The Macroeconomic Newsletter

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Interest Rate Increases Stress the Banking System

The Federal Reserve provides the banking system with a framework to settle inter-bank transactions. On two occasions it is very clear that interest rate increases severely stressed the banking system. When the inter-bank settlement system temporarily fails to clear transactions banks are effectively "bouncing or kiting checks" to each other.

The 9-11 event triggered the first failure of the settlement system. For technical reasons a statistic called "Settlement Fails" surged to epic proportions. At the peak of the technical problem it became impossible to settle $1.4 Trillion dollars of inter-bank transactions. The Fed was able to smooth the failure over.

9/19/2001 1,476,185,000,000

The system failed in July and August of 2003 when an unexpected market driven spike in long-term interest rates occurred. Rates were managed downward and the problem was temporarily solved.

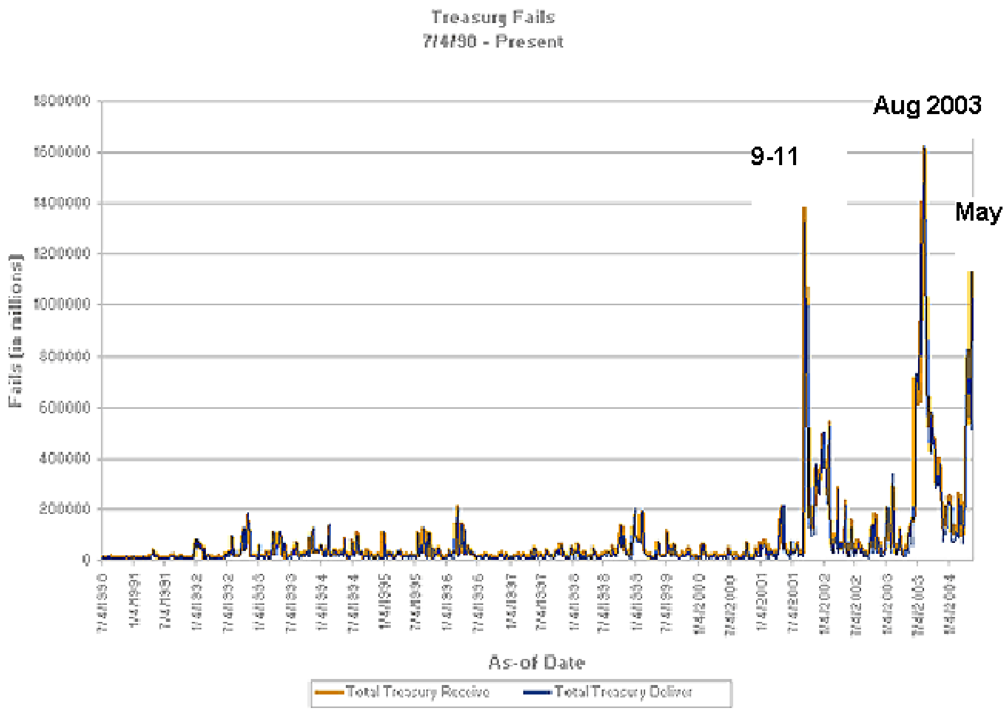
7/30/2003 938,354,000,000
8/6/2003 1,409,644,000,000
8/13/2003 1,356,773,000,000
8/20/2003 1,622,011,000,000
8/27/2003 1,040,811,000,000

The same condition of failure occurred in May of 2004. The failure was directly related to the recent rise in interest rates.. Increases in M3 liquidity could be "a fix" to this problem.

