

Time to move on? ... From 3s5s to 5s10s

iTraxx Curves Views & Trades

- **There still may be some P&L left in 3s5s flatteners, but they are not as attractive as they were earlier this year – we would scale back.** The duration-weighted 3s5s flattener trade is still positive carry + slide (and positive default) and still looks relatively steep for the current index spread. However, it's become a bit of a crowded trade, especially in the index (Main), and also a lot more market directional than it was (likely suffering if the index widens).

- Single name 3s5s flatteners have more upside than index flatteners, especially those which are steeper than the index and have underperformed the index, spread-wise recently. We highlight a few candidates.

- **As 3s5s flatteners become less attractive, 5s10s become more so after their recent steepening – we would start adding them.** 5s10s curves have recently reached record steep levels, shouldn't steepen much if the index widens and we expect them to flatten if we tighten from here. Moreover, it seems that 5s10s Main index steepeners are a crowded trade (the opposite situation to 3s5s). What's the catch? Unfortunately, unlike in 3s5s, it costs money to run 5s10s flatteners if spreads roll down the curve, although less than ever.

- **Trade recommendations:**

- **Main 3s10s duration weighted flatteners:** If one is holding 3s5s flatteners, an attractive option is to start extending them – i.e. leave the 3y short and extend the 5y long to the 10y tenor.

- **Open Main duration weighted 5s10s flatteners,** funding their running cost. How?

- **Reducing the amount of the 5y short risk leg – our preferred option.**
- Selling OTM payers – for brave investors.
- Via selective single name flatteners in Main credits – we propose a few.
- Via selective 5s10s steepeners in Crossover single names – we propose long dated bonds to be paired with 5y CDS short risk positions to effectively construct steepener trades.

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

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3s5s – took a while to flatten ... but 2014 hasn't disappointed

Track the P&L of index curve trades
(duration-weighted and equal notional) with
our [iTraxx Curve P&L Report](#)

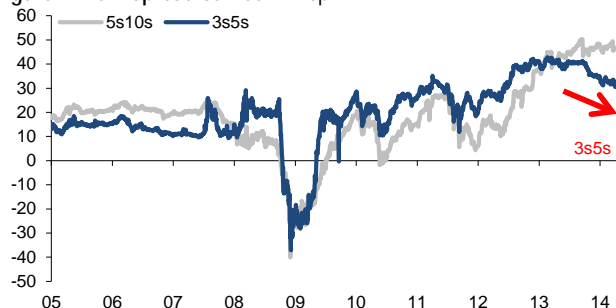
3s5s Main flatteners have been one of the most discussed trades over the past 2 years. The curve steepened above ~40bp in late 2012, making the cost of running duration-weighted flatteners (carry + slide) positive – always a good technical signal that the room for steepening is limited (as very few investors are willing to enter duration weighted steepeners where they pay to have negative default risk).

It took more than a year for the curve to start flattening from its record steep levels; after barely moving during 2013 – although to be fair to all those who recommended the trade in 2013 (including us¹), it didn't lose any money (see our [iTraxx Curve P&L Report](#)).

Only in early 2014 did we see investors both extending the maturities of their long risk positions to the 5y point and entering 3s5s flatteners. Spreads had tightened so much and so quickly that sourcing “comfortable” carry had become tough, with distressed opportunities nowhere to be found. Thus, trades without a strong directional spread exposure but with positive carry had more traction in early 2014 than anytime over the past 5 years.²

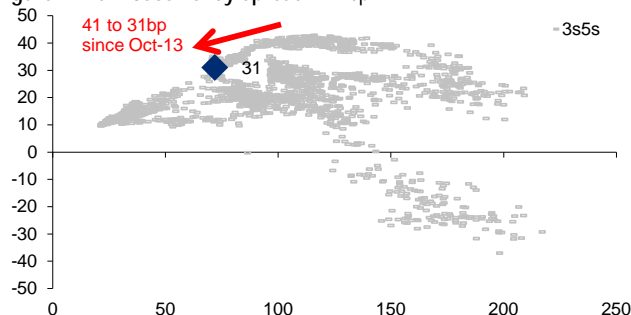
The 3s5s flattener was one of the clearest beneficiaries of this trend. Investors piled into the trade and the curve flattened from above 40 to the current level of around 30bp. Interestingly, the 5s10s curve kept steepening during this period due to both the preference for 5y longs and to investors actually entering 5s10s steepeners (which generated positive carry + slide). It looked as if investors didn't care whether the trade was a flattener (3s5s) or a steepener (5s10s); they just cared about the carry and would be happy to enter any trade with positive carry and little directional spread exposure.

Figure 1. Main spread curves – in bp.



Source: Citi Research, Markit.

Figure 2. Main 3s5s vs. 5y spread – in bp.



Source: Citi Research, Markit.

The duration-weighted 3s5s flattener trade is still positive carry + slide (and positive default) and still looks relatively steep for the current index spread. However, it's become a bit of a crowded trade, especially in the index, and also a lot more market directional. The picture is very similar in Crossover, although the challenging liquidity in the 3 and 10y Crossover tenors means investors do not have (and are unlikely to take) significant positions in Crossover curves. **We next discuss the merits of moving 3s5s flatteners to the 5s10s space, and include several trade idea recommendations.**

¹ See [2013 credit outlook](#) (3-Jan-13), [A hedge for all seasons](#) (28-Mar-13), and [Equal Notional 3s5s Flatteners](#) (5-Sep-13).

² See [Looking for carry but afraid of adding more outright longs?](#) (11-Mar-14).

3s5s – Not the most attractive flattener anymore

3s5s Flatteners

Pros: still steep from a historical point of view, and still positive carry + slide

Cons: has become a consensus/crowded trade and a lot more spread directional

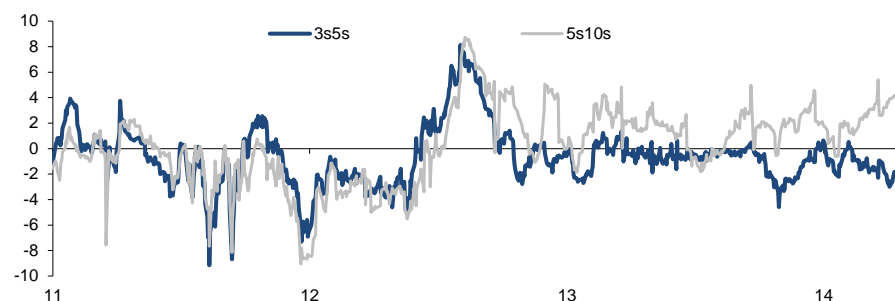
3s5s flatteners still look attractive on a few dimensions, but they're no longer viewed as a "no-brainer, no-downside" type of trade.

