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# Recent Developments in Discount Window Policy

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Underlying trends in the depository sector along with changes in federal legislation have had important ramifications in recent years for the discount window, the Federal Reserve's lending facility. The periods of stress and consolidation in the depository sector during the 1980s and 1990s led to the active involvement of the discount window in many failing-bank situations. Indeed, the scope of problems in the banking industry and the extent of discount window lending to troubled institutions were greater than in any period since the Great Depression.

In addition, changes became evident during the 1980s in the willingness of healthy institutions to turn to the discount window. Many banks apparently became more reluctant to turn to the window for fear of provoking market concerns about their financial condition. The greater reluctance to borrow weakened the historical relationship between discount window borrowing and the spread of the federal funds rate over the discount rate. This weakening, in turn, impaired the effectiveness of the discount window in tempering unexpected pressure in the reserve market and reduced the Federal Reserve's emphasis on borrowed reserves in the day-to-day management of the reserve market.

Perhaps the most notable legislation affecting the discount window has been the Depository Institutions Deregulation and Monetary Control Act of 1980, which dramatically expanded the universe of

depository institutions eligible to borrow at the discount window. As a result, the Federal Reserve assumed greater direct responsibility for responding to the liquidity needs of all depositories.

Another important legislative change arose in response to the large number of bank failures in the 1980s and the associated depletion of the insurance funds of the Federal Deposit Insurance Corporation (FDIC). The legislation, the Federal Deposit Insurance Corporation Improvement Act of 1991, contained provisions intended to discourage Federal Reserve lending to depositories that do not meet minimum capital standards. Although these provisions do not prohibit the Federal Reserve from lending to such institutions, they specify that the Federal Reserve will incur a limited liability to the FDIC for lending that extends beyond certain time periods and that results in increased losses to the FDIC's insurance funds.

## *DISCOUNT WINDOW LENDING: THE BASICS*

Sections 10B and 13 of the Federal Reserve Act authorize the Federal Reserve Banks to extend discount window credit to depository institutions in the form of discounts and advances. In the early years of the Federal Reserve System, discounts were the primary form of discount window credit. A bank wishing to obtain a discount from its Federal Reserve Bank would present a short-term business loan or other asset meeting the type and maturity specifications set forth in the Federal Reserve Act. The Federal Reserve Bank would extend credit in an amount that reflected the value of the asset at maturity minus a "discount" based on the Federal Reserve's discount rate and the time until maturity of the asset. When the asset matured, the Federal Reserve returned it to the bank and received from the bank a cash payment equal to the maturity value of the asset.

An advance is operationally simpler than a discount, and all discount window credit has been

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NOTE. This article has benefitted substantially from extensive comments received from the members of the Discount Policy Group at the Federal Reserve Board—Donald L. Kohn, Oliver Ireland, Gary P. Gillum, and Manley Williams. Helpful suggestions were also received from other staff members at the Board and from discount officers at the Reserve Banks.

provided in the form of advances for many years. For an advance, a bank requests a loan from its Federal Reserve Bank. The rate charged on the loan is the discount rate, and the duration of the loan is determined by the Reserve Bank.<sup>1</sup> To secure the advance, the borrower must pledge collateral in amounts and of types that are satisfactory to the lending Reserve Bank.

In addition to authorizing loans to “eligible” depository institutions, the Federal Reserve Act—in sections 13(3) and 13(13)—authorizes the System to act in emergency circumstances as “lender of last resort” to individuals, partnerships, and corporations. Enacted in 1932, section 13(3) was intended to enable the Federal Reserve to provide credit in the form of discounts for borrowers unable to obtain adequate credit accommodations from other banking institutions; its use was limited to periods of unusual and exigent circumstances, as determined by the affirmative vote of at least five members of the Board of Governors.<sup>2</sup>

The Congress enacted section 13(13) in 1933 to authorize the Federal Reserve to make advances to individuals, partnerships, and corporations on the security of U.S. Treasury and federal agency obligations. Although this provision, unlike section 13(3), carries no statutory restrictions on its use, the Federal Reserve has always regarded its applicability as being limited to unusual or exceptional circumstances. Indeed, since 1973, the Board’s Regulation A, which governs discount window lending activities, has restricted use of this authority to emergency circumstances in which borrowers cannot obtain credit from other sources and their failure to obtain credit would adversely affect the economy.

### *Purpose and Borrowing Eligibility*

The Federal Reserve Board’s Regulation A defines three discount window programs, each serving a

distinct purpose: (1) adjustment credit, to help depository institutions meet unexpected short-term liquidity needs; (2) seasonal credit, to assist smaller institutions in managing liquidity needs that arise from regular swings in loans and deposits; and (3) extended credit, to help depositories that have somewhat longer-term liquidity needs resulting from exceptional circumstances. None of these programs is intended to be a substitute for market funding sources; Regulation A stipulates that banks must first exhaust market sources of funds before turning to the discount window.<sup>3</sup> To ensure that this principle is met in practice, Reserve Banks regularly monitor the sources and uses of funds for institutions while they are borrowing.

Before the Monetary Control Act of 1980, only banks that were members of the Federal Reserve System had regular access to discount window credit.<sup>4</sup> The act imposed reserve requirements on a much larger set of depository institutions and simultaneously extended discount window access to them.<sup>5</sup> As a result, nonmember commercial banks and savings banks as well as savings and loan associations (S&Ls) and credit unions became eligible to borrow at the discount window.<sup>6</sup>

An institution that anticipates borrowing from the Federal Reserve must execute a borrowing agreement and other documents with its Federal Reserve Bank that define the terms and conditions under which discount window loans will be provided. For both historical and administrative reasons, most institutions that are eligible to borrow do not choose to file borrowing agreements or borrow at the discount window. For example, of the approximately 27,000 depository institutions eligible to borrow at the beginning of this year,

1. Regardless of the expected duration of a discount window loan, Reserve Bank operating circulars and borrowing agreements specify that all discount window advances are demand loans—they may be called at the discretion of the Reserve Bank.

