

# Position for Crossover spreads to stay range-bound via options

## November should not be as lively as October, spread-wise

- We remain constructive but would take profits as we move tighter, especially in synthetics. At the same time, the potential for a near-term gap wider has largely diminished. Thus, we are comfortable positioning for spreads to remain range-bound near term.

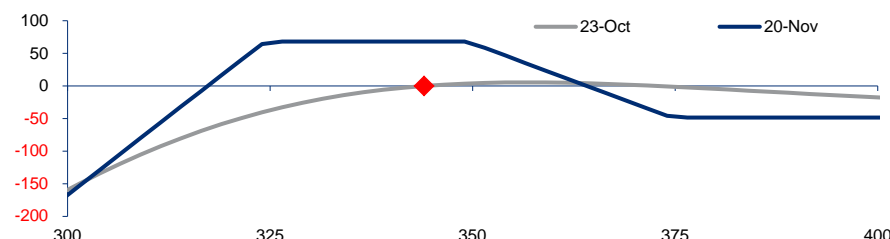
### ■ Trade: Crossover 325-350-375 receiver ladder; Nov-13, no delta.

The trade generates 68c if spreads, on Nov-20<sup>th</sup>, are between 325 and 350bp, with a negative payoff only if spreads are either below 317 or above 364bp respectively. The trade takes advantage of the current high implied vol of both low strike receivers and high strike payers (i.e. **flat receiver and payer skews**) by selling two 325 strike options and buying one 375 strike option.

- The recent demand to buy low strike short-dated receivers in Crossover, to position for spreads continuing their aggressive tightening, has pushed the receiver skew to extremely flat levels. We believe this is not sustainable and that investors will soon find attractive selling receivers, as many times during this year.

Figure 1. Trade spread exposure – 317/364bp breakeven at expiry

P&L in cents of the Xover straddle notional in Figure 2. X-axis: index spread, bp.



Source: Citi Research.

Figure 2. Crossover receiver ladder – Trade details

Type	Strike	Expiry	Price	Position	Notional (m)	Upfront
Receiver	325	20-Nov-13	17.9c	Sell	200	357,383
Receiver	350	20-Nov-13	60.9c	Sell	100	608,975
Receiver	375	20-Nov-13	145.0c	Buy	100	-1,449,568
Total						-483,209

Source: Citi Research. Indicative prices shown.

Investing in options is not suitable for all investors. Please see the disclosures concerning the risks of investing in options below and discuss with your Financial Advisor whether this particular options strategy is suitable for you.

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

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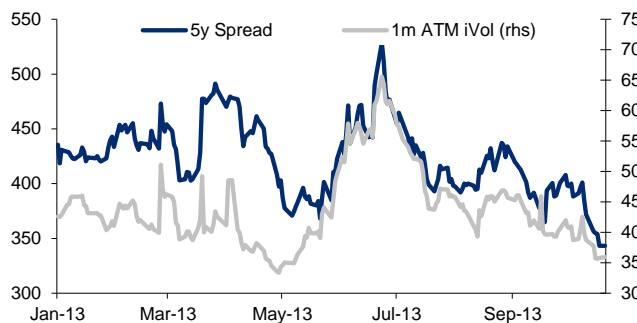
In our view, the market reaction during the recent US shutdown/debt-ceiling clearly shows that **investors are probably less fully invested than we thought**. The rush to chase spreads tighter when the temporary solution was agreed was far more pronounced than the rush to add tail-hedges as we were approaching the 17<sup>th</sup> without a solution. Even though investors are trying to compensate their conservative positioning by buying a larger than usual bucket of high spread/high beta instruments, the rally last week was an indication that the “pain trade” (and path of least resistance) is still for tighter spreads.

Track movements in volatility with our daily analytics: [iTraxx](#) and [CDX](#)

In the **options space**, an indication of the rush to unwind tail-hedges and to position for further spread tightening can be clearly seen in the **aggressive flattening of the 1m payer and receiver skews** (see Figure 4 for iTraxx Crossover). Investors seemed in a rush to sell any OTM payers they had bought as tail hedges and to buy OTM receivers probably to cover themselves in the event of spreads tightening further.