What's wrong with 3s5s now?

- The flattening since early January has been on the back of plenty of investors putting the trade on, which makes it a **consensus and crowded trade**. This is particularly the case in the index. Figure 3 shows the difference between the traded curve and the theoretical one (implied by the single name spreads) for 3s5s and 5s10s. The difference is clearly mean-reverting (to zero), and it currently suggests that traded index 3s5s are 3-4bp flatter than their theoretical level, and that index traded 5s10s are 5-6bp steeper than their theoretical level.

Figure 3. Main spread curves – traded minus theoretical

In bp. Positive: traded steeper than theoretical. Negative: traded flatter than theoretical.



Source: Citi Research, Markit.

- The trade **has lost the nice non-directional profile** which, looking at historical levels, it had when 5y Main was above 100bp and the 3s5s was above 40bp. Currently, as Figure 2 shows, the 3s5s curve would flatten/steepen ~1bp for every 3bp the 5y tightens/widens (provided the curve continues to be on the "steep" side of the range for each index spread level).

Why is it still a good trade?

- **3s5s are still steep considering the current index levels** from a historical point of view, as Figure 2 shows. With 5y Main around 70bp, the 3s5s has never been steeper than its current level.
- **It continues to be positive carry + slide – something which gives it plenty of merit for investors looking to hedge either default risk or tail events**, as we've argued recently.³ See Figure 4 and Figure 5.

Figure 4. iTraxx Main S21 3s5s duration-weighted flattener

Carry, slide and time value expressed in cents of the 5y notional traded.

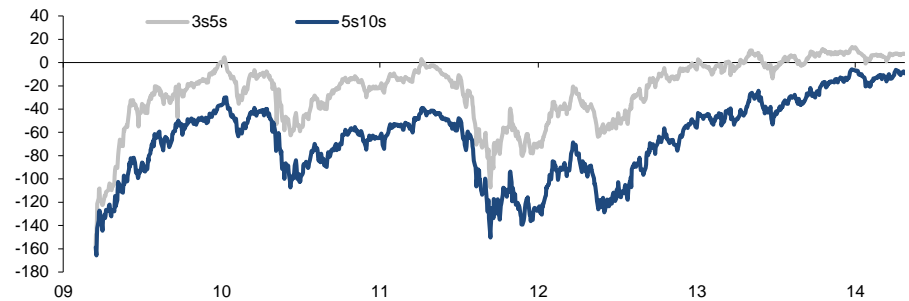
Tenor	Maturity	Spread (bp)	Prot.	Notional (€)	12m Carry (€)	12m Slide (€)	12m Time (€)
3y	20-Jun-17	40	Buy	-15,839	-64	-49	-113
5y	20-Jun-19	71	Sell	10,000	71	47	119
Total		31		-5,839	7	-1	6

Source: Citi Research, Markit. Indicative mid-prices shown as of COB yesterday. Assuming full running trading (i.e. coupon = flat spread, 0% upfront).

³ See [Options vs. Curves: Playing with Tail Risk: Sell it where it's expensive & buy it where it's cheap](#) (13-Feb-14).

Figure 5. Carry in Main duration-weighted flatteners – excludes slide/roll-down

In cents of the long dated leg notional.



Source: Citi Research, Markit.

We are in two minds regarding this trade, but definitely feel it is not the “no-brainer” it once was. Thus, we would progressively scale back on index 3s5s flatteners and move into ... 5s10s flatteners.

Single name 3s5s flatteners have more upside than index flatteners, especially those which are steeper than the index and have underperformed the index, spread-wise recently. We highlight a few potential candidates on the trade idea section below.

Progressive flattening from front to back

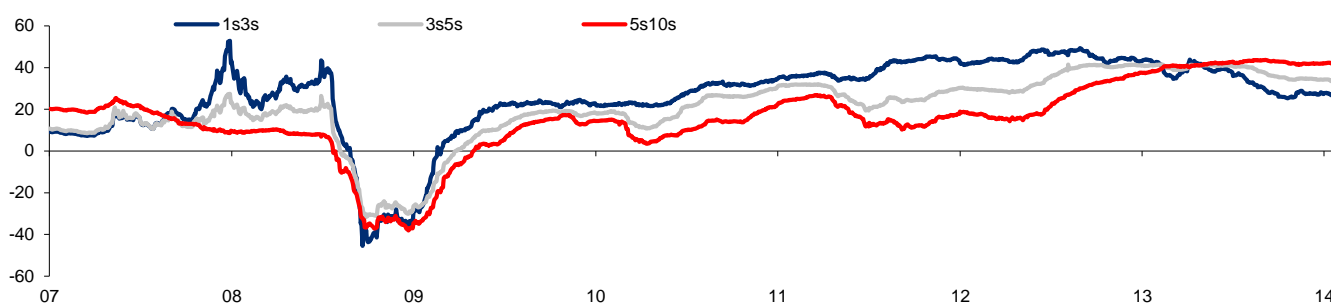
CDS spread curves are following a clear pattern which, to us, paints a bullish picture and makes 5s10s curves the most likely candidate to flatten next.

Figure 6 shows Main 1s3s, 3s5s and 5s10s spread curves.

- 1s3s curves steepened all the way from 2009 to late 2012 and then progressively flattened as investors started extending risk positions from the very short end to 3y maturities. 3s5s kept steepening as 1s3s started flattening, in a clear signal that the 3y point was the preferred one for long risk investors – as they became progressively more constructive their first reaction was to extend maturities.
- 3s5s steepened until the end of 2012, didn't move during 2013, and started flattening early this year. As 3s5s flattened, 5s10s steepened. Investors were taking another bullish step, extending risk positions from the 3 to the 5y tenor, and doing very little in longer dated maturities.

Figure 6. Main curves – 1s3s started flattening in Nov-12, 3s5s in Oct-13, 5s10s in ...?

Computed using theoretical index spreads for on-the-run indices, in bp.

