.com
	Shuo Li[2]	(1-212) 723-1179	shuo2.li@citi.com
Asia Pac	**APAC Rates Strategy**		
	Steven Mansell[o]	(61-2) 8225 4900	steven.mansell@citi.com
	Sandeep Arora[6]	(813-6) 270-7228	sandeep.k.arora@citi.com
	Japan Rates Strategy		
	Eiji Dohke[6]	(813-6) 270-7246	eiji.dohke@citi.com
	Maki Shimizu[6]	(813-6) 270-7249	maki.shimizu@citi.com
	Jacy Sun[6]	(813-6) 270-7247	jacy.sun@citi.com
	Bond Portfolio Analysis		
	Hideaki Takahashi[6]	(813-6) 270-7231	hideaki.takahashi@citi.com
	Yukichi Shimosato[6]	(813-6) 270-7995	yukichi.shimosato@citi.com

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Appendix A-1

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