Risk management. Too clever by half

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Recent shocks are making financial institutions reassess the way they control the risks they are taking

Risk management

"I USED to sleep easy at night with my VAR model," said Allen Wheat, chief executive of Credit Suisse First Boston, at a recent conference in Monte Carlo—a rather brave venue in current circumstances. In recent months, the "value-at-risk" model, which purports to show how much money a firm could make or lose, has not worked for CSFB —or for the myriad other financial firms that used it. The same can be said of risk-management systems in general, and the people who ran them. Financial firms employed the best and brightest geeks to quantify and diversify their risks. But they have all—commercial banks, investment banks and hedge funds—been mauled by the financial crisis. Now they and the world's regulators are trying to find out what went wrong and to stop it happening again.

This crisis, which erupted after Russia defaulted on August 17th, differed from previous ones—the 1987 stockmarket crash, say, or the bond-market crash in February 1994. Losses then came from sudden downward lurches in the market. This time, in contrast, the spark was a sharp increase in spreads—price differences—between, for example, government bonds and lesser credits. Everyone was caught out.

One reason is that everyone was up to the same thing. Shareholders tend to shun institutions that take outright punts on markets. Better instead, they think, to take what appear less risky bets on the difference in price between two assets: in the jargon, "relative-value" trades.

The eagerness to do such trades was also the product of a bull market and a strong economy, especially in America. Yields on government bonds fell, so investors and financial firms bumped up returns by, among other things, taking more credit risk. They bought emerging-market debt, junk bonds: credit, indeed, of every sort. And because they were all buying, the price of these assets rose. The strategy was not restricted to credit. Traders also took big punts on the relative values of a variety of different financial instruments, including, among others: yields on liquid, newly issued American Treasuries compared with older issues; yields on European government bonds in the run-up to monetary union; and the relative volatility of European interest-rates and equities.

Returns on such trades were low but apparently safe, so the firms borrowed heavily to leverage their bets. This reached absurd proportions in the case of Long-Term Capital Management, a hedge fund that had to be rescued by its bankers. It was easy to increase leverage because borrowing, using assets as collateral, became much cheaper—lenders were overly sanguine about credit risk. Russia is an extreme example. In 1996 GKO s, Russian treasury bills, were deemed so risky that no bank would accept them as collateral for a loan. Then banks relented and accepted them as security for half their market value. By earlier this year some hedge funds were able to borrow 95% of the value of this splendid collateral. And the biggest hedge funds were able to borrow from banks without any "haircut" at all against better government securities.

That, as one risk manager now admits, is like a banking system without reserve requirements. Banks lent to one another on similar, if not quite so generous, terms. Of late many funds and weaker banks have had less generous treatment from lenders.

All this was wonderful for traders. In a bull market, the bigger their bets, the more money they made. Few thought much about potential losses. The rewards for punting with abandon were huge, while the penalties were small—they could walk into another job if they were fired. Very few had their fat bonuses tied to the long-term value of the firm. And the more money they had already tucked away the bolder they became. Greed, says the boss of one big firm, meant that "traders took risks that put you at the edge."

But what made their eventual losses so huge was that many financial firms had the same positions. Which is not surprising: their data was similar, and their traders had learnt the same financial theory. So had their risk managers. Yet in a crisis, unwinding all these positions simultaneously became almost impossible. Liquidity dried up. Witness what happened to the corporate-bond market in America, where, at the peak of the crisis, only about 5% of outstanding issues actually traded. Even that most liquid of markets; the dollar, fell by a fifth against the yen in just three days last month.

Back to basics

Was risk management flawed or were risk managers not powerful enough? Probably a bit of both. Some banks simply did not pay their risk managers enough or give them enough control. But in many cases the risk-management

systems and those who ran them both failed. The boss of one big firm calls super-sophisticated risk managers "high-IQ morons": quite simply, they relied too much on theory and not enough on market nous.

Firms are trying to address these short-comings. Risk-management departments are being given more clout. Some big investment banks also want to rely less on models, and more on the market-savvy skills of those more versed in the trading arts. They are also asking the question: what if all our assumptions are wrong? And they have twigged that valuing big positions at prevailing market prices is foolish: the bigger the position, the worse the price they would get if they tried to unwind it.

Perhaps most important, they are taking a long, hard look at how traders are paid. Many look enviously at the partnership stucture of Goldman Sachs: the lure of a lucrative partnership is an incentive not to bet the firm. Though this cannot be replicated at publicly owned firms, it should be possible to tie bonuses more closely to the firm's share price.

For their part, regulators are likely to be much more sceptical than they were about firms' risk-management models. At the moment they require those firms that use their own VAR models to calculate their capital requirement to multiply the number by at least three; the worse the predictive power of the model, the higher the multiplier. And most models, reckons one regulator, have been pretty dreadful of late. Should they do more? Increasing transparency might help stop everyone having the same positions. Better co-ordination among regulators might do the same.

Yet for all the flaws that the recent crisis has exposed in risk management, it has also shown up one fundamental strength. In the securities business, firms try to value their positions at the true price of unwinding them. Even if, in practice, they have interpreted this generously, it is still a harsh discipline. When markets move against them firms must reduce positions and take the pain on the chin. That at least means that problems do not fester for ages—a lesson Japanese bank regulators could usefully have learnt eight years ago.
