

iTraxx Roll – Potential Name Changes

Provisional/Final Lists To Be Published On 9/13 September

- We review potential changes in iTraxx Main and Crossover membership ahead of the upcoming iTraxx roll date (20 September).
- We expect eight changes in iTraxx Main (including one in Financials) and four changes in iTraxx Crossover – see Figure 1.

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Figure 1. Potential changes in iTraxx on-the-run indices

From Series 19 to Series 20. Shaded names from Crossover supplementary list.

| OUT Main | IN Main | OUT Crossover | IN Crossover |
|--------------------|----------------------|---------------|--------------------|
| PostNL | Rexam | Infineon | PostNL |
| Xstrata * | Astrazeneca | Grohe | Trionista (ISTAGR) |
| Linde | Gecina | Codere | New Look |
| Henkel | Anheuser Busch InBev | Metsa Brd | Unilabs |
| JTI UK F | SABMiller | | |
| Technip | Repsol | | |
| Hannover Rueck | Rabobank Nederland | | |
| STMicroelectronics | ITV | | |

Source: Markit, Bloomberg, Citi Research. *Provided there is a guarantee from Xstrata Ltd to Glencore International AG (or the other way around). If not, Adecco would likely leave the index instead.

- In the first section of this note we review the timeline of events leading to the roll date, the main criteria which will determine inclusion in the new series and the available data on which we are basing our estimates for the potential changes in the composition of the on-the-run indices.

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

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Roll Timetable and Main Inclusion Criteria

The new (Series 20) iTraxx indices will start trading on 20 September, with the provisional and final membership lists published by Markit on Monday 9 September and Friday 13 September respectively, as Figure 2 shows.

Figure 2. Series 20 iTraxx Indices Roll Timetable: Main, Crossover, HiVol and (Senior and Sub) Financials

| From | To | Action |
|--------|--------|--|
| 1-Mar | 30-Aug | Fri. Liquidity: 6m period over which DTCC trading volumes are computed for the purposes of index inclusion. |
| 16-Aug | 30-Aug | Fri. Spreads: 10 last business days of August - average spreads over this period are used for Crossover and HiVol inclusion. |
| | 30-Aug | Fri. Ratings: entity ratings as of the last business day of August are considered for index inclusion. |
| | 9-Sep | Mon. Provisional membership lists published by Markit. |
| | 13-Sep | Fri. Final membership lists published by Markit. |
| | 20-Sep | Fri. Roll date: Series 20 iTraxx indices start trading (8:00am London time). |

Source: Citi Research, Markit.

Although the most important criteria used to determine inclusion in the new series (spreads, ratings, DTCC trading volumes etc.) will only be available at the end of August (Figure 2), we can already form a view regarding the potential candidates to enter/leave the on-the-run index. To put together this list, we have used the following spreads/ratings/DTCC volumes:

The potential names entering/leaving the indices that we list in this report should be taken as our best estimate only.

We expect that, as spreads/trading volumes/ratings etc. change, the final list may be different.

- **Spreads:** Crossover constituents need to trade above 2x iTraxx Main Non-Financials (average across single names) when the index is formed. We still don't know this level because (i) the spreads considered are the average over the last 10 business days of August (16-30 August) and (ii) we don't know the components of the new Main (it is the new Main Non-Financial names – Series 20 in this case – which are considered for this rule). Here, we use average spreads from 16 August to COB yesterday and our expectations for the members of the new iTraxx Main Non-Financials.
- **Ratings** for index inclusion will be considered as of the end of August. Here, we use current ratings.
- **Liquidity:** The liquidity metric considered when determining the components of Main and Crossover is the total DTCC trading volumes from (the week ending on the first Friday of) March 2013 to (the last Friday of) August 2013. Here, we aggregate the weekly trading volumes published by DTCC up to the end of last week (16 August).¹

There are other important criteria which we also have to take into account when screening for potential names entering/leaving the indices, such as:

- **€100 million debt outstanding** – Crossover constituents need to have at least €100 million of outstanding debt on 13 August² (in a currency deliverable into European CDS and with a maximum remaining maturity of 30 years).
- **Ownership and guarantees** – If it is confirmed that one entity has more than 50% of the voting rights of another entity (directly or indirectly), then the most liquid entity qualifies for index membership. If a company is guaranteed by or guarantees another one only the most liquid is eligible.

¹ We note that although DTCC doesn't publish weekly trading volumes for names with low gross outstanding notional (e.g. Schaeffler), these credits will be considered when putting together the final liquidity list which is used for index inclusion. As a consequence, we currently have no trading volume data for several names which could be (and are) part of the indices (Crossover in particular).

