A major improvement

In May David Rowe wrote that the Basel Committee 'could do better' with respect to the inclusion of op risk in the capital Accord. Here he says the working paper the committee published in late September outlines a major and valuable improvement in the proposal

Venturing into the operational risk arena was bound to be messy and, in many respects, unsatisfying. The term encompasses a wide range of disparate risk sources, making quantification difficult, as there is disagreement over what constitutes an operational loss versus some other type of loss. For example, what if a hedge position is booked incorrectly due to human input error and the resulting open position results in a market loss? Is this an op risk loss or a market risk loss? Actually it is both. Of course, this raises the need to distinguish this type of market loss from those where a trader just guesses wrong. Even with a careful definition of what constitutes an operational loss, the irregularity of such events is an obstacle to systematic and consistent data gathering.

In the face of these obstacles, it is tempting to fall back on a macro as opposed to a micro approach. This was the path taken by most early implementations of risk-adjusted return on capital (Raroc), where op risk was based on judgmental parameters (usually arrived at through negotiation) applied to activity indicators. These activity indicators might be more or less disaggregated by type of business or type of activity or a combination of the two. Most importantly, this approach didn't address the details of the operational process and did not offer any direct incentives, in the form of reduced capital requirements, for implementing less error-prone procedures or improved risk controls.

In their initial operational risk capital proposal, the Basel Committee followed this macro approach. Its basic and standard approaches were distinguished by differing degrees of disaggregation by business line and activity type. An internal measurement approach was also proposed whereby the probability of an event (PE) and the expected loss given an event (LGE) per unit of the exposure indicator would be based on a bank's internal loss data. A fixed multiplier (gamma) would then translate this into the level of unexpected loss. Finally, a loss distribution approach was proposed wherein the entire distribution of losses for each business line/risk type combination would be estimated. This would eliminate the need for a gamma factor to translate from expected to unexpected losses, since these would be implied by the loss distribution. But in the original proposal, it was stated flatly that "correlation effects across the cells are not considered in this approach". It was also said that the committee did not envisage "that this approach will be available at the outset of the New Basel Capital Accord".

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A constructive revision

After comment from a variety of sources, the risk management group of the Basel Committee on Banking Supervision consulted extensively with industry representatives. This spawned a major improvement in the op risk capital proposal. The first indication of the committee's revised thinking is contained in a working paper published on September 28.

The headline revision is a 40% reduction in the target level of op risk capital. The original estimate of 20% of risk-based capital was based on a preliminary quantitative impact study. It was universally agreed by the banking community that this would result in an aggregate increase in required capital, which was contrary to the committee's own stated goal. Hence it would have been surprising if this had not been revised.

I think the structural changes in the proposal will also have a significant long-term impact. The committee clearly took to heart the criticism that a macro approach offers little or no behavioural incentive for innovations to reduce op risk. Even the internal measurement approach and the loss distribution approach rely on historical loss data that accumulates slowly over time. As a result, innovations with an immediate risk-reducing impact could take five years or more to generate a meaningful reduction in required capital.

In the revised proposal, the committee defines a broad 'advanced measurement approaches' category. Under this heading they include the earlier internal measurement approach and the loss distribution approach. In the latter case, they are significantly more open to some recognition of the impact of diversification across specific op risk sources. This is a welcome change, since otherwise this effect is bound to be reflected in calibration of the appropriate confidence level to draw from the individual distributions. Such an approach favours riskier mono-line entities over their more diverse multi-line counterparts.

But the most significant change is the inclusion of forward-looking scorecard approaches among the potentially acceptable internal capital estimation methods. The committee insists that such approaches "must have a sound quantitative basis, with the overall size of the capital charge being based on a rigorous analysis of internal and external loss data". This specific requirement has been criticised by many industry analysts and will be the focus of continuing debate. Even as stated, however, it opens the way to important incentives for process improvement. For example, assume a fully automated order processing system has demonstrated the ability to reduce operational errors and resulting losses in existing installations. A bank could use this external loss experience to justify a nearly immediate reduction in op risk capital by implementing such a system. This represents a powerful financial incentive for banks to begin catching up with the industrial heartland in the area of operational quality control. The committee is to be commended for seeing the value of such incentives and for laying the groundwork to make them effective. ■