2. No loans have been made under this section since the 1930s, although the Board of Governors did activate this authority during two periods in the late 1960s and early 1970s in contemplation of possible liquidity difficulties among nonmember depository institutions.

3. As described below, this requirement does not strictly apply for the seasonal credit program. Regulation A does state, however, that seasonal credit is available only if similar assistance is not available from special industry lenders.

4. U.S. branches and agencies of foreign banks with reservable liabilities gained access to the discount window under the International Banking Act of 1978.

5. Under the act, nonmember depository institutions also gained access to various Federal Reserve priced services such as check clearing, collateral safekeeping, and electronic funds transfers. There is no linkage, however, between an institution’s use of Federal Reserve priced services and the availability of discount window credit.

6. The Board has determined that nonbank banks such as corporate central credit unions and bankers banks may have access to the discount window if they voluntarily maintain reserves.

only about 7,000 had filed borrowing agreements. Many smaller banks turn to their correspondent banks when funding needs arise. In addition, special industry lenders such as the Federal Home Loan Banks and corporate central credit unions serve as sources of liquidity assistance for their member institutions; credit unions, in particular, elect to rely almost entirely on their corporate central credit unions for any liquidity assistance rather than turn to the Federal Reserve.

### *The Mechanics of Borrowing*

Institutions almost always initiate loan requests by a telephone call to their respective Reserve Banks. During the call, the borrower describes the nature of the funding shortfall and indicates the amount and duration of the loan required. Staff members at the Reserve Bank ensure that the institution has filed the necessary borrowing documents and has collateral to secure the loan fully. Satisfactory collateral may include U.S. government and agency securities, mortgages covering one- to four-family residences, state and local government securities, commercial and consumer loans, and other customer notes of acceptable quality.

Many institutions that anticipate a periodic need to borrow maintain a pool of collateral earmarked to secure discount window loans. Collateral is usually held at the Federal Reserve Banks or by acceptable third-party custodians, but borrowers in good financial condition may be permitted to hold their own collateral under terms and conditions established by the Reserve Banks. The face value of collateral pledged to secure a discount window loan generally exceeds the amount of the loan; the difference is intended to provide a cushion against loss in the event that a borrower defaults and the Federal Reserve is forced to liquidate the collateral.<sup>7</sup>

### *THE ADJUSTMENT CREDIT PROGRAM*

The adjustment credit program operates at a “micro” level by assisting individual depository

institutions in meeting temporary funding requirements in appropriate circumstances. The program also operates at a “macro” level by moderating unexpected pressures in the reserve market.

### *Lending Policies*

Regulation A establishes two key criteria for determining whether to approve a request for adjustment credit: The loan must be for an appropriate reason and borrowers must have exhausted all reasonably available alternative sources of funds, including credit from special industry lenders. Discount officers at each Reserve Bank necessarily use their own judgment in applying these principles to individual circumstances. Appropriate reasons for borrowing include temporary, unanticipated funding shortfalls. Inappropriate reasons for borrowing include funding a *planned* increase in loans or securities, meeting an *anticipated* runoff of higher-cost funds, and exploiting the spread of the federal funds rate over the discount rate.

In judging whether borrowers have pursued all reasonably available alternative sources of funds before turning to the discount window, the Federal Reserve distinguishes between banks with ready access to national money markets, usually large banks, and those that do not have such access, which generally are smaller banks. The distinction between large and small banks is not, however, based solely on asset or deposit size. Most U.S. branches of foreign banks, for example, are treated as large institutions even when the quantity of their assets booked in the United States is small; these branches are typically part of large multinational banking organizations that have ready access to market sources of funds, and the parent entities are expected to meet the bulk of the funding needs of their U.S. branches.

Under these distinctions, Reserve Banks typically grant the requests of large banks for discount window assistance only very late in the day, when the money markets are closing, and usually only when money markets have tightened considerably near the end of a reserve maintenance period (see box, “Borrowing Behavior of Large Banks”). In addition, the largest banks are assumed to be in a position to repay their discount window loans quickly through prompt adjustments in their bal-

7. In most cases, standard “haircuts” are applied to the value of the collateral. The haircuts are intended to account for various factors including the credit, liquidity, and market risks associated with the collateral. Additional haircuts are taken at the discretion of the Federal Reserve Bank when lending to troubled institutions.

### Borrowing Behavior of Large Banks

The borrowing function is a convenient way of summarizing the general relationship between borrowing and the spread of the federal funds rate over the discount rate. However, the general relationship obscures some important differences in behavior between institutions in different size categories. Large banks, for example, must make greater efforts than others to obtain funding in national money markets before turning to the discount window; thus, these banks usually turn to the window only late in a reserve maintenance period, which is when reserve pressures tend to appear. Discount window requests by smaller banks are more likely to be approved early in a maintenance period because they are not presumed to have the same degree of access to market funding.<sup>1</sup> Indeed, from 1987 to 1993, more than 80 percent of all discount window borrowing by large banks (defined here as those with total deposits greater than \$10 billion) occurred in the second week of the maintenance period, and more than 60 percent occurred on the last day of the maintenance period (chart, left panel). By contrast, discount window borrowing by smaller banks was nearly uniformly distributed over the maintenance period.<sup>2</sup>

Unexpected movements in the federal funds rate on those days when large banks choose to borrow offer another difference between the borrowing behavior of

large and small banks. For this illustration, an unexpected movement is defined as the difference between the federal funds rate at 11:00 a.m. and at the close.<sup>3</sup> Again for the 1987–93 period, large banks borrowed on days when the unexpected movement in the federal funds rate was relatively large. In particular, the average unexpected jump in the federal funds rate exceeded 10 percentage points on the final days of maintenance periods (second Wednesdays) on which large banks borrowed. By contrast, for smaller banks, the average unexpected movement was closer to zero for each day.