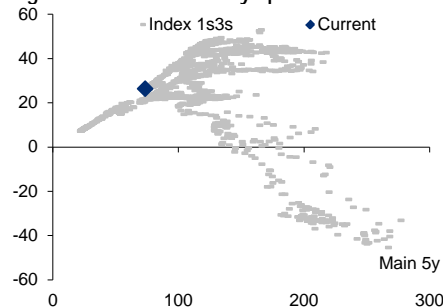


Source: Citi Research, Markit.

If this pattern continues and investors continue to progressively extend maturities as they become more constructive, **tenors above 5y look to be the next to benefit from this trend.** The key question is: when will this process start?

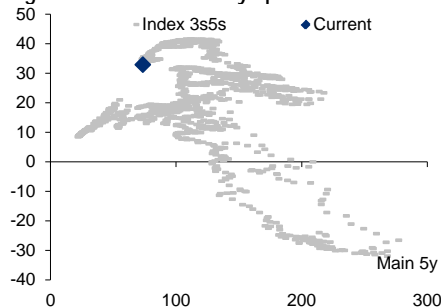
In any case, **5s10s look steeper than 1s3s and 3s5s and a lot less market directional when looking at historical scatterplots vs. 5y spreads:** see Figure 7, Figure 8 and Figure 9.

Figure 7. Main 1s3s vs. 5y spread



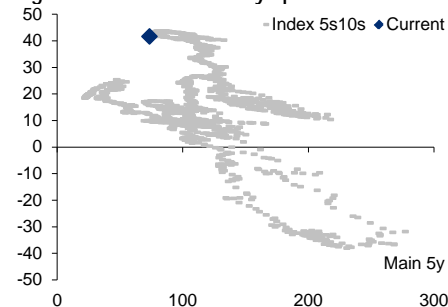
Source: Citi Research, Markit. Computed using theoretical index spreads for on-the-run indices, in bp.

Figure 8. Main 3s5s vs. 5y spread



Source: Citi Research, Markit. Computed using theoretical index spreads for on-the-run indices, in bp.

Figure 9. Main 5s10s vs. 5y spread



Source: Citi Research, Markit. Computed using theoretical index spreads for on-the-run indices, in bp.

5s10s – Start legging into back end flatteners

5s10s curves have everything we would be looking for except that, on a duration-weighted format, they still cost money – but to be fair getting paid in flatteners shouldn't be viewed as the norm, given the positive jump-to-default risk they generate.

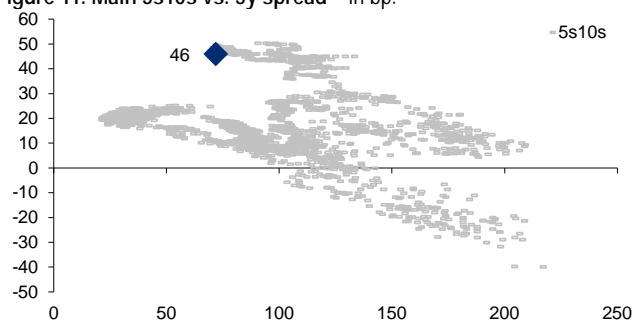
5s10s curves have recently reached **record steep** levels (Figure 10) and **shouldn't steepen much as the index widens** if history is of any guide (Figure 11). Moreover, judging from the difference between 5s10s traded and theoretical Main index curves (Figure 3), it seems that **5s10s steepeners are the crowded trade** (the opposite situation to 3s5s).

Figure 10. Main spread curves – in bp.



Source: Citi Research, Markit.

Figure 11. Main 5s10s vs. 5y spread – in bp.



Source: Citi Research, Markit.

What's the catch? It unfortunately costs money to run 5s10s flatteners if spreads roll down the curve, although less than ever (Figure 5). The carry component of this cost is very small, as Figure 12 shows: it is the slide in the 5y leg which makes the trade more costly. There is an argument to wait for the 3s5s to flatten further, reducing the slide in the 5y leg ... but one may miss the trade in the meantime.

Figure 12. iTraxx Main S21 5s10s duration-weighted flattener

Carry, slide and time value expressed in cents of the 10y notional traded.

Tenor	Maturity	Spread (bp)	Prot.	Notional (€)	12m Carry (€)	12m Slide (€)	12m Time (€)
5y	20-Jun-19	71	Buy	-17,627	-126	-83	-209
10y	20-Jun-24	117	Sell	10,000	117	40	157
Total		46		-7,627	-9	-43	-52

Source: Citi Research, Markit. Indicative mid-prices shown as of COB yesterday. Assuming full running trading (i.e. coupon = flat spread, 0% upfront).

3s5s vs. 5s10s – To move or not to move?

3s5s flatteners are clearly becoming less attractive and 5s10s are getting more interesting. Moving flatteners from the 3s5s to the 5s10s space makes sense, although how fast is hard to tell; curves have tended to move very slowly over the past few years.

- 3s5s have a positive carry + roll down and 5s10s have a negative one. This will make people reluctant to roll their 3s5s flatteners.
- 3s5s are clearly more crowded than 5s10s and have higher downside in a moderate index widening (20-30bp or so).

Investors looking for tail-hedges should remain in 3s5s flatteners given their lower cost if nothing happens, and the fact that both flatteners would likely perform similarly in a tail-event (as was the case in 2008 – see Figure 10 for the behavior of both curves back then as well as our [iTraxx Curve P&L Report](#) for the actual P&L).

Investors who expect spreads to stay where they are or widen moderately from here should prefer 5s10s flatteners given their lower spread directionality.

Bullish investors may think 3s5s flatteners are more attractive, and they may be in the first leg of a tightening, but they will unlikely be on the second leg of the tightening (i.e. if the market moves from being reluctantly bullish to being fundamentally bullish). In the second scenario, we expect investors (as we highlighted in a previous section) to continue extending maturities. Besides, very bullish investors should prefer outright index longs. **The advantage of 5s10s flatteners vs. 3s5s flatteners (or outright index longs) for bullish investors is that they have a lot less downside if spreads widen.**

What to do then?

- Open **5s10s flatteners, funding their running cost** – we elaborate on this in the trade ideas section.
- If one is holding 3s5s flatteners, an attractive option is to start extending them – i.e. leave the 3y short and extend the 5y long to the 10y tenor, effectively opening **3s10s duration weighted flatteners** (see Figure 13, Figure 14 and Figure 15).

