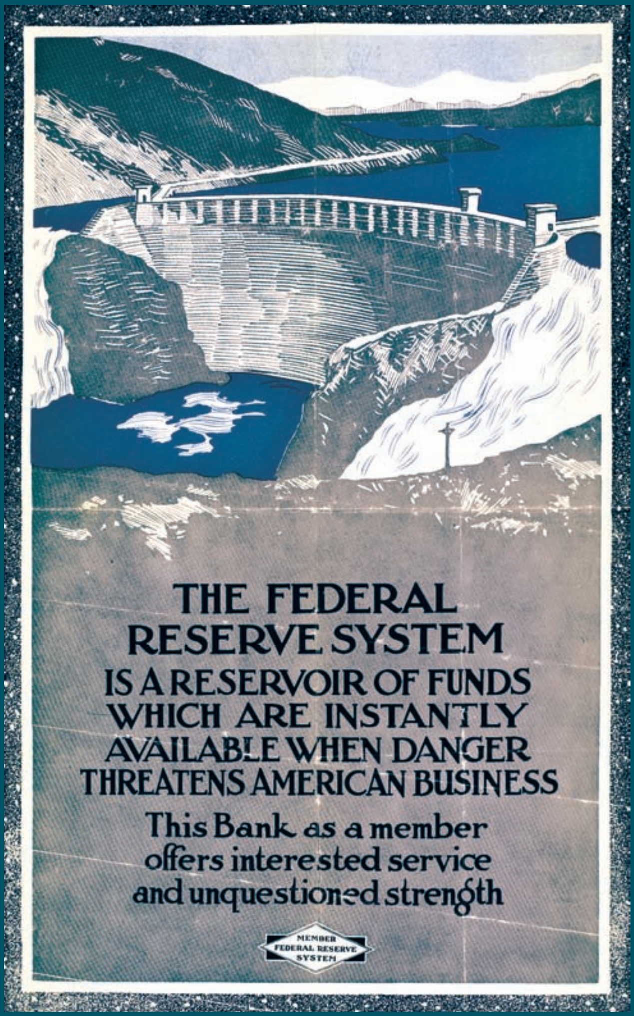


Federal Reserve System member banks have the right to elect six of the nine directors of their local Reserve Bank. Member bank constituents are also eligible for service as a director. If elected to serve as a Reserve Bank director, a member bank representative has the opportunity to participate in monetary policy formulation.

2007 Operational Highlights

The Discount Window: A Flexible and Strong Financial Resource

Analyst: This is Jack Hodgkiss, Credit Risk Management. How can I help you?

Bidder: This is Jane Smith, XYZ Bank and Trust. May I put in a bid today for your TAF product?

Analyst: Sure, anytime before one o'clock. The first thing I need is your bank's ABA number.

Bidder: 1234-5678-9.

Analyst: All right, Jane, got it. Let's start with your bid, in terms of the bid rate.

Bidder: Um, bid rate...five-twenty-five.

Analyst: That's five point two five percent, correct?

Bidder: Right.

Analyst: OK, and now the amount.

Bidder: Seven-hundred fifty million...even.

Analyst: Seven-hundred fifty, even. OK, and your phone number?

Bidder: 555-555-1234.

Analyst: Got it. Again, that's five point two five zero for seven-hundred fifty million dollars.

Bidder: Yep, that's it.

Analyst: Thanks. I'll transfer you to another member of our staff who will verify your request and then we'll be all set.

This transcript details one of the many phone calls received in 2007 from Fourth Federal Reserve District depository institutions seeking funds from the discount window.[1] It was one of the first bids received from such an institution seeking credit under the Federal Reserve Board's new Term Auction Facility, or TAF.

discount window: *n.* the Federal Reserve instrument of monetary policy that allows eligible financial institutions to borrow money from the central bank

DID YOU KNOW? The discount window, now a figurative expression, once referred to a real physical location. In the early years of the Federal Reserve System, bankers came to a Federal Reserve Bank teller window to obtain credit. The Federal Reserve Bank of Cleveland's Discount Window Department was located in the Bank's first-floor lobby. You can see these windows on a Bank tour or by visiting the Bank's Learning Center and Money Museum.