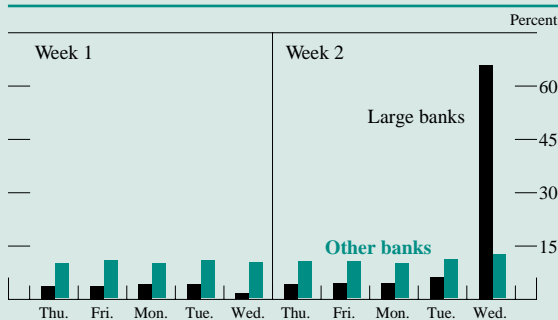
In part, the correlation between unexpected movements in the federal funds rate and the number of large banks turning to the window likely reflects the nature of the largest banks' business. These banks often act as providers of short-term funding to smaller banks, securities dealers, and corporations. On days when the aggregate level of reserves falls short of what depositories anticipated, the federal funds market tightens, and the largest banks can be subject to sudden demands for short-term liquidity. As these banks scramble for funds late in the day, the federal funds rate can be bid up well above the trading range that had been expected earlier in the day until some banks turn to the window.

1. Since February 1984, reserve maintenance periods have been defined as fourteen-day intervals beginning on a Thursday and ending on Wednesday two weeks later.

2. In this analysis, "smaller" banks are those whose deposits are between the level required for weekly reporting of deposit data to the Federal Reserve and \$10 billion. The threshold for reporting is changed each year, but it was close to \$40 million throughout the sample period.

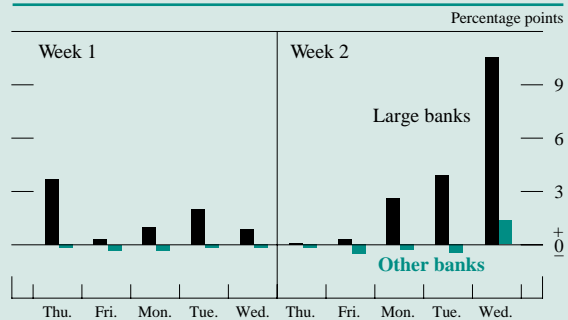
3. The concept of unexpected movements in the funds rate is based on the idea that if the funds market is arbitrated effectively, the federal funds rate prevailing early in the day must be the rate that the market expects to prevail at the close of business. If, for example, the expected level of the federal funds rate at the close exceeded the level of the funds rate earlier in the day, banks would bid up the earlier rate by borrowing heavily in the funds market in order to lend funds at a higher rate later in the day.

Distribution of discount window borrowings during the reserve maintenance period, by day of the period and bank size, 1987–93



Note. Distributions of borrowings by a class of banks on a given day of the reserve maintenance period is the number of borrowings on that day by banks in that class during 1987–93 divided by the total number of borrowings by banks in that class during those years. Large banks are those with total deposits exceeding \$10 billion.

Average unexpected change in the federal funds rate on days of the reserve maintenance period when banks borrowed, 1987–93



Note. Unexpected change in the federal funds rate is the rate at the close less the rate at 11:00 a.m. Large banks are those with total deposits exceeding \$10 billion.

ance sheets. As a result, discount window loans to large banks are usually extended for only one business day. Banks with less ready access to money market funding may request discount window loans on any day of the reserve maintenance period and at an earlier hour of the day;<sup>8</sup> the Reserve Banks may approve such loans with a term of several days.

The interest rate charged for adjustment credit ordinarily is the basic discount rate. In certain circumstances, however, a higher rate may be applied. For an unusually large loan that results from a major operating problem at the borrower's facility, the highest rate established for loans to depository institutions may be charged; in the current discount rate structure, that rate would be the market-related rate on extended credit (see below).<sup>9</sup>

### The Borrowing Function

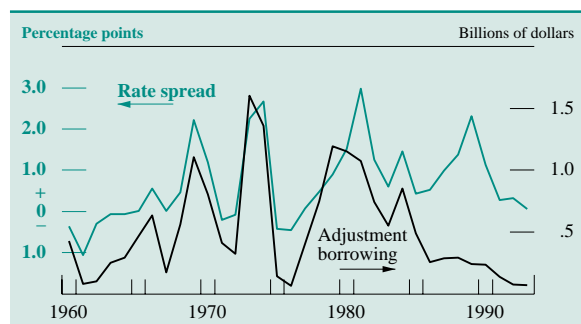
Apart from assisting individual banks in meeting short-term liquidity pressures, adjustment credit serves an important "pressure release" function in the reserve market. The level of adjustment borrowing has historically exhibited a fairly stable relationship to the spread of the federal funds rate over the discount rate (chart 1); wider spreads create a greater incentive to borrow, thus leading to higher aggregate levels of borrowing. This so-called "borrowing function" works to dilute the influence that shifts in the supply and demand for reserves can have on the federal funds rate. For example, on a given day, changes in factors affecting the supply of nonborrowed reserves, such as increases in currency in circulation or flows of reserves from depository institutions to the U.S. Treasury's account at the Federal Reserve, could result in an aggregate shortage of reserves available

to depository institutions. A shortage of reserves tends to push up the federal funds rate. But a rise in the federal funds rate induces more banks to turn to the discount window, which alleviates some of the pressure in the reserve market and damps the rise in the federal funds rate.