² Fifth business day preceding the roll date.

iTraxx Main

iTraxx Europe Main contains the **125 most liquid investment grade** CDS contracts with the following sector break-down: 30 Autos & Industrials, 30 Consumers, 20 Energy, 20 TMT and 25 Financials.

Liquidity is measured by DTCC trading volumes and, for iTraxx Main purposes, a credit is considered “investment grade” if it is rated higher than BBB- negative outlook/watch by all rating agencies that rate it.

- **Autos and Industrials – 3 potential changes:** **PostNL** would leave the index given its downgrade to BBB- Negative by S&P and Moody’s since the last roll. **Linde** would leave the index because of low trading volumes. **Xstrata** will also leave the index, after its merger with Glencore, provided there is a guarantee between the two CDS reference entities (Xstrata Ltd and Glencore Int. AG); to the best of our knowledge, although there are cross-guarantees between Glencore Int. AG and Xstrata Schweiz AG, it is not clear cut whether those guarantees are effective between Xstrata Ltd and Glencore Int. AG. Adecco would leave the index if Xstrata does not. **AstraZeneca**, **Rexam** and **Gecina** would enter the index.
- **Consumers – 2 potential changes.** Using available trading volumes, **Henkel** and **JTI** would leave Main, being replaced by **Anheuser Bush** and **SABMiller**.
- **Energy – 1 potential change.** Using available trading volumes, **Technip** would leave Main, being replaced by **Repsol** (after the upgrade to Baa3 Stable by Moody’s shortly after the previous roll date).
- **Financials – 1 potential change.** Using available trading volumes, **Hannover Rueck** would leave Main, being replaced by **Rabobank**; however, the trading volume difference between the two is very small and the final result may change depending on the trading volumes over the next two weeks.
- **TMT – 1 potential change.** **STMicroelectronics** would leave the index given its downgrade to BBB- Negative by Fitch in July. **ITV** would enter the index after the recent upgrade by Moody’s.

Figure 3. iTraxx Main: Potential credits leaving the on-the-run index

Credits which are part of Series 19 but are at risk of not being included in Series 20. Spreads in bp.

| BBG Ticker | Name | iTraxx Sector | EOD yesterday 5y spread | 16-Aug 22-Aug Av. Spread | Moody's | SP | Fitch | 6m DTCC trading vol. (\$m)* | Reason for leaving |
|------------|------------------------|---------------|----------------------------|--------------------------------|-------------|-------------|----------|--------------------------------|-----------------------|
| TNTNA | PostNL NV | Autos & Ind. | 236 | 231 | Baa3 NEG | BBB- NEG | NR | 5,154 | Ratings |
| XTALN | Xstrata Plc | Autos & Ind. | 153 | 153 | Baa2 STABLE | BBB | NR | 4,096 | Merger |
| LINGR | Linde AG | Autos & Ind. | 49 | 49 | A3 STABLE | A STABLE | NR | 1,256 | Liquidity |
| HENKEL | Henkel AG & Co KGaA | Consumers | 51 | 50 | A2 STABLE | A STABLE | A STABLE | 1,361 | Liquidity |
| JAPTOB | JTI UK Fin PLC | Consumers | 35 | 35 | Aa3 STABLE | AA- | NR | 883 | Liquidity |
| TECFP | Technip | Energy | 103 | 103 | NR | BBB+ STABLE | NR | 600 | Liquidity |
| HANRUE | Hannover Rueck SE | Financials | 106 | 105 | NR | A | A- | 3,994 | Liquidity |
| STM | STMicroelectronics N V | TMT | 88 | 86 | Baa2 NEG | BBB NEG | BBB- NEG | 2,637 | Ratings |

Source: Citi Research, Markit, Bloomberg. *: Total DTCC trading volumes since 1-Mar-13.

Figure 4. iTraxx Main: Potential credits entering the on-the-run index

Credits which are not part of Series 19 but are likely to be included in Series 20. Spreads in bp.

