

No silver bullet

The emergence of contingent credit default swaps has presented banks with a new way to manage their counterparty credit exposures. However, they have important limitations, argues David Rowe

In one way or another, I have been involved with counterparty credit exposure management for more than 15 years. During most of that period, you could not buy credit protection for the uncertain exposure implicit in a reference swap to a third party. Credit derivatives desks had no way to deal with that type of trade. The irony, however, was that the third party could call the swaps desk across the trading floor and the same bank would be perfectly happy to take on the identical credit risk (plus any accompanying market risk) by undertaking the swap directly. More recently, we have seen the emergence of contingent credit default swaps (CCDSs) that fill this gap.

In many ways, the emergence of a CCDS market signals that banks are now taking this growing source of credit risk more seriously. This is good news, since counterparty exposure is arguably the most illiquid form of credit risk that banks undertake, mainly because such credit exposure is entangled in the complex dynamics of bilateral derivatives portfolios. Nevertheless, being a by-product of derivatives market-making, counterparty credit risk has often received less attention than it deserved. In some institutions, that lack of adequate attention continues to this day.

The mark-to-market plus add-on approach was a quick and dirty way to incorporate current and potential future counterparty credit exposure into Basel I. It was hammered out between supervisors and the industry under severe time pressures in 1986 and 1987, and was intended to be a rough-and-ready approximation to the aggregate credit exposure of an active market maker.

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Unfortunately, some variation on this type of calculation was soon being used to estimate the exposure of individual counterparties for purposes of credit limit setting and control. The palpable inconsistency of these estimates across counterparties became increasingly clear throughout the 1990s. Despite this, many institutions remained unwilling to undertake the significant investment required to deploy and maintain a proper simulation-based system for tracking counterparty exposure.

The advent of credit derivatives in the 1990s offered a new tool for managing counterparty credit risk, but also introduced a significant new complication. For major counterparties, it was now possible to buy a fixed amount of protection for a stated term. The fixed character of the protection limited its value relative to the uncertain exposure created by a bilateral derivatives portfolio. Nevertheless, CDSs represented a valuable addition to the risk manager's arsenal.

However, credit derivatives created their own secondary counterparty exposure to the provider of the credit protection. Not only that, this secondary exposure was especially challenging to incorporate into potential future exposure simulations.

So what is the potential contribution of CCDSs? The essential point to keep clearly in mind is that counterparty exposure is only meaningful as a (bilateral) portfolio concept. Individual deal exposures are meaningless in isolation. Clearly, a CCDS is ideally suited to a situation where a client has one large swap whose credit exposure is to be transferred. They can also work quite well to approximate the exposure of a small number of trades driven by a single risk factor. Unfortunately, most counterparties have more complicated portfolios than this. The only effective way to mimic the credit exposure to such a counterparty is with an over-the-counter structure that references every trade in the bilateral portfolio. Given the historical problems in documenting standard CDS contracts, supporting CCDSs that reference complete counterparty portfolios is an operational nightmare of staggering proportions. Furthermore, since any CDS is a one-way contract (effectively an option rather than a swap), there is no way to mimic the net value of a portfolio's exposure with a portfolio of CCDSs.

Beyond laying off the credit risk of a single swap with a specific obligor, there could be a role for CCDSs in mitigating industry concentrations in a bank's derivative credit exposure. This would require the ability to simulate the aggregate potential future exposure for the industry and then determine the sensitivity of that exposure to its most significant market drivers. Such trades, however, would have to reference a basket of entities in a first- or nth-to-default type of structure. Therefore, while preserving the comparative simplicity of a single underlying notional swap, this would introduce the complication of multiple names.

In brief, CCDSs offer an interesting new tool for managing counterparty credit risk. They do not, however, provide a silver bullet for addressing this most awkward of risk challenges. ■