PROBABILISTIC ESTIMATES IN STRATEGIC PLANNING

by Steve Brown

One of the problems with static rate shocks or forecasts in bank risk management is that they do not give managers information about how likely a scenario might be to occur. What is the probability of rates rising 100bp in the next year, versus not rising at all? Banks expecting rates to rise 100bp in 2010, may be interested to learn that the likelihood of this happening is dropping quickly and rates may actually decline in 2010.

We come from the school of bank risk management that believes it is important for management to articulate a rate view when it comes to strategic planning, in order to better understand how decisions (and the background) are made. Probabilistic forecasting takes things one step further and assigns probabilities to different rate scenarios. These can then be incorporated in budget forecasting and asset-liability management. When these scenarios are combined and weighted as to their probabilities, the methodology provides a single, integrated set of risk estimates banks can manage towards. If you consider a bank's predominate rate view as the "most probable" case, then an important part of contingency planning is for management to understand the probability of the next most likely case. This exercise serves to focus management attention on more important scenarios. A bank will always have loss numbers should rates rise an immediate 500bp in 2010, but is that scenario worth planning for? Should the bank take a lower yield now if a rate scenario has less than 5% odds of occurring? After banks get back from their strategic planning sessions and start to model new initiatives, we suggest running different scenario through an ALM model to better understand strategy.

Later this week, we will go into the details of our economic projection (also in our free "Monthly Asset/Liability Package"), for now, let's say our primary view is not that of the forward curve (which has overnight rates going up 1.25% in 2010, with a time weighted average Fed Funds rate of 0.77%). Our primary rate view, which we place a 60% probability of occurring, is that short-term rates remain unchanged and rates are only 0.50% greater in the 2Y area one year from today. We assign a 25% probability to the path of the forward curve, which has short-term rates going up as previously stated and the 2Y part of the curve going up 1.00%. Finally, we place only a 15% probability of a strong recovery occurring in 2009 (where short-term rates rise 2.50% and the 2Y rises 1.50%).

Notice that our statement outlines what portion of the curve we are talking about and puts a time horizon on the analysis. Advanced banks also add the extra element of forecasting credit spreads, but most banks do not.

Each new strategy can be run separately through an ALM model given each rate view. By multiplying estimated earnings and affect on the economic value of equity with each of these set scenarios and averaging them together (essentially arriving at a weighted average), we can now choose the strategy that gives the best projected return. Rolling out a new mortgage product may outperform all other products if rates remain the same, but it would be disastrous if your bank placed a much higher probability on a sharply higher rate view. The same analysis can be had for a new branch, cash management product, waiving foreign ATM fees, becoming an SBA preferred lender or any number of strategic initiatives. Better still, expanding modeling to include volume, pricing, revenue and expenses, gives management a better understanding of strategy. The downside is that using probabilities of occurrence inserts subjectivity. This is OK, however, since it is better to focus management on high probability events, than to treat all the same, or to focus on the wrong ones. In other words, it is better to be approximate and probably right, than precise and probably wrong.

BANK NEWS

Sweep Disclosure

The FDIC issued a FAQ sheet and provided clarity on sweep rules and disclosures that took effect July 1. To see the clarification, go: http://www.fdic.gov/news/news/financial/2009/fil09039a.html

Silverton Loans

The FDIC released information that it will conduct (through a 3rd party) a bank-only bid for the failed bankers' bank's loan portfolio. Banks will be able to bid on a pools or any one of the 660 individual loans that total $1.2B.

Fees

In 2008, 53% of banking income stemmed from upfront fees on loan origination, overdraft fees, late payment charges and the lot (a 35% increase from 2005). For a bounced check, the average charge is $28.95.

FHLBs

Total 1Q income dropped over 50% to $345mm, accounting for $516mm in mortgage related writedowns. The combined capital for the 12 regional banks declined to 3.65% from 3.81% at the end of 4Q.

Home Foreclosures

Over the past 3Y, home prices have fallen by 1/3 and according to Barclays Capital, values are expected to continue dropping through the whole of 2010 with foreclosures topping off in the latter half of next year.

CA IOU

BofA, Wells and other large banks refused to accept CA State IOUs, citing elevated risk levels. Credit Unions and some community banks have said they may continue to do so.