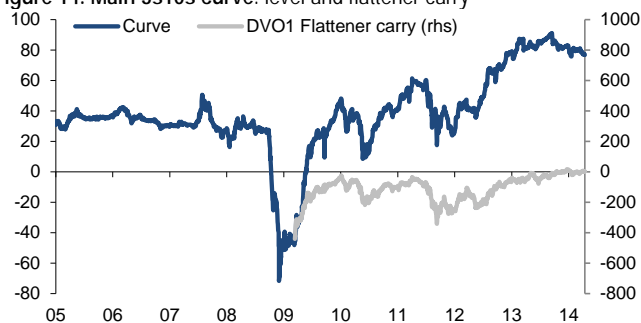
Figure 13. iTraxx Main S21 3s10s duration-weighted flattener

Carry, slide and time value expressed in cents of the 10y notional traded.

Tenor	Maturity	Spread (bp)	Prot.	Notional (€)	12m Carry (€)	12m Slide (€)	12m Time (€)
3y	20-Jun-17	40	Buy	-27,920	-113	-86	-198
10y	20-Jun-24	117	Sell	10,000	117	40	157
Total		76		-17,920	4	-45	-41

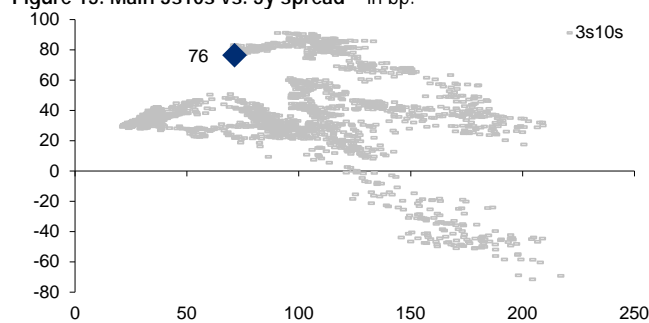
Source: Citi Research, Markit. Indicative mid-prices shown as of COB yesterday. Assuming full running trading (i.e. coupon = flat spread, 0% upfront).

Figure 14. Main 3s10s curve: level and flattener carry



Source: Citi Research, Markit. Curve in bp, carry in cents of the 10y notional

Figure 15. Main 3s10s vs. 5y spread – in bp.



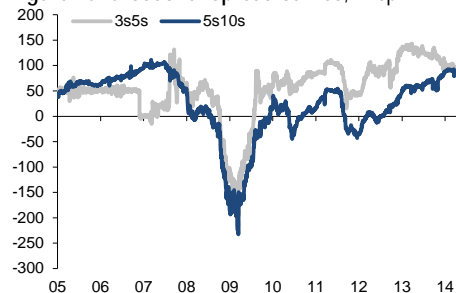
Source: Citi Research, Markit.

What about Crossover?

First, liquidity in Crossover curves is challenging. Investors can play front-end curves via index rolls, but taking a single name mismatch component (especially when using S21 which has 10 additional names).

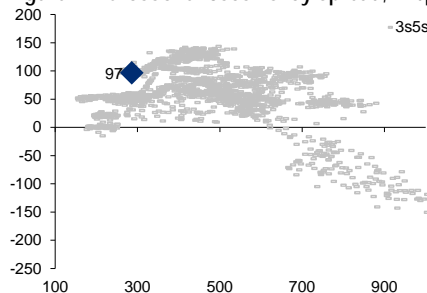
Otherwise, the dynamics we've highlighted for Main curves are similar for Crossover curves, except for the fact that Crossover 5s10s have more upside for steepening if we continue tightening, as Figure 16 and Figure 18 show. Thus, **we wouldn't favor Crossover 5s10s flatteners; in fact we believe selective single name back end steepeners in Crossover (using long dated bonds vs. 5y CDS if long dated CDS liquidity is a challenge) could offer a good way to fund Main 5s10s index flatteners** – we elaborate on this in the next section.

Figure 16. Crossover spread curves, in bp.



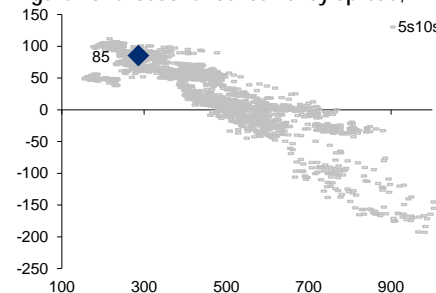
Source: Citi Research, Markit.

Figure 17. Crossover 3s5s vs. 5y spread, in bp.



Source: Citi Research, Markit.

Figure 18. Crossover 5s10s vs. 5y spread, in bp.



Source: Citi Research, Markit.

Trade ideas: “Funded” Main 5s10s flattener

We like 5s10s flatteners, but realise that a non-positive carry trade is going to be hard to get any traction in this environment. So if investors are going to, as we recommend, open 5s10s duration-weighted flatteners (Figure 19), they'll look to fund them somehow. “Funding” always means to get long some risk. We examine a few ways of doing so.

Figure 19. iTraxx Main S21 5s10s duration-weighted flattener

Carry, slide and time value expressed in cents of the 10y notional traded.

Tenor	Maturity	Spread (bp)	Prot.	Notional (€)	12m Carry (€)	12m Slide (€)	12m Time (€)
5y	20-Jun-19	71	Buy	-17,627	-126	-83	-209
10y	20-Jun-24	117	Sell	10,000	117	40	157
Total		46		-7,627	-9	-43	-52

Source: Citi Research, Markit. Indicative mid-prices shown as of COB yesterday. Assuming full running trading (i.e. coupon = flat spread, 0% upfront).

How to fund it – v1?

Reducing the amount of the 5y short risk leg

As Figure 19 shows, a duration weighted 5s10s flattener involves buying 1.76x 5y protection for each 1x 10y protection sold. In order to get a 5s10s flattener to have “zero cost” (carry + slide), the ratio should be closer to 1.36x – see Figure 20. **This is the trade we are adding to our model portfolio.**

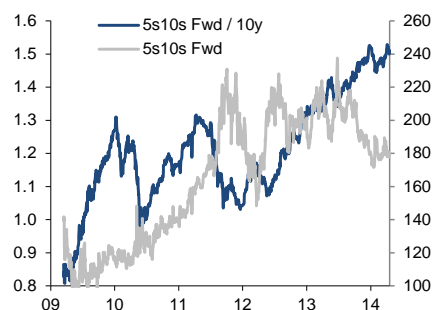
Figure 20. iTraxx Main S21 5s10s “zero cost” flattener

Carry, slide and time value expressed in cents of the 10y notional traded.

