

## The Credit Default Swap Market and the Settlement of Large Default

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### NON-TECHNICAL SUMMARY

The huge positions in credit default swaps (CDS) borne by market participants have raised concerns about the ability of the market to settle major entities' defaults. The near-failure and the outright failure of two major counterparties such as AIG and Lehman Brothers in 2008, have revealed the exposure of CDS's buyers to counterparty risk and hence highlighted the necessity of organizing the market, which set in motion a large train of reforms.

First we go through the functioning of the market and concentrate on its vulnerabilities. All financial derivatives have been designed for hedging risks, but in practice, they are also widely used for sheer speculation. CDS are no exception. Aimed at protecting against a borrower's default, CDS have been used much beyond this scope, for their outstanding amount now outsizes that of the bonds. Moreover, because the CDS market is highly concentrated, it has not contributed to transfer the risk properly, but has concentrated it on a handful of major institutions. We also review in the paper the main other subjects of concerns since the Lehman Brothers' failure, such as the lack of regulation of the OTC market, the interlocking positions of participants and the market opaqueness.

Second, we try to understand the resilience of the market to the major defaults occurred recently in spite of its weaknesses mentioned above. To do that, we unravel the auction process implemented to settle defaults. Because many CDS holders do not hold the underlying bond, the size of the debt to settle in case of default generally exceeds the existing amount of underlying securities. This entails a lack of deliverable bonds, which would be able to push up the price of securities artificially at the time of settlement. That is why an auction process has been designed by Markit to determine the recovery rate (or final price). The system covers physical and cash settlement at the same price. The auction has two stages, designed to determine: (i) an intermediate recovery rate, or inside market midpoint (IMM), and the sum of net buy and sell requests for physical settlement, called open interest; (ii) the recovery rate, or final price. We

look into the two stages in the case of the Lehman Brothers' auction. To do that, we describe the strategies of buyers and sellers as well as the links with the bond market. We then study the way it worked for settling some other key defaults, such as Washington Mutual, CIT and Thomson, as well as for the Government Sponsored Enterprises (GSEs). As shown by these examples, the auction process has worked smoothly. However, the final price is not always exempted of biases due to the strategic behaviour of participants.

All the concerns raised during the crisis, and especially the fear of a systemic effect, have shown the need for more regulation of the market. The last section of the paper is aimed at describing the main ongoing reforms. Regulatory measures are being designed, in collaboration with the industry in order to ensure better market practices and higher risk management standards. The move to central counterpart is considered as a key tool to strengthen market resilience. The recording of transactions is also important to mitigate the market opaqueness and provide supervisors with a better view of the risks involved.

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