ERISK COMMENTARY

The Risks That Regulators Dare Not Name

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In the lead article in this month's ERisk Report we examine how efficiently Basel II captures the risk arising out of individual bank credits. But the extent to which the new rules capture other bank risks and portfolio effects is also important.

The most obvious "holes" in Basel II are caused by three risks that bank executives deal with as part of their working life, but that are simply ignored by Pillar I of the new rules:

- interest rate risk;
- liquidity risk; and
- business risks.

Interest rate risk is usually defined as the exposure of a bank to changes in rates or the shape of the yield curve. Taking this risk might seem an activity better suited to hedge funds than banks. But many banks take interest rate risk as a way of re-employing excess capital if regulatory capital exceeds economic capital. Under Basel II, interest rate risk will continue to be an important "relief valve" for differences between regulatory and economic capital.

Liquidity risk is the danger that a bank will fail to meet its immediate funding needs despite being solvent (in the sense that assets exceed liabilities). Defined as such, assigning risk capital to liquidity risk is very difficult. Nonetheless, assigning no regulatory capital at all may tempt banks to bear more liquidity risk to pick up additional yield.

The regulators' failure to include business risks is curious in light of the Accord's much-trumpeted inclusion of a charge for operational event risks. In many banking lines, business risks such as fluctuations in volumes and margins are more important than operational event risks. Leaving out these risks means that businesses "heavy" in business operating risk continue to gain an unfair advantage under Basel II, compared with businesses heavy in credit risk.

Aside from those risks that have simply been left out, there are some important problems in how the credit risk capital requirements in Pillar I attempt to capture portfolio effects. In particular, the correlations embedded in the Internal Ratings-Based (IRB) risk-weight function seem rather high, especially for retail loans, when we compare them to real-world experience. The Basel Committee has made the bold assumption (without empirical evidence) that correlations decrease as probability of default increases, which dampens capital requirements for riskier credits. For sub-prime retail credits this clashes with joint regulatory guidance issued in 2001 in the US that requires much greater capital.

Meanwhile, mechanical features of the regulatory capital formulae are applied inconsistently across products. For example, unsecured personal loans attract regulatory capital intended to cover both Expected Loss and Unexpected Loss. But regulatory capital for credit cards (which exhibits an entirely different set of correlations) will cover only 10% of the Expected Loss.

Likewise, while the capital factors governing the capital requirements for commercial loans are sensitive to maturity, this is not so in the case of retail loans (or small business loans treated as retail loans on a "pool basis"). It's easy to envisage some strange pricing discontinuities around certain key size thresholds, becoming pronounced as maturity increases.

But by far the most glaring problem with the IRB framework is the way it fails to reward the diversification of risks. The initial release included a cumbersome "granularity adjustment" (now, in some sense, moved to Pillar II) which addressed obligor-level diversification, or lack thereof, in corporate portfolios. In reality, many more significant and unrewarded sources of diversification exist between: asset classes (eg, retail vs. corporate); subportfolios (eg, industries and/or geographies); and risk types (eg, credit risk vs. operational risk).

The result is that the IRB approach does not particularly penalize a bank that puts all of its money into a single loan, relative to a bank that carefully constructs a well-diversified loan portfolio and a well-balanced mix of business. Yet bankers recognize intuitively that diversifying risks offers improved risk-adjusted returns for shareholders.

For this and other reasons, it's essential that decision makers at banks take into account the economic risks and rewards that Basel II ignores. A handsome return on regulatory capital does not mean that a bank should plunge in.

Luckily, as we discuss in our main article this month, the answer to this problem is provided in the supervisory element, or Pillar II, of the new regulations. Here, banks are told they must improve their decisions by employing a robust economic capital model that takes into account the full range of their risks.

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