Tenor	Maturity	Spread (bp)	Prot.	Notional (€)	12m Carry (€)	12m Slide (€)	12m Time (€)
5y	20-Jun-19	71	Buy	-13,627	-97	-64	-162
10y	20-Jun-24	117	Sell	10,000	117	40	157
Total		46		-3,627	20	-24	-4

Source: Citi Research, Markit. Indicative mid-prices shown as of COB yesterday. Assuming full running trading (i.e. coupon = flat spread, 0% upfront).

Figure 21. 5s10s forward spread: outright (rhs, bp) and ratio to 10y spread (lhs)



Source: Citi Research, Markit.

Some investors may point out that we are just adding directionality to the “non-directional” 5s10s curve, after having argued that we don’t like 3s5s flatteners for their spread directionality. We mentioned before that we would expect the 3s5s curve to steepen ~1bp for each 3bp of 5y index flattening. Reducing 0.4x the notional of the 5y short in a 5s10s flattener as suggested here would add a very similar directional exposure.⁴ The counter-argument is that, between two equally directional flatteners, 3s5s a 5s10s, the 5s10s looks better as it is less crowded.

Investors can go all the way to **equal notional 5s10s flatteners**, i.e. going long risk the 5s10s forward spread (currently at ~175bp) – which is, compared to the 10y spread as high as it’s ever been (~1.5x) – see Figure 21.

⁴ If the 5y index widens 3bp and we have a 0.4x long, the impact will be similar to 1.2bp (= 3 x 0.4) on a 1x 5y index long.

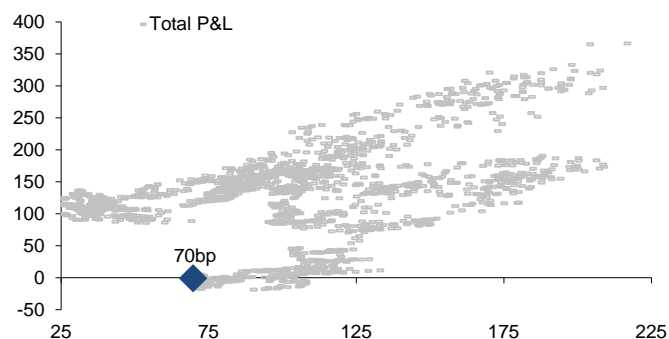
How to fund it – v2? Selling OTM payers

We recently recommended investors to [sell tail events in options and buy them in curves via 3s5s flatteners](#). The same concept can be applied to fund 5s10s flatteners: selling 3m OTM payers in iTraxx Main.

The 3m carry + slide on a 5s10s duration-weighted flattener is around 7c (of the 5y notional; 12c of the 10y notional). A 3m 100bp payer in 5y Main prices at around 7c ([link to the trade our pricing tool](#)). We can compare the P&L of a 5s10s flattener with the P&L at expiry of a 100bp 3m payer option bought, assuming the option notional is 1x the notional on the 5y leg of the flattener respectively – see Figure 23. The option P&L with a 1x notional tracks reasonably well the P&L of a flattener when spreads widen above 100bp and curves flatten/invert.

Figure 22. 5s10s Flattener 3m P&L vs. 5y spread

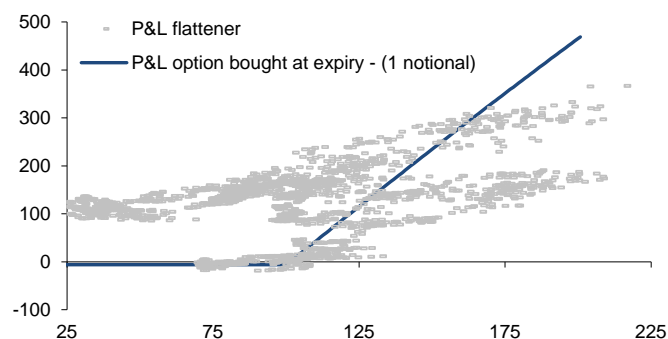
In cents (100c = 1%) of the 5y notional. Using a 3m horizon, for all the spread & curve historical combinations shown in Figure 11.



Source: Citi Research, Markit.

Figure 23. P&L vs. 5y spread – 3m 100bp payer bought vs. 5s10s flattener

P&L, in 3m time, in cents of the 5y notional on the flattener. For the flattener we use all the spread and curve historical combinations shown in Figure 11.



Source: Citi Research, Markit.

How to fund it – v3?

Selective 3s5s flatteners in Main single names

We noted above that single name 3s5s in Main may represent a more attractive source of flatteners than the index, given that (i) the index curve is flat compared to the single name theoretical one, and (ii) the dispersion on the single name curves and recent spread movements allow investors to find cases with steeper curves than the index and higher time values for flatteners.

We screen for single names for which the 3y/5y ratio is higher than the index one (56%) and the 12m time value of a duration weighted flattener is above 20c (it's ~10c for the index). Given the directionality of 3s5s (curves will tend to steepen if we widen) we look for names which have underperformed the index recently (by considering only names for which the spread ratio to the index is above 70% of the past 6m range). Figure 24 contains the names satisfying these criteria; this is purely a quantitative screening and investors are advised to consider the fundamental side of these trades by, for example, reaching out to our Credit Sector Specialists (CSS). The spreads in Figure 24 are mids from Markit as of COB yesterday.

Figure 24. Selective 3s5s single name flatteners in iTraxx Main

BBG Ticker	Name	5y	3y	3s5s (bp)	In cents of 5y notional			3s5s (bp) 6m range	3y/5y	Current	Spread to index ratio 6m range
					12m Carry	12m Roll D.	12m Time Val.				
PSON	Pearson Plc	73	42	32	7	25	31	74%	57%	1.03	92%
WKLNA	Wolters Kluwer N V	71	39	32	8	23	31	18%	55%	1.00	89%
SUEDZU	Suedzucker Ag	103	61	42	6	23	29	93%	59%	1.45	100%
TSCOLN	Tesco Plc	104	61	43	7	21	29	83%	59%	1.46	91%
METFNL	Metro Ag	134	81	53	6	21	27	35%	61%	1.89	94%
ELTLX	Ab Electrolux	94	55	39	7	20	27	100%	58%	1.32	94%
CENTRI	Centrica Plc	68	38	30	7	19	26	90%	56%	0.95	72%
BALN	Bae Sys Plc	82	46	36	9	16	25	80%	56%	1.14	77%
ROLLS	Rollsroyce Plc	65	36	29	7	14	21	70%	56%	0.91	93%
VATFAL	Vattenfall Ab	61	35	26	6	16	21	81%	57%	0.85	89%
BPLN	Bp P.L.C.	59	33	26	6	14	20	30%	56%	0.82	96%

Source: Citi Research, Markit. Indicative mid spreads as of COB yesterday.

