

Update on the Federal Reserve's Term Auction Facility

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The Federal Reserve's Term Auction Facility (TAF) which provides short-term funds to qualified borrowers at the discount window has been extended through June 2009. The first auction of this second phase occurred on April 6th when the Fed again offered \$150 billion in 28-day credit. Bidders requested \$106.25 billion at the auction and all bids were accepted at a stop-out rate of 0.25%. The next auction of \$150 billion in 84-day funds is scheduled for April 20th. Subsequent auctions will rotate between 28-day and 84-day maturities through June 29th. Additionally, the Federal Reserve changed collateral requirements for all discount window borrowing effective April 27, 2009. The changes increase the effective cost of borrowing under TAF.

Borrowers at all auctions so far in 2009 have paid 0.25%. While at the high end of the Fed's target range for the federal funds rate, this continues to be a relatively cheap source of funds well below the London Interbank Offer Rate (LIBOR). The low TAF borrowing rate reflects the recent high levels of liquidity at many banks and the limited number of bidders relative to the \$150 billion available (the last auction had only 105 bidders, all receiving their full allocation). Clearly, the largest institutions remain the biggest participants in TAF given that the average amount borrowed per institution normally exceeds \$1 billion.

Change in Collateral Requirements

On March 30, 2009, the Federal Reserve announced that it was changing collateral requirements for discount window borrowings, including borrowings under TAF. In broad terms, the Federal Reserve values collateral differently depending on whether the pledged loans are 'individually deposited' or 'group deposited.' Collateral (lendable) values for group deposited loans are based on assumptions regarding the risk characteristics of the underlying loans. Given the ongoing credit difficulties throughout the U.S., effective April 27, 2009 the Fed reduced the lendable values from previous levels by 10% to 35% depending on the type of loan. The following Table indicates the changes for group deposited loans.¹ Lendable values were not changed for individually deposited loans.

The obvious implication is that a bank's borrowing capacity has fallen sharply for its group deposited loans. Viewed alternatively, banks must now post loans with greater nominal principal

¹ The data are from the March 30, 2009 announcement which can be obtained at <http://www.frbdiscountwindow.org/announcement090330.cfm>

values in order to access the same amount of funds. If qualifying collateral is not available, a bank will be able to borrow less. The net impact is to increase the effective borrowing rate under TAF.

Impact of Increased Collateral Requirements on the Effective TAF Borrowing Rate

The impact of greater collateral requirements can be demonstrated by an example. Consider two banks where one has ‘excess collateral’ in the sense that its available collateral far exceeds the amount it is willing to borrow under TAF and another has limited amounts of qualifying collateral that subsequently restrict how much it might borrow under TAF.

Bank with Excess Collateral: Effective borrowing rate is the TAF stop-out rate

Any bank with excess collateral will be forced to increase the nominal amount of collateral pledged against TAF borrowings due to the reduced lendable values. Because the amount borrowed is not constrained, however, the marginal cost of borrowing is the TAF stop-out rate.

Bank with Limited Collateral: Effective borrowing rate is the TAF stop-out rate + premium

On the other hand, consider a bank that wants to borrow \$8.5 million under TAF. Previously, it posted \$10 million of home equity loans (HELs) as collateral under the 85% collateral requirement. In this case, its marginal cost of borrowing was 0.25%, the TAF stop-out rate. However, with the new collateral requirements, the \$10 million in HELs now backs just \$5 million in TAF borrowing. To fund the same \$8.5 million in assets and without qualifying collateral for the discount window, the bank would have to borrow an additional \$3.5 million from an alternative source. If the rate paid on this additional borrowing was 3.5%, the bank’s weighted average marginal cost of funds jumps to 1.875%, or 1.625% more than previously.²

Clearly, the size of the increased borrowing cost, or premium, depends on each bank’s available collateral and marginal cost of funding. The example with HELs is a “worst case scenario” given that HELs suffered the greatest haircut as their lendable value fell from 85% to just 50%. The key point, however, is that the collateral haircuts raise the effective borrowing rate for all banks without excess collateral.

² $(0.50)(0.25\%) + (0.50)(3.50\%) = 1.875\%$

Implications

- The Federal Reserve continues to provide large amounts of liquidity to the financial system. Given the relatively limited interest in the TAF auctions, participating banks should be able to borrow under TAF at rates near 0.25% unless the Fed sharply lowers the amount of funds available or raises the target federal funds rate. At present, the Fed has not formally indicated how much will be offered at TAF auctions beyond April 20th. It is unlikely that it will increase the federal funds target rate given the recession.
- Federal Reserve actions to reduce lendable values against qualifying collateral lower bank liquidity because borrowing capacity has declined. Bankers should revise their contingency funding plans in light of these changes in collateral standards.
- Banks with ample collateral should continue to find the TAF auctions attractive. Funds can be used to replace higher cost maturing deposits or other borrowed funds which should lower average borrowing costs and raise net interest margins.
- Banks with limited qualifying collateral will find that the TAF stop-out rate is less than the effective borrowing rate due to recent reductions in lendable values for different types of loans. Management should reassess the effective borrowing rate under TAF incorporating the lower collateral values.

Lendable Values for Discount Window Borrowing, Group Deposited Loans

Loan Type	Current Lendable Value	4-27-09 Lendable Value
Commercial and Agricultural Loans (Normal Risk Rated)	75%	65%
Commercial Real Estate Loans	75%	65%
Construction Real Estate Loans	75%	65%
1-4 Family Residential Mortgages	85%	70%
Home Equity Loans	85%	50%
Consumer Loans - Autos, Private Banking, Installment, etc.	80%	65%
Consumer Loans - Credit Card Receivables, Student Loans	75%	60%
Consumer Loans - Subprime Credit Card Receivables	60%	45%