

**Bruce I. Jacobs, Co-Founder and Principal of Jacobs Levy Equity Management in Roseland, New Jersey and an expert in quantitative equities, reviews the new reports on controlling systemic risk from hedge fund activities and argues the case for enhanced disclosure by hedge funds and their counterparties.**



## Why hedge funds need to be kept in check

REMEMBER last summer? The Russian debt default? Chaos in emerging markets? The Long-Term Capital Management (LTCM) hedge fund plummeting to earth like a defective rocket, threatening to ignite a veritable arsenal of banks, securities dealers, and lesser hedge funds?

The reports on those exciting times are now appearing. They include the Basle Committee on Banking Supervision's Banks' Interactions with Highly Leveraged Institutions (January 1999), the President's Working Group report on Hedge Funds, Leverage, and the Lessons of Long-Term Capital Management (April 1999), and the Counterparty Risk Management Policy Group's Improving Counterparty Risk Management Practices (June 1999).

Hedge funds represent only a small portion of the investment field. As of mid-1998, hedge funds controlled up to \$1tn in total assets, compared with over \$13tn in the hands of commercial banks, private pension funds, and mutual funds. But, as all these reports agree, hedge funds can have outsize impacts on public markets.

As I recount in my new book, "Capital Ideas and Market Realities: Option Replication, Investor Behavior, and Stock Market Crashes" (Blackwell), LTCM exemplifies the nature of the threat. LTCM specialised in relative-value strategies based on the arbitrage models of LTCM partners, and Nobel laureates, Myron Scholes and Robert Merton. These relied heavily on off-balance-sheet derivatives positions in swaps, futures, and OTC options.

Some of LTCM's futures positions were very concentrated, accounting for more than 10% of open interest and an even more substantial portion of average daily trading volume. Overall, however, LTCM's positions were distributed across a number of countries, various instruments, and about 50 counterparties, creating the illusion of safety through diversification. The problem was, LTCM's positions all rested on one basic prediction - that default spreads and

market volatility would decline. When the Russian debt moratorium set off a flight to quality, LTCM's bets went south.

Faced with massive margin calls, LTCM traded off its most liquid positions, sending shock waves through bond and equity markets. Furthermore, the very possibility that LTCM might default (requiring its counterparties to liquidate positions and collateral in a number of markets) exacerbated price volatility and led to a general reappraisal of credit risk. World markets in late 1998 experienced a credit crunch, with significant cutbacks in capital flows to emerging markets, commercial mortgage markets, and hedge funds themselves.

What can be done to mitigate the dangers posed by hedge funds? The President's Working Group remarks that the "opaqueness of LTCM's risk profile is an important part of the LTCM story" and suggests increased public disclosure of hedge fund activity. It recommends that hedge funds be required to submit quarterly reports, and that these reports provide more meaningful estimates of market risk. The Working Group further recommends that public companies disclose their direct material exposures to hedge funds.

The Counterparty Risk Management Policy Group, representing the investment and commercial banking counterparties of hedge funds, as well as the Basle Committee, focus more on improving creditors' internal credit and market risk management practices. In this regard, all reports note several specific inadequacies in risk measurement that were revealed by the turmoil of 1998.

First, value-at-risk can grossly understate potential market risk and mislead investors because of its reliance on historical data, which tend to downplay extreme events, and on historical correlations, which can mutate when markets are under stress. (Also, as I point out in *Capital Ideas and Market Realities*,

VAR does not take into account the volatility-increasing feedback effects of the type of derivatives-based trading undertaken by LTCM.) We will likely see much more reliance on stress testing in the future.

Second, the collateral posted by LTCM and other hedge funds may have lured counterparty creditors into a false sense of security. For the most part based on current market values and exposures, the value of such collateral can melt away in crisis situations. Enhanced measures of potential future exposure, taking into account the effects of volatility and illiquidity on prices in stressed markets, could ensure that collateral remains adequate and thus reduce the potential for forced liquidation and resulting market destabilization.

Yet relying completely on the due diligence of financial institutions to protect markets from the turmoil created by hedge fund blow-outs seems problematic, especially considering the poor job hedge fund counterparties did in 1998. Enhanced disclosure by hedge funds and their counterparties could help to ensure that due diligence standards are maintained. It would also increase the transparency of hedge fund activities, improving the public's awareness of potential liquidity and volatility problems.

Of course market discipline is the best discipline, as the President's Working Group notes. Despite any disincentives that may have been created by the Fed-chaperoned bailout of LTCM, banks and other counterparties are not giving hedge funds any free passes right now. But, then, the debacle of 1998 is still fresh in our minds. The real test will come with the next bout of market excess, when financial institutions are again tempted to override the bounds of common sense in search of El Dorado.