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Walter Bagehot, the Discount Window, and TAF

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A widely recognized critical function of a central bank is to be a lender of last resort, particularly in times of financial distress. Walter Bagehot—a 19th century English intellectual—summarized the lender of last resort function with the dictum "lend freely at a high rate, on good collateral." In response to the mortgage-related distress in financial markets, the Fed has implemented a number of new lending programs. Prominent among these is the Term Auction Facility (TAF), through which the Federal Reserve Banks auction funds to depository institutions. The TAF may not reflect Bagehot's views on the role of a lender of last resort—and neither may recent traditional discount window lending.

Since the Fed's inception, banks have been allowed to borrow from Reserve Banks' discount windows. Once an important source of bank reserves, borrowing at the discount window has diminished over time: After substantial borrowing by then-troubled Continental Illinois Bank in early 1984, depository institutions became more reluctant to borrow from the Fed and borrowing fell to tertiary levels. Consequently, few depository institutions borrowed from the discount window during the early months of the financial market turmoil in 2007.

To provide more liquidity to depository institutions (and with the hope of reducing their reluctance to borrow at the discount window), on December 12, 2007, the Fed announced the establishment of a temporary Term Auction Facility. Under the TAF, the Fed supplies a predetermined amount of funds to depository institutions for 28-day (two maintenance periods) and 84-day terms against the same collateral used to secure conventional discount window loans. The funds are auctioned. The Fed sets a minimum bid rate; however, all loans are made at the lowest rate (the stop-out rate) that exhausts the amount of funds being auctioned. The initial auction was for $20 billion; the most recent auction was $150 billion.

> "Lend freely at a high rate, on good collateral."
>
> —Walter Bagehot

By contrast, discount window loans are initiated by depository institutions that come to the Fed and request a loan. Discount window loans adhered to Bagehot's dictum—lend at a high rate—in that the primary credit rate was set at 100 basis points above the Federal Open Market Committee's target for the federal funds rate. But under the TAF, depository institutions compete for funds by indicating the amount they wish to borrow and the rate that they are *willing to pay*.

Figure 1
Funds Target, Primary Credit Rate, 1-Month CD Rate, 1-Month Eurodollar Rate, and TAF Stop-Out Rate

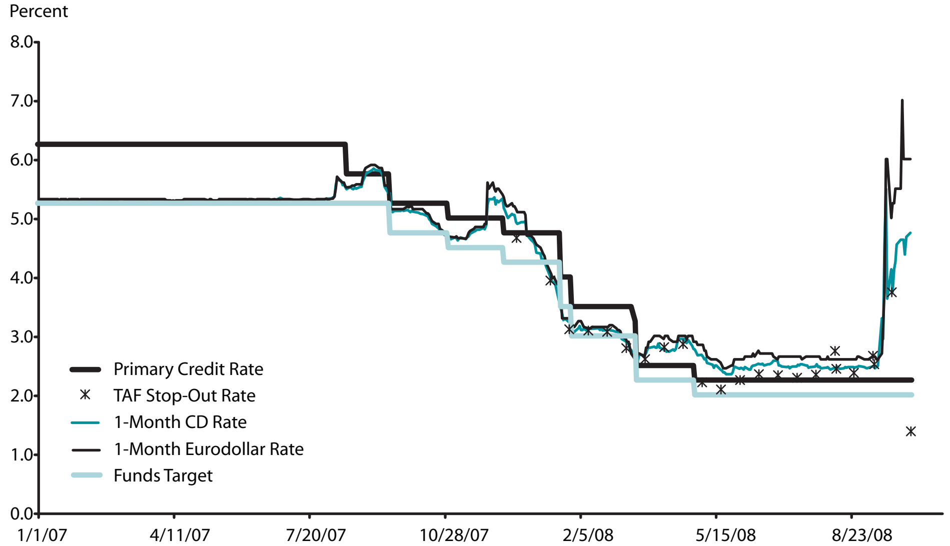
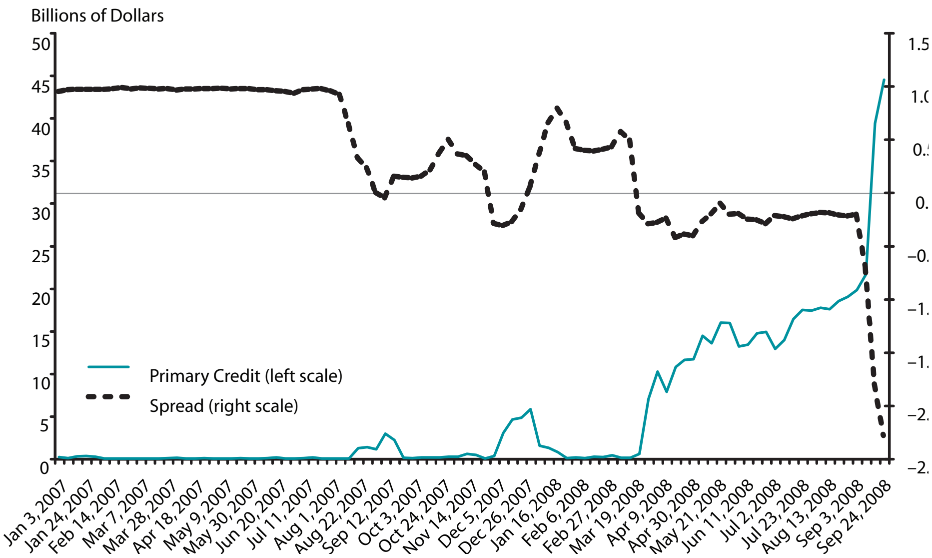


Figure 1 shows the primary credit rate, the 1-month CD and eurodollar rates, and the stop-out rates for each of the 24 TAF auctions: The stop-out rate has been at or below CD and eurodollar rates and often below the primary credit rate. Hence, rather than lending at a penalty as Bagehot recommended, the TAF has provided funds at rates that have generally been low relative to rates that depository institutions would have had to pay otherwise. Indeed, the rate on the $150 billion auction held on October 6 was 1.39 percent, 86 basis points below the then primary credit rate of 2.25 percent and 36 basis points below the new primary credit rate of 1.75 percent established on October 8.

Figure 2
Primary Credit Outstanding and the Spread Between the Primary Credit Rate and the 1-month CD Rate **(daily averages of weekly figures for weeks ending the date shown)**



The figure also shows that until recently the primary credit rate was a penalty rate relative to rates on CDs or eurodollars. The primary credit rate remained a penalty rate despite the Fed reducing the spread between it and the funds rate target from 100 to 50 basis points on August 17, 2007. On March 18, 2008, the Fed reduced the spread further to just 25 basis points. On the next day, the Fed reduced the primary credit rate 75 basis points by reducing the funds rate target by that amount. As a result of these actions, the primary credit rate has since been consistently lower than the CD and eurodollar rates.

Figure 2 shows the average daily level of primary credit outstanding for weeks ending the date shown (left scale) and the average daily percentage point difference between the primary credit rate and the 1-month CD rate for the same weeks (right scale). The primary credit rate is a penalty rate when the difference is positive and a subsidy rate when it is negative. The figure suggests that the reluctance by depository institutions to borrow from the Fed—which had characterized discount window borrowing since mid-1984—appears to have vanished. Indeed, primary credit has recently been at levels not experienced historically at the discount window. The strong negative correlation (–0.84) between these series suggests that depository institutions borrow primarily when the primary credit rate is a subsidy rate. ■