Figure 3. Crossover spread and 1m implied volatility

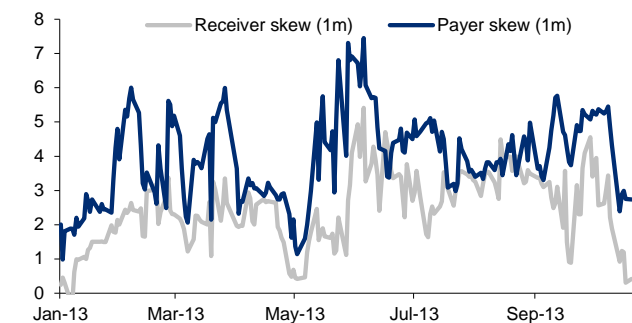
On-the-run spreads, in bp (lhs); 1m ATM implied vol, in %, rhs.



Source: Citi Research, Markit.

Figure 4. Crossover 1m receiver and payer implied vol skew

Receiver skew: difference between ATM and 25% delta receiver implied vol. Payer skew: difference between 25% delta payer and ATM implied vol. In %.



Source: Citi Research, Markit.

As we highlighted in our latest [European Credit Weekly](#) (H. Lorenzen, 18-Oct), we remain constructive but would be taking profits on longs as we tighten. With Crossover spreads trading on top of the long term forecast we had back in September (350bp),<sup>1</sup> **we are more inclined to position for spreads to remain range-bound at current levels than to tighten aggressively from here**. In our view, investors will likely take a step back and realise that we have rallied aggressively on the back of a tail event not happening, rather than on anything particularly positive in its own right. This is particularly the case in synthetic products – which feel richer than cash to us [given that investors favoured synthetic longs to chase the rally last week](#).

At the same time, **the potential for a large widening in the near term seems very limited to us**, now that the US debt-ceiling deadline has been pushed into 2014 and the economic newsflow continues on a positive trend.

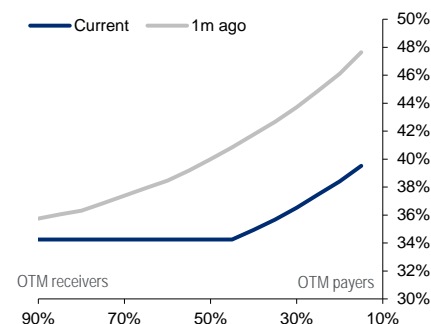
#### Position for a range-bound market

On the back of our views above and the current pricing in Crossover options, we believe a 325-350-375 receiver ladder provides an attractive way to position for the next month. The trade generates 68c if spreads on Nov-20<sup>th</sup> are between 325 and 350bp, with a negative payoff only if spreads are either below 317 or above 364bp respectively. The trade allows investors to position for a near term range-bound trading environment, taking advantage of the current high implied vol of both low and high strike options (i.e. flat receiver and payer skews) by selling two 325 strike options and buying one 375 strike option. The receiver skew in 1m Crossover

<sup>1</sup> See [European Credit Outlook](#), H. Lorenzen, 6-Sep.

Figure 5. Crossover 1m vol skew

X-axis: Imp. Vol. Y-axis: payer delta.



Source: Citi Research, Markit.

options is fully flat (and much flatter than the payer skew), which is the reason why we prefer to structure the trade selling two low strike options.

## Trade: 325-350-375 Nov. Crossover Receiver Ladder

Figure 6 shows the trade details, Figure 8 shows its spread exposure and Figure 9 shows the trade breakeven spreads (317/364bp) at expiry vs. the recent history of Crossover spreads. The trade generates a net short volatility exposure (negative vega), but we believe that if volatility falls we will see a normalization of the receiver and payer skews (both steepening), which should largely compensate for any short term reduction in implied vol.

We prefer to have negative exposure in very large tightenings via Crossover than via Main – given that we expect spreads to decompress if we move substantially tighter. This is one of the reasons why we would rather do this trade in Crossover than in Main.

