

# VI Prudential Safeguards for Bank Liquidity

Since no system of prudential control can eliminate the possibility of bank failure, depositors can never be certain that banks will be able to repay their deposits; and if doubts arise about the solvency of a bank, depositors will attempt to withdraw their funds. To protect themselves, banks maintain a prudent degree of liquidity. They keep part of their assets in liquid form (which, incidentally, may also reduce the risk of loss from interest rate fluctuations) and arrange for lines of credit with other banks. As with other prudential guidelines or controls, banks need to strike a balance between prudence and profitability: more liquid assets have lower yields, while charges apply to agreed lines of credit with other banks.

This section discusses the adequacy of international banks' prudential standards in three areas affecting liquidity: (1) the degree to which the maturities of assets and liabilities are matched, (2) the quality of the short-term assets banks can use to meet deposit withdrawals, and (3) the extent to which banks arrange for stand-by lines of credit from other banks.

## Matching of Maturities

As was noted above, banks limit their vulnerability to fluctuations in market interest rates in the international area by making floating rate loans, on which the interest rate is reset at regular intervals (usually either three months or six months) on the basis of market rates or continuously on the basis of domestic prime rates. They also, to a large extent, match the maturity of their liabilities to the roll-over dates for their assets. The residual interest rate risk is small enough that fluctuations in market rates are unlikely to cause major problems. This assumes, however, that funds are available to banks at the market rates that form the basis for the interest rates on bank assets. If banks have to pay premium rates to renew their liabilities because of a loss of depositor confidence, more serious losses could result, and in extreme cases, banks could find themselves without access to funds at all.

One way to handle that problem would be to match final maturities, not just roll-over dates. Part of the function of banking is to carry out maturity transformation, however, and much of the profitability of interna-

tional banking comes from the ability of banks to provide depositors with short-term assets and to provide borrowers with long-term liabilities. Full matching of maturities would imply a very different sort of banking system.

For transactions in domestic currency, the clear availability of a lender of last resort provides banks with the assurance of the liquidity needed to meet unexpected deposit withdrawals, provided that the banks are fundamentally sound. Most banks and supervisory authorities thus consider it not to be imprudent to have some degree of mismatch of maturities on international operations in domestic currency. Mismatch in foreign currencies, however, is a subject of concern in some countries. This concern seems to be felt most strongly in Japan, where banks maintain strict standards for matching maturities, presumably from a general sense of vulnerability to international economic shocks and memories of the tiering that Japanese banks encountered in 1974. French banks follow similar standards. Supervisors in other countries also encourage their banks to be cautious in mismatch of maturities but do not enforce strict standards, and their bankers believe that a substantial degree of mismatch is unavoidable.

## Quality of Short-Term Assets

A second aspect of bank liquidity is the encashability of the short-term assets maintained by banks. Most short-term assets denominated in foreign currency take the form of deposits with other banks. One potential source of contagion of banking problems is that banks with deposits in other banks that fail would have their liquidity impaired. In 1974, for example, some banks suffered substantial losses or delays in recovering some of their interbank deposits.

As a result of that experience, banks substantially tightened their procedures for controlling their interbank assets. Most banks now regularly review their lines of credit to other banks on the basis of detailed examinations of their balance sheets and other available information—a tightening of procedures akin to their tightening of country risk analysis. Exposure limits are established that cannot normally be increased without a detailed re-examination of the borrowing bank's situation. Monitoring of exposure can provide early warnings of potential

problems, and a bank that tries to increase its borrowings rapidly or that fails to reduce its borrowings from time to time will be subject to special scrutiny.

Prior to the 1974 bank failures, banks did not attach much concern to the "daylight exposure" that resulted from accepting payment orders from other banks against settlement later on. Most banks now impose limits on such overdrafts. One motivation for the recent change in the U.S. Clearing House Interbank Payments System (CHIPS) from next-day settlement to same-day settlement was to reduce the duration of such exposure. Banks are also moving to protect themselves from excessive exposure to an individual bank by developing "on-line" monitoring systems, through which they can quickly become aware of any change in their consolidated exposure. This monitoring capability allows the bank to give each branch the large exposure limit it needs for effective operation while preserving effective overall control.

### **Interbank Borrowing and Stand-By Credit Lines**

Banks experiencing a runoff of deposits can try to supplement disposal of short-term assets by borrowing from other banks. As the discussion of asset management suggests, the extent to which a bank can normally increase its liabilities to other banks is, at most, the amount available within the credit limits set by such banks. These limits are seldom stated outright. To try to ascertain the limits and to strengthen their image of reliability, banks run their borrowings from other banks up and down. While these credit lines provide assurances of funds to meet normal day-to-day fluctuations in other liabilities, their informality means that they could rapidly disappear if it was believed that the bank was in difficulty. The counterpart of the ability of banks thought to be sound to increase their takings from other banks is the possible cutoff of funding for banks rumored to be unsound.

Many of the financial crises of the 1930s were exacerbated by withdrawal of interbank credit lines,

particularly from Central European banks. A recent example of the effects of a specific outside event on interbank confidence is the deterioration of Poland's situation. Many banks reviewed their limits on other banks that were believed to have large exposures to Poland. As a result, some banks encountered moderate tiering for brief periods. Current banking problems have also occasioned a more widespread review of credit limits.

One way in which banks protect themselves against a runoff of deposits is by establishing confirmed stand-by lines of credit from other banks. These, however, are costly and are used only to a limited extent, mainly by the small banks that are most vulnerable to a cutoff of funding. Quantitative information on such lines is lacking, but one large U.S. bank reports that the stand-by credit lines it has extended to other banks are equal to 10 per cent of its current interbank placings. Reciprocal credit lines, without fees, are sometimes established between, say, large U.S. banks and large German banks to provide assurance of funding in each other's currencies. Confirmation of credit lines, however, provides no absolute assurance of availability, since credit lines are often subject to certain caveats and, in any case, might not be usable if the granting bank itself were in difficulty.

Though, in general, domestic banking is characterized by a much smaller degree of dependence on interbank deposits than is international banking, in one respect interbank funding is perhaps more important domestically. When individual banks in domestic systems get into trouble, other banks tend to rally to their support in hopes of avoiding the contagious effects of a bank failure on their own operations; often such behavior is encouraged by supervisors. Internationally, banks may be less fearful of possible contagion from the collapse of banks in other countries; in 1974, for example, there was a sharp cutback in interbank credit following the failure of Bankhaus I.D. Herstatt. This distinction should not be overdrawn. In today's world, banks and bank supervisors are much more conscious of the way in which banking problems in one country can affect banks in others.