Time to Lift the Veil

by

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A clearinghouse for credit derivatives trading?

The severe stress in the credit derivatives markets since the inception of the sub-prime crisis has been reported in great detail in the financial press. Hitherto arcane CDOs and CDSs (Collateralized Debt Obligations and Credit Default Swaps) have become part of the popular vocabulary. An important aspect of these markets is that these products are traded over-the-counter (OTC) in bilateral transactions between banks and other institutions. In this sense, they are fundamentally different from other financial instruments such as stocks or equity options, which are mainly traded on exchanges. This distinction has many implications, the most important being that relative to exchange trading, OTC markets feature greater counterparty and operational risks as well as lower transparency. Counterparty risk arises from uncertainty about whether one side of the trade will fulfill its obligation in future. Operational risk arises from uncertainty about whether trades will be cleared and settled in an orderly manner by counterparties. Differences in transparency arise from the fact that information about trading volumes and prices is easily available in the case of exchange-traded markets, while in the case of OTC products it is difficult to obtain such data, and hence trading is more opaque.

A case in point is the market for CDS contracts – essentially, insurance products against default risk of companies or sovereigns. Some selective information about the history of this market would serve to illustrate how the differences between OTC markets and exchanges contributed to the broader financial crisis. The CDS market has grown by leaps and bounds since its inception in the mid-1990’s, from around $180 billion in terms of notional amounts outstanding in 1998 to over $50 trillion today. In the early part of this crisis, the fees for purchasing default insurance in this market went up only marginally. However, from mid-February until mid-March of this year, a period during which Bear Stearns’ financial health weakened substantially, the fees for CDS contracts on financial firms widened more than two-fold. For instance, in mid-February, buying protection against the default of Goldman Sachs’ senior unsecured debt for five years cost around 100 basis points annually, but this rose to almost 250 basis points by mid-March. Once the Bear Stearns crisis was resolved through its Fed-brokered sale to JPMorgan Chase, the fee reverted within a month to its mid-February levels. In another such example, the CDS fees on a number of financial firms skyrocketed following the collapse of Lehman Brothers and AIG, reverting sharply only once the rescue packages for banks were announced worldwide. Even companies with pristine credit quality such as GE experienced a huge spurt in their CDS fees to around 600 basis points, and even higher, in recent weeks.

What caused the CDS fees – one of the best market indicators of the credit risk of a firm – to widen so dramatically? Was it just the fact that the financial firms were perceived to be similar to each other, and thus riskier, in the wake of failure of some of their peers? Or was counterparty risk – the risk that the writer of the CDS contract would fail to fulfill its obligations – also an important culprit? It is hard to dispute that large, global financial firms hold correlated portfolios that fluctuate together in value; hence, an increase in the credit risk of one financial firm is generally adverse news about the credit risk of others. But there are also systemic consequences of the failure of a large financial institution, given that such institutions have close ties with each other through a large number of derivative contracts.
Systemic concerns arising from counterparty risk amongst large financial institutions have grown dramatically over the last year, mainly due to the exposures in CDS contracts. Consider the case of Bear Stearns, which was a leading “clearer” of the CDS contracts between financial institutions that trade in these over-the-counter contracts. The imminent failure of Bear sparked fear amongst major financial institutions over the settlement and clearing of these contracts. Since the company was the intermediary in many of these transactions, there was concern that it would be unable to fulfill its obligations on many trades in time, resulting in mark-to-market losses for other institutions. This, in turn, accentuated counterparty risk that was feared to possibly affect orderly trading and settlement of future CDS trades. The lack of adequate transparency in the exposures of different institutions to each other aggravated such fears immensely. Similar fears, which crippled the CDS markets when Lehman Brothers filed for bankruptcy and AIG was tottering on the edge of bankruptcy before being bailed out, are considered largely responsible for the freezing up of inter-bank markets in that period, the effects of which linger to this day. Indeed, many observers feel, with the benefit of hindsight, that it was a mistake to let Lehman fail, since it was a systemically important counterparty, and thus an important part of the global financial “plumbing.”

Given this backdrop, some key questions to answer are the following. Is the over-the-counter nature of these markets responsible for heightened counterparty risk fears? OTC markets have thrived in the financial sector over the past 25 years since the much-celebrated success of the interest-rate swaps market – the market for hedging exposures to fluctuating interest rates. However, the episodes discussed above have shown that OTC markets have several undesirable features, especially during a stressed market situation. But then why don’t participants in these markets privately achieve outcomes that efficiently address these undesirable features? Put another way, why might regulation in the form of centralized clearinghouse or exchanges desirable? There are at least two reasons.

First, all OTC contracts feature collateral or margin requirements, wherein counterparties post a deposit whose aim is to render the contract essentially minimal, near-zero, counterparty risk. The deposit is adjusted daily based on fluctuations in value of the underlying contract (marking to market) and the creditworthiness of the counterparties. The difficulty, however, is that such collateral arrangements are negotiated on a bilateral basis. Parties in each contract do not take full account of the fact that counterparty risk can also affect other players due to lack of adequate transparency about their inter-connectedness. An analogy is useful at this point. It is necessary to have regulations for safety of individual households against fires since each household privately bears the costs of arranging for such safety but its benefits accrue to the entire neighborhood. Similarly, it would be natural to require counterparties with large shares of exposures to post higher collateral requirements. Otherwise, having to unwind these exposures in an abrupt manner, as witnessed in the case of Lehman Brothers and AIG, can put severe price pressure on markets at large. Since OTC markets prevent aggregation of information between trades, they also preclude a ready identification of large exposures in the first place.

Second, the same forces outlined above create resistance from large players to move trading from OTC markets to centralized clearing or exchanges. Large players benefit from the lack of transparency in OTC markets since they “see” more orders and contracts than other players do. They can also unwind their positions more stealthily in OTC markets. And, as noted before, large players would also be required to post higher collateral to clearing houses and exchanges.

In response to these concerns regarding the OTC nature of credit derivatives markets, the Federal Reserve has initiated a move to migrate the clearing of credit default swap contracts through a platform offered jointly by the Chicago Mercantile Exchange and the hedge fund Citadel. The Depository Trust and Clearing Corporation (New York) and LCH.Clearnet
Group (London) have announced a merger to create the world’s largest clearing-house, also providing services for OTC products such as interest-rate swaps and credit default swaps. These developments augur well for the credit derivatives market and overall financial stability. The AAA credit rating and risk-management expertise of centralized clearinghouses will help assuage fears over counterparty and operational risks. Centralized clearing will also enable aggregation of trade-level information so that prices, volumes and open interest can be disseminated to market participants beyond the direct participants. Such dissemination would make it possible for regulators to monitor the outstanding positions of a particular institution, and also of a particular contract. And, prices of credit default swaps would reflect what they are supposed to – the credit risk of the underlying entity – rather than that of the counterparty providing the insurance.

Will these initiatives succeed? Some institutions, especially large players, will likely resist calls to move away from the OTC. Hence, the regulatory resolve to do so must be strong. The resisting players must realize (or be informed) that OTC markets can continue to arise whenever the financial sector needs to innovate and customize, but once these markets grow beyond a critical size, they will be required to move to centralized clearinghouses or exchanges. Although we have focused on CDS markets as the proximate example, many other markets that have figured prominently in the current crisis, most notably those trading mortgage-backed securities, collateralized debt obligations (CDOs), and asset-backed commercial paper, have also experienced severe stress. Fundamentally, there is no reason why these products cannot be traded and cleared more centrally.

It is high time to lift the veil of opacity of bank balance sheets and inter-bank linkages, starting with more transparent and centralized platforms for credit derivatives trading.

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