## Legal **lethargy**

Constraining buy-side institutions to hold only investment-grade securities uses a nearly century-old metric with limited contemporary relevance. **David Rowe** supports one modest proposed reform

Financial regulation has long aimed to limit fiduciaries' risk-taking to appropriate levels. In

particular, for pension and certain endowment funds, this is intended to provide assured long-term income support for beneficiaries. Such funds are often constrained to invest only in investment-grade securities, and the underlying assumption is that such securities constitute a fundamentally low-to-moderate risk position. When the securities in question were basically corporate bonds, this was a reasonable approximation to reality. Today, such an approximation is far from assured.

When bonds were the standard form of fixed-income security, the fundamental source of risk was a default of the issuer and a resulting failure to make interest and principal payments on schedule. The instrument was sufficiently simple that the legally required cash payments from the issuer were well defined and easily understood. But this simple world began to unravel as far back as 1994, during what could be called the 'First Great Derivatives Crisis'.

Investment banks had designed complex structured securities issued by US government guaranteed credit agencies. These carried credit ratings one notch below the full faith and credit of the US government, so they easily qualified as investment grade. All these ratings implied, however, was that the legally required payments on the securities were likely to be met by the issuer. They said nothing about how those required payments might be severely reduced as a result of

floaters designed to allow creation of floating rate tranches, with essentially no principal fluctuation risk, despite fixed rates on the underlying mortgages. In some cases, inverse floaters were leveraged to support floating-rate tranches in multiples of the size of the inverse floaters.

market events. Many of these securities were inverse

The credit ratings of these securities were technically accurate, but they implied nothing about the principal risk embedded in the cashflow contingencies. The attractively high yields on these securities made them easy to sell to unsophisticated investors such as small (and not so small) municipal cash management funds. Rising interest rates in 1994 resulted in massive

Rising interest rates in 1994 resulted in massive losses, most notoriously the \$1.6 billion loss that bankrupted Orange County in California.

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The structured securities featured in the 1994 crisis had no credit risk, as the contractual payments were guaranteed. This was not the case for the non-guaranteed collateralised debt obligations (CDOs) at the heart of the 2007 crisis. Failure to receive 100% of the legally obligated payments on the underlying assets was a clear danger for investors in subprime CDOs. So how much protection did subordinated tranches afford to the more senior tranches, and what was the resulting probability of various tranches being paid out in full?

Many have blamed the credit rating agencies for failing to estimate this probability accurately. However, such estimates relative to subprime CDOs were subject to great uncertainty. Historical data upon which to base the analysis was far from abundant. Furthermore, the rate of growth in the volume of subprime mortgage loans was historically unprecedented and the size of its macro-economic effects was unclear.

Any estimate of the probability of 100% repayment across various tranches was surrounded with considerably more uncertainty than was true for a traditional bond. Currently, however, there is no formal means for a rating agency to attach a robustness indicator to a rating. Demanding that credit agencies attach such an indicator to all ratings would be a constructive step forward. A related consideration is the volatility of any given credit rating. Historical data indicates that credit ratings of CDO tranches are more prone to large downgrades than those for corporate bonds.<sup>2</sup>

A subjective robustness index could well be a valuable indicator of the potential for such large downgrades. If such an index ranged from 1 for highly robust to 5 for highly uncertain, it would be easy to extend portfolio restrictions so investors can only hold investment-grade securities with a robustness index of 3 or better, for example. It would also be possible to set up self-defined portfolio guidelines/restrictions – for instance, investors might be restricted to having no more than 10% of holdings in investment-grade securities with robustness indexes of 4 or worse.

Of course, such a change is only a small step forward. It would not address the issue of relative diversification/concentration implicit in different investments. Subprime CDOs were highly concentrated by being similarly exposed to a downturn in the US housing market. Nevertheless, a small step forward is superior to maintaining the status quo.

<sup>1</sup> Michael Gordy of the Federal Reserve Board has suggested such a step but he emphasises that this is a personal view and does not reflect official Fed policy <sup>2</sup> Berating agencies, Risk September 2007, pages 25–28 (http://www.risk.net/public/showPage.html?page=465516)