| BBG Ticker | Name | iTraxx Sector | EOD yesterday 5y spread | 16-Aug 22-Aug Av. Spread | Moody's | SP | Fitch | 6m DTCC trading vol. (\$m)* |
|------------|-------------------------|---------------|-------------------------------|--------------------------------|-------------|-------------|-------------|-----------------------------------|
| REXLN | Rexam plc | Autos & Ind. | 98 | 98 | Baa3 STABLE | BBB- STABLE | NR | 1,524 |
| AZN | Astrazeneca PLC | Autos & Ind. | 54 | 54 | A2 STABLE | AA- | AA- | 1,509 |
| GFCFP | Gecina | Autos & Ind. | 127 | 126 | Baa2 STABLE | BBB STABLE | NR | 1,379 |
| ABIBB | Anheuser Busch InBev NV | Consumers | 55 | 55 | A3 POS | A STABLE | A STABLE | 2,229 |
| SABLN | SABMiller PLC | Consumers | 60 | 59 | Baa1 STABLE | BBB+ POS | BBB+ STABLE | 1,409 |
| REPSM | Repsol SA | Energy | 140 | 141 | Baa3 STABLE | BBB- | BBB- STABLE | 2,947 |
| RABOBK | Rabobank Nederland | Financials | 93 | 92 | Aa2 NEG | AA- STABLE | AA NEG | 4,085 |
| ITVLN | ITV Plc | TMT | 129 | 128 | Baa3 STABLE | BBB- STABLE | BBB- STABLE | 3,074 |

Source: Citi Research, Markit, Bloomberg. *: Total DTCC trading volumes since 1-Mar-13.

iTraxx Crossover

iTraxx Crossover contains up to **50 European high yield** (or not rated) CDS contracts.

See Figure 7 for a brief summary of Crossover rules – including a description of the two lists from which Crossover members are selected: “**Liquidity List**” and “**Supplementary List**”.

We expect two names to leave Crossover due to too tight spreads (**Infineon** and **Grohe**), one due to too wide spreads (**Codere**) and one name due to insufficient outstanding debt (**Metsa Board**, after its bond maturity in April).

Crossover constituents need to trade above 2x the average spread of iTraxx Main Non-Financials (the new Series 20). This rule is applied to the average spreads over the last 10 business days of August, i.e. 16-30 August. Using the expected changes in iTraxx Main Non-Financials highlighted above, and average spreads from 16 August to yesterday, we estimate that the average spread of the credits in Series 20 Main Non-Financials index is 95bp. This means that, to be part of the Series 20 Crossover, credits would have to have an average spread above **190bp**. There are two credits in the current (Series 19) Crossover index whose average spread (15-22 Aug) is below this level: Infineon (135bp) and Grohe (178bp).

Crossover constituents need to have an average upfront, over the last 10 days of August, below 50% (assuming a 500bp coupon). Using data from 16 August to yesterday, the average upfront for Codere is 50.4% (it closed at 47.5% yesterday). Thus, whether Codere is in Crossover Series 20 will depend on both its spreads until the end of August and whether it triggers a CDS credit event before the roll data.

Figure 5. iTraxx Crossover: Potential credits leaving the on-the-run index

Credits which are part of Series 19 but are at risk of not being included in Series 20. Spreads in bp.

| BBG Ticker | Name | iTraxx Sector | EOD yesterday 5y spread | 16-Aug 22-Aug Av. Spread | Moody's | SP | Fitch | 6m DTCC trading vol. (\$m)* | Reason for leaving |
|------------|--------------------------|---------------|-------------------------------|--------------------------------|-----------|--------|-------|-----------------------------------|-----------------------|
| IFX | Infineon Tech Hldg B V | TMT | 136 | 136 | NR | NR | NR | 903 | Too tight |
| GROHE | Grohe Hldg GmbH | Autos & Ind. | 185 | 180 | B3 STABLE | B- POS | NR | 2,347 | Too tight |
| CODERE | CODERE Fin LUXEMBOURG SA | Consumers | 47.5%** | 51%** | Ca NEG | CC | NR | 3,820 | Too wide |
| MESSA | Metsa Brd Corp | Autos & Ind. | 273 | 277 | B2 STABLE | B- POS | NR | 1,986 | Liquidity |

Source: Citi Research, Markit, Bloomberg. *: Total DTCC trading volumes since 1-Mar-13. ** Upfront, assuming a 5% coupon.

The liquidity metric considered when determining the components of Crossover (“**Liquidity List**”, i.e. with liquidly traded CDS) is the total DTCC trading volumes from March 2013 to (the last Friday of) August 2013. DTCC doesn't publish weekly trading volumes for some names in the current Crossover Series 19 (e.g. Schaeffler, Smurfit Kappa Acquisitions, Polkom and Cerved) because they do not

have enough gross outstanding notional.³ However, although the trading volumes for these names are not publicly available, they will be considered by DTCC when putting together the final list of the top-1,000 most liquid names (globally) from which Crossover (and Main) members are selected. We assume that all of the five aforementioned names will be on that final top-1,000 list given that names in Crossover have, historically, traded enough to be part of that list. However, our assumption may well prove wrong, in which case we will have more names from Crossover Series 19 that will not be part of Crossover Series 20.

