Jim Bullard, President and CEO Federal Reserve Bank of St. Louis

The Fed as Lender of Last Resort

Because our central bank has relied on the federal funds rate target for so long to guide the economy, many people think that the target rate is the only tool at the Fed's disposal. As we are seeing in the current financial crisis, the Fed has other options. Most visible so far have been the lending programs that have been created in the past year, along with established programs that have been modified.

Among the tools the Fed can use is the discount window, which has been around since the Fed was established in 1913. The window was the primary instrument for central banking operations for decades, just as open market operations (the buying and selling of U.S. Treasury and federal agency securities to achieve a desired quantity of reserves or the fed funds rate target) have dominated in modern times. Traditionally, the discount window has offered overnight lending for generally sound depository institutions to relieve short-term liquidity problems. Discount window loans must be fully secured.

Except in unusual circumstances, depository institutions rarely tapped into the discount window for fear they would be stigmatized as weak. But that attitude changed beginning last year as financial market turmoil intensified. The Fed notso-subtly reminded depository institutions about the availability of the window, cut the window's interest rate (the discount or primary credit rate) and increased loan periods to a maximum of 90 days. The line at the window was soon long. Primary credit lending exceeded \$90 billion in November.

In December 2007, the Fed launched the Term Auction Facility to help meet depository institutions' need for liquidity. This facility auctions term funds against collateral. Starting a bit more than a year ago, auctions have been held several times a month, with available amounts ranging from \$20 billion to many multiples of that. Borrowing via the TAF has been substantial, reaching a level of \$384.6 billion in November.

Last March, the Fed began two lending programs for primary dealers, those banks and securities broker-dealers with whom the Fed trades U.S. government securities to carry out open market operations. The Term Securities Lending Facility (TSLF)

"The lender of last resort function of the central bank is an important one during a financial crisis, and the Fed has been extraordinarily active during the current episode in fulfilling this function."

provides secured loans to primary dealers on a 28-day term. The Primary Dealer Credit Facility (PDCF) provides overnight loans. Among the collateral that the Fed accepts for these loans are mortgage-backed securities. Both facilities lend at an interest rate equal to the New York Fed's discount rate.

This past fall, the Fed introduced another set of lending programs. The Asset-Backed



Commercial Paper (ABCP) Money Market Mutual Fund Liquidity Facility (sometimes shortened to AMLF) extends collateralized loans (from the Boston Fed) to finance purchases of ABCP in an attempt to encourage secondary markets to lend long-term. A few weeks later, the Commercial Paper Funding Facility (CPFF) was introduced to help alleviate a shortage of term funding in the commercial paper market. With financing from the New York Fed, a special purpose vehicle (SPV) was set up to buy three-month unsecured and asset-backed paper.

This list is not exhaustive, and the Fed may devise other lending facilities in an attempt to mitigate the effects of financial market turmoil. But it is important to emphasize that all of the facilities mentioned above are separate from the well-publicized loans drawn up just for AIG, Bear Stearns and Citigroup. These firms received special and immediate handling because of fears that their collapse could have a systemic effect.

In all, the Fed has made more than \$2 trillion in loans so far during this crisis. No doubt, this is a staggering amount, but all of it is collateralized or secured. The lender of last resort function of the central bank is an important one during a financial crisis, and the Fed has been extraordinarily active during the current episode in fulfilling this function.