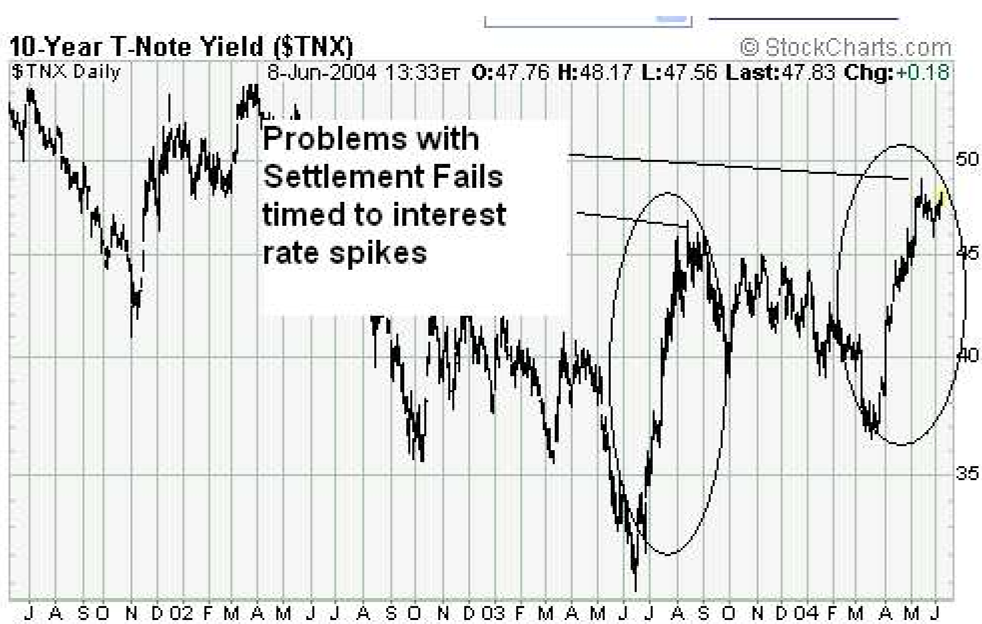
5/19/2004 1,175,041,000,000
5/26/2004 868,148,000,000

The next page contains a graph of "Settlement Fails" and a graph of the"10 Year Treasury Yield." The recent failures are timed exactly to interest rate increases. The settlement system has a significant problem absorbing modest changes in interest rates. The FED must have to step in periodically to prevent a crisis from occurring. Interest rate sensitive derivatives and interest rate arbitrage plays are putting pressure on the continuity of the banking system.

Given this condition, how can the FED raise interest rates to levels needed without blowing up the entire system? The problem is that the market will raise rates if the FED fails to do so.



(The Settlement Fails Graph has many years of data, and three major anomalies.)



OPTIONAL READING

This statement, by Alan Greenspan, provides a description of how the system failed during 9-11. This provides insight into how the system works.

"With borrowers and lenders uncertain whether the financial markets were open and with communications among issuers, their banks, and the settlement system impaired, there were difficulties in rolling over maturing commercial paper. The resulting shortfalls in the coverage of billions of dollars of maturing paper were managed by rolling fails into the next day's settlement or by drawing on bank lines, causing bank assets to balloon for a few days. Similarly, disruptions in the connectivity of communication lines and the shift to backup sites caused delays in payments and settlements, with billions in funds building up at a small number of participants unable to send out funds covered by similar amounts of Federal Reserve open market operations, overdrafts, and loans to those who could not receive. To facilitate the channeling of dollar liquidity to foreign financial institutions operating in the United States and to meet all appropriate demands for dollar liquidity, thirty-day currency swap lines were arranged with major central banks, again in record volume. Fed and bank balance sheets ballooned with the maldistribution of reserves, and domestic and foreign operations, but there was no fear of either credit or liquidity risk. Fed funds borrowers and lenders, forced to deal directly because brokers were temporarily unavailable, quickly reached agreements to trade at the targeted federal funds rate. Similarly, in response to losses of personnel and equipment at some participants, dealers agreed voluntarily to extend settlement in the Treasury market to T+5. Crucially, lenders--banks in particular--stepped up to meet their commitments, real and implied, to avoid the disruptions that were a large part of the terrorists' objective. "

Fedwire Funds Service The Fedwire Funds Service provides a real-time gross settlement system in which more than 9,500 participants initiate funds transfers that are immediate, final, and irrevocable when processed. Participants that maintain a reserve or clearing account with a Federal Reserve Bank may use Fedwire to send payments to, or receive payments from, other account holders directly. Participants use Fedwire to handle large-value, time-critical payments, such as payments for the settlement of interbank purchases and sales of federal funds; the purchase, sale, and financing of securities transactions; the disbursement or repayment of loans; and the settlement of real estate transactions.

In the Fedwire Funds Service, only the originating financial institution can remove funds from its Federal Reserve account. Originators provide payment instructions to the Federal Reserve either on line or off line. On-line participants send instructions through either a mainframe or PC connection to Fedwire, and no manual processing by the Federal Reserve Banks is necessary.

National Settlement Service The National Settlement Service (NSS) allows participants in private-sector clearing arrangements to exchange and settle transactions on a net basis through reserve or clearing account balances. NSS is available to arrangements that settle across Federal Reserve Districts as well as to arrangements that settle entirely within a single Federal Reserve District. There are approximately seventy NSS participants including check clearinghouse associations, automated clearinghouse (ACH) networks, and credit card processors.