1. The bidder's identification has been changed to preserve anonymity.

The 2007 discount window bears little resemblance to its 1914 ancestor, which was one of the Federal Reserve's key activities when it opened for business that year. It may seem that the story of the "window" lacks vibrancy and interest. But when examined in light of its recent revitalization—including the introduction of the TAF—the window's history reveals a timeline of events that parallels the exciting ebb and flow of financial markets and the U.S. economy. These events have tested the relevancy of Federal Reserve lending activity and confirmed the important role the discount window has played—and continues to play—in supporting the Federal Reserve's monetary policy activities.[2]

Key Dates in Discount Window History

1914 – 1933	1951 – 1955	2001 – 2007
The Early Years	A Recalibration	Re-engaged, Reinvented

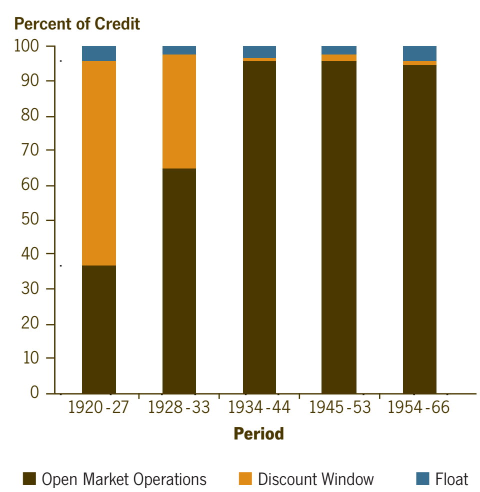
The Early Years - The discount window was intended to be the Federal Reserve's primary means for influencing credit and monetary developments. In the early years, Reserve Banks influenced the availability of credit to financial institutions by altering the discount rate (the interest rate at which the central bank agrees to make funds available to borrowing institutions). Collateral requirements were stringent and limited to high-quality, highly liquid, short-term agricultural, industrial, and commercial obligations.

Initially, lending activity for the Federal Reserve System and the Federal Reserve Bank of Cleveland was vigorous. The central philosophy was to grant credit liberally, particularly when emergencies caused by unusual conditions required prompt relief. The Federal Reserve's approach was influenced by the prevailing theory of monetary policy, known as the Real Bills doctrine, which held that the central bank should provide liquidity only in exchange for securities that directly finance commerce.[3] The self-liquidating nature of the discounted paper allowed the quantity of money in circulation to rise and fall with the needs of trade.

As a result, most reserves supplied to the national and local economies were through member bank discounting and direct lending (or advances, using the term of the day). Discounts and advances in relation to Federal Reserve credit reached a peak of about 82 percent in 1921 and did not fall below 37 percent until 1930 (see figure below). During this period, roughly 60 percent of member banks maintained an active borrowing relationship with their local Reserve Bank. It was not uncommon for hundreds of banks to borrow continuously in excess of their capital and surplus.[4] Similar experiences were reported for Fourth District institutions. Economic times were often quite volatile, characterized by growth and prosperity followed by reversals and recessions.

At the end of the 1920s and into the 1930s, open market operations—purchases and sales of U.S. Treasury and government agency obligations—gradually began to replace the discount window. Part of the reason was the low attractiveness of private obligations for discounting, given the volatile economic period (especially during the Great Depression) and, later, in view of the extensive holdings of government debt as a result of the Roosevelt administration's national recovery efforts.[5] Despite its secondary role, the discount window continued to support member banks as needed, particularly as a source of funds when financial pressures heightened.

Sources of Reserve Bank Credit



In the early years of the Federal Reserve, the discount window played an important role in the implementation of monetary policy. In time, open market operations became the primary mechanism.

Source: Shull (1971).

