## The New Discount Window

by Ed Stevens

or the past 20 years, the Federal Reserve Banks have made discount window loans to depository institutions (DIs) at interest rates that were below the rate at which DIs would lend to each other in the federal funds market (see figure 1). Now, that has changed. On January 9, 2003, the Reserve Banks raised their basic discount rates by 150 basis points to a level higher than the federal funds rate. This represented no change in the stance of monetary policy, but rather one of operational procedure. The intention is to rely on an above-market discount rate instead of the administrative devices of 12 Federal Reserve Banks (such as lending guidelines) to ration borrowing at the discount window. If it works-and so far it has (see inset on figure 1)—the discount rate should become a ceiling on the level of the federal funds rate, the effect of which will be to keep the actual federal funds rate closer to the target. Whether the discount rate actually will act as a ceiling, however, will only emerge from experience during periods of substantial reserve shortage such as those that drove the funds rate far above the discount rate in the past.

This Commentary looks at the changes in the behavior of DIs and the 12 Federal Reserve Banks that will be necessary to ensure the desired realignment of rates. In general, three changes must take place. The first seems assured: Reserve Banks actually must set their basic discount rates above the Federal Open Market Committee (FOMC) target for the federal funds rate. Initially, rates have been set at a 100 basis-point spread above the funds rate target. The Federal Reserve System has indicated it intends to maintain a significant positive spread between these two official rates, although the size of the spread might need to be varied.

Two other important changes must take place if the actual market federal funds rate is to remain below the discount rate: Depository institutions must shed their reluctance to borrow at the discount window, and Reserve Bank lending officers must adopt a new approach to lending. Revisions to Federal Reserve Regulation A, also effective on January 9, should facilitate these changes. A comparison of the old and new discount windows shows how those revisions enable—but don't guarantee—the required changes in borrower and lender behavior.

# ■ Why the Discount Rate Used to Be Lower

Under the old discount window arrangement, the discount rate on adjustment credit typically was below the funds rate, sometimes by a very substantial margin. (Adjustment credit was the most basic of the three types of credit provided.) This was possible only because DIs were reluctant to borrow at the discount window and Reserve Banks operated under Board of Governors regulations that guarded against arbitraging the low discount rate. Otherwise, the funds rate would have fallen to the level of the discount rate and generated an inconsistency between the institutional structure of the Federal Reserve System and the structure of the market for bank reserves.

To understand this potential inconsistency, recognize that the Banking Act of 1935 lodges monetary policy authority in the United States in the Federal Open Market Committee. The FOMC includes the seven members of the Board of Governors, the president of the Federal Reserve Bank of New York, and, on a rotating basis, four presidents of the remaining 11 Reserve Banks. Policy authority is exerted mostly through open market operations. These purchases or

New regulations will change the way credit is rationed at the Federal Reserve's discount window. The Reserve Banks used to charge a below-market discount rate and rely on loan officers to restrict access to loans. Under the new system, the discount rate normally will be significantly higher than market rates, but loans will be available to any sound institution (which means most) at its discretion. This new arrangement eliminates any perception of a subsidy at the discount window. It also should prevent the actual fed funds rate from exceeding the discount rate so long as depository institutions feel free to borrow at the window.

sales of securities add or drain bank reserves, creating downward or upward pressure on the cost and availability of money and credit, which can be indexed by the level of the federal funds rate.

Like open market operations, an increase or decrease in lending at the discount window also adds or drains bank reserves. The level of the discount rate at which a Reserve Bank will lend is set by its board of directors, subject to "review and determination" by the Board of Governors. With the discount rate below the federal funds rate, unrestrained arbitrage between the discount window and the funds market would expand the quantity of bank reserves and pull the funds rate down to the level of the discount rate. The FOMC then might attempt to push the funds rate back up to its target level by draining reserves through open market operations. This would not work, however, because any resulting upward pressure on the funds

rate would simply trigger additional borrowing that replaced the drained reserves as DIs took advantage of the rate spread.

Such a tug-of-war is entirely hypothetical, of course. For one thing, the governors represent a majority of the FOMC, so an imagined conflict over the appropriate policy rate only would be possible if the usual policy consensus failed to emerge from discussions within the FOMC. More to the point, 30 or more years' experience of a federal funds rate above the discount rate has shown no tendency for borrowed reserves to replace nonborrowed reserves because the Reserve Banks guarded against arbitrage. In fact, higher levels of borrowing did not pull the funds rate down toward the discount rate. Instead, higher spreads seem to have been necessary to overcome DIs' reluctance to borrow.