Although relatively stable for many years, the borrowing function has been less reliable recently, having gradually shifted down since the mid-1980s (chart 1). The result has been a smaller volume of adjustment credit for any given spread of the federal funds rate over the discount rate. The increased reluctance to borrow at the discount window appears to be related in large part to the difficulties experienced in the banking sector during the 1980s. With large numbers of banks and thrifts failing during these years, many banks apparently became more reluctant to turn to the discount window for fear of being labeled a financially weakened institution. This reluctance became acute during the economic downturn in 1990–1991, and the effectiveness of the discount window as a pressure release valve in the reserve market was impaired (see box, "Shifts in the Borrowing Function").

The instability of the borrowing function in recent years also has complicated the Federal Reserve's day-to-day operating procedures. For part of the 1980s, the Federal Reserve relied heavily on the quantity of borrowed reserves as an "operating target" for daily reserve management. As the borrowing function became less stable, however, the "borrowing target" came to be treated much more flexibly; other variables such as the federal funds rate and various measures of reserve conditions have become more important operating guides for reserve management.

1. Adjustment borrowing and the spread of the federal funds rate over the discount rate, 1960–93



8. However, the proceeds of discount window loans are usually not made available to borrowers until the end of the day.

9. In 1980 and 1981, at times when the spread between money market rates and the discount rate was exceptionally wide, the Federal Reserve imposed a surcharge in addition to the basic discount rate. The surcharge, varying between 2 and 4 percentage points, was applied to institutions with deposits of \$500 million or more that borrowed too frequently. The surcharges were intended to encourage these institutions to make quicker portfolio adjustments.

### Shifts in the Borrowing Function

During the second half of the 1980s, the level of adjustment credit associated with a given spread between the federal funds rate and the discount rate (the so-called borrowing function) declined. One frequently cited factor for the downward shift in the borrowing function is that well-publicized troubles in the banking industry have had a chilling effect on the willingness of banks to turn to the discount window.

The chilling effect could arise because, although the Federal Reserve holds information about discount window borrowing by individual banks in the strictest confidence, market participants at times have tried to infer which banks might be borrowing through knowledge of which banks were bidding for funds in the market late in the day. Usually such inferences have been little more than educated speculation, but market rumors about bank borrowing at the discount window have occasionally prompted withdrawals by account holders or curtailed a bank's access to other market funds. As a result, in the latter half of the 1980s and the early 1990s, troubled or financially weak institutions turned to the window only as a last resort. Moreover, healthy depositories with legitimate reasons for borrowing appeared to avoid the window for fear of raising questions in the marketplace about their financial condition.

The greater reluctance of banks to borrow has had little effect on the ability of the Federal Reserve to achieve its objectives for money growth or for general conditions in reserve and money markets. The reluctance has, however, complicated somewhat the construction of short-term conditional forecasts of borrowed reserves, and it has also reduced the effectiveness of the discount window as a pressure release valve in the reserve market.

The behavior of the federal funds rate early in 1991 provided a strong indication that the discount window

was operating less effectively as a buffer in the reserve market. In December 1990, the Federal Reserve cut reserve requirements on nonpersonal time deposits and Eurocurrency liabilities. As a result, reserve balances in the System fell substantially.<sup>1</sup> For a time in early 1991, sharp fluctuations in the demand for excess reserves and an unusual degree of day-to-day volatility in the federal funds rate suggested that the marginal demand of banks for reserves was being importantly affected by the volume of daily clearing activity in the banking system. If banks had been more willing to turn to the discount window, the influence of the daily variability of reserve demand on the federal funds rate most likely would have been significantly muted. In February 1991, in his semiannual testimony to the Congress under the Full Employment and Balanced Growth Act of 1978 (the Humphrey-Hawkins act), Federal Reserve Board Chairman Greenspan noted that the discount window was available, as always, to meet the short-term liquidity needs of depository institutions in appropriate circumstances. For a time, this statement appeared to stimulate a bit more borrowing. Even with the marked improvement in the health of depository institutions since 1991, however, the level of discount window borrowing remains subdued in comparison with levels once associated with a given spread of the federal funds rate over the discount rate.

1. Depository institutions may hold a combination of vault cash and reserve balances to satisfy reserve requirements. The volume of vault cash held by most banks is dictated by customer demands for currency. As a consequence, the reduction in required reserves in December 1990 showed through largely as a reduction in reserve balances held by depository institutions.

### SEASONAL CREDIT

The seasonal credit program was established in 1973 to assist small institutions that lack effective access to national money markets and that experience a seasonal pattern of swings in deposits and loans. Previously, these banks had been forced to hold a relatively large share of their asset portfolio in liquid securities through much of the year to be in a position to accommodate their funding needs during the peak period of loan demand and deposit runoffs. By granting these banks longer-term funds to meet their seasonal needs, the sea-

sonal credit program allows them to carry fewer liquid securities during the off-peak periods of the year and to extend more loans in their local communities. The program is structured so that larger institutions must meet a greater portion of their seasonal need through market funding sources. Typically, institutions with more than \$250 million in total deposits are not able to demonstrate a seasonal need under the current structure of the seasonal program. In addition, Regulation A specifies that seasonal credit is available only if similar assistance is not available from special industry lenders.

Most lending under the seasonal credit program is to small agricultural banks in the Midwest.<sup>10</sup> Agricultural banks face strong loan demand and deposit runoffs as farmers cultivate their crops during the spring and summer months. In the fall, farmers sell their crops, rebuild their deposit balances, and pay down their bank loans. Simultaneously, banks pay down their seasonal loans with the Federal Reserve.

