Credit derivatives

The great untangling

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Some of the criticism heaped on credit-default swaps is misguided. The market needs sorting out nonetheless

THEY are, says a former securities regulator, a “Ponzi scheme” that no self-respecting firm should touch. Eric Dinallo, the insurance superintendent of New York state, calls them a “catastrophic enabler” of the dark forces that have swept through financial markets. Alan Greenspan, who used to be a cheerleader, has disowned them in “shocked disbelief”. They have even been ridiculed on “Saturday Night Live”, an American television show.

Until last year credit-default swaps (CDSs) were hailed as a wonder of modern finance. These derivatives allow sellers to take on new credit exposure and buyers to insure against companies or governments failing to honour their debts. The notional value of outstanding CDSs exploded from almost nil a decade ago to $62 trillion at the end of 2007—though it slipped to $55 trillion in the first half of this year and has since continued to fall. Traded privately, or “over the counter”, by banks, they seemed to prove that large, newfangled markets could function perfectly well with minimal regulation.

That view now looks quaint. Since September a wave of large defaults and near-misses, involving tottering banks, brokers, insurers and America’s giant mortgage agencies, Fannie Mae and Freddie Mac, has sent the CDS market reeling. Concern that CDSs are partly to blame for wild swings in financial shares has frayed nerves further.

The failure in mid-September of Lehman Brothers showed that the main systemic risk posed by CDSs came not from widespread losses on underlying debts but from the demise of a big dealer. The aftershock spread well beyond derivatives. Almost as traumatic was the rescue of American International Group (AIG), a huge insurer that had sold credit protection on some $440 billion of elaborate structures packed with mortgages and corporate debt, known as collateralised-debt obligations (CDOs). Had AIG been allowed to go bust, the swaps market might well have unravelled. Similar fears had led to the forced sale of Bear Stearns in March.

Foul-ups with derivatives are hardly uncommon, but CDSs have been causing particular consternation. One reason is the broad threat of "counterparty risk"—the possibility that a seller or buyer cannot meet its obligations. Another is the rickety state of back-office plumbing, which was neglected as the market boomed. A third is that swaps can be used to hide credit risk from markets, since positions do not have to be accounted for on balance-sheets. They make it beguilingly easy to concentrate risk. AIG could have taken the same gamble in other ways, for instance by borrowing heavily to buy mortgages. But the CDS route was quicker and less visible.

If counterparties pay up, CDSs are a zero-sum game: what the seller loses, the buyer gains. Counterparty risk upsets the symmetry. It is tempting to write lots of swaps in good times, when pay-outs seem improbable, without putting aside enough cash to cover the potential losses. Being AAA-rated, AIG was able to post modest margin requirements—the deposit it had to pay against the risk of the contract being triggered. When its credit rating was cut, a lot more margin was suddenly demanded and it had to turn to the public purse.

"We sent out a signal that the stronger you were, the crazier you could be," says Mr Dinallo: highly rated companies were allowed to write reckless volumes of swaps. Originally conceived as a means for banks to reduce their credit exposure to large corporate clients, CDSs quickly became instruments of speculation for pension funds, insurers, companies and (especially) hedge funds. And with no fixed supply of raw material, unlike stocks or bonds, bets could be almost limitless.

The industry is scrambling to limit the damage. Robert Pickel, head of the International Swaps and Derivatives Association (ISDA), says he is determined to combat "misconceptions" about CDSs. The true amount at risk, after cancelling out offsetting exposures, is only about 3% of their notional value (that is $1.6 trillion, even so). Opaque as CDSs may be, they are less complex than CDOs. In essence, they unbundle the interest on a debt from the risk that it is not paid back. Selling credit protection is similar to writing certain kinds of common options on shares.