2. The focus of this essay is the Federal Reserve discount window's primary credit program and its predecessor, the adjustment credit program. The Federal Reserve also offers two other lending programs: the seasonal credit program, designed to assist small depository institutions in managing significant seasonal swings in their loans and deposits, and the emergency credit program, which is authorized by the Board of Governors in unusual and exigent circumstances for individuals, partnerships, and corporations that are not depository institutions.
3. Marshall (2002).
4. Shull (1971).
5. Marshall (2002).

A Recalibration – From the Depression until the early years after World War II, Reserve Bank discount window lending declined and remained low. This outcome was not unexpected, as banks maintained large holdings of government securities and held excess reserves, thus reducing their need to borrow.[6] Following the Treasury–Federal Reserve Accord in 1951, which released the Federal Reserve from the obligation to support the market for U.S. government debt at pegged prices and allowed the independent conduct of monetary policy, normal monetary policy operations resumed and banks returned to the discount window. Despite a relatively nominal increase in lending activity, discount officers' perceptions reflected a shift in opinion. In contrast to the earlier days, which had generally encouraged lending (perhaps for all but speculative purposes), the new sentiment considered lending an exceptional activity (for appropriate reasons and typically permitted only under the close watch of the responsible discount officer).[7]

In 1953, the Federal Reserve organized a committee to evaluate discount window lending guidance. The committee's findings led to a 1955 revision of Regulation A, the authority governing discount window lending administration. This revision "reflected a choice to restrict activity at the discount window well below even the lowest levels reached in the 1920s and to provide almost all reserves through open market operations."[8] The new rules required discount officers to scrutinize borrowing requests and closely monitor borrowing duration and frequency. In other words, questions were asked about why banks were borrowing money, and appropriate answers were expected. Not surprisingly, lending activity was minimal in the years that followed. Over time, the discount window was regarded as a generally unattractive source, even under what would otherwise be considered reasonable circumstances. "Reluctance to borrow" became a well-established discount window concept for many institutions.

Legislative Changes - Following Regulation A's revision, not much was done publicly to address the window, although the topic was well-studied behind the scenes. Twenty-five years later, in 1980, Congress passed the first of two laws affecting discount window availability. The Depository Institutions Deregulation and Monetary Control Act dramatically expanded the universe of depository institutions eligible to borrow at the discount window. As a result, the Federal Reserve assumed responsibility for meeting the liquidity needs of not only member banks, but any institution subject to reserve requirements. The Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) restricted Federal Reserve lending capabilities to potentially insolvent institutions. This act was designed to address perceived issues in discount window lending in the turbulent 1980s, when the Federal Reserve lent for extended periods to banks that eventually failed. In some cases, this lending helped provide uninsured depositors and other creditors sufficient time to remove their funds from a troubled bank, which increased the losses to the federal deposit insurance fund.[9]

The discount window's ability to support Federal Reserve policy objectives, particularly as the lender of last resort, came into sharp focus in 2001.

PRESS RELEASE: SEPTEMBER 11, 2001

"The Federal Reserve System is open and operating. The discount window is available to meet liquidity needs."

In addition to the more horrible loss of life, the attacks on New York City and Washington DC on September 11, 2001, disrupted domestic and global financial markets. The Federal Reserve moved quickly, cutting interest rates, infusing emergency cash into the financial system, encouraging lenders to loosen repayment terms for distressed borrowers, and coordinating monetary policy easing and payments-system support internationally. System lending activity reached historic proportions, with $46 billion lent on September 12 (more than 200 times the daily average for the previous month). The Federal Reserve Bank of Cleveland experienced similar historic lending activity, reporting the largest single day ($5.3 billion) and week of lending in its history. Among the lessons learned in the event response was the critical importance of the Federal Reserve's "lender of last resort" role in helping to maintain stability within the financial markets.

Sources: Board of Governors of the Federal Reserve System (2001); Schlesinger (2001).

6. Shull (1971).
7. Hakkio and Sellon (2000).
8. Shull (1971).
9. Broaddus (2000).

For the rest of the century, discount window lending activity began to depart from its historical pattern of rising in periods when the spread between the federal funds rate and the discount rate increased, and falling when the spread narrowed.[10] At times, lending activity bore little relationship between the direction of interest rates and the funds/discount rate spread.[11] The federal funds rate displayed increased volatility, particularly on settlement day (when depository institutions must meet their reserve requirements).