Banks that wish to establish a seasonal line generally are required to submit three years of historical data on loans and deposits to their Reserve Bank. From these data, the Reserve Bank calculates the maximum amount of credit that each institution is eligible to borrow in each month of the year; the approved seasonal line also may reflect adjustments based on discussions with the borrower regarding expected funding needs in the coming year. Reserve Banks require that borrowers meet a certain portion of their seasonal need—known as the “deductible”—from their own resources. The deductible is based on the size of the borrower and reflects the presumption that larger depositories have greater access to market sources of funds and therefore should have less need for seasonal credit.

Institutions with approved seasonal credit lines are not required to exhaust all other “reasonably available” sources of liquidity before borrowing. Indeed, borrowers of seasonal credit are permitted to maintain a net “sold” federal funds position that is consistent with historical operating patterns. The Reserve Banks monitor borrowers, however, to ensure that they are using seasonal credit to fund increases in loans or deposit runoffs and that they are meeting the “deductible” portion of their seasonal need through their own resources. As with all forms of discount window credit, seasonal credit loans must be fully collateralized.

Usage of the seasonal credit program has grown and changed significantly over time. Since passage of the Monetary Control Act of 1980, nonmember banks have become increasingly important users of the program (chart 2); indeed, in recent years, they have outnumbered member banks as borrowers of seasonal credit. Changes in the terms

10. Seasonal borrowers also include some depositories in resort areas that experience large changes in their loans and deposits over the course of a year.

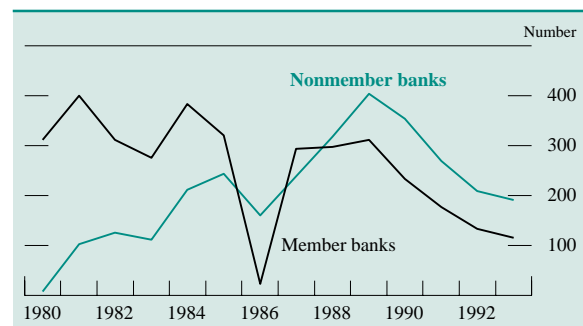
of the program in 1985 contributed to greater use of seasonal credit. In that year, the 4 percent deductible for the first \$100 million of deposits was lowered to 2 percent, and the 7 percent deductible on additional deposits up to \$200 million was lowered to 6 percent; the 10 percent deductible on deposits in excess of \$200 million remained the same. These reductions were intended to help alleviate the severe financial difficulties experienced in the farm sector during the mid-1980s.<sup>11</sup>

Until recently, the rate charged on seasonal credit loans was the basic discount rate, the same rate charged for adjustment credit. The discount rate generally lies below market interest rates, and hence the seasonal program created a small subsidy for borrowers.<sup>12</sup> Given the rapid growth of seasonal credit over the 1980s and a judgment that financial markets had become better able to meet the seasonal funding needs of smaller banks, the Board elected to move to a market-related discount rate on seasonal credit beginning in January 1992. The market-related rate is established at the

11. In 1985 the Board also created a temporary simplified seasonal program. This program was designed to make it easier for small agricultural banks that might be experiencing unusual liquidity pressures to gain access to seasonal credit. Banks could borrow up to one-half of the increase in their total loans in excess of 2 percent from a base level. The discount rate for the temporary seasonal program was set at ½ percentage point above the basic discount rate. The amount of borrowing under the temporary program was quite small and the Board discontinued the program in 1988.

12. Using the federal funds rate as a benchmark, the extent of the subsidy for seasonal borrowers was relatively small. An average seasonal borrower during the peak months of the year might borrow about \$1 million. Assuming that the spread between the federal funds rate and discount rate was a rather wide 100 basis points and that the institution maintained its peak level of borrowing continuously for a full 9 months (very unlikely), the implied subsidy would amount to only about \$7,500 per year, a minuscule savings on the bank’s overall funding costs.

## 2. Number of banks using seasonal credit, 1980–93



beginning of each reserve maintenance period and is based upon the average federal funds rate and the average secondary market rate on negotiable ninety-day bank certificates of deposit prevailing during the previous maintenance period.

The move to a market-related rate has not dramatically reduced the volume of borrowing under the seasonal credit program (chart 3); indeed, the peak levels of borrowing in 1994 were close to the record levels posted in 1989. In part, this continued use may indicate that borrowers still find the market-related discount rate charged on seasonal credit to be attractive relative to rates offered by their correspondents. Also important may be the nonpecuniary costs of borrowing from correspondents, who may impose relatively restrictive terms on the types of acceptable collateral, the size of credit limits, and the length of periods of continuous borrowing.

**EXTENDED CREDIT**

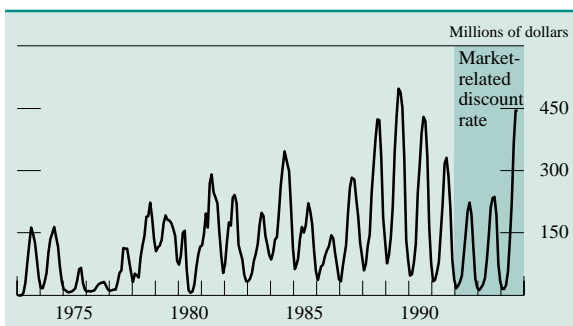
The extended credit program is designed to address the needs of institutions facing longer-term (“extended”) liquidity pressures in exceptional circumstances. For the past several years, the discount rate charged on extended credit has been somewhat above market interest rates. In addition, this program affords credit only under stringent conditions. Institutions seeking extended credit must submit a business plan describing how they intend to address their liquidity difficulties, and they must have exhausted all other sources of funding before turning to the window. Borrowers in the extended credit program are expected to restrain lending

activity to the minimum required to remain viable in serving their markets. More generally, a borrower must shrink its balance sheet in an orderly manner, and its efforts to do so are closely monitored by its Reserve Bank. As described in detail below, the Federal Deposit Insurance Corporation Improvement Act of 1991 places restraints on discount window lending to institutions that do not meet minimum capital standards.