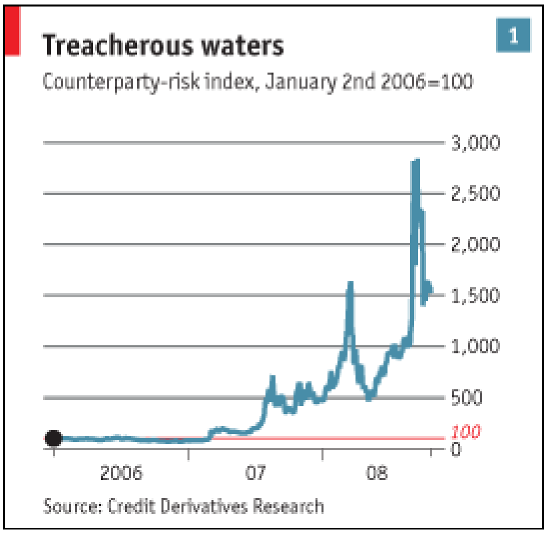
The root cause of the crisis, Mr Pickel argues, is bad mortgage lending, not derivatives: swaps on subprime mortgages grew unstable because the loans themselves were dodgy. Last month JPMorgan's Blythe Masters, one of the market's founders, urged regulators to distinguish between tools and their users: "Tools that transfer risk can also increase systemic risk if major counterparties fail to manage their exposures properly."

That will not reassure everyone. Still, there has been "more fear than facts" around the CDS market, says Brian Yelvington of CreditSights, a research firm. Essentially, it provides fixed-income investors with "a liquid way to do what equity and futures participants have been doing for years: to take a negative as well as constructive view on credit."

Furthermore, the market has held up better than many expected. The process for settling claims after Lehman's default and the government's seizure of Fannie Mae and Freddie Mac "performed as designed", says Darrell Duffie of Stanford University. Only $6 billion had to change hands in the Lehman auction, overseen by ISDA, because most payments had already been made as swap-sellers marked their positions to market; in all, $21 billion had been theoretically at risk. Margin payments are widely thought to cover two-thirds of total CDS exposure.

The CDS market has remained fairly liquid throughout the crisis, even as cash markets dried up. At the moment, derivatives spreads reflect fundamental values more accurately than those in corporate-bond markets, reckons Tim Backshall of Credit Derivatives Research (CDR). Swap spreads have become a key barometer of financial health. They provided an early indicator of trouble at investment banks, although they became distorted as more and more firms scrambled to hedge or speculate.

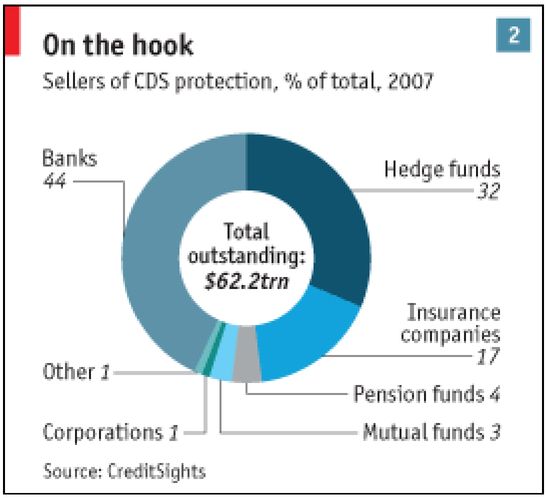
But if credit swaps were not a primary cause of the past year's conflagrations, they were, in certain respects, an accelerant. Financial eggheads used them as building blocks in "synthetic" CDO-type structures, which are based on CDSs rather than actual bonds. The market value of some tranches has slumped to less than ten cents on the dollar. And CDSs share some problems with securitisation. A paper last year by economists at the Federal Reserve Bank of New York concluded that they "give banks an opaque means to sever links to their borrowers, thus reducing lender incentives to screen and monitor."



Some fear that worse may be yet to come. The failure of another big actor in the market would send dealers and other counterparties scurrying to replace trades, almost certainly at a higher cost. Replacing those struck with Lehman, as spreads widened after its bankruptcy filing, is thought to have cost some dealers upwards of $200m each.

That risk remains, judging by CDR's counterparty-risk index, which measures the health of CDS dealers (see chart 1). The next shock could be the failure of a hedge fund with a big swap book, given the spike in redemptions and margin calls many funds face, thinks Pierre Pourquery of the Boston Consulting Group. Hedge funds wrote almost a third of all credit protection last year (see chart 2).

