Basel's flawed paradigm

The proposed new Basel Capital Accord is a major improvement on the existing framework. Nevertheless, argues David Rowe, it reflects an obsolete definition of capital adequacy. Here, he proposes an alternative paradigm for consideration

The newly proposed Capital Accord released by the Basel Committee on Banking Supervision (the Committee) is undoubtedly a major advance over the present regime. The current rules have only a tenuous relationship to the risk – and hence the capital requirements – of banks. The new proposal reinforces the trend away from a one-size-fits-all approach to regulation, and credit risk capital can be calculated using an Internal Ratings Based (IRB) approach as an alternative to a simple standardised method.

The IRB Approach also recognises important differences in how to model the risk of large corporate exposures versus retail and residential mortgage credits. And it includes special treatment for risk mitigates like collateral, guarantees and credit derivatives.

But despite all the commendable advances in the current proposal, there is a nagging void at its core. This is the failure of the Committee to state a clear rationale for why capital is to be held in the first place, or to provide a well-defined criterion for what constitutes a minimum acceptable level. The only apparent ground rule seems to be that minimum capital is 8% of (risk-adjusted) assets. This is most obvious in how the Committee arrived at the initial parameters for operational risk capital. Their discussions with banks using internal economic capital allocation methods indicated that operational risk accounted, on average, for 20% of such internal requirements. The expectation seems to be that reduced credit risk capital will be required when more advanced forms of analysis are employed. The operational risk capital charge is intended to keep the average required capital levels constant. But why is 8% of assets the "right" amount of capital?

An alternative paradigm

Capital is obviously necessary as a buffer to absorb unexpected losses. The degree of uncertainty surrounding unexpected losses relative to the amount of capital to absorb them determines the likelihood of an organisation defaulting on its obligations. Presumably, the ultimate criterion determining regulatory capital requirements is a maximum acceptable likelihood of bank failure. A reasonable interpretation of regulators' intentions is that they want banks to maintain, at worst, a minimum investment grade credit rating.

For a traditional banking operation, earnings are driven primarily by the interest rate spread between loans and deposits. The biggest threat to this stream of earnings is an unexpected surge in credit losses. In this context, earnings volatility is closely related to the size and quality of a bank's assets. Such considerations clearly lay behind the original 1988 Basel Accord benchmark for regulatory capital equal to 8% of risk-adjusted assets.

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But even in 1988, banks had begun venturing into non-traditional activities such as forex and swaps trading. These were shoehorned into a capital/asset framework where they didn't fit. With the introduction of market risk capital requirements, it was necessary to concentrate directly on potential losses. Here again, however, an imputed risk-adjusted asset was backed out of the capital requirement to maintain the traditional paradigm.

By the end of the 1990s, the capital/asset framework was being strained by more than the growth of fee-based and trading activities. Credit derivatives and related forms of credit risk transfer became increasingly important. This introduced a revolutionary new reality into the banking world, namely the ability to short credit risk, quickly, easily and anonymously. Such instruments disrupt the core of a capital/asset perspective. What is the relevance of asset size and quality when offsetting positions may neutralise much of the potential risk?

These changes have not gone unnoticed by the Basel Committee. Much of the growing complexity of the regulatory capital rules concerns how to handle these continuing innovations. The problem, it seems to me, is that such treatments are forced into a capital adequacy framework that grows increasingly obsolete.

Focusing explicitly on unexpected losses would concentrate attention on the reason for holding capital in the first place. It would also highlight the fact that controlling default risk at the enterprise level is the central objective. Unexpected loss is also a concept directly applicable to the full range of banking activities, whereas the capital/asset framework is not. Such a focus further raises questions about many details of the proposed capital Accord.

The Committee clearly understands that unexpected loss is the central issue. But in many places, elaborate analysis is devoted to developing expected loss models, then unexpected loss (or the associated capital allocation) is a fixed multiple of the expected loss. These multiples can reflect different ratios of expected and unexpected losses for different business lines. But it would be valuable to be explicit about the assumed loss distributions and associated percentiles that are the basis of these multipliers. This would provide a consistent rationale for the regulators' choices across business lines. At various places in the proposal, the Committee encourages increased transparency to strengthen market discipline. While I agree with this recommendation, additional regulatory transparency would also be healthy.

Aggregation

Finally, an explicit unexpected loss perspective would force consideration of how to aggregate risk across multiple activities and business segments. Here the proposed Accord is woefully weak. Throughout the proposal, the approach is to calculate unexpected losses and associated capital requirements at finer and finer levels of detail. Generally, however, these capital requirements are then aggregated by simple addition. (The one exception is a rather elaborate "granularity adjustment" permitted in the IRB credit risk capital calculation.)

Additive aggregation is only appropriate if all the risk contingencies are perfectly correlated, which is clearly not the case. The upshot of such an approach will almost certainly be to moderate the detailed capital requirement multipliers as compensation for the overly conservative aggregation procedure. This will tend to understate required capital for narrowly focused institutions relative to those that are more broadly diversified.

The new Accord is an important advance over current regulations. It clings, however, to an already obsolete capital/asset framework for judging capital adequacy. An explicit focus on unexpected loss at the enterprise level would be a much superior paradigm for this discussion. It would bring regulatory capital calculations closer to the best practice approach used for internal allocation of economic capital. It could be applied consistently across all the rapidly evolving areas of banking activity. It would clarify the issue of appropriate aggregation methods across business lines. Finally, it would force regulators to be more explicit about their assumptions and goals in this whole exercise. Unfortunately, the last benefit may also be the reason it is unlikely to happen. ■