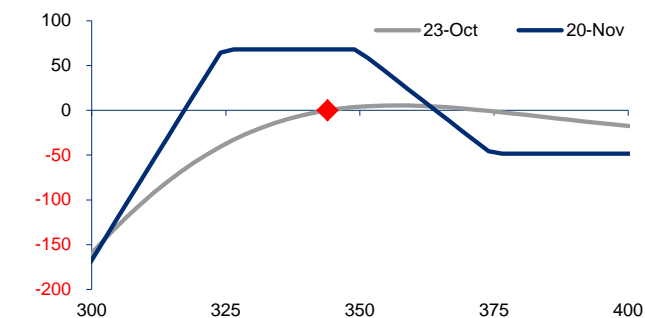
Figure 6. Trade Details

Type	Strike	Expiry	Price	Position	Notional (m)	Upfront	Delta	Gamma	Theta	Vega	Vol %
Receiver	325	20-Nov-13	17.9c	Sell	-200	357,383	20,480	-1,988	13,969	-26,032	34.3%
Receiver	350	20-Nov-13	60.9c	Sell	-100	608,975	22,608	-1,334	7,987	-17,389	34.3%
Receiver	375	20-Nov-13	145.0c	Buy	100	-1,449,568	-33,663	1,037	-5,235	14,803	37.7%
Index	@ 344 bp		No position								
					Total	-483,209	9,425	-2,285	16,720	-28,618	

Source: Citi Research. Indicative prices shown; COB yesterday. Delta: MiM if index spreads widen 1bp // Change in delta if spreads widen 1bp // Theta: MiM if one day goes by // Vega: MiM if implied vol increases 1%.

Figure 7. Trade spread exposure – 317/364bp breakeven at expiry

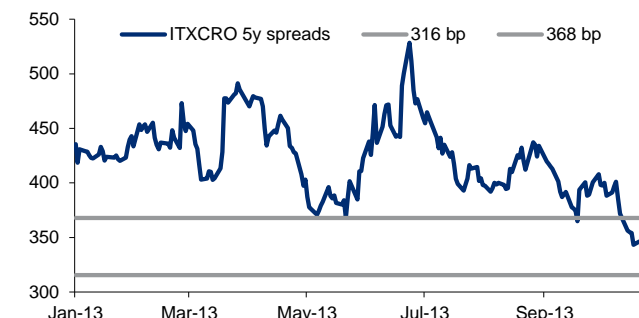
P&L in cents of the Xover straddle notional in Figure 6. X-axis: index spread, bp.



Source: Citi Research, Markit.

Figure 8. Crossover spreads vs. trade breakevens at expiry

On-the-run spreads, in bp.

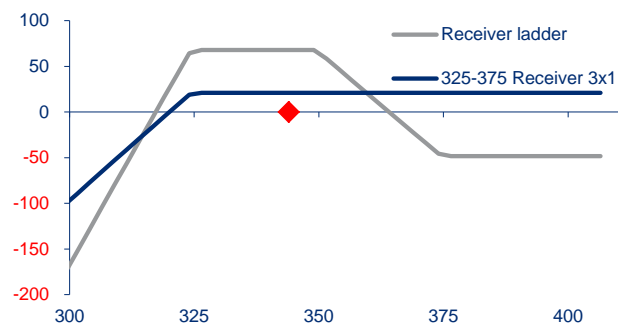


Source: Citi Research, Markit.

Finally, Figure 10 and Figure 11 compare the P&L of the receiver ladder with the P&L of selling a 325 receiver and entering a receiver 3x1 respectively. We prefer the receiver ladder vs. the receiver given that we do not think we will widen much from here and vs. the receiver 3x1 given that it generates wider breakevens.

Figure 9. Trade spread exposure vs. selling a receiver

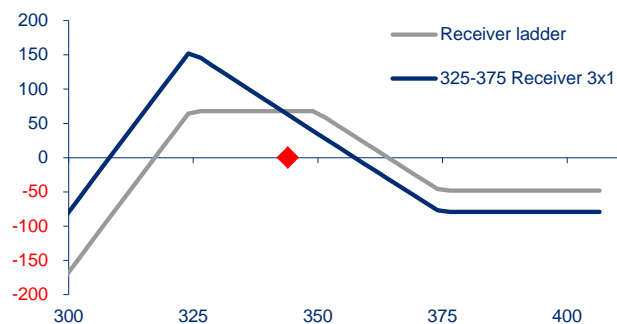
P&L in cents at the option expiry (20-Nov). X-axis: index spread, bp.



Source: Citi Research, Markit.