Perceptions of stigma were more pronounced, with bankers reporting that the discount window was not an attractive source of funding—despite its favorable rate (generally 50 basis points below the federal funds rate target)—given the high scrutiny and other restrictions assigned to loan requests. For example, interested institutions were required to exhaust all other funding sources before making a loan request. Formal limitations were also placed on borrowing frequency and the use of loan proceeds.

This combination of factors signaled a noticeable decline in the attractiveness of the discount window as a contingency funding source. Simply put, healthy institutions were often unwilling to turn to it—even under appropriate circumstances—for fear of provoking market or regulatory concerns.[12] Over time, these issues raised real concerns regarding the discount window's ability to carry out its role of relieving dislocations in local financial markets.

Re-engaged, Reinvented – The events of September 11, 2001, presented a rare opportunity to reveal the discount window's primary strength—its ability to provide liquidity to institutions in need. Barring this extraordinary event, however, borrower reluctance remained.

The New Primary Credit Lending Program –To address the shortcomings of the window, the Board of Governors introduced the primary credit program in January 2003 as the principal safety valve for ensuring adequate liquidity in the banking system. For institutions not qualifying for primary credit, the newly established secondary credit program would apply.[13]

FEDERAL RESERVE'S PRIMARY CREDIT PROGRAM

Purpose
To help sound depository institutions meet short-term, backup funding needs

Key Terms

- **Term:** Typically overnight; term borrowing permitted up to 90 days
- **Eligibility:** Institutions in generally sound overall condition
- **Collateral:** Pledge of a wide range of eligible assets
- **Rate:** Federal funds rate + 25 basis points (variable)

Administration
Minimal; generally "no questions asked"

The new program was different from its predecessor, the adjustment credit program, in two important ways. First, the discount rate was priced at an above-market rate (initially, the funds rate plus 100 basis points, although the spread was permitted to vary—and has since mid-2007—to facilitate discount window availability in response to financial market developments) in contrast to the below-market rate for the former program. Second, the new program would be administered with substantially reduced oversight.

An important goal of the new program was to reduce borrower reluctance. By rationing credit based on price and the condition of the borrowing institution (including financial condition and capitalization eligibility standards) rather than on discount officer administration and oversight, the new program would more efficiently serve as a safety valve, relieving financial market pressures.

10. The federal funds rate is the interest rate at which depository institutions lend balances at the Federal Reserve to one another.

11. Hakkio and Sellon (2000).

12. Clouse (1994).

13. Secondary credit is extended under the same collateral requirements as primary credit. Extended at a rate 50 basis points higher than the applicable primary credit rate, secondary credit is available to institutions that are unable to meet the financial condition and capitalization standards for primary credit. Given the adverse financial condition of these parties, secondary credit requests are subject to discount officer scrutiny. Borrowers are generally able to obtain funds only on a short-term basis.

Federal Reserve Bank of Cleveland's Credit Risk Management Department in front of the discount window in the Bank's main lobby

Todd Berardinelli, Mark Meder, Jack Hodgkiss, Doug Banks, Jeff Hirsch, Ann Makohon,Toby Trocchio, Eric Polansky, and Stacey Steadman; (not pictured) Jane Chodzin, Kathy Lucic, and Sue Prior

FOURTH DISTRICT CONTRIBUTIONS

The Credit Risk Management Department at the Federal Reserve Bank of Cleveland made significant contributions to the New Primary Credit Lending Program. In 2002, Cleveland staff chaired a national project that developed a standard depository institution risk assessment framework. The framework enabled greater consistency across the Federal Reserve System and helped establish eligibility standards for the primary credit and TAF programs.

