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Credit Derivatives
Western Europe

iTraxx Roll: Expected spreads and preferred trades

Sell the S21-22 roll in Financials and Crossover

- **Late but promising** – The index roll is next Monday and we expect it to bring attractive trading opportunities.

- **Our expectations for the S21-22 roll spreads** – 113bp for Crossover, 8bp for Main, 9bp for Senior Financials and 63bp for Sub Financials. As a result of the wider spreads in the new on-the-run indices due to the roll, we are adjusting our year end forecasts in Main and Crossover (5y) to 60bp and 310bp respectively – previously at 55bp and 260bp respectively.

- **Trade 1: Sell the Financials roll and profit from the technical** – We're already seeing a strong technical in the banks' single name 2003-2014 roll, taking the new 2014 contracts wider (vs. 2003) as investors holding 2003 shorts are rolling while those holding 2003 longs are not. The same technical should play out in the index roll, in our view. Thus, we expect the S22 Financial indices (with banks in 2014 docs) to start trading too wide vs. S21 indices (with banks in 2003 docs) because of those technicals in the single name and index sides. We think these technicals will eventually fade and we would position for that by selling the Financial indices rolls (both Sub and Senior) by selling S22 index protection and buying S21 index protection.

- **Trade 2: Sell the Crossover roll** – Especially if you are bullish. We expect investors with S21 shorts to roll quickly, driving S22 wide to S21. Moreover, with our bullish view of the world (predicated on the expected ECB QE), we expect a risk-on environment going forward which should favor the new S22 Crossover index (with a wider spread and a longer maturity).

- **Don't forget the tranches** – The "roll process" won't be over until iTraxx Main and Crossover tranches are launched on Oct. 13th and 20th respectively.

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Roll spreads and trades

Figure 1. Well worth the wait

Source: Citi Research.

Expected Roll Spreads

"Roll" spreads between the new (Series 22) and current (S21) index series will be determined by their different **composition** (see Figure 4) and **maturity** (6 months), supply and demand ("roll **skew**") and – this time around – by the different **definitions** for bank CDS constituents which will be used for each series (2003 docs for S21 and 2014 docs for S22). Figure 2 shows our expected roll spreads for iTraxx indices. The numbers below may change as single name spreads move in the current volatile market, especially for Crossover names.

Figure 2. Expected S21-22 iTraxx roll spreads

	Composition	Maturity	Skew Roll	New CDS Defs	Total Roll
Crossover	+85	+20	+8	0	**113**
Main	+1.3	+6	+0.5	0.1	**8**
Senior Fin	+0.6	+5	+3	+0.3	**9**
Sub. Fin	+2	+8	+8	+44	**63**

Source: Citi Research, Markit. In bp.

Spread impact of the different definitions for banks. Series 22 indices will include the new (2014) definitions for all credits, whereas Series 21 indices will only include them for non-banks:[1]

- This will be particularly important for iTraxx Sub Financials given that banks represent 68% of the index and bank spreads in the 2014 single name CDS contracts are trading much wider than in the 2003 contracts (~75% for non-Swiss banks and ~160% for Swiss banks[2], on average). We expect the 2003-2014 contract differences to add 44bp to the roll in Sub Financials.

- The different contracts for banks will also impact the roll in Senior Financials: the single name CDS bank 2014 contracts are trading, on average, ~1% wider than the 2003 contracts, which we expect to add ~0.5bp to the roll spread. As we review later, the fact that the 2014 Senior single name bank contracts are trading wider than the 2003 contracts wasn't expected at all: we were expecting them to trade tighter (5-10%). This is due, in our view, to the "technical" playing out by which investors with short positions have more incentives to roll.

- Finally, this will have a minimal impact in iTraxx Main given that (Senior) banks only represent 14% of the index.

[1] Markit has confirmed that the "standard" index contracts for iTraxx S21 and previous series after the roll will use the new definitions for credits not excluded from the Protocol (i.e. non-banks) and the old definitions for credit excluded from the Protocol (i.e. banks).

