Regulators double down

It might be argued that trying to formulate a reliable quantitative estimate of extreme, low-probability tail risk for banks is futile. If true, this raises serious questions about the wisdom of developing a more complex Basel III capital framework, argues **David Rowe**

Despite the difficulty we all experience dealing with complexity – especially new and untested forms of complexity – most of us feel the benefits far outweigh the costs. Sometimes, however, complexity can outrun the safeguards designed to limit its adverse side-effects. In such instances, the unintended negative consequences can be dramatic. In one sense, the painful financial and economic upheaval of the past three years can be traced to unbridled complexity outrunning the ability of both public and private organisations to control it effectively.

> Sometimes, complexity serves only narrow, selfish ends while creating consequentially injurious knock-on effects. In other cases, complexity might have worthy primary goals but breeds little-understood dangers. I have reluctantly come to the conclusion that regulatory capital rules fall into this latter category.

> The Basel I capital framework was rushed into place in about two years prior to 1988. It was primarily motivated by a perceived insufficiency of bank capital ratios that had stagnated (at round 6% in the US) since the recession of 1974–75. In essence, Basel I had a very simple and uncomplicated prime directive: raise bank capital ratios. All other considerations were secondary to this primary goal. This allowed the initial framework to be formulated and implemented in little more than two years.

> Discussion of Basel II began within a year of Basel I going live. In formulating it, regulators faced an arguably insurmountable task of reconciling two competing objectives: meeting the desire for greater risk sensitivity preserving a level playing field across institutions of differing characteristics and locations in a framework of broadly compatible rules.

> > Unfortunately, the dramatic differences among small and large institutions made a single uniform capital assessment framework unworkable. The necessary compromise was a three-level regime, with inevitable inconsistencies and possibilities for regulatory arbitrage.

Underlying all this, however, was an even more fundamental problem. A primary concern of regulators is the preservation of deposit guarantee funds. It is outright bank failures that threaten these funds and may potentially result in subsequent economic hardship. Losses short of default are primarily a private concern, except insofar as they raise

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the risk of an eventual default. Assessing the amount of capital necessary to prevent default requires an analysis of the extreme left tail of the profit and loss distribution. Most of the techniques deployed to do this involve distributional analysis, which applies statistical techniques to the available data to derive estimates of the parameters of a stochastic process. If there is one lesson we have learned from the Great Recession, however, it is that exhaustive study of the middle 99% or even 99.99% of a distribution does not provide a reliable guide to how things behave deep in the tail. What appear to be extreme tail events are typically the result of structural regime changes. Trying to assess the likelihood of such extreme events is simply beyond the capability of distributional analysis.

Assuming I am right in this claim, it raises a serious question about the wisdom of attempting to formulate a Basel III capital regime. Markets have become dramatically more complicated since the Basel II debate started. Credit risk has become a widely traded commodity and the old distinction between market risk and credit risk has been effectively obliterated. The feasibility of establishing a reliable means of estimating extreme tail risk would be questionable in a comparatively stable world. In fact, we face a world characterised by global political uncertainty, continuing innovations in capital markets and a regulatory regime that is necessarily constrained by the need for deliberation and dialogue so essential for open democratic governance. In this environment, believing a reliable tail risk estimation scheme can be established and then maintained in the face of rapid innovation strikes me as a triumph of hope over experience and common sense.

So what is to be done? I believe the best way forward is to return to reliance on much simpler (and, yes, less risk-sensitive) measures of capital adequacy combined with structural reforms that eliminate too-big and too-complexto-fail institutions. I would prefer to avoid an anti-trust style break-up of the largest banks, relying instead on rapidly escalating capital requirements as banks grow and become more systemically risky. I know it will be argued there is no easy and objective way to establish the systemic impact of any given institution. I don't dispute this, but we face similar dilemmas all the time in public policy. The objective, however, should be clear: any institution that is permitted to exist should be structured in such a way that if it is permitted to fail, the secondary damage to society at large is acceptably small. Only reinforcing the fear and consequences of failure in the very fabric of financial institutions will offer hope that risk will be better managed in the future than it was leading up to the sorry experience of the past three years.