In 2003, Cleveland discount window leadership assumed responsibility for regulatory and other outreach, promoting awareness of the new primary credit program. Notable contributions included the creation of an innovative, self-directed web-based training tool, including content for the banking community, regulators, and general public (see **www.frbdiscountwindow.org**); more than 20 presentations on the new lending program to various local and national groups; and several articles promoting awareness of the new program.

One study concluded that while the primary credit program did not significantly affect overnight borrowing activity (the higher direct costs of borrowing under the new program effectively countered the attractive, reduced credit administration), its utility in relieving funding market pressures was evident. The study noted a significant reduction in the spread between the target and effective federal funds rates, suggesting that the new primary credit program was acting appropriately to relieve overnight borrowing rate volatility. In essence, depository institutions were turning to the discount window when rates spiked rather than paying higher rates in the overnight markets.[14]

The Term Auction Facility - The most recent chapter in the rebirth of the discount window occurred in December 2007 with implementation of the new temporary Term Auction Facility (TAF). Beginning in late summer 2007, the financial markets were rocked by adverse developments in the subprime mortgage and other markets. On August 17, 2007, the Federal Reserve responded by reducing the primary credit rate by 50 basis points (in turn, narrowing the spread between the primary credit rate and the federal funds rate from 100 basis points to 50 basis points) and by providing term financing for up to 30 days, renewable by the borrower. These changes were designed to reassure depository institutions about the cost and availability of funding. Subsequently, on December 12, 2007, the Federal Reserve introduced the TAF as an additional measure to address the elevated short-term pressures in funding markets. To further bolster market liquidity and promote orderly market functioning, on March 16, 2008, the authorized term for primary credit was extended from 30 days to 90 days, and the spread on primary credit to the federal funds rate was narrowed to 25 basis points.

The TAF allows banks to borrow from the Federal Reserve at relatively attractive rates against a wide range of their assets. TAF credit is a fixed-rate term advance (generally one-month maturity) determined through an auction process. Under this program, the Board sets the auction parameters, including the offering amount, the minimum and maximum bid amounts, the minimum bid rate, bid submission date, and opening and closing times. Participants must be eligible for primary credit.

At the time of this writing, the Board has successfully completed 12 auctions, yielding $510 billion in funds advanced.

THE TERM AUCTION FACILITY

HOW DOES IT WORK?

- Eligible bidding depository institutions contact their local Reserve Bank discount window to submit their TAF bid.
- Once the bid submission period is closed, the Reserve Bank forwards all eligible bids to the TAF auction agent.
- The TAF auction agent orders the bids from the highest to lowest rate.
  - Bids are accepted starting with the highest rate submitted, working down to successively lower rates, until the offering amount for the auction is fully allocated or the minimum bid rate is reached (whichever is first).
  - The lowest accepted interest rate is the “stop-out rate.” Bids at interest rates above the stop-out rate will be allocated the full bid amount. Bids at the stop-out rate may be prorated.
- All participants awarded a TAF advance will pay the stop-out rate, regardless of the interest rate at which they bid.

14. Artuç and Demiralp (2007).

Conclusion – Jack Hodgkiss, the analyst in the TAF phone transcript at the beginning of this essay, is a member of the Federal Reserve Bank of Cleveland's Credit Risk Management (CRM) Department. Jack and his colleagues have played key roles in helping to shape U.S. central bank discount window lending and collateral policies and procedures. CRM staff administer Fourth District discount window lending (specifically, the primary, secondary, seasonal, and emergency credit programs) and collateral activities; oversee depository institution access to daylight and overnight credit; and administer reserve requirements. With the assistance of the Banking Supervision and Regulation Department, CRM monitors the financial condition of the 1,152 institutions in the Fourth District to determine their eligibility for participation in the discount window primary credit and TAF programs and to administer daylight credit.

The Fourth District discount window and its related programs are in good hands. But what does the future hold? Will the TAF continue to complement the window as a permanent fixture of monetary policy? Early reports suggest that the TAF has been successful, but time will provide the true test. For now, we in the Fourth District financial community look to the discount window to be our financial bridge, to remain flexible and strong, to offer support during times of transition, and to present an alternative route when disruptions block our way.

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