



# Enron and systemic risk

Regulators worry that concentrating derivatives market-making in a few major dealers poses severe systemic risk issues. Could one big player's failure break the whole system? David Rowe says Enron is an ideal test case, with some encouraging indications

Stripped of the hype and fancy jargon, derivatives markets are a highly efficient mechanism for risk intermediation. This, and this alone, is the reason for their expansion and resiliency over the past 20 years.

If a company has a risk that management deems unacceptable they can hedge some or all of it with an appropriately structured derivatives contract. Thus, if an airline wants to protect against increased fuel costs it can enter a commodity swap where it pays fixed and receives floating based on the price of jet fuel. Of course, there needs to be an ultimate counterparty (or counterparties) willing and able to take on the risk of being on the other side of this arrangement. This might be an entity, such as an oil producer, with the opposite risk profile. If such a counterparty ultimately stands opposite the airline in this trade, it reduces risk to both participants. In that case, there is a clear reduction in aggregate risk in the system and a demonstrable social benefit from the transaction. Day in and day out, the bulk of derivatives transactions are of this type and serve to mitigate risk for end-users.

In some cases, of course, there may be an imbalance of vulnerabilities for the system as a whole. In that case, it is not possible to match off counterparties with complementary risk profiles. Either some fundamental risks will go unhedged or speculators must step in to assume the role of those counterparties that are in short supply. Needless to say, this will increase the cost of hedging to the other side of the market, since such speculators must be induced to participate based on what they view as acceptably high expected returns. Nevertheless, assuming the speculators are sufficiently well capitalised to absorb the potential losses, such trades also create net social benefits. They do so by transferring risk from those less willing or able to bear it to those who are more so.

As in the exchange of traditional physical commodities, bilateral barter is a grossly inefficient means of arranging transactions. This is why central merchants inevitably arise. By stocking and distributing goods, the much-maligned



David Rowe is group executive vice-president for risk management at SunGard Trading and Risk Systems  
e-mail: david.rowe@risk.sungard.com

'middleman' significantly improves efficiency. Many buyers and sellers can go to one or a few merchants, thereby avoiding the cost of searching and gathering information from large numbers of participants on the other side of the market. In general, the middleman's mark-up is modest relative to the systemic cost reduction introduced by such an arrangement.

What is true for physical commodity markets is also true for markets in intangibles such as risk. Dealers stand ready to enter standard-size transactions on either side of the market subject to a bid-offer spread (the middleman's mark-up). Just as a retailer must stock an inventory of goods, however, so a derivatives dealer must warehouse some risk. It is only possible to match every trade with an exactly opposite offset for a small handful of transactions. It is for this reason that some market risk limits are essential for a market-making activity to be viable. Successful speculation on the part of market-makers can augment their returns, albeit with a corresponding increase in the volatility of those returns. It is the bid-offer spread, however, that provides the stable core source of revenue.

Some have compared the demise of Enron to that of Long-Term Capital Management (LTCM). In terms of humbling the mighty there is an obvious similarity. In-

deed, in terms of the gross volume of positions and the number of entities directly affected, Enron's failure is a bigger event than was that of LTCM. As a result, some have been surprised that the aftermath of Enron's failure has been comparatively orderly. To be sure, some big banks and a significant number of end-users face credit losses on their in-the-money derivatives contracts. The market disruption, however, has been relatively modest. The difference is that Enron was a market-maker whereas LTCM was a major speculator.

## Balanced book

LTCM had large open positions, whereas Enron's book, while much larger in gross terms, was relatively balanced by comparison. Yes, many counterparties found themselves suddenly unhedged when their Enron contracts were liquidated and they needed to enter the market to seek replacement trades. However, because Enron's book was comparatively balanced relative to its gross size, the volume of needed replacement trades on one side of most markets was reasonably balanced against those on the other side. Of course, markets are never frictionless. For example, some Enron counterparties have experienced their own financial deterioration since the liquidated contracts were booked and face difficulty finding market-makers willing to approve their credit. But overall, the market adjustment has gone remarkably smoothly.

Enron's dramatic failure contains many lessons. Perhaps the most important is the need for sound audit, compliance and risk oversight operations, with clear authority from senior management and the board to enforce approved policies. The second lesson is that credit risk is a real issue in derivatives markets. It should not be relegated to simplistic assessment systems and a cavalier view that "they are just derivatives, it's not real credit risk". Finally, on a happier note, markets have adjusted remarkably well in the aftermath of the Enron failure. They have accommodated a large, but relatively balanced, demand for replacement trades with comparative ease. On this issue, at least, regulators can sleep a bit easier based on recent experience. ■