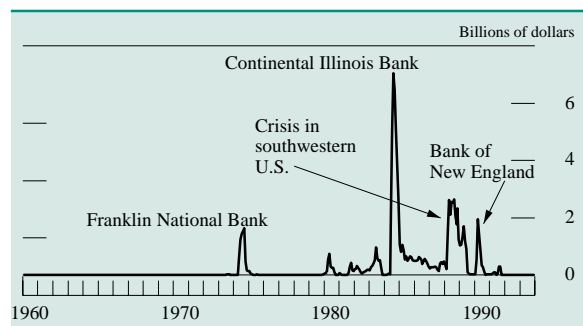
Certain borrowers drew heavily on extended credit in the 1980s (chart 4), especially during the 1985–91 period, when the number of failures of banks and thrift institutions exceeded that of any period since the Great Depression.<sup>13</sup> Some of the Federal Reserve’s extended credit lending in this period bridged a temporary period of illiquidity for institutions that proved to be viable, but in many other cases Federal Reserve loans were provided to institutions that were closed or required federal assistance to restore viability. Federal Reserve lending in these latter cases provided time for the FDIC and the chartering authorities to arrange for orderly closings of failing institutions. Extended credit lending was conducted in consultation with the FDIC and the relevant state and federal banking authorities to ensure that such lending would serve a clear public purpose. The Federal Reserve’s lending to troubled institutions during the 1980s has been the subject of some controversy, however, and a brief review of extended credit lending since 1980 provides some perspective on the Federal Reserve’s actions.

13. During these years, 1,192 federally insured banks failed and 1,034 federally insured S&Ls failed or were subject to supervisory mergers.

3. Seasonal borrowing, 1973–September 1994



4. Extended credit borrowing, 1960–1993





*EXTENDED CREDIT LENDING: 1980–85*

In the late 1970s and early 1980s, the depository sector came under considerable strain as a result of a steep climb in interest rates and inflation and the ensuing deep economic recession. In the savings and loan industry, many institutions faced weak earnings on their asset portfolios at a time when their funding costs had risen sharply. Moreover, federal limits on interest rates on deposits, in combination with the sharp rise in market interest rates, sparked a severe decline in deposits as account holders, in a process called disintermediation, shifted their funds into money market instruments offering higher yields. As a result, many S&Ls (as well as banks) suffered intense liquidity pressures.

The Federal Home Loan Bank (FHLB) System historically had served as a key funding source for savings and loan associations by issuing debt in the national money markets and lending the proceeds to its member associations. However, by mid-1981 the magnitude of the disintermediation at thrift institutions raised the possibility that it would exceed the funding capacity of the FHLB System. As a precautionary measure, the Federal Home Loan Banks and the Federal Reserve announced that they would lend jointly to financially sound S&Ls that needed longer-term liquidity assistance. The amount of lending under this program was relatively small; the program did, however, establish a precedent for cooperation between the FHLB System and the Federal Reserve that would become important again during the S&L crisis of the late 1980s.

In another action associated with the early-1980s prospect of possibly large-scale lending to S&Ls, the Federal Reserve altered the structure of rates charged on extended credit. Since 1974, extended credit borrowers had been charged a rate of up to 2 percentage points over the basic discount rate. In August 1981, the rate structure was revised to charge the basic discount rate for the first 60 days of extended credit borrowing, the basic discount rate plus 1 percentage point for the next 90 days of borrowing, and the basic rate plus 2 percentage points for borrowing beyond 150 days. The purpose of the graduated rate schedule was to increase the incentive for institutions to address their liquidity problems as their reliance on the discount window became more prolonged.

The liquidity and solvency problems among commercial banks in the early 1980s were not as severe as those in the thrift industry, but some banks were in serious trouble. In 1980, the FDIC provided extensive “open-bank assistance” to First Pennsylvania Bank, which had suffered large losses on its securities portfolio.<sup>14</sup> The Federal Reserve provided extended credit to First Pennsylvania for a time to address its liquidity needs. In July 1982, Penn Square National Bank failed owing to substantial losses on energy loans. Liquidity pressures emerged during the days immediately preceding the bank’s failure, and the Federal Reserve provided limited discount window assistance.

Penn Square was a relatively small institution, but it was an aggressive originator of loan participations. The largest single purchaser of these loan participations was Continental Illinois National Bank. Losses on loans purchased from Penn Square, coupled with other asset quality problems, led to severe liquidity pressures at Continental in early May 1984.

To address the bank’s problems, staunch the outflow of funds, and prevent similar runs at Continental’s respondent banks, the FDIC implemented an open-bank assistance package. The FDIC also took the extraordinary step of announcing on May 17, 1984, that all general creditors of the bank would be fully protected against loss. In support of the FDIC’s efforts, the Federal Reserve provided extensive discount window assistance to Continental from May 1984 through September 1985.

Continental drew heavily on extended credit at a time when the highest interest rate charged for extended credit loans—2 percentage points over the basic discount rate—was lower than market rates. Concerns that Continental was obtaining substantial funding at a below-market rate prompted the Federal Reserve Bank of Chicago to obtain the Federal Reserve Board’s permission to apply a market-related rate to Continental’s borrowing. Later, on November 8, 1984, the Board changed

14. In the case of First Pennsylvania, assistance was provided under the “essentiality” clause of section 13(c) of the Federal Deposit Insurance Act. Under this provision, the FDIC could provide assistance to a depository institution without regard to cost considerations if the institution was deemed “essential” to provide adequate banking service in its community. A finding of essentiality required a majority vote of the FDIC Board; the case of First Pennsylvania marked only the third time that the FDIC had invoked the essentiality clause.

the rate structure for extended credit to give all Reserve Banks the option of applying a market-related rate for extended credit borrowing beyond 150 days instead of the basic rate plus 2 percentage points. The previously established schedule of the basic rate for the first 60 days and the basic rate plus 1 percentage point for the next 90 days was left unchanged. The market-related rate was intended to apply principally to larger institutions with access to national money markets, especially during times when market rates generally exceeded the basic rate plus 2 percentage points.