[2] The iTraxx Sub Financials index will refer to the 2014 Sub CDS contract with the CoCo supplement for Swiss banks (CS and UBS) – and the "conventional" (i.e. without the CoCo supplement) Sub contract for non-Swiss banks. The 2014 CoCo Sub CDS for Swiss banks trades significantly wider than the 2014 non-CoCo Sub CDS for non-Swiss banks as well as than the 2003 Sub CDS for Swiss banks – see Figure 5. In a nut-shell, see here for more details, trading the 2014 Sub CDS contract with the CoCo supplement means that: If a (Tier 2) CoCo is written down / converted into equity, it will trigger a credit event and the CoCo will be deliverable (whatever it has been converted into; provided it satisfies all the other deliverable characteristics).

Figure 3. Net non-dealer position in S21 iTraxx indices, $bn.

	S21
iTraxx Main	7.1
iTraxx Crossover	-2.8
iTraxx Senior Fin	-2.6
iTraxx Sub Fin	0

Source: Citi Research, DTCC. As of Friday 26-Sep. Positive: Non-dealers long risk. Negative: Non-dealers short risk.

"Roll skew" – supply and demand. When indices roll, newly launched indices generally trade with a more positive (or less negative) skew than their predecessors, given that the short risk positions built up in the indices tend to roll first. Over the past few rolls, the average skew difference between the newly launched index and its predecessor on the day of the roll was +10bp for Crossover, +1.5bp for Main, +1bp for Senior Financials and +5bp for Sub. We expect something similar this time around, especially in Crossover and Senior Financial indices where the net positioning of non-dealers is substantially short (risk), as our index positioning report shows (see also Figure 3).

- We are expecting the new S22 Crossover index to trade with 8bp more positive skew than the S21 index to reflect the fact that shorts tend to roll first and that non-dealers are net short risk in S21. We expect this technical to eventually fade, causing a tightening in the new S22 index vs. the old S21 one and, as a consequence, we would be sellers of the roll (sell S22 protection vs. buy S21 protection) on day one – more details below.

- We are expecting investors holding shorts in Financials, both Senior and Sub, to look to roll them quickly to the new Series in order to have their hedges in the new, "improved" (for hedging purposes), index. As a consequence, and given that non-dealers are currently net short in Senior Financials, we expect a strong buying pressure on the roll once it starts trading – we are seeing this already in the single name CDS roll for banks (from 2003 to 2014 contracts). We are expecting this technical to be worth around 3 and 8bp in the Senior and Sub Financials roll. As in the case of the Crossover roll above, we expect this technical to eventually fade and, as a consequence, we would be sellers of the roll (sell S22 protection vs. buy S21 protection) on day one – more details below.

Figure 4. Changes in iTraxx on-the-run indices: 9 in Main, 1 in Fins, 21 in Crossover

From Series 21 to Series 22. Shaded names from Crossover supplementary list.

OUT Main	IN Main	OUT Crossover	IN Crossover
Gecina	Alstom	Alstom	Eileme
Linde	PostNL	Dixons	Numericable
Unibail	Wendel	Lafarge	Boparan
Electrolux	Carlsberg	Societe Air France	Care Uk
Henkel	Deutsche Bahn	UCB	Dry Mix
Imperial Tob.	Iss Global	Wendel	Financiere Quick
Kingfisher	Svenska		Galapagos
Swiss Re.	ING		Isolux
SES	Stmicroelectronics		Hema
			Lock Lower (Lindorff)
			Loxam
			Matalan
			Monitchem (CABB)
			Novafives
			Premier Foods
			Public Power
			Ice Cream
			Selecta
			Stonegate Pub
			Stretford 79 (Iceland)
			Twinkle Pizza (Express)

Source: Markit, Citi Research.

