

STANDARD & POOR'S

Why index trades are the latest trend in global CDOs

Diane Lam of Standard and Poor's explains why index trades will attract an ever wider band of investors and other CDO participants

Increasingly, CDO managers have expressed interest in executing "index trades" – credit default swaps (CDSs) on publicly disclosed indices of corporate credits. Proposals generally centre around two broad index families – the TRAC-X indices, which are administered by Dow Jones, and the CDX indices, administered by iBoxx. But there are many index classes available for different market and geographical segments.

The index instruments can be analysed both on a leveraged and an unleveraged basis. The approach to rating the leveraged instruments is largely the same as that for normal synthetic CDOs. However, there is a crucial difference in the rating methodology for unleveraged index trades and how such instruments are incorporated as assets into CDOs.

Why trade an index?

Most market participants expect that index trades will attract an ever wider band of investors and other CDO participants over the years for different reasons.

As a tool to manage marked-to-market risk

The fact that indices are constructed to closely represent the market as a whole means that they are powerful tools to manage marked-to-market (MTM) risk. An investor in a credit-linked note (CLN) or a seller of protection under a CDS seeking to offset spread volatility could purchase protection on an index. In this example, rising spreads in the market would lead to an MTM loss on the sold protection leg of this hedge and an MTM gain on the bought protection leg. Also, given the many flavours of indices now available, an investor who wanted exposure to the entire market (and so sold protection on an index), but did not like certain industries, such as telecoms, could buy protection via the CDX telecoms index, thus neutralising this part of his or her exposure.

Relative value between cash bond market and index

A simple arbitrage opportunity exists between an index itself and the components of that index. In the most basic example, the spread on the index may differ from the average spread of the underlying components.

An investor could then make profits by buying protection on the index and selling protection at wider spreads on the individual names.

Minimises negative drag

Managers of cash CDOs see benefits of buying CLNs referenced to an index to minimise negative drag during ramp-up. These tools allow the manager to park cash from the sale of notes into a yielding asset while at the same time limiting the risk exposure of their transaction to that of the general market.

Relatedly, there could be an arbitrage advantage in holding the CLN backed by the index instead of a collection of cash bonds that represents the index. The CLN may trade wider than the cash bonds at times, providing incentive to hold the synthetic exposure.

The structure of an index trade

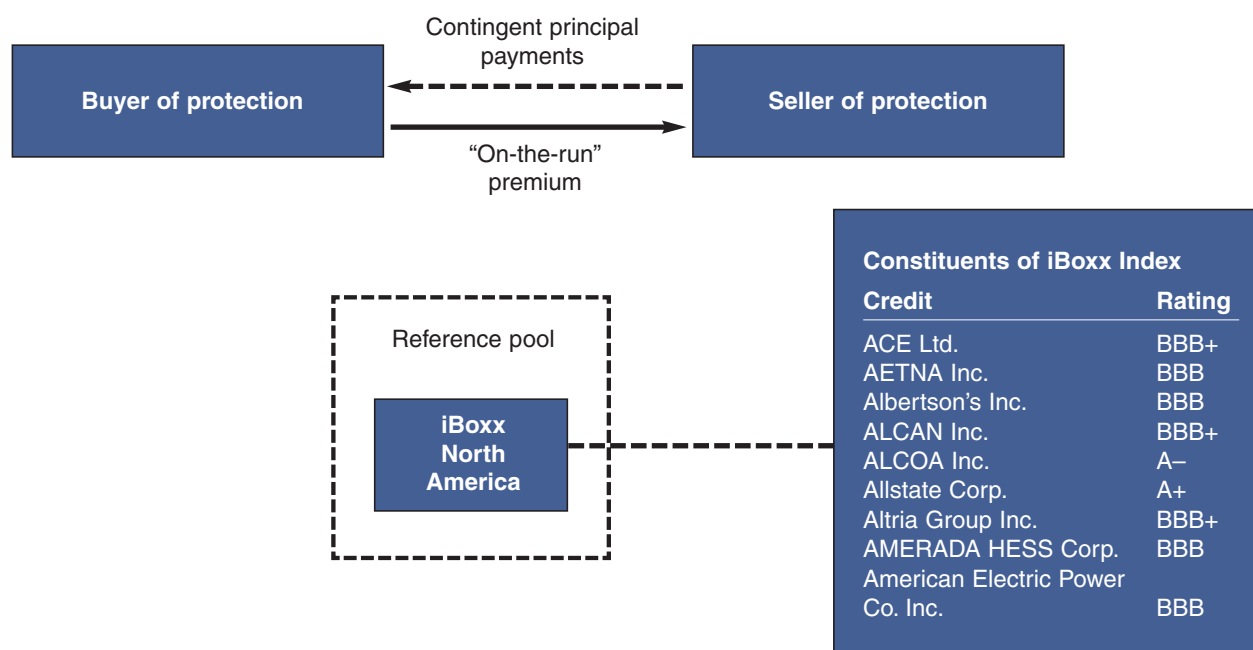
In most cases, Standard & Poor's is asked to rate a funded CLN that is issued by an SPE, acting as a seller of protection via a CDS. Standard & Poor's can also rate these transactions in unfunded form, where the risk transfer is simply a CDS contract between an investor and a protection seller, with no upfront cash changing hands.

