

## Learning Curve®

# Index Contingent Credit Default Swaps

Last month, the **International Swaps and Derivatives Association** and **Markit Indices** published standard template documentation for trading index contingent credit default swaps referencing certain CDX and iTraxx credit derivatives indices. Index CCDS is the first new credit derivative product for which ISDA has published standard documentation for since the start of the financial crisis. This Learning Curve provides an overview of the product and some of the principal features of the new documentation.

### Background

ISDA first published a template confirmation for trading single-name contingent credit default swaps in February 2007 based on a standard single-name physically-settled CDS confirmation. The principal distinguishing feature of that template was that the notional amount of protection, instead of being fixed at the outset, was determined by reference to the termination value of a hypothetical derivative transaction. Upon a credit event in respect of the relevant reference entity, the termination value of the reference derivative—if any—would be crystallised and become the notional amount of the transaction. The transaction would then be physically settled by delivery of a par amount of obligations of the reference entity against payment of that notional amount. Settlement of single-name CCDS was subsequently swept under the auction settlement regime implemented by ISDA's Big Bang and Small Bang protocols with the effect that most single-name CCDS trades would be cash-settled based on the final price of the obligations of the reference entity determined in the relevant auction.

The single name CCDS product was developed primarily to allow counterparties to hedge their counterparty credit exposure under derivatives transactions where other forms of credit risk mitigation, such as collateralisation, were not available.

Last year, ISDA formed a working group of major dealers to develop standardised documentation for a tradable index CCDS product that could be used by financial institutions to hedge rate/credit cross-gamma exposure as a way of managing their credit valuation adjustment and debt value adjustment risk.

### Overview

Index CCDS are based on a regular untranching credit default swap transaction on CDX, iTraxx Europe or iTraxx SovX. However, as with the single-name product, instead of specifying a fixed notional amount of protection at the outset, the amount of protection purchased in respect of any reference entity in an index is intended to reflect the value, from the perspective of

the exposed party (i.e. the credit protection buyer), of a hypothetical interest rate swap or cross-currency swap (known as the "reference derivative") between the exposed party and the other party. To avoid having to value the reference derivative upon a credit event, the credit protection buyer will, in most cases, realise its protection by requiring the credit protection seller to enter into a transaction with it on the terms of the reference derivative in a size determined by reference to the recovery rate on the relevant reference entity determined in the related CDS auction.

Unlike the single-name CCDS product, the index CCDS are not intended to hedge the credit protection buyer's individual swap exposures to each of the reference entities in the index. Instead, the reference derivative is intended as an approximation of the macro exposure that the protection buyer may have across a portfolio of counterparties.

### Documentation

The recently published documentation comprises (a) the Index Contingent CDS Additional Provisions, (b) short-form Index Contingent CDS Confirmations and (c) the CCDS Reference Derivative Matrix.

#### *Index Contingent CDS Additional Provisions*

The contingent technology developed by the ISDA working group for index CCDS are set out in the Index Contingent CDS Additional Provisions. These provisions take the form of common amendments to the most recent versions of the standard terms supplements for untranching transactions published by Markit for each of the indices. The principal features of these provisions are discussed below.

#### *Index Contingent CDS Confirmation*

To enter into an index CCDS trade, parties must execute a confirmation on the applicable form published by ISDA for CDX and Markit for iTraxx. Each confirmation incorporates the latest version of the applicable standard terms supplement on the relevant index, as well as the Index Contingent CDS Additional Provisions. As with standard index trades, the parties are only required to specify certain trade details in the confirmation, including the relevant series and version of the index being referenced, the credit protection buyer and seller, the term of the transaction and the protection premium. The parties are also required to specify the commercial terms of the relevant reference derivative but for a standard trade this would normally be achieved



Chris Arnold

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by simply referencing one of the reference derivative types set out in the CCDS Reference Derivative Matrix. The parties must establish the overall size of the index CCDS trade by specifying the 'original notional amount' or 'original currency amounts' of the reference derivative. Where the reference derivative is a fixed/floating swap, parties must also specify the relevant fixed rate.