Senior and Sub Financials – Sell the roll on day 1

The theory: From a "theoretical" point of view, we were expecting the **2014 contracts for senior and sub banks to trade ~5-10% tighter and ~50% wider, respectively, than the 2003 contracts**:

- We expected the 2014 senior CDS bank contracts to trade slightly tighter than the 2003 contracts. The 2014 contracts provide a better hedge than the 2003 contracts in scenarios of bail-ins or good-bad bank resolutions, which should make the new contract wider; however, the perceived probability of a senior bail-in is low enough to make the impact of this low. What should make 2014 senior contracts slightly tighter than the 2003 ones is the fact that the 2014 contracts do not have the cross-default sub-senior CDS trigger which 2003 contracts have: a sub credit event doesn't trigger a senior credit event in the 2014 contracts. It is very hard to properly quantify the absolute and relative impact of the two points above …our best guess was for the 2014 senior bank contracts to trade 5-10% tighter than the 2003 ones.

- We also expected the new 2014 bank sub CDS contracts to trade ~50-60% wider than the 2003 contracts, on average (for non-Swiss banks). The 2014 sub CDS contracts should solve the shortcomings which have made the 2003 CDS contracts ineffective when hedging sub debt: lack of deliverable obligations in bail-in scenarios (e.g. SNS) and sub CDS contracts following senior, not sub, debt in good-bad bank situations (e.g. BES). Thus, we expected the new bank sub CDS contracts to trade close to where sub debt trades (~160bp): this meant that the 2014 sub spreads would need to be, on average, around 50-60% wider than the 2003 ones (~100bp).

Theory vs. Practice: 2014 spreads trading too wide vs. 2003 – both in senior and sub. Figure 5 shows, for the banks in the S22 index, traded spreads for senior and sub single name CDS in both the 2003 and 2014 contracts.

Figure 5. 2003 vs. 2014 CDS docs for banks – current differences in senior and sub CDS spreads

	Senior CDS 5y spread				Sub CDS 5y spread			
Bank	**2003 Docs**	**2014 Docs**	**Diff (bp)**	**Diff (%)**	**2003 Docs**	**2014 Docs**	**Diff (bp)**	**Diff (%)**
Barclays Bk plc	62	64	2	3%	99	156	57	58%
Bco Bilbao Vizcaya Argentaria S A	73	72	-1	-2%	100	172	72	72%
Bco SANTANDER SA	70	71	0	1%	96	163	67	69%
BNP Paribas	60	62	1	2%	86	123	37	43%
Commerzbank AG	85	85	0	0%	143	253	110	76%
Cr Agricole SA	62	63	1	2%	92	134	42	46%
Deutsche Bk AG	70	70	1	1%	97	159	63	65%
HSBC Bk plc	50	51	2	3%	78	114	36	47%
ING Bank N.V.	54	56	2	3%	80	138	58	73%
Intesa Sanpaolo SpA	81	81	0	0%	108	176	68	63%
LLOYDS BK PLC	63	62	-1	-2%	104	145	41	40%
Royal Bk of Scotland Pub Ltd Co	75	78	3	3%	113	189	76	68%
Societe Generale	73	74	1	1%	102	164	62	61%
Std Chartered Bk	86	88	2	2%	111	181	70	63%
UniCredit SpA	95	95	-1	-1%	135	236	101	75%
Credit Suisse Gp Ltd	56	55	-1	-1%	73	187	114	156%
UBS AG	46	47	0	1%	63	170	107	169%
Average	68	69	1	**1%**	99	168	70	**73%**
Average Non-Swiss	71	71	1	**1%**	103	167	64	**74%**
Average Swiss	51	51	0	**0%**	68	179	110	**163%**

Source: Citi Research, Markit. Current 5y maturity (Sep-19). * 2014 sub CDS for Swiss banks will include the CoCo (T2) supplement.

Source: Citi Research

In both cases single name 2014 CDS contracts are trading wider (vs. 2003 contracts) than we expected, on average: +1% vs. -5/10% in Senior and +75% vs. ~50/60% on Sub contracts. This reflects, in our view, the "technical" we are seeing in the market where investors holding 2003 single name CDS bank shorts are rolling quickly to move their hedges to the 2014 contract (which protects them better in a bail-in or good-bad bank scenario). As only investors holding shorts seem to be keen to roll, the 2014 contracts are trading wide. The difference between our expected spreads and where spreads are currently trading is, expressed in bp, around 6bp and 19bp for the average senior and sub bank spread (excluding the Swiss banks). Given that banks represent 68% of the Financial indices, the difference between the expected and traded spreads could represent around 4 and 13bp respectively.