How to fund it – v4?

Selective 5s10s steepeners in Crossover

Crossover 5s10s curves have more room to continue steepening than Main 5s10s in our view, especially if we tighten, as we argued above. Thus, 5s10s Crossover steepeners can be used to fund Main 5s10s steepeners. The only problem is that neither in the index nor in many single names is the liquidity on the 10y tenor extremely good.

One way around this is to enter back end steepeners in Crossover names by buying 5y protection and buying long dated bonds (duration adjusted). We screen for bonds in the €iBoxx HY index, issued by Crossover companies, which have maturities in the 7-10y bracket. We only screen for non-callable, fixed-coupon bullet bonds. Other things equal, bonds trading with a negative basis (i.e. wider than the matching maturity CDS) would be more attractive. Figure 25 lists these names. For reference purposes, Figure 26 shows the carry and slide of 5s10s flatteners on those companies.

Figure 25. Bonds in the iBoxx € HY index which can be used to construct back-end steepeners

ISIN	Label	Description	Remaining Maturity (y)	Bond spread	CDS spread	Basis	5y CDS
XS1048657800	ABGSM-6.000-03/31/21	ABENGOA FINANCE SAU	7.0	466	567	102	503
XS0999654873	FNCIM-4.500-01/19/21	FINMEC FINANCE SA	6.8	265	281	16	225
XS1048568452	FIAT-4.750-03/22/21	FIAT FINANCE & TRADE	7.0	287	333	46	269
XS0458887030	FINM-5.250-01/21/22	FINMECCANICA FINANCE SA	7.9	277	298	21	225
XS0486101024	TITM-5.250-02/10/22	TELECOM ITALIA SPA	7.9	273	261	-12	195
XS1020952435	TITM-4.500-01/25/21	TELECOM ITALIA SPA	6.9	251	242	-8	195
XS0974375130	TITM-4.875-09/25/20	TELECOM ITALIA SPA	6.5	255	235	-21	195
XS0975113498	LAF4-4.750-09/30/20	LAFARGE SA	6.5	161	156	-5	122
XS0985874543	HEIGR-3.250-10/21/20	HEIDELBERGCEMENT FIN LUX	6.6	176	223	48	172
XS1002933072	HEIGR-3.250-10/21/21	HEIDELBERGCEMENT FIN LUX	7.6	191	246	55	172
XS0832993397	UPCH-6.375-09/15/22	UPC HOLDING BV REGS	8.5	400	371	-29	288
FR0011694496	WENE-3.750-01/21/21	WENDEL SA	6.9	197	218	21	159
XS0862322947	UNITY-5.750-01/15/23	UNITYMEDIA HESSEN / NRW	8.9	323	255	-68	190

Source: Citi Research, Markit, iBoxx. Indicative mid spreads as of COB yesterday. * Matched maturity CDS spread.

Figure 26. 5s10s single name steepeners – 12m carry and slide

BBG Ticker	Name	5y	5y	5s10s (bp)	In cents of 10y notional		
					12m Carry	12m Roll D.	12m Time Val.
LGFP	Lafarge	122	122	74	16	134	149
HEIGR	Heidelbergcement Ag	172	172	101	15	195	209
MWDP	Wendel	159	159	114	-7	217	210
TITIM	Telecom Italia Spa	195	195	91	39	177	216
UNITY	Unitymedia Kabelbw Gmbh	190	190	73	52	206	259
FNCIM	Finmeccanica S P A	225	225	94	49	264	313
UPCB	Upc Hldg Bv	288	288	99	72	277	349
FIAT	Fiat S P A	269	269	100	63	288	351
ABGSM	Abengoa Sa	502	502	104	133	291	425

Source: Citi Research, Markit. Indicative mid spreads as of COB yesterday.

Analytics, Past Trade Ideas & Publications

Analytics – Available at Citi Velocity

Options	iTraxx Volatility Report CDX Volatility Report European Cross-Asset Volatility Report Volatility P&L Report – Credit Indices	Tranches	iTraxx Series 9 Tranche Report iTraxx Series 19 Tranche Report iTraxx Series 21 Tranche Report
Curves	iTraxx Curve P&L Report	Indices	CDS Indices Positioning Report CDS Indices Trading Volumes Report

Recent Trade Ideas

Options -	Main 70-75 May Receiver 1x2	2 Apr 2014
Options -	Buy SenFin vs. Sell CDX IG straddles	18 Mar 2014
Single names vs. Index	Releveraging Trade	24 Feb 2014
Tranches vs. Options -	Sell protection and monetize the positive convexity by selling straddles	20 Feb 2014
Tranches -	Buy 9-100% S9 Jun-18 protection, delta-hedged	20 Feb 2014
Tranches -	Sell 3-6% S9 Jun-18 protection, delta-hedged	20 Feb 2014
Options vs. Curves -	Flatteners vs. OTM payers	13 Feb 2014
Options -	Sell Main vol, buy SenFin vol	21 Jan 2014
Tranches -	More mezz, less seniors - 3-6% vs. super senior	15 Jan 2014
Options -	SenFin vs. Xover Recs	9 Jan 2014
Options -	Payer spread vs. index long	9 Jan 2014
Options -	Sell 1m Main straddles	9 Jan 2014
Options -	Sell Crossover Receiver	9 Jan 2014
Options -	Sell strangles and go on holidays: Position for spreads to stay in the recent range in mid-January	9 Dec 2013
Tranches -	Sell S9 Jun-18 6-9% protection vs. Xover 5y S20	15 Nov 2013
Tranches -	Sell S9 Jun-18 22-100% protection vs. light delta	15 Nov 2013
Indices -	Long risk Senior Fins. vs. short risk Main	5 Nov 2013
Options -	Crossover receiver ladders	23 Oct 2013
Options -	Long risk CDX IG vs. Main via Receivers	15 Oct 2013
Options -	Buy Senior Financials straddles vs. sell Crossover straddles	9 Oct 2013
Tranches -	Long risk equity vs. short risk 3-6% in S19 Jun-16 (3y)	26 Sep 2013
Tranches -	Long risk S19 Jun-18 (5y) 3-6% vs. 5y S20 Crossover	26 Sep 2013
Tranches -	Long risk iTraxx S9 Jun-18 (10y) super senior vs. short risk CDX IG S9 Dec-17 (10y) super senior	26 Sep 2013
Indices -	Equal Notional 3s5s Flatteners: Adding cautious longs by selling forward protection	5 Sep 2013
Single Names -	Sub/Senior compression trades in European banks	13 Aug 2013
Options -	iTraxx Senior Financials vs. CDX IG via Receivers	7 Aug 2013