Figure 10. Trade spread exposure vs. a receiver 3x1

P&L in cents at the option expiry (20-Nov). X-axis: index spread, bp.



Source: Citi Research, Markit.

## Trade Recommendations Summary

This section provides details of the trade ideas recommended in our published research.

We are opening the trade recommended in this report.

Figure 11. Open trades – Summary and P&L

Trade Description	Leg	Format	Direct.	Notnl.	Entry Upfront	Entry Spread	Entry Coupon	Current Upf.	Current Spread	P&L* Total	P&L* Month**
iTraxx Main Eq. Notional Flattener	Main S19 3y	Prot.	Buy	1	-0.97%	65	100	-1.61%	40	-0.77%	-0.25%
05-Sep-13	Main S19 5y	Prot.	Sell	1	0.24%	105	100	-1.0%	77	1.39%	0.58%
									<b>Total</b>	<b>0.62%</b>	<b>0.32%</b>
S19 Jun-16 0-3% vs. 3-6%	Main S19 0-3% Jun-16	Prot.	Sell	1	8.00%	839	500	5.31%	718	3.06%	4.41%
26-Sep-13	Main S19 3-6% Jun-16	Prot.	Buy	2	-7.00%	234	500	-8.6%	172	-3.89%	-3.42%
									<b>Total</b>	<b>-0.83%</b>	<b>0.99%</b>
S19 3-6% vs. S20 Crossover	Main S19 3-6% Jun-18	Prot.	Sell	1	-3.25%	422	500	-5.64%	367	2.76%	3.18%
26-Sep-13	Crossover S20 Dec-18	Prot.	Buy	1	-5.18%	386	500	-6.8%	346	-2.00%	-2.19%
									<b>Total</b>	<b>0.76%</b>	<b>0.99%</b>
iTraxx vs. CDX IG super senior	Main S9 22-100% Jun-18	Prot.	Sell	1	0.60%	37	25	0.36%	33	0.26%	0.29%
26-Sep-13	CDX IG S9 30-100% Dec-17	Prot.	Buy	1	-3.54%	13	100	-3.6%	14	-0.11%	0.00%
									<b>Total</b>	<b>0.15%</b>	<b>0.29%</b>
Senior Fin vs. Xover straddle	Xover Dec-13 140bp straddle	Price	Sell	1	2.64%			2.85%		-0.22%	
09-Oct-13	SenFin Dec-13 140bp straddle	Price	Buy	2.05	1.29%			1.2%		-0.13%	
									<b>Total</b>	<b>-0.35%</b>	
CDX IG vs. Main Receivers	CDX IG S21 Nov 85 Receiver	Price	Buy	1	0.473%			0.70%		0.23%	
15-Oct-13	Main S20 Nov 100 Receiver	Price	Sell	1	0.517%			0.8%		-0.24%	
									<b>Total</b>	<b>-0.02%</b>	
325-350-375 Nov. Crossover Receiver Ladder	325 Xover Nov Rec	Price	Sell	2	0.179%						
23-Oct-13	350 Xover Nov Rec	Price	Sell	1	0.609%						
	375 Xover Nov Rec	Price	Buy	1	1.450%						
									<b>Total</b>		

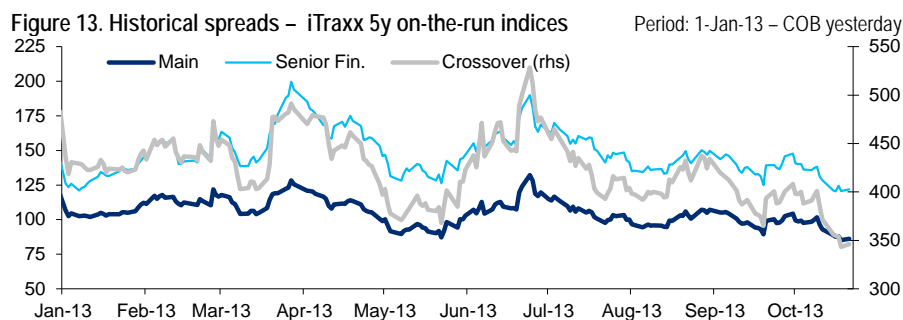
Source: Citi Research. Spreads and coupons in bp. \* P&L expressed as % of the leg with notional equal to 1. \*\* Over the last month. Prices as of COB yesterday.