Expect the same technical in both indices, making the S22 wide to S21. We expect investors holding S21 index shorts to roll first, taking the skew differential between S22 and S21 series to positive territory: ~3bp and ~8bp in the Senior and Sub indices, respectively (vs. a historical average of 1 and 5bp respectively).

Double Whammy. Thus, the new indices will trade "technically" wide because of this technical in the single names as well as the technical in the index: in both cases the technical making the S22 index wider. The technical coming from the single names is captured, in our expected roll spreads in Figure 2, in the "composition" part; whereas the technical coming from the indices is captured in the "roll skew" part.

Trade: We would be sellers of the S21-22 roll (i.e. sell S22 protection and buy S21 protection) **in both Senior and Sub indices**:

- Sizing? An equal notional trade would leave a very market directional exposure (roll to widen if the market widens and vice-versa). One could also use the spread ratio on both indices to size the trade: e.g. if the traded spreads in S21 and S22 Sub Financials are 88.5 and 151.1bp respectively, we would buy protection on 1.7 units of S21 for each 1 unit of S22 protection we sell. This way we remove much of the market directionality of the trade. This will also generate a zero carry trade vs. a positive carry trade for the equal notional sizing. To make the trade slightly positive carry we would size the trade as follows:
  - Buy protection on 1.5 units of S21 for each 1 unit of S22 protection we sell – in Sub Financials.
  - Buy protection on 1 units of S21 for each 1 unit of S22 protection we sell – in Senior Financials; i.e. equal notional in this case given the small spread differential between the two indices
- The trade would also leave us with two minor residual exposures: a 4.5-5y flattener as well as long risk ING vs. short risk Aviva (the non-overlapping names).
- Moreover, we would be <u>long risk 2014 vs. short risk 2003 in bank CDS contracts</u> (the 2003 with a larger notional than the 2014 ones). We are happy to take this exposure, as we think we are compensated enough given how wide the 2014 contracts would trade due to the technical we discussed above.

Crossover – Sell the roll on day 1?

We would also be tempted to sell the Crossover roll on day 1, especially if the skew differential between S22 and S21 indices gets close to +10bp – which will happen if investors holding S21 short risk positions look to roll their hedges quickly and in enough size. This is what happened in the last roll, where the skew differential between S21 and S20 opened at around 8-9bp and progressively tightened to flat – see Figure 7.

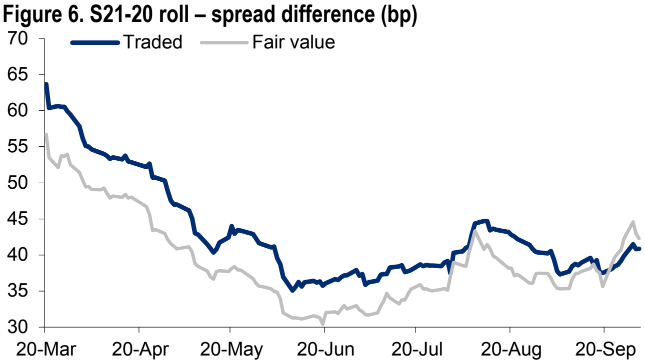
However, selling the Crossover S22-21 roll will also involve a fairly substantial exposure to the non-overlapping names in both indices which, as Figure 4 shows, are many. Selling the roll would involve getting long risk the names in S22 which are not in S21 (and short risk the names which aren't[3]), i.e. the investor is going long risk the new entrants in Crossover. This played out very well in the previous roll – see Figure 7 – as the market tightened and investors were eager to get long risk the new Crossover names.

We are not single name experts so we would look at trading this roll carefully, but we would be tempted to sell the roll on the back of (i) the expected technical driving the skew differential close to 10bp and (ii) our bullish view of the world on the back of European QE likely going ahead in a meaningful size and in a not too distant future.