#### **■** The Old and the New

To keep the federal funds rate from being pulled down to the level of the discount rate when the discount rate was a below-market rate, Reserve Banks had to maintain nonprice guidelines that would ration access to discount window credit. Lending officers had to engage in nonprice rationing of adjustment credit loans to DIs experiencing unexpected and exceptional reserve shortages. They screened out borrowers who might borrow too frequently, had unused alternative sources of funds, or would relend discount window credit in the market.

Changes in Regulation A are intended to eliminate nonprice rationing of discount window credit. Central to the new discount window is the primary credit program, which provides the counterpart of the old discount window's adjustment credit. Like adjustment credit, primary credit is designed as a "back-up source of liquidity" to supply credit mostly "on a short-term basis, usually overnight." The difference between the new and the old windows is that eligible DIs-those in sound condition with adequate collateral—may borrow reserves through the primary credit program at their own discretion. Of course, they can do so only at the new level of the discount rate, 100 basis points above the monetary policy target for the federal funds rate. DIs ineligible for primary credit must use a secondary credit facility under close scrutiny, again with adequate collateral, and at an interest rate

50 basis points above the new discount rate on primary credit.

The vast majority of DIs are eligible for primary credit because their supervisors judge them to be in sound condition. As a result, any time the federal funds rate were to rise above the discount rate, eligible DIs in need of funds could borrow from the Reserve Banks rather than in the funds market. The availability of primary credit should make the discount rate an effective ceiling on the funds rate, just as it does in a number of other nations with similar discount window arrangements.

Under the old discount window regulations, too-frequent borrowing was discouraged, but the revised rules should make this unnecessary. At a discount rate 100 basis points above the target federal funds rate, it seems unlikely that frequent borrowing could be profitable. Arguably, some eligible DIs might have such attractive lending opportunities and scarce funding sources that the discount window would represent a profitable source of funds. If this turns out to be the case, an important question then would be whether supervisors consider this a safe and sound practice for otherwise sound DIs. If not, then Reserve Bank directors and the Board of Governors could increase the spread of the discount rate above the funds rate target to further discourage frequent borrowing without reimposing administrative guidelines for rationing credit.

Another old adjustment credit rationing device required DIs to exhaust market alternatives before turning to the discount window. Those eligible for the new primary credit program need not demonstrate that they have exhausted alternatives (except those seeking loans with a maturity longer than "a very short term....usually overnight" but only "up to a few weeks"). Again, a well-managed DI normally wouldn't want to pay the premium discount rate for primary credit when it had cheaper alternatives, making an administrative rule superfluous. A possible objection might be that some DIs, not in good condition, could borrow at the discount window and avoid paying an even greater risk premium for funds in the market. The new program should avoid such "adverse selection" because DIs judged to be in poor condition are not eligible for primary credit. Instead, they must use the secondary credit program that continues to rely on nonprice rationing (close scrutiny of reasons for

borrowing, means of repayment, and changes in condition) in addition to price rationing (a rate 50 basis points higher than the primary credit rate).

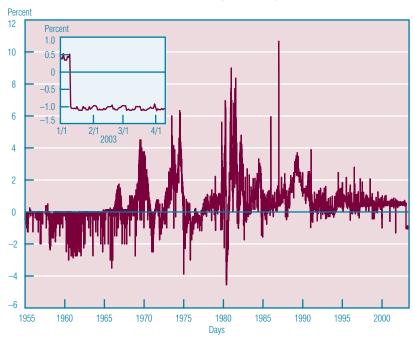
A prohibition on relending was a third standard discount window policy for nonprice rationing of adjustment credit. Now, for primary credit borrowers, a policy against relending funds would be counterproductive to a goal of the program, which is to constrain variations in the federal funds rate. When there is a shortage of reserves at many DIs, those that borrow and relend are performing a service in the market that otherwise would have to be done by the Reserve Banks. Revised Regulation A recognizes this by removing the guideline against relending. In this way, market forces can take over at least part of the job that had fallen to the Reserve Banks when they had to protect against funds market arbitrage.

Two other types of types of credit were available under the old discount window: seasonal borrowing and extended credit. These programs provided longerterm loans to a small number of borrowers in special circumstances. The recent revisions to Regulation A make no change in seasonal lending. This program provides credit (at an interest rate tied to market rates) to DIs, typically small institutions in agricultural or vacation areas, that experience pronounced and protracted seasonal swings in loan demand relative to deposit supply and that lack reasonable access to market sources to close the funding gap.

Extended credit has been available, within constraints set by Congress, for funding a troubled DI until supervisors resolved its difficulties. Revised Regulation A folds extended credit into the new secondary credit program. Secondary credit presents no danger of arbitrage with the federal funds market.

