ERISK COMMENTARY

Why Benchmark Capital Factors Get Failing Marks

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It's a simple idea: banks hold capital to absorb unexpected losses from the risks they take. The greater the risks, the more capital the bank requires if it is to attain a given solvency standard.

An important implication of this is that, throughout the bank, capital should be attributed to products and services based upon their risk. This "economic capital" attribution acts as a kind of "risk currency" and makes sure the bank is compensated for taking each risk: the more risk, the more economic capital, and the higher the required return on the deal.

For regional banks, benchmark capital factors are a tempting shortcut to the labor involved in developing such a "bottom-up" economic capital model. But benchmark capital factors miss the point of attributing capital in the first place.

Benchmark capital factors aren't based on the particular risks taken by a bank. Instead, they are a "top-down" way of guessing at the risk capital your bank requires. Conceptually, this approach is a slightly evolved version of the one-size-fits-all "8%" rule from the 1988 Basel Capital Accord.

Typically, the benchmark factors are borrowed from a bank that has performed a proper bottom-up analysis of its portfolio, or obtained from consultants who have performed some sort of risk capital analysis for a number of banks. The factors might be differentiated by broad asset classes, and by rating within some asset classes.

The problem is that any benchmark approach assumes your bank is, in certain ways, identical to the benchmark. But regional banks can't simply be viewed as scaled-down versions of the larger, internationally active banks that tend to be the source of much of the capital factor benchmarking data. They are attractive to investors precisely because they are unique. They offset the economies of scale available to larger banks by exploiting niche markets, building strong customer relationships, and understanding regional economies and collateral values.

As a result, key risk factors such as credit ratings don't mean the same thing from bank to bank. Different underwriting criteria mean the probability of default associated with each regional bank's credit rating is tricky to relate to the benchmark – even if a lot of time is spent "mapping" the rating scales to benchmarks.

Benchmark capital factors also cannot easily capture the effects of different facility structures – collateral amount and type, undrawn commitments, term, covenants, etc. Good lenders expend huge effort structuring facilities to mitigate their bank's risk; if capital is insensitive to their key risk drivers, then lenders' incentives to do the right thing will be weakened.

And because some industries and regions are much more cyclical than others, it's also difficult to know how the concentration risks in a regional bank portfolio are related to any benchmark data. Benchmark capital factors are very likely to attribute too much capital to an industry segment (if the benchmark bank concentrated its lending in that segment) or too little (if the regional bank happens to be unusually active in that segment). Worse still, benchmark capital factors will prove insensitive to any rise in portfolio concentration over time.

The economic capital approach avoids these problems because it calculates risk directly from the attributes of the deals that enter the institution's unique credit portfolio: probability of default by rating, recovery rates according to facility characteristics, and concentration risks according to the portfolio's composition.

Without this differentiation, the bank cannot tell whether it is pricing properly for its risks or where it is creating value for shareholders. Indeed, using a loan-pricing tool based on benchmark capital factors can be a worse option for your bank than simply following local market pricing, as inaccuracies that lead to underpricing will actively attract uneconomic business.

Because of the weakness of top-down benchmark factors, the Fed has gone so far as to specifically discourage the approach for big banks: examiners are instructed to be wary of any approach that focuses narrowly on allocated capital and consequently may be "unable to meaningfully aggregate the allocated capital across business lines and risk types" (SR99-18).

Benchmarks have a role to play in measuring economic capital for regional banks, but not as capital factors. Benchmark parameters at a very granular level (eg, recovery rates by collateral type) require less troubling assumptions about comparability and can accelerate the deployment of a proper model of economic capital. Benchmarks might also be useful as a "sanity check" on the results of economic capital models.

Meanwhile, the trouble and cost of implementing the real solution to the problem – an economic capital model – is falling fast. Nowadays, regional banks might even find it quicker to implement an economic capital model than to agonize over the relevance of benchmark capital factors.

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