

Deposit Insurance and the Effective Pricing of Risk

Regulators could mitigate institutions' excessive risk taking by adopting a risk-sensitive approach to pricing deposit insurance premiums. Those premiums would have to reflect the complex risks associated with trading and off-balance-sheet activities as well as traditional credit quality considerations.

BY DAVID M. ROWE

A BASIC PRINCIPLE of economics is that underpricing stimulates demand. A recent example was the huge surge in subprime mortgage lending as banks and nonbanks raced to originate loans for inclusion in the flood of collateralized debt obligations. In the process, interest rates were reduced (admittedly for a temporary term), and longstanding limitations on loan-to-value and income-to-value ratios were relaxed. The point was even reached where NINJA (no-income-no-job-or-assets) loans became a target of Internet humor.

Certainly, the recent episode has been extreme and was justified by a sense that the assets being originated would be held on the books only for a temporary period.¹ Nevertheless, some analysts say that banks have underpriced credit for many years, even—or perhaps especially—when it is expected to be held on the books to maturity.

How have banks been able to price credit so poorly and remain viable? One contributing factor is that the large retail deposit funding of banks is not competi-

tively priced. In part, this pricing is the result of deposit insurance that underpins public confidence in the safety of these deposits. Under normal circumstances, this pricing allows banks to borrow at rates below those that would be consistent with default risk.² Of course, an additional cost of retail deposits is the insurance premium banks must pay to the FDIC.

Deposit insurance is arguably one of the great success stories of modern banking legislation. It has substantially reduced periodic bank runs that proved so disruptive to financial markets and the general economy before it was introduced.³ Like all such successful innovations, however, deposit insurance has its drawbacks. The most serious is the moral hazard that arises when deposit insurance premiums are not sufficiently sensitive to differing risk levels across banks. This encourages excessive risk taking on the part of banks, as the owners reap the upside rewards while avoiding the full impact of downside losses.⁴



Regulators could mitigate such destructive—and potentially costly—behavior with a risk-sensitive approach to pricing deposit insurance premiums. Without such risk-sensitive pricing, bank shareholders benefit from society's willingness (in the limit) to bail out depositors, thereby reducing the return required to attract such deposits.

Despite its importance, setting appropriately risk-sensitive deposit insurance premiums is a daunting task. It is further complicated by the rapid evolution of banking in recent years. Certainly for banks that have an active market-making activity, a comprehensive risk analysis is required. Even many smaller banks, however, have moved toward an originate-and-distribute model, making



their balance sheets far more dynamic than under the traditional originate-and-hold regime. In this context, truly risk-sensitive deposit insurance premiums would require considerably more detailed data-gathering and analysis than is reflected in current practice.

Ultimately, regulators need to develop granular estimates of expected and unexpected losses for each bank based on underlying risk pools and the additional risks associated with trading activities and securitization. This would require:

- New and more detailed data to be collected from financial organizations that goes beyond that available from bank call reports.
- A series of models appropriate for banks of different sizes and compositions.
- An adjustable scale of deposit insurance premiums tied to risk.

In effect, such risk estimates would have to become part of the regular examination process. Practical considerations mean that the complexity of this detailed risk assessment process would vary across banks, based on the potential systemic impact of their failure.

Such risk estimates would require reporting, at least for comparative purposes, of much broader fair-value estimates of both assets and liabilities. Certainly pro forma fair-value estimates for thrift institutions would have provided a beneficial early warning of the emerging savings and loan crisis in the late 1980s. Such estimates, however, do raise many of the same questions that surround proposals to permit wider use of fair-value data for recognition and measurement of financial instruments on official accounting statements.

Chief among the issues surrounding fair-value accounting is the uncertainty around the assessment of heterogeneous assets that often are traded only intermittently, if at all. Beyond that is the question of loss given default and the likely timing of recoveries, which affect both solvency and liquidity considerations. These can create a significant area for dispute between banks and regulators, although there may be a role for external auditors here.

One argument in favor of fair-value accounting is that the current mixed-attribute accounting model creates a conflict between management of GAAP earnings and effective hedging of true economic value. This conflict would be intensified insofar as fair-value-based risk assessments, and corresponding deposit insurance premiums, exist in parallel with the use of GAAP for official financial reporting.