Trade: We would be sellers of the S21-22 roll (i.e. sell S22 protection and buy S21 protection) **in Crossover**:

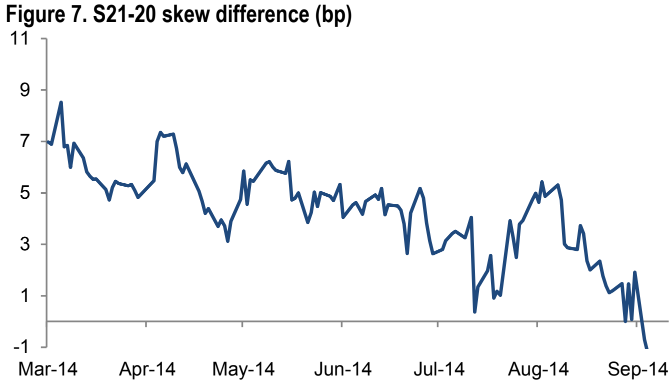
- Sizing: As in the case of the Financials roll trade before, if we were to use the spread ratio on both indices to size the trade, assuming the traded spreads in S21 and S22 Crossover are 254 and 367bp, respectively, we would buy protection on 1.47 units of S21 for each 1 unit of S22 protection we sell. This way we would remove much of the market directionality of the trade. To make the trade slightly positive carry we prefer to buy protection on 1.35 units of S21 for each 1 unit of S22 protection we sell.

Figure 6. S21-20 roll – spread difference (bp)



Source: Citi Research, Markit.

Figure 7. S21-20 skew difference (bp)



Source: Citi Research, Markit. S21 minus S20 skew.

We will be adding the three trades mentioned above to our Credit Derivatives Model portfolio using the COB levels on Monday 6-Oct. (when the indices start trading).

[3] Both the non-overlapping, i.e. the names in S21 but not in S22, but also the overlapping ones given the higher weight of the names in S21 than in S22 (on the back of the fewer credits in S21: 60 vs. 75).

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 21 Tranche Report
Curves	iTraxx Curve P&L Report	**Indices**	Main Report // Crossover Report What's moved? Report CDS Indices Positioning Report CDS Indices Trading Volumes Report
Returns	European Credit Derivatives Returns		

Recent Trade Ideas

Options	Main Receiver 1x2s	23-Sep-14
Curves	Short risk 5y Main NonFin vs. Long risk 7-10y iBoxx NonFin	18-Sep-14
Curves	Short risk 5y Xover vs. long risk 10y SenFin	18-Sep-14
Options	Sell Xover vol vs. buy SenFin vol	15-Aug-14
Options	Sell Xover receivers	1-Aug-14
Tranches	Long risk super senior tranches	21-Jul-14
Options	Main receiver 1x2s	13-Jun-14
Options	Main bearish risk reversal	13-Jun-14
Curves	5s10s Senior Fin flattener (J. Faith)	30-May-14
Options	European vs. US credit vol	28-May-14
Tranches	Sell 0-3% Jun-15 S9 protection: outright, vs. CDX IG 5y or vs. SX5E	21-May-15
Indices	Sub/Senior Financials compression (J. Faith)	20-May-15
Curves	5s10s Main Flatteners	25-Apr-14
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 (H. Lorenzen)	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

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Teach-in presentations: Indices / Options / Tranches

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Other publications

Cross Asset Volatility: Credit versus Rates: Use credit options to position for the coming rate hike (A. Basu)	24-Sep-14
Where to Find the Best Index Longs: A method for finding value in credit indices (A. Basu)	4-Sep-14
We love the roll	29-Aug-14
An Algorithm-driven Relative Value Signal: A simple method to monetize credit versus equity relative value (A. Basu)	14-Aug-14
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Trading volumes in European credit	5-Aug-14
iTraxx Roll - Potential Changes: Crossover to be expanded to 75 names	1-Aug-14
Smart Ways to Sell Credit Volatility (A.Basu)	24 Jul 2014
2014 CDS Definitions getting closer II: Update on protocol and CoCo supplement	11-Jul-14
Hedging the tail – Why real money should consider all options (H. Lorenzen)	1 Jul 2014
Lazy longs for July	23 Jun 2014
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

Source: Citi Research. Please click the links to see the complete trade ideas and rationales and pricing at time of recommendation.

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Appendix A-1

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