Figure 6. iTraxx Crossover: Potential credits entering the on-the-run index

Credits which are not part of Series 19 but are likely to be included in Series 20. Spreads in bp.

| BBG Ticker | Name | iTraxx Sector | EOD yesterday 5y spread | 16-Aug 22-Aug Av. Spread | Moody's | SP | Fitch | 6m DTCC trading vol. (\$m)* |
|------------|-----------|---------------|-------------------------------|--------------------------------|----------|----------|-------|-----------------------------------|
| TNTNA | Postnl Nv | Autos & Ind. | 236 | 231 | Baa3 NEG | BBB- NEG | NR | 5,154 |
| ISTAGR | Trionista | | | | B1 | B+ | NR | |
| NEWLOK | New Look | | | | B1 | B- | B | |
| UNILAB | Unilabs | | | | B3 | B | | |

Source: Citi Research, Markit, Bloomberg. *: Total DTCC trading volumes since 1-Mar-13.

We can only find one name which satisfies all the rules to enter Crossover via the “Liquidity List”: **PostNL** (which leaves Main) – see Figure 6.

Supplementary list

If there are four names leaving Crossover and only one entering from the “Liquidity List”, we will be looking at 47 credits eligible for the Crossover “Liquidity List” and, as a consequence, we should have three credits entering Crossover from the “Supplementary List”, i.e. without liquidly traded CDS but with enough debt issued over the past 12 months. Based on debt issued since September 2012, **Trionista (ISTAGR)**, **New Look** and **Unilabs** will likely be the credits entering Crossover via the supplementary list.

³ DTCC publishes weekly trading volumes for the 1,000 names with the largest gross outstanding notional (globally). This means that weekly trading volumes for names with low gross outstanding notionals are not published by DTCC, even if they are actively traded.

Figure 7. Crossover membership at a glance⁴

The iTraxx Crossover index is designed to serve as a reference for the European high yield CDS market.

The index includes European high yield issuers with liquid CDS traded and, if there are less than 50 issuers with enough CDS liquidity, a number of issuers which have been active in the new issue market but do not yet have a liquid CDS contract traded. All the credits in iTraxx Crossover need to satisfy the following rules:

- **Ratings:** Crossover companies need to be either not rated by any rating agency or be rated BBB-/Baa3 with negative outlook (or watch) by at least one rating agency.
- **Lower spread cut-off:** Crossover companies need to trade wider than twice the average spread of the constituents of the iTraxx Non-Financial Index.⁵
- **Higher spread cut-off:** Crossover companies need to trade tighter than 50% upfront (plus 500bp running coupon).⁶
- **Debt:** Crossover companies need to have issued or guaranteed more than €100 million publicly traded debt securities (which shall be taken to exclude loans and equities) with a maximum remaining maturity of 30 years.
- **Ownership/guarantees:** If it is confirmed that one entity has more than 50% of the voting rights of another entity (directly or indirectly), then the most liquid entity qualifies for index membership. If a company is guaranteed by or guarantees another one only the most liquid is eligible.

Before the index roll, DTCC publishes an "Index Roll Report" with the top 1,000 traded single name CDS for the 6 months prior to the month of the roll. This is the list used to select the single name CDS which will form part of the Crossover index "**Liquidity List**". If more there are more than 50 credits in the DTCC report eligible for Crossover inclusion, the 50 most liquid are chosen. If there are less than 50 credits in the DTCC report eligible for Crossover inclusion, Markit forms a "**Supplementary List**" with credits which satisfy all other requirements for Crossover inclusion and (i) have issued a minimum of €500m of new debt over the past 12 months (at least €250m in EUR/CHF/GBP) and (ii) have senior unsecured debt outstanding (at least a bond with an amount outstanding of €200m or above). The final portfolio comprises of a maximum of 50 names with the highest ranking entities from the Liquidity List (sorted by DTCC trading volumes) and if required, the Supplementary List (sorted by debt issued over the past 12 months).⁷

Source: Markit, Citi Research

⁴ The official iTraxx index rules can be found in Markit's website. This is our interpretation only.

⁵ Average spreads over the last 10 business days of the month prior to the roll date are considered.

⁶ Average spreads over the last 10 business days of the month prior to the roll date are considered.

⁷ If less than 50 entities are available from the Liquidity List, the total number of entities selected from the Supplementary List will be calculated by adding 5 entities to the number of entities from the Liquidity List. Names are then removed from the list (if required) so that the total number of entities is rounded down to the nearest multiple of 5.

Appendix A-1

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