Latest “European Credit Derivatives Views & Trades” Investor Presentation: [Index tightening overdone? What are the best carry trades?](#)

Other publications

Where do we expect iTraxx rolls to trade?	19 Mar 2014
Our preferred carry trades in indices, options and tranches	11 Mar 2014
New 2014 CDS Definitions - What's new? What's changing? Why? When? How?	26 Feb 2014
iTraxx Roll - Potential Changes: Crossover number of constituents will increase to 60 names	10 Feb 2014
2014 European Credit Outlook: Strategy // Positioning and Trades	13 Jan 2014
Global Structured Credit Outlook: A Rockier Ride (R Roy, A Basu, K Malhotra, R Brauchler)	20 Dec 2013
2013 Trading Volumes in European Credit: CDS Indices, Single Name CDS and IG Bonds	5 Dec 2013
Credit Options - What did investors do in 2013? What will they do in 2014? (2013 European Credit Conference Presentation)	4 Dec 2013
Credit Index Options 1-0-1: Launching our option pricing tool @ CitiVelocity (2013 European Credit Conference Presentation)	2 Dec 2013
Europe Returns: Assessing value across flow and structured credit assets	22 Nov 2013
iTraxx Tranches Views & Trades: Mezz may be back next year	15 Nov 2013
Financial CDS to get a re-vamp	7 Aug 2013
Hedging menu: payer spreads, 3s5s flatteners and Jun 15/18 equity tranche flatteners	28 Mar 2013
What bail-in means for CDS	11 Feb 2013

Source: Citi Research.

Trade Recommendations Summary

We are opening the trade recommended in this report and not closing any of our open trades.

Figure 27. Open trades – Summary and P&L

Trade Description	Leg	Format	Direct.	Notnl.	Entry Upfront	Entry Spread	Coupon	Current Upf.	Current Spread	P&L* Total
Sell 1m Main straddles *** 09-Jan-14	Sell 1m Main straddles	Price	Buy	1.00	0.00%			0.73%		0.73%
									Total	0.73%
Payer spread vs. index long *** 09-Jan-14	Buy 3m 25-60% pay spread Sell index prot.	Price Price	Buy Buy	1.00 1.00	0.00% 0.00%			-0.30% 0.72%		-0.30% 0.72%
									Total	0.42%
SenFin vs. Xover Recs *** 09-Jan-14	Buy 3m SenFin Recs Sell 3m Xover Recs	Price Price	Buy Buy	1.00 0.29	0.00% 0.00%			0.32% -1.37%		0.32% -0.40%
									Total	-0.08%
Flattener vs. OTM payer *** 13-Feb-14	3s5s flattener Main Sell 3m 120bp Main payer	Price Price	Buy Buy	1.00 0.75	0.00% 0.00%			0.22% 0.10%		0.22% 0.07%
									Total	0.29%
Equity tranche vs. straddle *** 20-Feb-14	Sell Jun-18 S9 equity prot., DH Sell 1m Main straddles, DH	Price Price	Buy Buy	1.00 0.50	0.00% 0.00%			-0.45% 0.15%		-0.45% 0.08%
									Total	-0.37%
Senior tranche short *** 20-Feb-14	Buy Jun-18 S9 9-12% prot., DH Buy Jun-18 S9 12-22% prot., DH Buy Jun-18 S9 22-100% prot., DH	Price Price Price	Buy Buy Buy	0.03 0.10 0.78	0.00% 0.00% 0.00%			0.19% 0.17% -0.05%		0.01% 0.02% -0.04%
									Total	-0.01%
Mezz tranche long *** 20-Feb-14	Sell Jun-18 S9 3-6% prot., DH	Price	Buy	1.00	0.00%			-0.30%		-0.30%
									Total	-0.30%
Releveraging trade 24-Feb-14	Basket of low spread/leverage CDS Main NonFins	Prot. Prot.	Buy Sell	1.00 0.50	-3.14% -1.54%	35 67	100 100	-3.10% -1.54%	36 69	-0.12% 0.08%
									Total	-0.04%
Senior Fin vs. CDX IG straddle 18-Mar-14	SenFin Jun-14 90bp straddle CDX IG Jun-14 65bp straddle	Price Price	Buy Sell	1.00 1.90	0.97% 0.51%			0.75% 0.37%		-0.22% 0.27%
									Total	0.05%
Main May Rec 1x2s 02-Apr-14	Main May 75bp Rec Main May 70bp Rec	Price Price	Buy Sell	1.00 2.00	0.24% 0.10%			0.24% 0.10%		0.00% 0.00%
									Total	0.01%
iTraxx Main 5s10s flattener 25-Apr-14	Main S21 5y Main S21 10y	Prot. Prot.	Buy Sell	1.36 1.00	-1.42% 1.48%	71 117	100 100			
									Total	

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. *** We track the trade P&L by using an initial 0% upfront and a current upfront equal to the trade P&L in %. DH = delta hedged.

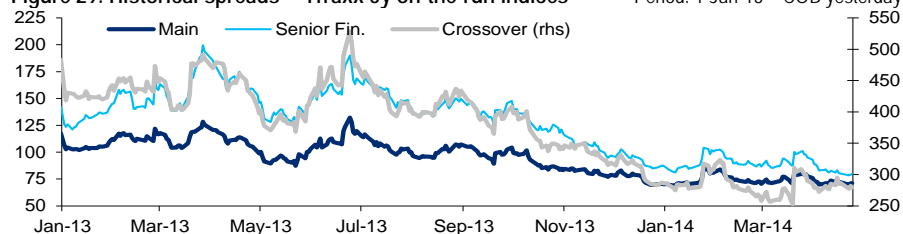
Figure 28. Open and closed trades summary statistics

Number	Open	Closed*	Percentage	Open	Closed*
In profit	5	16	In profit	50%	76%
In loss	5	5	In loss	50%	24%
	10	21			

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

Representative Market Conditions

Figure 29. Historical spreads – iTraxx 5y on-the-run indices



Source: Citi Research, Markit. In bp.

