

The new market risk challenge

Since the late 1990s, the issue of market risk assessment has been viewed as largely settled. However, a recent statement from the Basel Committee is likely to change this comfortable presumption, writes David Rowe

For much of the 1990s, market risk was the central focus for financial risk management professionals. When the Switzerland-based Basel Committee on Banking Supervision approved the use of internal models for calculating regulatory capital, it set off a flurry of activity. Existing models had to be documented, product and geographic coverage had to be expanded and procedures for recurring back-tests had to be established. All this gave rise to extensive discussions around the relative theoretical and practical merits of different techniques. Market risk was a regular topic on the risk management conference circuit and there were even dedicated conferences that covered little else.

That now seems like ancient history. Once banks received supervisory approval for their internal models, market risk discussions faded fairly quickly. While debate over the strengths and weaknesses of value-at-risk has emerged from time to time, market risk as a 'hot-button' issue seems to have had its day. First, Y2K became an obsession that absorbed untold amounts of resources for what was essentially litigation insurance. Once that crisis passed, credit derivatives began to take centre stage with debates over pricing, hedging and risk management. Dramatically rising volumes, rapid product innovation and the relatively heterogeneous nature of credit risk have kept it in the limelight. It appears, however, that the perception of market risk assessment as a settled issue is about to change.

In July, the Basel Committee released a paper focusing mainly on unresolved issues relating to the calculation of regulatory capital for trading credit risk.¹ These issues include allowable cross-product netting, treatment of double default effects, the short-term maturity adjustment and treatment of failed trades and non-DvP transactions. Tucked in the middle, however, is an 18-page section entitled *Improvements to the current trading book regime*. The document describes several key revisions to Pillar I of the market risk amendment designed "to enhance the risk sensitivity of methodologies for assessing risks within the trading book that are not adequately cap-



David Rowe is group executive vice-president for risk management at SunGard Financial Systems - Europe. Email: david.rowe@risk.sungard.com

tured in the current capital regime".²

The main issues addressed in this section fall into four broad categories:

- a renewed focus on event risk and the need for stress testing;
- concentration and related liquidity risk;
- the increasing importance of new factors such as correlation and skew risk;
- capturing the specific risk and potential sudden default implications of credit-risky underlying instruments.

This appears to be the opening salvo in what is likely to be an extended debate over necessary upgrades to internal market risk models.

Talk about integrating market and credit risk has been around for almost 10 years. Integration of the underlying market and transaction data certainly has both theoretical and practical value. Nevertheless, the general illiquidity of many sources of credit risk had made meaningful analytic integration unrealistic. Over the past five years, however, market forces have made well publicised inroads into the area of credit risk. Liquidity has expanded dramatically in the credit default swap market; nth-to-default basket structures have become commonplace, and collateralised debt and loan obligations are now a widely applied credit risk management tool for major banks.

The effect of all this has been to move a great deal of credit risk out of the bank-

ing book and into the trading book. Despite this, banks have made little progress towards incorporating specific risk – such as credit quality – into their VAR models. They have preferred to live with the specific risk surcharge prescribed in Basel I rather than devote the time and resources needed to incorporate specific risk explicitly.

In light of the increased importance of specific risk in the traded assets of most banks, the Basel Committee appears ready to force the issue. The option to model VAR without reference to specific risk, provided the result is multiplied by four instead of three to arrive at the associated regulatory capital amount, is being removed. Instead, a 3x multiplier must be applied to both general and specific risk.³ Clearly, both components must be treated explicitly, although such treatment may be incorporated into a unified VAR model.

In addition, banks must estimate an appropriate capital charge for the risk of sudden default that is "incremental to the risk captured in their VAR-based calculation (ie, default risks that are not captured in the historical spread data of the VAR model)".⁴ As in the case of the advanced measurement approach to operational risk, the Committee has left it open as to how incremental default risk is to be estimated. It "may be part of the bank's internal model or a surcharge from a separate calculation... all approaches will be subjected to a soundness standard comparable to the IRB-based approach for credit risk... adjusted, where appropriate, to reflect the impact of liquidity, concentrations, hedging, and optionality".⁵

In this remarkably low-profile release, the Basel Committee appears to have opened a real Pandora's Box. Assuming they follow through with these proposals, market risk is destined to reappear at the centre of the debate over risk management methodology. ■

¹ Basel Committee on Banking Supervision, *The Application of Basel II to Trading Activities and the Treatment of Double Default Effects*, July, 2005, available at www.bis.org/publ/bcbis116.pdf

² *Ibid*, page 63, para 264

³ *Ibid*, page 67, para 285

⁴ *Ibid*, page 67, para 286

⁵ *Ibid*, page 67, para 286