Another point of controversy surrounding fair-value accounting is the treatment of the impact of own-credit deterioration on the value of a firm's liabilities. Such deterioration will obviously result in a decline in the fair value of those liabilities in the market. Recognizing this on the firm's balance sheet, however, would result in a misleading

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increase in net worth (and in earnings, if the impact were allowed to flow through the income statement).

Obviously, this effect would be reversed in any sensible approach to estimating default risk for an institution. If such risk estimates simply treated liabilities at historical cost, however—while most assets were assessed at fair value—there would be a significant increase in the volatility of the resulting earnings and changes in net worth. This volatility could be mitigated by recognizing the impact of interest rate changes and *general* moves in credit spreads on the fair value of liabilities. But that still leaves open the treatment of demand deposits.

It is logical to value demand deposits at face value, given that they are non-interest-bearing liabilities payable on demand. Non-interest-bearing does not imply, of course, that such deposits are without cost. The expense of check clearing, statement generation, and many other operational activities must be recognized. That said, computer technology, economies of scale, and FDIC insurance combine to make demand deposits a financially attractive source of funding. Some have argued that a bank's most important asset isn't an asset at all but rather its subsidized retail deposit base. In addition, the operational cost of demand deposits is largely unrelated to movements in interest rates. As a result, the benefits of this advantageous source of funding increase as interest rates rise. How to factor this consideration into risk-sensitive deposit insurance premiums is a further complication.

The process described for setting risk-adjusted premiums for deposit insurance is closely related to the *internal capital adequacy assessment process* (ICAAP) required for Basel-II-compliant banks. For such banks, supervisors could well start from the ICAAP results and, if necessary, demand some adjustment to the bank's own parameter assumptions. One advantage of this is that Basel-II-compliant banks represent a sizable proportion of total FDIC-insured deposits. A less complicated approach would likely be acceptable for the large number of non-Basel-II-compliant banks given the smaller systemic risk they present.

Careful reflection of credit diversification in the calculation of deposit insurance premiums would provide a powerful incentive for effective credit portfolio risk management. This would encourage smaller banks to make greater

use of the array of credit risk hedging and diversification tools that have become available in the past 15 years.

Conclusion

Historical cost accounting and only marginally risk-sensitive deposit insurance premiums have allowed banks to be comparatively inefficient in their pricing of credit. More granular and more risk-sensitive deposit insurance premiums would encourage greater risk-based differentiation in the cost of bank credit. Proper recognition of diversification across a bank's credit exposures in setting deposit insurance premiums would encourage greater use of the tools for credit hedging and credit exchange that many smaller banks have failed to adopt. To be effective, however, those premiums would have to reflect the complex risks associated with trading and off-balance-sheet activities, as well as traditional credit quality considerations.

A final consideration is how to deal with the emerging view that the Federal Reserve needs to serve as a lender of last resort for large investment banks as well as commercial banks. Assuring that the former contribute their fair share to a reserve fund, even though they have no officially insured deposits, is just one of the many sensitive issues that will be contested in the debate about restructuring U.S. financial regulation. ❖



David M. Rowe, Ph.D., is executive vice president for Risk Management at SunGard. Contact him by e-mail at David.Rowe@sungard.com.

Notes

1 In the euphoria, some banks neglected to recognize that such temporary holdings can amount to a sizable pipeline when a market grows dramatically.

2 At least one bank treasurer has noted that the current crisis is creating a scramble to attract stable retail deposits and that this has actually resulted in such deposits being priced 100 to 150 basis points above the wholesale curve. Presumably, this situation is a temporary anomaly.

3 Last year's run on Northern Rock Bank was reportedly the first in Great Britain since 1866. In one sense, this record is surprising given that, prior to the Northern Rock failure, U.K. deposit insurance covered only 100% of the first £2,000 and 90% thereafter up to a ceiling of £35,000. Shortly after the Northern Rock failure, the U.K.'s Financial Services Authority increased this coverage to 100% up to £35,000 per person, per institution.

4 To a degree, the same argument can be made for any limited liability corporation. The difference for a bank is that the deposit guarantee supports a larger funding base, thereby enabling more extensive risk taking.

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