Sellers of protection will be watching nervously for a wave of corporate defaults as big economies slip into recession. Standard & Poor's expects the default rate on junk-grade debt to leap to 23% by 2010. Sovereign debt is looking wobbly too, especially but not exclusively in emerging markets. The cost of insuring against a default by the United States has quadrupled since January.



As rising defaults trigger CDS payments, the effect on other markets is likely to grow. Credit insurers are increasingly having to find money to pay claims that once seemed merely notional. Christopher Whalen of Institutional Risk Analytics, a consultancy, calls these commitments a "liquidity black hole". Because banks lack the liquidity to cover these positions, they must raise it in interbank markets. This may be keeping the rate at which big banks borrow from each other higher than it would otherwise be, thinks Mr Whalen (though it has fallen from its peak last month). It may also be causing rushed sales in equity and bond markets.

Concern about the damage that the failure of a big swap-seller might yet do has created pressure for the CDS market to be regulated. New York has charitably offered to oversee "covered" swaps—those where the protection buyer holds the underlying bonds; Mr Dinallo labels uncovered CDS trades as "naked", likening them to abusive short-selling of shares. Federal regulators, who passed up several opportunities to police the market during the credit boom, are circling too.

Dealers are hoping to head them off with a series of initiatives, which have been stepped up recently at the prompting of the Federal Reserve. Chief among them is the creation of a central clearing house for credit derivatives. Several groups, including a dealer-backed venture led by Intercontinental Exchange and a tie-up between CME Group, another exchange operator, and

Citadel, a hedge fund, are vying for licences. One or more is likely to be awarded in the next few weeks.

The biggest benefit would be less counterparty risk, since each member firm would face only the clearing house, not lots of partners. Standardised collateral arrangements would reduce the sort of payment disputes that have flared up this year, including those between AIG and buyers of its insurance. This set-up has worked well for trading of energy swaps.

Although it would ease one problem, it may create another by concentrating risk in the clearer—“like the military putting all its artillery shells in a single dump,” says a banker. Any clearer will need to have “tremendous creditworthiness” and iron-clad risk controls, says Craig Donohue, chief executive of CME, which is planning to back its venture with its $7 billion guarantee fund and $115 billion in collateral.

Besides a clearing house, the market could do with more transparency. A lack of disclosure on CDS exposures has frequently led the market to overestimate risks: had it been realised that settlement payments on Lehman swaps would be only $6 billion, rather than the hundreds of billions feared, much of the turmoil in debt markets could have been avoided. To provide more clarity, the Depository Trust & Clearing Corporation, which runs the central registry for swaps, has just begun publishing weekly data on the largest (but not broken down by counterparty).

A streamlining of back offices, which were swamped as trading surged, is also necessary. Only now is the industry discovering the joys of “compression”, which allows offsetting swaps to be torn up. A staggering $25 trillion-worth, almost half of the total, has been binned in recent months. Though this does little to cut the amount at risk, it reduces operational costs and strips away a layer of complexity that has obscured trading exposures. There are plans to extend this tidying-up exercise to other derivatives, including interest-rate swaps, whose gross value, $393 trillion at the end of 2007, dwarfs that of CDSs.

All this will strengthen market infrastructure. But it will also eat into the profits of big dealers, such as Goldman Sachs and JPMorgan, at a time when every dollar is precious. Estimates of their total revenue related to CDSs run as high as $30 billion a year. This will fall as central clearing brings more price transparency, and drop even further if the swaps end up being traded on exchanges. The dealers have long argued that bespoke swaps do not belong on bourses. But contracts, especially those tied to indices rather than single names, are steadily becoming more standardised. Most CDSs, thinks a bank regulator, will move to exchanges “within a few years”.

These quasi-voluntary efforts may or may not reassure those calling for more dramatic intervention. Buyers and sellers of swaps will probably be required to disclose more information. They will certainly have to stump up more capital to trade, making the market less attractive. Indeed, since September the typical margin demanded by dealers has more than doubled. Once reshaped, the CDS market will be a bit duller and a lot less lucrative. But it will also be much safer.