

# Don't count on buffers

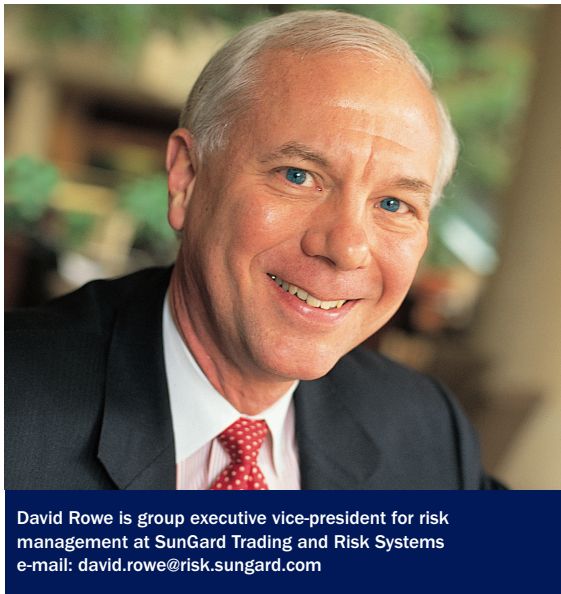
One possible mitigator of the pro-cyclical impact of risk-sensitive capital requirements would be counter-cyclical changes in capital buffers. Empirical evidence on this issue is scarce and a new regulatory capital regime could well induce a behavioural change. Nevertheless, David Rowe argues that relying on counter-cyclical capital buffers to neutralise the impact of pro-cyclical capital requirements is risky at best

Most of the discussion surrounding the pro-cyclical implications of risk-sensitive regulatory capital rules has focused on required capital. Naturally, however, few institutions hold just the bare minimum capital required by regulators. To do so would subject them to undesirable regulatory and market sanctions should an unexpected shock push their capital below the minimum. This raises the question of how capital buffers (the excess of actual capital over the minimum regulatory requirement) behaves over the business cycle. If banks build up such buffers in an expanding economy and allow them to fall during recessions, this could offset the impact of pro-cyclical changes in minimum regulatory capital.

One of the most intractable challenges to the empirical social sciences is structural change. History unfolds within a certain context, and analysing it to predict behaviour in a different structural setting is very risky. In the problem at hand, past behaviour of actual capital levels was in the context of the Basel I capital rules, which are only mildly pro-cyclical. More risk-sensitive and more pro-cyclical capital requirements could well change banks' attitudes toward capital buffers.

In addition, identifying the impact of business cycles on capital buffers requires isolating other relevant considerations such as the cost of capital, the impact of an institution's size and ease of access to capital markets, and idiosyncratic differences of management risk appetite between otherwise similar institutions. All these considerations argue for treating any conclusions based on empirical analysis of historical data with caution. Nevertheless, one study of capital buffers in the Spanish banking industry is suggestive.

A study of the behaviour of capital buffers was conducted by three analysts at Banco de España.<sup>1</sup> The authors evaluated annual data from 1986 through 2000 using standard econometric panel data techniques. They constructed an equation



David Rowe is group executive vice-president for risk management at SunGard Trading and Risk Systems  
e-mail: david.rowe@risk.sungard.com

for capital buffers over time and across institutions that reflected the cost of capital, non-performing loan ratios, size of institution, an institution-specific dummy variable to capture general differences in management style and the annual growth rate of GDP.

As expected, capital buffers are negatively related to the cost of capital, the level of non-performing loans and to a dummy that isolates banks in the largest 10% of the sample. They are positively related to a dummy identifying banks in the smallest 10% of the sample.

Most interestingly, capital buffers are negatively related to the growth rate in GDP. That is, capital buffers tend to fall in periods of rising GDP and rise when GDP falls. In effect, this study points to capital buffers being pro-cyclical, not counter-cyclical. As indicated earlier, these results must be interpreted with caution. Nevertheless, they are not encouraging with respect to concerns about the pro-cyclical impact of risk-sensitive capital requirements.

Some have argued that the wide adoption of improved credit analysis induced

by Basel II will significantly mitigate the credit cycle. In retrospect, it is always easy to see what banks should have done to manage the credit cycle more effectively. Credit standards need to be raised, and credit extensions restricted, before the economy peaks and turns down. That reduces the pressure of growing assets on capital ratios late in the cycle. It also minimises bad debt losses during the downturn that erode capital. Unfortunately, this is much easier said than done.

First, it is never clear when the economy will reach a turning point. Many times there are credible predictions of a downturn for two to three years before one actually arrives, as was the case in the late 1990s. Recall that Alan Greenspan's "irrational exuberance" comment was made in December 1996 and the stock market didn't peak until March 2000, more than three years later.

Second, competitive forces inevitably drive any business to try to build market share during a boom. Banking is no exception. Once again, Alan Greenspan articulated the point best in a speech made in May 2002. He said: "History instructs us that, during recoveries and booms, risk discounts erode as the level of optimism lowers the barriers to prudence. Even those lenders less inclined to reach for more risk-laden proposals are driven to maintain their share of the rising credit flow, if not to increase it."<sup>2</sup>

Periodic fluctuations in business activity have proven to be an inevitable feature of market economies. In effect, such fluctuations are the price of faster long-term economic growth and improved standards of living induced by competitive forces. Expecting improved credit modelling to result in banks avoiding future credit cycles is a triumph of hope over experience. ■

<sup>1</sup> J Ayuso, D Pérez and J Saurina, Are capital buffers pro-cyclical?, April 2002, Banco de España

<sup>2</sup> A Greenspan, Cyclical and banking regulation; remarks at the conference on bank structure and competition, Federal Reserve Bank of Chicago, May 10, 2002