Defining risk tolerance

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Consider that there are only four answers available: high, medium, low, or not applicable. Risk, like beauty, is in the eye of the beholder. So what's the criteria? Your own judgment? Regulatory guidance? Guidance from senior management? Or a strict definition of risk tolerance as approved by your board of directors?

Starting from the end of the list, board involvement with the "risk tolerance" definition is seemingly rare, at least in my experience with community banks. Guidance from senior management generally echoes regulatory guidelines with ambiguous language such as:

high = significant customer, earnings or compliance impact;
medium = some customer, earnings or compliance impact; and
low = minimal customer, earnings or compliance impact.

This qualitative guidance leaves us with the fall-back alternative – your own judgment!

If you're managing a community bank, it's not like the question doesn't come up regularly; IT risk assessments, GLBA risk, BSA risk, business continuity risk assessments, enterprise risk, and for some, SOX and/or FDICIA risk assessments. Here's a recommendation. This question is a great agenda item for board strategic planning. If the board defines risk tolerance once and for all, in an unambiguous manner, all managerial risk assessments have a solid and consistent foundation.

Here's an approach. First, if there is no risk for a given banking process, so state. It's OK. Really! "N/A" is indeed an acceptable outcome of your risk analysis; in fact, determination of risk-or-not is an important starting point. Then, rather than getting stuck in the "significant-some-minimal" conundrum, look to a financial measure.

I suggest that all risk factors may be connected to an eventual dollar outcome. Take, for example, the ever-popular reputation risk. If a computer breach at the bank resulted in erosion of customer confidence, just how many accounts, or more importantly, how many relationships might you lose? And if you lost 100 relationships, for example, is the financial implication dire? Probably not; a short-term FHLB borrowing or brokered CD might easily cover the short-term deposit down-tick. Might the bank be embarrassed in the community and might someone lose their job? Of course. But our risk assessments should look to disastrous impacts on the bank as a whole, and such focused analysis may not result in quite the "high" risk that our emotional judgments may indicate.

Defining risk using a financial measure is unique to each bank's situation. Following is a discussion of the pros and cons (and applicability) of two approaches.

Capital ratio erosion

Let's consider erosion of the equity capital ratio as the foundation for a financial risk definition. Posing the risk question in terms of "how many basis points of our capital ratio might we lose before we [the board] consider a situation to be dire?" "Dire", in this case equals high risk. The bank's asset size and relative capital ratio allows us to calculate a loss factor, complete with tax–cushioning implications.

By way of example, consider the following. As of 9/30/06, nine community banks in New England (excluding de novos and one major player) had capital ratios in excess of 20%. In fact, the "nine" average 24.38%, with an

average asset size of $383 million. Rounding this grouping to $400 million at 24% capital, let's define our risk tolerance as follows. If an event causes our capital ratio to fall below 20%, let's consider that loss level as our "high" risk definition. We would need our "event" to result in a financial loss of $26.67 million, mitigated, at a 40% assumed tax rate, to impact our capital by $16 million. By all measures, a remaining 20% capital ratio is exceedingly healthy and this analysis seems to indicate that the "nine" are risk-proof.

But now let's talk about a different reality, addressing the majority of our institutions and take as our example a $400 million community bank with a capital ratio of 8.50%. Might we not (as a board) define a major, high-risk event in terms of an 8.00% capital target? Our after-tax loss event tolerance therefore would be only $2 million; a pre-tax event of $3.33 million. And now, scaling downward to a $100 million asset-size, 8.50% capital ratio institution, our tolerance becomes $500,000; $833,333 pre-tax. For the $100 million bank, we might reasonably define high risk with an $833,333 threshold, and then perhaps describe "medium" as a 25 basis point change ($416,667 to $833,333 as medium), and then predicted losses of less than $416,667 would be classified as low risk. Stock banks would of course need to include a market value impact prediction in this financial analysis as well.

When viewed this way, the thresholds for high-medium-low seem higher than we might have otherwise presumed. I would emphasize that risk assessments are performed for a reason; to serve as the "qualifier" for additional analysis, audit and control. The risk assessments should take the long view, and not get lost in one-year's bottom line effect. When assessing risk, we are performing a health check, and looking to mitigate the disastrous rather than unfortunate "thing"; when assessing risk, we're trying to get at the essence of what could go wrong that could produce dire consequences.

Erosion of Return on equity

Approach number one may make sense for many institutions. In fact, most of my client banks have adopted capital erosion as the measuring stick. The problem with the capital erosion approach hinges on size and relative capital strength. The example of nine New England banks as risk-proof begs further examination of the issues, because how would those banks define risk in financial terms? How about erosion of return on equity?

Strategic plans, forecasts, budgets, market projections and performance targets all use financial measurements; ROA, ROAA, growth, efficiency ratio, ROE, etc. Erosion of, or missing-the-mark with respect to any of these ratios have real impacts on stakeholder confidence, regulatory safety and soundness, and performance bonuses, for example. The one ratio that incorporates most of the success factors is ROE, since it measures profitability against the institution's relative strength and size by way of equity value.

Let's use the aggregation of our nine equity-rich banks. Our "presumptive" bank is $400 million in asset size with a capital ratio of 24% ($96 mil.). Let's assume that the earnings environment du jour enables an ROA of 1.00% ($4 mil.), resulting in an ROE of 4.17%. Might we not then define our risk tolerance based on a target ROE? Let's play it out.

Expecting 4.17% as the current year's ROE, let's assume that our board has decreed that any event (or aggregation thereof) that reduces our ROE to less than 4.00% represents high-risk. Calculating the dollar value of such a definition is based on a 17 basis point erosion of our ROE; $163,200 after-tax; $272,000 pre-tax. My alleged managerial judgment tells me that the measure of "high" is much too tight; a $163,200 event for a 24% ($96 mil.) capitalization is merely a ripple in the pond.

Let's expand. How about a target threshold of 3.00%? Calculating the dollar value of a 1.17% erosion of our ROE defines high risk as $1,123,200 after-tax; $1,872,000 pre-tax. Too high a threshold? Perhaps. How about 3.50% as the ROE threshold? High risk = $643,200 after-tax; $1,072,000 pre-tax.

The point here is that a thoughtful calculation, although it still involves managerial judgment, creates the common risk tolerance definition for enterprise risk analysis. Perhaps a bank needs to adopt the papa-bear/ baby-bear /mama-bear, too-big/ too-small/ just-right approach. The "normal" capital sized institutions would presumably view the analysis in much tighter terms than our sample (the congregation of the nine).

Concluding

Banks that have used a strong process-centric approach to their risk assessment efforts, and that have employed a financial measure have seemingly and interestingly identified fewer "high" risk processes. A thorough process-centric approach with a solid financial measuring stick has also illuminated risks in unexpected areas, while providing comfort relative to the impacts in the more "risky" functions.

This approach is seemingly what the SEC is striving for in its latest guidance relative to Sarbanes-Oxley compliance. In suggesting a top-down risk-based methodology, they are stressing the risk assessment as the "qualifier" for further analysis and audit.

To bankers, a last thought. Akin to the retailer's "you break it, you buy it!", if the board defines it, the board owns it, and as a by-product of a solid risk tolerance definition, accountability gets a better measuring stick. Do the math. First!

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