Figure 12. Open and closed trades summary statistics

Number	Open	Closed*	Percentage	Open	Closed*
In profit	3	6	In profit	50%	86%
In loss	3	1	In loss	50%	14%
	6	7			

Source: Citi Research. \* Since 1-Jun-13. Excluding the trade ideas opened in the current publication.

### Representative Market Conditions



Source: Citi Research, Markit. In bp.

Figure 14. Closed trades since Jun-13 – Summary and P&L

Trade Description	Leg	Format	Direct.	Notnl.	Entry Upfront	Entry Spread	Entry Coupon	Current Upfront	Current Spread	P&L* Total
Main July Receiver Fly	105bp Receiver	Price	Buy	1	0.25%			0.23%		-0.01%
Opened: 18-Jun-13	90bp Receiver	Price	Sell	2	0.0%			0.0%		0.07%
Closed: Expiry	75bp Receiver	Price	Buy	1	0.00%			0.0%		0.00%
									<b>Total</b>	<b>0.06%</b>
Senior Fin vs. CDX IG Receivers	SenFin October 140bp receiver	Price	Buy	1	0.53%			0.69%		0.17%
Opened: 26-Jul-13	CDX IG October 75bp receiver	Price	Sell	2	0.19%			0.2%		0.02%
Closed: 13-Aug-13									<b>Total</b>	<b>0.19%</b>
Series 9 vs. Series 19 equity	iTraxx Main S9 0-3% Jun-18 (10y)	Prot.	Buy	1	46.25%	1,720	500	39.82%	1,703	-7.98%
Opened: 5-Jun-13	iTraxx Main S9 Index Jun-18 (10y)	Prot.	Sell	5	-2.05%	132	175	-2.73%	114	6.12%
Closed: 25-Sep-13	iTraxx Main S19 0-3% Jun-18 (5y)	Prot.	Sell	1	31.75%	1,227	500	25.15%	1,188	8.15%
	iTraxx Main S19 Index Jun-18 (5y)	Prot.	Buy	6.2	0.39%	108	100	-0.53%	88	-7.63%
									<b>Total</b>	<b>-1.34%</b>
S19 Jun-16 3-6% vs. S9 Jun-18 Index	iTraxx Main S19 3-6% Jun-16 (3y)	Prot.	Sell	1	-3.59%	375	500	-7.23%	229	4.72%
Opened: 9-Jul-13	iTraxx Main S9 Index Jun-18 (10y)	Prot.	Buy	2.5	-1.58%	138	175	-2.7%	114	-3.83%
Closed: 25-Sep-13									<b>Total</b>	<b>0.89%</b>
Commerzbank sub/senior compr.	Sub CDS	Prot.	Sell	1	-5.65%	375	500	-8.03%	327	3.24%
Opened: 13-Aug-13	Senior CDS	Prot.	Buy	2.51	2.37%	150	100	1.9%	140	-1.49%
Closed: 14-Sep-13									<b>Total</b>	<b>1.75%</b>
RBS sub/senior compr.	Sub CDS	Prot.	Sell	1	-7.71%	339	500	-11.10%	254	4.25%
Opened: 13-Aug-13	Senior CDS	Prot.	Buy	2.02	2.80%	168	100	1.8%	139	-2.43%
Closed: 14-Sep-13									<b>Total</b>	<b>1.82%</b>
BNP sub/senior compr.	Sub CDS	Prot.	Sell	1	-14.42%	198	500	-16.21%	168	2.65%
Opened: 13-Aug-13	Senior CDS	Prot.	Buy	1.68	0.86%	118	100	0.3%	105	-1.30%
Closed: 14-Sep-13									<b>Total</b>	<b>1.36%</b>

Source: Citi Research. Spreads and coupons in bp. \* P&L expressed as % of the leg with notional equal to 1.

**Notes:** The list of open trades reflects our current views; we have no plans to provide regular coverage or updates to these trades. P&L on trade ideas includes carry and roll costs but not trading commissions/costs. Results should not, and cannot, be viewed as an indicator of future performance.