#### ***CCDS Reference Derivative Matrix***

In order to simplify and standardise the terms of the reference derivative, ISDA has published the CCDS Reference Derivative Matrix that sets out standardised terms for a range of reference derivative types. The reference derivative types in the first version of the CCDS Reference Derivative Matrix include euro, U.S. dollar and sterling fixed/floating interest rate swaps and euro, U.S. dollar, sterling and Canadian dollar floating/floating cross-currency basis swap transactions. It is anticipated that ISDA will expand the range of reference derivative types as the market develops. The parties incorporate these terms into their transaction by specifying the relevant reference derivative type in the Index Contingent CDS Confirmation.

### **Principal Features**

#### ***Upfront Premium***

Consistent with the contingent nature of the credit protection, it is anticipated that index CCDS will trade on an up-front premium basis only and the fixed payments provisions of the standard terms supplements are therefore deleted in the additional provisions.

#### ***Physical Reference Derivative Settlement***

In line with regular index transactions, the determination of a credit event in respect of a reference entity in the relevant index will generally be made by ISDA's Determinations Committees. Where a Determinations Committee resolves to hold an auction in respect of the relevant reference entity, unlike a regular index transaction, no payment is required to be made by the credit protection seller to the credit protection buyer. Instead, the credit protection buyer has the option of requiring the credit protection seller to enter into a transaction with the buyer on the terms of the reference derivative, (a 'physical reference derivative transaction') with the credit protection buyer taking the position of the exposed party. The notional size of that physical reference derivative transaction is equal to the product of (a) the original notional amount (or original currency amounts) specified in the confirmation, (b) the weighting of the relevant reference entity in the relevant index and (c) the difference of 100% and the auction final price determined for the reference entity in the CDS auction. The physical reference derivative transaction will become effective on the applicable auction settlement date and a true-up payment (the 'interim accrued obligation') will be also due in respect of any payments which would have been required to be made under the transaction between the date the relevant credit event is deemed to have occurred and the date that the physical reference derivative transaction is entered into.

Therefore, an index CCDS can be thought of as a basket of

swaptions for which the exercise trigger is the occurrence of a credit event in respect of the relevant reference entity and the underlying swap transaction is the reference derivative with a notional amount adjusted by reference to the recovery on the obligations of the reference entity in the applicable CDS auction. As the exercise is at the credit protection buyer's option then it is expected that the credit protection buyer would only trigger if the physical reference derivative transaction would be in-the-money to the credit protection buyer at the relevant time.

#### ***Fallback Settlement***

The index CCDS provides a fallback settlement mechanism in the event that no auction is held in respect of a reference entity for which a credit event has occurred, although this seems an unlikely scenario given the liquidity of the names in each index. In this case, the index CCDS would be physically-settled in the traditional way by delivery by the credit protection buyer of bonds or loans with an outstanding principal balance equal to the floating rate payer calculation amount and payment by the credit protection seller of the par amount. The floating rate payer calculation amount must first be agreed between the parties and is intended to reflect the mark-to-market value of the reference derivative following the relevant credit event. If the parties are unable to agree the mark-to-market value, the calculation agent is required to conduct a dealer poll of four derivatives dealers to determine the value in accordance with the terms of the market quotation methodology under the 1992 ISDA Master Agreement. The mark-to-market value is then adjusted by a net interim payment that reflects the payments that would have been required to have been made under the reference derivative between the date the relevant credit event is deemed to have occurred and the date that the mark-to-market value is determined.

#### ***Restructuring***

In the case of the iTraxx indices only, upon the occurrence of a restructuring credit event in respect of any reference entity, then that reference entity is removed from the index and no longer forms part of the index CCDS transaction. Instead, a separate transaction on the same terms is deemed to be entered into between the parties and that transaction is settled in accordance with the terms of the index CCDS. This ensures that the index CCDS transaction addresses restructuring credit events in a manner consistent with regular iTraxx trades.

### **Conclusion**

The index CCDS product provides financial institutions with a new tool in the effective management of CVA and DVA risk and demonstrates that the industry is still capable of considerable innovation.

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*This week's Learning Curve was written by **Chris Arnold**, a partner in the derivatives and structured products practice at **Mayer Brown** in London*