### *EXTENDED CREDIT LENDING: 1985–90*

As the problems at Continental Illinois subsided, a series of new problems began to emerge. In March 1985, a privately insured S&L in Ohio failed, raising widespread concern over the safety of deposits in the numerous thrift institutions without federal deposit insurance. Soon thereafter, a liquidity crisis for privately insured institutions arose in Maryland. The Federal Reserve supplied discount window assistance in both states to help calm the situation and to permit solvent institutions to remain open.

At about the same time, a severe downturn in the farm economy resulted in heavy losses for Midwestern banks in agricultural communities. And a little later, a sharp decline in oil prices led to the deterioration of portfolios of energy loans at banks in the Southwest—a situation that was soon compounded by a collapse in commercial real estate markets and a broad regional economic downturn. During this period, many of the largest banks in Texas failed. With hundreds of institutions failing during the latter half of the 1980s, Federal Reserve credit was often provided to allow time for orderly resolutions, which gave depositors uninterrupted access to their funds and, more broadly, ensured that an adequate level of banking services would continue to be available.

As the frequency of extended credit lending situations increased, the Federal Reserve moved to simplify its rate structure for extended credit and to broaden the use of a market-related rate. On July 27, 1987, the Board approved a policy of charging the basic discount rate for the first thirty days of borrowing and a flexible rate somewhat above market rates for borrowing beyond thirty

days. The flexible rate also could be applied sooner than thirty days at the discretion of the lending Federal Reserve Bank.

By the late 1980s, the difficulties of many S&Ls far exceeded the capability of the Federal Savings and Loan Insurance Corporation to resolve them. As a result, President Bush in the early days of his administration acted to place insolvent S&Ls in federal conservatorships while the Congress developed legislation to address the fundamental structural, regulatory, and deposit insurance problems in the thrift industry.

To meet potential liquidity needs that might arise before legislation could be enacted, the Federal Reserve in concert with the FHLB System and the Treasury entered into a Joint Lending Program to provide liquidity to S&Ls experiencing severe withdrawals of deposits, particularly those institutions in federal conservatorship. Under this program, established on February 23, 1989, credit was extended only when alternative funds were not available. The Federal Reserve and the FHLB System each advanced 45 percent of the loans, and the Treasury advanced 10 percent. Credit extensions were secured by the assets of the borrower and guaranteed by the Federal Savings and Loan Insurance Corporation. Lending under the program was slight—only two S&Ls in conservatorship borrowed—but the program offers another example of the cooperative action of federal banking authorities to avert potential systemic crises.

In August 1989, the Congress passed the Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA), which established the Resolution Trust Corporation (RTC) as a temporary agency charged with resolving the hundreds of S&Ls that failed. The RTC also assumed responsibility for any liquidity support that thrift institutions in conservatorship might require, so the Joint Lending Program was discontinued.

### *BENEFITS AND COSTS OF EXTENDED CREDIT LENDING*

Concerned over the mounting frequency and cost of bank failures, the Congress in 1991 began to develop legislation to strengthen the ability of federal banking agencies to deal promptly with financially weak depositories. The Congress also

## FDICIA and the Discount Window

The Federal Deposit Insurance Corporation Improvement Act of 1991 is aimed at enhancing market and regulatory discipline in the banking sector and protecting the federal deposit insurance funds. The core elements of FDICIA establish five capital categories for depository institutions: (1) well capitalized, (2) adequately capitalized, (3) undercapitalized, (4) significantly undercapitalized, and (5) critically undercapitalized. These categories are defined by specific capital ratios.<sup>1</sup> FDICIA prescribes increasingly severe supervisory actions to be applied to an institution as it moves into lower capital categories. In addition, FDICIA also places restraints on Federal Reserve lending to institutions that fall below minimum capital standards.<sup>2</sup>

### Section 142

Section 142 of FDICIA amended section 10B of the Federal Reserve Act to set time periods beyond which the Federal Reserve may not lend to undercapitalized and critically undercapitalized institutions without incurring a potential limited liability to the FDIC.

The Board generally incurs a potential liability to the FDIC if an undercapitalized institution borrows for more than 60 days in any 120-day period.<sup>3</sup> This liability provision may be suspended for a 60-day period if the head of the institution's primary federal regulator certifies in writing to the Federal Reserve that the institution is

viable. Alternatively, the liability provision may be suspended for a 60-day period if the Federal Reserve conducts its own examination of the institution and the Chairman of the Board of Governors certifies in writing to the lending Federal Reserve Bank that the institution is viable. Each subsequent 60-day suspension of the liability provision requires new viability certifications. For critically undercapitalized institutions, the Board incurs a potential liability to the FDIC for increases in discount window advances beyond a 5-day period beginning on the date the institution becomes critically undercapitalized.

The potential liability to the FDIC incurred by the Board for advances exceeding the section 142 limitations is capped at the lesser of the interest earned on the increases in advances beyond the specified period or the losses the Federal Reserve would have incurred if the increased advances had been unsecured. Section 142 further requires that the Board report to the Congress within six months after incurring any such liability to the FDIC.

