

# New Synthetic CDOs Use Leverage to Counter Narrow Spreads

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- » With credit spreads still well below historic norms, CDO market participants are using a new breed of synthetic CDO products that use leverage to boost investor returns. The new products, leveraged super senior transactions, constant proportion portfolio insurance and constant proportion debt obligation transactions, adjust leverage based on market-value-related triggers.

## Leveraged Super-Senior Transactions

LSS synthetics are leveraged senior synthetic CDO tranches with a trigger mechanism tied to the reference portfolio's cumulative losses and (sometimes) widening spreads. If the trigger is hit, the swap may be unwound with a potential market value loss. Other structures remedy the breach via a further cash investment by investors (if funded) or by increasing the notional size of the investors' swap (if unfunded).

The degree of leverage in these tranches may be quite high; the maximum funded position can reach 5 to 10 times the size of the notes issued.

Most LSS to date reference corporate entities or high-grade ABS collateral. The latter allows structurers of ABS CDOs to lay off their retained risk. From an investor's perspective, the higher leverage means higher returns.

## Constant Proportion Portfolio Insurance and Constant Proportion Debt Obligation Transactions

Two other forms of esoteric synthetic CDOs, constant proportion portfolio insurance (CPPI) and constant proportion debt obligation (CPDO) transactions, are similar to LSS in that they also employ leverage and market-value-related adjustments to leverage. However, instead of requiring a change in leverage on the breach of a trigger, leverage is dynamically adjusted as the market value of a referenced index varies. Both CPPI and CPDO transactions reference widely traded corporate or ABS credit indexes.

CPPIs adjust their leverage away from an index in favor of a zero-coupon instrument designed to assure the return of principal on the rated notes. In contrast, CPDOs actually increase leverage as the value of the reference index declines – however, if the decline in the index exceeds the established threshold (e.g., 20%), the transaction is terminated and the investors take a loss.

When analyzing such details, we generally use a simulation approach. In LSS transactions that rely on both loss and spread triggers, we determine the likelihood of tripping each trigger by simulating both rating transitions (including defaults) and credit spreads. For the index-based CPPI and CPDO transactions, Moody's simulates the behavior of the index in conjunction with the transaction's structure.