Figure 30. Closed trades since Oct-13 – Summary and P&L

Trade Description	Leg	Format	Direct.	Notnl.	Entry Upfront	Entry Spread	Coupon	Final Upfront	Final Spread	P&L*
Commerzbank sub/senior compr.	Sub CDS	Prot.	Sell	1.00	-5.65%	375	500	-8.03%	327	3.24%
Opened: 13-Aug-13	Senior CDS	Prot.	Buy	2.51	2.37%	150	100	1.95%	140	-1.49%
Closed: 14-Oct-13									Total	1.75%
RBS sub/senior compr.	Sub CDS	Prot.	Sell	1.00	-7.71%	339	500	-11.10%	254	4.25%
Opened: 13-Aug-13	Senior CDS	Prot.	Buy	2.02	2.80%	168	100	1.77%	139	-2.43%
Closed: 14-Sep-13									Total	1.82%
BNP sub/senior compr.	Sub CDS	Prot.	Sell	1.00	-14.42%	198	500	-16.21%	168	2.65%
Opened: 13-Aug-13	Senior CDS	Prot.	Buy	1.68	0.86%	118	100	0.26%	105	-1.30%
Closed: 14-Oct-13									Total	1.36%
S19 3-6% vs. S20 Crossover	Main S19 3-6% Jun-18	Prot.	Sell	1.00	-3.25%	422	500	-5.70%	366	2.99%
Opened: 26-Sep-13	Crossover S20 Dec-18	Prot.	Buy	1.00	-5.18%	386	500	-6.96%	343	-2.32%
Closed: 14-Oct-13									Total	0.67%
iTraxx vs. CDX IG super senior	Main S9 22-100% Jun-18	Prot.	Sell	1.00	0.60%	37	25	0.34%	32	0.29%
Opened: 26-Sep-13	CDX IG S9 30-100% Dec-17	Prot.	Buy	1.00	-3.54%	13	100	-3.43%	16	0.00%
Closed: 4-Nov-13									Total	0.29%
Senior Fin vs. Xover straddle	Xover Dec-13 400bp straddle	Price	Sell	1.00	2.64%			2.63%		0.00%
Opened: 9-Oct-13	SenFin Dec-13 140bp straddle	Price	Buy	2.05	1.29%			1.48%		0.40%
Closed: 15-Nov-13									Total	0.40%
325-350-375 Nov. Crossover Receiver Ladder	325 Xover Nov Rec	Price	Sell	2.00	0.18%			0.02%		0.32%
Opened: 23-Oct-13	350 Xover Nov Rec	Price	Sell	1.00	0.61%			0.47%		0.14%
Closed: 15-Nov-13	375 Xover Nov Rec	Price	Buy	1.00	1.45%			1.46%		0.01%
									Total	0.47%
CDX IG vs. Main Receivers	CDX IG S21 Nov 85 Receiver	Price	Buy	1.00	0.47%			0.62%		0.15%
Opened: 15-Oct-13	Main S20 Nov 100 Receiver	Price	Sell	1.00	0.52%			0.91%		-0.39%
Closed: Expired 20-Nov-13									Total	-0.24%
S19 Jun-16 0-3% vs. 3-6%	Main S19 0-3% Jun-16	Prot.	Sell	1.00	8.00%	839	500	3.88%	725	5.11%
Open: 26-Sep-13	Main S19 3-6% Jun-16	Prot.	Buy	2.00	-7.00%	234	500	-9.75%	132	-7.47%
Closed: 9-Dec-13									Total	-2.36%
SenFin vs. Main	Senior Fin. 5y S20	Prot.	Sell	1.00	0.60%	112	100	0.07%	102	0.61%
Open: 26-Sep-13	Main 5y S20	Prot.	Buy	1.35	-0.79%	84	100	-0.94%	81	-0.32%
Closed: 9-Dec-13									Total	0.29%
S9 super senior vs. light delta	Main S9 22-100% Jun-18	Prot.	Sell	1.00	0.18%	30	25	0.03%	26	0.19%
Open: 15-Nov-13	Main S9 index Jun-18	Prot.	Buy	0.33	-3.65%	93	175	-4.24%	77	-0.29%
Close: 14-Jan-14									Total	-0.10%
75-85 Main January strangle	75bp Jan Main receiver	Price	Sell	1.00	0.08%			0.19%		-0.11%
Open: 9-Dec-13	85bp Jan Main Payer	Price	Sell	1.00	0.13%			0.00%		0.13%
Close: 14-Jan-14									Total	0.02%
Sell Crossover Receiver	275bp Feb. Receiver	Price	Sell	1.00	0.32%			0.17%		0.15%
Open: 9-Jan-14									Total	0.15%
Close: 13-Feb-14										
iTraxx Main Eq. Notional Flatteners	Main S19 3y	Prot.	Buy	1.00	-0.97%	65	100	-1.57%	33	-1.04%
Open: 5-Sep-13	Main S19 5y	Prot.	Sell	1.00	0.24%	105	100	-1.47%	65	2.15%
Close: 13-Feb-14									Total	1.11%
S9 6-9% vs. S20 Crossover	Main S9 6-9% Jun-18	Prot.	Sell	1.17	-0.25%	294	300	-3.19%	223	4.37%
Open: 15-Nov-13	Crossover S20 Dec-18	Prot.	Buy	1.00	-7.07%	344	500	-9.80%	274	-4.06%
Close: 19-Feb-14									Total	0.31%
3-6% vs. super senior	Main S9 3-6% Jun-18	Prot.	Sell	1.00	-5.50%	366	500	-5.34%	367	0.34%
Open: 14-Jan-14	Main S9 22-100% Jun-18	Prot.	Buy	9.00	0.03%	26.625	25	0.12%	28	0.60%
Close: 19-Feb-14									Total	0.94%
Main vs. SenFin vol ***	Sell Feb 70 Main straddles, DH	Price	Buy	1.00	0.00%			-0.02%		-0.02%
Open: 21-Jan-14	Buy Feb 80 SenFin straddles, DH	Price	Buy	0.50	0.00%			0.02%		0.01%
Close: Expired									Total	-0.01%

Source: Citi Research. Spreads and coupons in bp. * P&L expressed as % of the leg with notional equal to 1. *** We track the trade P&L by using an initial 0% upfront and a final upfront equal to the trade P&L in %.

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.

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Appendix A-1

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