### Section 473

The bulk of the provisions in FDICIA pertaining to the discount window are contained in section 142, but section 473 effects a technical change in the emergency lending powers of the Federal Reserve under section 13(3) of the Federal Reserve Act. Section 473 removes a restriction on the "kinds and maturities" of notes, drafts, and bills of exchange that can be discounted for individuals, partnerships, and corporations under the authority of section 13(3). In those extremely unlikely circumstances in which section 13(3) lending authority might be invoked, this change provides greater flexibility to the Federal Reserve in managing a financial crisis.

1. For details, see the Federal Reserve's Regulation H, 12 C.F.R. 208; and *Federal Reserve Regulatory Service*, 3-1506-1506.2.

2. For purposes of section 142, an institution that receives the lowest supervisory rating from its primary federal regulator is also classified as undercapitalized, regardless of its actual capital ratios.

3. Changes in capital categories for depository institutions are tied to dates associated with official actions such as the required filing date for a Call Report, receipt of written notice from a primary regulator, or the delivery of a final report of examination.

undertook an assessment of Federal Reserve lending to institutions whose capital had slipped below adequate levels.

The Federal Reserve had long been mindful of both the benefits and potential costs associated with prolonged lending to institutions whose solvency is unclear. An important benefit of Federal Reserve lending in these situations has been the time provided to the FDIC and the other banking agencies to carry out the orderly closure and resolution of failed institutions. Arranging for the sale of a failed

bank can be time consuming and labor intensive—bid documents must be prepared and potential acquirers must have time to conduct a careful review of the failed bank's assets and liabilities. This process helps the FDIC obtain the best price for the failed bank through competitive bidding by interested acquirers.

In the absence of liquidity assistance, many failed institutions would have been closed abruptly, with possible interruptions in depositors' access to their funds—including balances covered by federal

deposit insurance—and in the availability of other banking services. At times of widespread financial distress, when depositors and other creditors cannot be certain of the solvency of individual banks, such disruptions may generate fears among customers of other banks and thereby trigger a spread of liquidity pressures. Abrupt and disorderly closures also may adversely affect the market value of failed institutions and reduce the price obtained by the FDIC.

The Federal Reserve recognized that costs may be associated with prolonged lending to troubled institutions. Such lending, for example, can allow uninsured depositors and other general creditors to exit a failing bank before its closure. When Federal Reserve loans, which are fully collateralized, replace funds that are not federally insured, the FDIC may face higher resolution costs. In addition, a perception that discount window assistance will be readily available to troubled institutions can weaken market discipline in the banking system and remove some of the pressure on bank regulators to close troubled institutions promptly.

In assessing the experience of the previous years, the Congress and the Federal Reserve agreed that it would be appropriate to establish restraints on the provision of discount window credit to institutions that do not meet minimum capital standards. To this end, section 142 of the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) sets time periods beyond which the Federal Reserve may not lend to institutions below minimum capital standards without incurring a potential limited liability to the FDIC (see box, “FDICIA and the Discount Window”).

Section 142 of FDICIA did not become effective until December 19, 1993. The delayed implementation was intended, in part, to provide time for the federal banking agencies to exercise the new regulatory authorities granted in FDICIA to strengthen the banking system. Nevertheless, the Federal Reserve sought to move as promptly as was prudent to bring its administration of the discount window into line with the provisions of section 142. The level of extended credit fell sharply (chart 4), partly reflecting a smaller number of bank failures; but the drop also reflected the more aggressive posture of the Federal Reserve and bank regulators in resolving troubled banks swiftly,

which thereby reduced the need for prolonged liquidity assistance from the discount window.<sup>15</sup>

### *POTENTIAL IMPLICATIONS OF RECENT REGULATORY DEVELOPMENTS*

The panoply of regulatory changes stemming from FDICIA included many initiatives that directly link a bank’s funding capability with its capital status. For example, FDICIA prohibits institutions that are undercapitalized from accepting brokered deposits. In addition, institutions that are not allowed to accept brokered deposits may also lose “pass-through” deposit insurance on new deposits or rollovers of existing deposits obtained from fiduciaries such as pension funds and insurance companies.<sup>16</sup> Institutions that fall below minimum capital standards may face limits on the deposit interest rates they can offer to attract new deposit accounts. In addition, an undercapitalized depository may find its usual federal funds lines and respondent balances diminished as a result of a restriction, mandated by FDICIA and put in place this year, that requires banks to limit their exposure to an undercapitalized depository institution. Also, under the Federal Reserve’s policies to contain payments system risk, institutions generally face tighter constraints on their intraday reserve positions as their capital condition deteriorates.

Other regulatory developments may indirectly exert a powerful influence on bank liquidity in the future. For example, the incentive for unsecured general creditors—Eurodollar creditors and sellers of federal funds for example—to withdraw their funds at an early stage of a bank’s decline is now greater because of the national depositor preference provision adopted as title III of the Omnibus Budget Reconciliation Act of 1993. This provision

15. The last period of heavy extended credit lending occurred in the first half of 1990 when the Bank of New England borrowed from the discount window continuously from January 15 to June 13 of that year. The bank did not borrow again before its closure on January 6, 1991.

16. As an example of pass-through deposit insurance, a financial institution acting as a custodian for many individuals—a pension fund or insurance company, for example—deposits in a bank, say, \$10 million, in which case deposit insurance may be “passed-through” to each individual up to the limit of \$100,000 per individual, which in turn may allow the entire \$10 million deposit to be insured.

places the claims of insured and uninsured domestic depositors of a failed bank ahead of the claims of other general creditors. As a result, unsecured general creditors are at greater risk of loss in a bank failure and may flee the bank earlier to avoid such losses.

To date, strong capital and earnings for most depository institutions have mitigated the potential

liquidity effects of these regulatory developments. These factors likely would become important, however, in some future period of financial distress. In that event, the Federal Reserve will likely face critical decisions about curtailing the access of troubled banks to the discount window at a much earlier stage of their difficulties than was typical in the past. □