In both the unfunded and funded cases, the buyer of protection will pay a premium to the seller of protection in exchange for a commitment to make principal payments when underlying reference entities default. The principal payment will occur when total defaults exceed a contracted loss threshold.

Standard & Poor's analysis will address the likelihood that the seller of protection will have to make a principal payment to the buyer, or, by extension, the likelihood that total defaults will exceed the loss threshold. Quantitatively, Standard & Poor's assesses this likelihood by running the CDO Evaluator and examining the CDS documentation to determine the appropriate recovery rates to assign.

Consequently, when these transactions are done on a leveraged basis, the analysis is identical to a typical synthetic CDO, except that the reference pool is a publicly known index of names instead of a tailor made

Typical index trade



pool of names, negotiated between the seller of protection and the buyer.

The main analytical challenge when looking at index trades occurs when unleveraged transactions are rated by Standard & Poor's. An unleveraged index CDS is similar to a "first-to-default" transaction, in that as soon as one credit event in the pool occurs, the seller must make a payment to the buyer.

In these cases, Standard & Poor's traditional "first-dollar loss" approach tends to be stressful – in all cases proposed so far, the probability of losing \$1 in a pool of 50 to 150 credits is worse than 'CCC-' remote. Since there is no distinction made between investment-grade indices or high-yield indices (or any indices for that matter), there is not much use indicating to investors that their probability of losing \$1 is worse than 'CCC-' remote.

Thus, for unleveraged index trades Standard & Poor's will assign a new kind of rating – the portfolio weighted-average rating. This rating is designed to indicate the "average credit quality" that an investor in an index is exposed to. The combination of the weighted-average view with a strong explanation that an investor is highly likely to experience at least \$1 of loss should provide for a more nuanced view of the risks of index trades.

Generating the weighted-average rating

The weighted-average rating can be generated most easily by running a pool in the CDO Evaluator and taking the weighted-average rating. It should be noted, however, that for pools with a significant component of bivariate risk or for pools with credits domiciled in emerging markets, alternative analytical criteria may be implemented.

The weighted-average rating can also theoretically be taken from a direct observation of the distribution of defaults: the weighted-average rating is equivalent to the mean of the distribution.

Standard & Poor's would also assess how to handle weighted-average ratings for pools with bivariate risk. This will likely not be an immediate concern, however, as all index trade proposals up to now have been on indices of credits in non-emerging markets.

For reference, please find a sample of index-linked transactions rated by Standard & Poor's

- April 5, 2004 New issue: iBond Securities PLC
€250 million iBoxx crossover floating-rate credit-linked secured notes, series 4D
- April 5, 2004 New issue: iBond Securities PLC
€500 million iBoxx diversified component floating-rate credit-linked secured notes, series 4C
- April 5, 2004 New issue: iBond Securities PLC
€500 million iBoxx corporate component floating-rate credit-linked secured notes, series 4B
- April 5, 2004 New issue: iBond Securities PLC
€500 million iBoxx 100 floating-rate credit-linked secured notes, series 4A
- January 20, 2004 New issue: iBond Securities PLC
€500 million iBoxx 100 Diversified floating-rate credit-linked secured notes, series 3C

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