Tools for Managing Liquidity Risk

New Emphasis on Liquidity Risk:

The FDIC recently issued guidance to underscore the importance of sound liquidity risk management for financial institutions. The regulatory emphasis on liquidity has been building for some time, but has now taken on greater importance in the wake of the recent turmoil in financial markets generally and credit markets specifically. The FDIC states that “Recent disruptions in the credit and capital markets have exposed weaknesses in liquidity risk measurement and management systems. Among other things, specific mention is made of banks that rely on “liability-based” funding strategies or those that have “other complex liquidity risk exposures”. These institutions should use dynamic cash flow analysis to monitor their liquidity exposures and should have contingency funding plans. Considering the fact that most banks today rely at least in part on wholesale sources of funding, this is an important development indeed.

Funding the Bank: A Brief History

For decades, community banking was a process of gathering deposits from households and businesses that held excess cash and making loans to others who needed credit. Depositors were willing to accept a rate of interest lower than the rate borrowers were willing to pay. A variety of changes took place in the early 1980s that were to have profound effects on the business of banking for years to come. Legislation removed intrastate banking restrictions and the deregulation of deposit rates. Competition among banks soared as banks were allowed to go outside of their geographic market to seek deposits. Depositors also found that they had more choices and technological advances allowed for new and more efficient delivery channels. The end result was that core deposits began falling as a percentage of total assets. In the wake of these changes, bankers realized that they would need to explore alternative sources of funding the bank. Today, both small and large banks regularly use wholesale sources and rate-sensitive deposits as part of their funding strategy.

Pro forma Cash Flows

Liability-based funding strategies and reliance on wholesale sources of deposits raise the balance sheet risk profile of banks that do not have adequate tools for monitoring scenario cash flows. These banks need cash flow analyses that simulate multiple scenarios in order to show an institution's projected exposures and potential funding shortfalls or gaps. A good asset / liability management reporting system should incorporate these simulations. This sort of dynamic cash flow monitoring helps institutions to develop forward-looking strategies that work to limit their liquidity exposures. It is also important to report the cash flow projections and exposures to the Board of Directors along with strategies that address significant potential funding shortfalls. As always, the analysis and reporting should make sense for the complexity of the bank’s balance sheet.
Contingency Funding Plan (CFP)

Banks should also develop a contingency funding plan if they do not currently have one. This is a plan which comports with the liquidity risk profile of the institution and lists potential liquidity events which could result in problems. These events may be market oriented and only indirectly related to the bank, or they may involve issues specific to the institutions. Things such as credit or asset quality concerns, falling below a well capitalized position, unexpected asset growth, sudden loss of deposits or funding sources, or other negative liquidity developments. The ultimate effect of any single event should be taken into consideration, and the bank should game-plan alternative strategies in response.

Investments and Liquidity:

Banks traditionally used the investment portfolio as a store of liquidity. This original purpose seems to have faded somewhat as alternative sources of funding became available and widely used. Today, it may make sense for banks to revisit the role of the investment portfolio as a vehicle for managing liquidity. Proper identification of bonds and bond-types that provide reasonably consistent and predictable cash flow, as well as securities that are readily sold in the secondary market is critical. The risk/reward relationship for securities should be viewed with an eye toward liquidity risk. When purchasing a bond or considering alternatives, portfolio managers should take a hard look at the cash flow uncertainty or optionality as well as the underlying price sensitivity.

We know that on any given day, the bond portfolio may receive interest payments or principal payments from matured bonds, call features, or prepayments. Some portfolios have very well defined cash flows because they consist of simple bullet bonds that pay semiannual interest payments and return principal in one lump sum on the stated maturity date. These portfolios don’t always offer much in terms of relative yield, but they are easy to manage. Most bond portfolios, however, are much more dynamic and require constant cash flow analysis.

Scenario Cash Flow Analysis:

From a liquidity management standpoint, the ability to monitor the scenario dynamics of investment cash flows is extremely important. Projected cash flows under the existing rate environment are a necessary starting point, but must be supplemented by additional projections for different rate scenarios. We know that portfolios which contain callable bonds and/or MBS will experience faster cash flows when rates fall and slower cash flows when rates rise. This asymmetry of cash flows and the degree to which those cash flows are uncertain needs to be calculated and reflected in an analytic reporting model.

Another important consideration is the fact that the degree of price sensitivity tends to vary directly with the degree of cash flow uncertainty. In other words, if cash flows are
uncertain and variable, then the underlying value of the portfolio will be similarly uncertain and variable. A portfolio consisting entirely of bullet bonds will have a level of price sensitivity or duration that is more or less constant and predictable. It may be high or low, but it will not experience much variation. Bonds with a high degree of cash flow uncertainty, on the other hand, will also carry a good deal of variable price sensitivity, and this price sensitivity is clearly a liquidity consideration.

Liquidity risk management is obviously important in today’s environment from both a regulatory standpoint and from the perspective of prudent bank management. Having the right processes, tools, and management practices in place will help the bank maintain healthy performance and an optimal risk/reward profile.

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