**Risks:** When buying calls and puts (or receivers and payers) the maximum loss is the premium paid. When selling calls (or receivers), the maximum potential loss would occur as the index spread decreases but is limited by the index spread being floored at zero. For puts (or payers), the maximum potential loss (amount below the strike) would eventuate should the index price fall to zero. Sector index options are cash settled. The above calculations do not include any additional fees or transaction costs. Note that ratio writing would leave the writer uncovered in one leg of the trade.

## Analytics, Recent Trade Ideas & Publications

Figure 15. Analytics – Available at Citi Velocity

Options	<a href="#">iTraxx Volatility Report</a> <a href="#">CDX Volatility Report</a>	Tranches	<a href="#">iTraxx Series 9 Tranche Report</a> <a href="#">iTraxx Series 19 Tranche Report</a>
Indices	<a href="#">CDS Indices Positioning Report</a> <a href="#">CDS Indices Trading Volumes Report</a>	Curves	<a href="#">iTraxx Curve P&amp;L Report</a>

Source: Citi Research.

Figure 16. Recent Trade Ideas

<a href="#">Long risk CDX IG vs. Main via Receivers</a>	15 Oct 2013
<a href="#">Buy Senior Financials straddles vs. sell Crossover straddles</a>	9 Oct 2013
<a href="#">Long risk equity vs. short risk 3-6% in S19 Jun-16 (3y)</a>	26 Sep 2013
<a href="#">Long risk S19 Jun-18 (5y) 3-6% vs. 5y S20 Crossover</a>	26 Sep 2013
<a href="#">Long risk iTraxx S9 Jun-18 (10y) super senior vs. short risk CDX IG S9 Dec-17 (10y) super senior</a>	26 Sep 2013
<a href="#">Equal Notional 3s5s Flatteners: Adding cautious longs by selling forward protection</a>	5 Sep 2013
<a href="#">Sub/Senior compression trades in European banks</a>	13 Aug 2013
<a href="#">iTraxx Senior Financials vs. CDX IG via Receivers</a>	7 Aug 2013
<a href="#">Sell Jun-16 3-6% Series 19 protection vs. Buy Jun-18 Series 9 index protection</a>	9 Jul 2013
<a href="#">Option trades ahead of the FOMC</a>	18 Jun 2013
<a href="#">iTraxx Series 9 vs. Series 19 Jun-18 equity tranches</a>	5 Jun 2013
<a href="#">Hedging via Crossover Bearish Ladders</a>	16 May 2013
<a href="#">Buy Main straddles: sell CDX IG straddles</a>	1 May 2013
<a href="#">Views &amp; Trades on iTraxx Series 9 Tranches</a>	18 April 2013
<a href="#">Beware of retail and food releveraging – short risk retailers &amp; food vs. Main Non-Financials</a>	18 April 2013
<a href="#">Receiver 1x2s – Mind the tail if going long</a>	2 Apr 2013
<a href="#">Hedging menu: payer spreads, 3s5s flatteners and Jun 15/18 equity tranche flatteners</a>	28 Mar 2013
<a href="#">Long insurers vs. short premium autos</a>	19 Mar 2013
<a href="#">Flatteners in iTraxx Equity Tranches</a>	6 Mar 2013
<a href="#">Long risk 3-6% vs. short risk 0-3% - Jun-15 iTraxx Series 9 tranches</a>	12 Feb 2013
<a href="#">Long risk Main vs. Crossover via indices and receiver options</a>	12 Feb 2013

Source: Citi Research.

Figure 17. Other publications

<a href="#">Financial CDS to get a re-vamp</a>	7 Aug 2013
<a href="#">What bail-in means for CDS</a>	11 Feb 2013

Source: Citi Research.

#### **RISKS**

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[http://www.theocc.com/components/docs/March\\_2011\\_ODD\\_Definitive\\_Supplement.pdf](http://www.theocc.com/components/docs/March_2011_ODD_Definitive_Supplement.pdf), and

[http://www.theocc.com/components/docs/January\\_2012\\_ODD\\_Definitive\\_Supplement.pdf](http://www.theocc.com/components/docs/January_2012_ODD_Definitive_Supplement.pdf). Investing in options other than Standardized Options may entail additional risks.

## Appendix A-1

### Analyst Certification

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