

Chapter 11: Executive Summary

Centralized Clearing for Credit Derivatives

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Background

Credit derivatives, mainly Credit Default Swaps (CDS) and Collateralized Debt Obligations (CDOs), have been under great stress during the sub-prime financial crisis and have contributed significantly to its severity. In large part this is because these relatively new products are traded in bilateral transactions over-the-counter (OTC), unlike other major financial derivatives that are traded on exchanges. OTC contracts can be more flexible than standardized exchange-traded derivatives, but they suffer from greater counterparty and operational risks, as well as less transparency.

The Issues

1. **Transparency**

The market for CDS provides a clear example of how lack of transparency makes risk assessment difficult. Following the bankruptcy of Lehman Brothers, about \$400 billion of CDS were presented for settlement, but once all the offsetting bilateral trades—invisible to the outsider—were netted out, only about \$6 billion ultimately changed hands. Evaluating and managing counterparty credit risk for CDS is a big problem with systemic implications. In March 2008, the Fed and the Treasury orchestrated a bailout of Bear Stearns because it was "too interconnected" to other financial firms through its extensive and complex network of bilateral OTC contracts to be allowed to fail. The serious consequences of letting a systemically important firm fail became all too apparent when Lehman Brothers had to file for bankruptcy and the credit markets responded by freezing up.

2. **Counterparty Risk**

CDS and other OTC contracts deal with counterparty credit risk by setting (privately negotiated) collateral requirements for both parties to the deal. But the terms are not standardized and no account is taken of the risk externality by which credit enhancement for one deal affects the risk exposures of other market participants. The shortcomings of this arrangement, including the fact that the OTC environment offers almost no transparency regarding the counterparties' overall risk exposure, became clear in the case of AIG, which had accumulated a huge exposure to CDS, and had to be bailed out after a credit rating downgrade precipitated collateral calls that it could not meet.

Three Levels of Centralized Clearing

We feel that when an OTC derivatives market becomes large and important enough to have a significant impact on the overall financial system it needs to have centralized clearing in order to aggregate information on outstanding deals and risk exposures for the benefit of regulatory authorities and other market participants. Three different types of central clearing offer different levels of market integration and transparency.

1. **Deals Registry**

The most basic arrangement would be a Registry of deals in which counterparties report on trades

they have set up bilaterally. A Registry could provide efficiency gains by both holding collateral for the counterparties and facilitating the transfers of funds among institutions.

2. **Clearing House as Central Counterparty**

A much stronger form of Clearing House would take on the role of counterparty and guarantor of all contracts, as does the clearinghouse for a futures or options exchange. Deals would still be set up in bilateral negotiation, but once registered with the Clearing House, the CDS would be broken into two separate contracts with the Clearing House in the middle. This kind of clearing facility would greatly reduce counterparty risk in the market, as long as it was adequately protected against default. An important element of that protection is that the Clearing House would set standardized margin requirements on all deals. This facility also has the valuable feature that it allows a firm to completely unwind a trade before maturity, because identical offsetting contracts made with different counterparties would cancel each other out when the Clearing House took the other side. We favor this form of centralized clearing over a pure OTC market structure or a registry for CDS and most other significant derivatives.

3. **Derivatives Exchange**

The most centralized form of market organization would be for trading to move to a formal exchange. An exchange offers the advantages of highly visible prices and volumes, broad market participation including retail traders, and elimination of counterparty risk through standardized margins and a contract guarantee supported by the capital of both a clearinghouse and independent market makers. One significant inconvenience of exchange trading is that contracts need to be standardized to permit large amount of trading in the same instrument. This would not be a big problem for CDS's, which are already quite standardized, but would be difficult for more individualized instruments, like CDO tranches. A second problem is that setting up and running an exchange is costly, so it is not suitable for thinly traded instruments.

Policy Recommendations

1. A firm trading credit derivative contracts over-the-counter should be required to provide information to a central Registry on each deal they enter into. Information gathered in this way should be available to regulators and, potentially, to the public in a form that balances the need for counterparties to be able to evaluate each other's risk exposures against firms' proper concerns for keeping the details of their trading strategies confidential.
2. When trading activity in a particular derivative expands to the point that the contract becomes systemically significant, it should move to centralized clearing with a clearinghouse that assumes the role of counterparty and guarantees every trade. This would greatly reduce counterparty risk and further improve market transparency, in addition to offering substantial efficiency gains in trading.
3. Moving trading to a formal exchange may be appropriate for some actively traded and largely standardized derivative instruments, but the major gains from establishing a centralized clearing facility are obtained once there is a clearinghouse that assumes the role of counterparty and guarantees every trade. We therefore feel that the strongest public policy need in the area of OTC derivatives is to require centralized clearing for all systemically important derivatives.