The transition from nonprice rationing to price rationing of discount window credit must involve more than a change in the wording of Regulation A if the desired results are to be achieved. Habits of thought and action must change. Potential borrowers no longer should wonder how they can demonstrate that they will not borrow too frequently, that they have exhausted all other possible sources of funds, and that they will not be relending the borrowed funds. Likewise, lending officers should no longer ask for nor expect to be offered such

### FIGURE 1 THE FEDERAL FUNDS RATE MINUS THE DISCOUNT RATE (1955–2003)



demonstrations from potential borrowers. The necessary conditions for receiving a loan are that the borrower be a sound DI, that it have adequate collateral, and that it pay the going discount rate.

#### **■** Roots of Reluctance

Neither reluctance to borrow nor restrictive lending guidelines were a part of the initial design or operation of the discount window contained in the 1913 Federal Reserve Act. Instead, the discount window was at the center of monetary policy operations under the gold standard. The Reserve Banks were expected to accommodate DIs when they sought funds to finance the shortterm credit needs of commercial customers. They did so by discounting (buying) DIs' existing short-term commercial credits (called "real bills," extended to bank customers to finance their shipments of output) at a discount rate that was competitive with market rates. If inflation or deflation brought with it an inflow or outflow of gold, the Reserve Banks could raise or lower their discount rates relative to market rates in other gold standard countries and correct the imbalance.

But this original policy conception never was fully implemented. The onset of World War I soon flooded the market with Treasury securities. Banks in need of extra reserves began to use their

Treasuries as collateral for discount window loans rather than discounting bills. By the 1920s, changes in monetary policy procedures brought open market operations in Treasury securities to the center of policy operations. More important, an interbank federal funds market developed at a positive rate spread above the discount rate. This appears to have reflected a growing view that depository institutions normally should fund themselves from market sources, using the discount window to obtain reserves only in exceptional circumstances of reserve shortage. The onset of the Great Depression cut short this experience with a positive rate spread and reserves shortage, but by the 1960s, the funds market again had become a dependable venue for DIs to buy and sell reserves for same-day reserve position adjustment.

DIs' reluctance to borrow undoubtedly took root in Reserve Banks' lending guidelines. This can be inferred from the fact that only rarely did Reserve Banks actually deny requests for adjustment credit. Rather, most DIs avoided applying for credit even when the funds rate was far above the discount rate. Transformation of loan officers' guidelines into reluctance to borrow is readily explained. DIs knew that they could not expect to borrow at will from the Reserve Banks because credit was

rationed, albeit without explicit quantified guidelines. Therefore, each DI was reluctant to borrow lest it use up an implicit limit on the number of times it might expect to borrow at the discount window. Too-frequent borrowing might preclude receiving a loan when faced with an even more severe reserve shortage or might incur adverse supervisory comment.

Widespread belief in an implicit limit on the use of adjustment credit was reflected in common explanations for the funds rate normally trading above the discount rate. For example, it was argued that a DI's reserve position manager would want to avoid presenting senior management and directors with information that could be interpreted as evidence of bad judgment. A visible trip to the discount window would be evidence of bad judgment, whereas managing to cover an unexpected need for funds in the market would not. Paying a very high price in the funds market also might not reflect bad judgment. After all, the extra cost would be only slightly more than \$2,700 per extra percentage point per hundred million dollars per night.

A more basic example was the widespread perception of a stigma associated with using adjustment credit. The Reserve Banks do not make the names of the DIs to whom they lend public. Nonetheless, total adjustment credit borrowing typically was small enough at most Reserve Banks that market observers might make inferences from an increase in a Reserve Bank's lending and a particular DI's prior market search for funds or rumors of its funding problems. If a DI's trip to the "lender of last resort" was inferred, it might be viewed as an act of desperation by an institution whose difficulties were not just an end-of-day surprise, but something much deeper. Any consequent widening of the DI's risk spread in funding markets might cost far more than the immediate saving realized from going to the window.

#### Overcoming Reluctance to Borrow and Lend

One success of the new primary credit program will be the elimination of a "subsidy" discount rate. A second will come when unintended shortages in the supply of reserves and unforeseen bulges in the demand for reserves no longer drive the federal funds rate above the

discount rate. Under the old discount window, DIs' reluctance to borrow, reflecting Reserve Banks' credit rationing, maintained the funds rate above the discount rate. Changes to Regulation A have substituted price (an above-market discount rate) for nonprice (administrative guidelines) methods of rationing discount window credit. As long as DIs understand that they need not be reluctant to ask for a loan, but only reluctant to pay the discount rate price, then primary credit borrowing should keep the federal funds rate at or below the discount rate. For this to happen, the Reserve Banks must make eligible DIs feel free to borrow at their own discretion.

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