



## A Tale of Two Crises

Recent developments in financial markets have lately dominated discussions about monetary policy. Analysts have noted that the effective federal funds rate has been trading relatively far from the target value set by the Federal Open Market Committee (FOMC). This is not uncommon in the face of financial market uncertainty. One of the defining features of crises is that markets tend to be more volatile, and the volatility can make it more difficult for the Fed to maintain the effective federal funds rate at the FOMC target.

To obtain some perspective on how the effective federal funds rate behaves in times of turmoil, we compare the recent behavior of the effective federal funds rate to its behavior in 1998. In the autumn of that year, the collapse of Long Term Capital Management (LTCM) sent shock waves through financial markets somewhat similarly to recent events involving the subprime mortgage market.

The chart shows daily data on the federal funds target and the associated effective federal funds rate for two episodes—the 1998 collapse of LTCM and the current case. (The 2007 data are in the lower portion of the chart and use the left axis, while the 1998 data are in the upper portion of the chart and use the right axis.) The data are aligned to the dates when each crisis became especially pronounced: September 23, 1998, the date of the LTCM collapse; and, recently, August 9, 2007.

The data in the lower portion of the chart have often been cited in recent discussions. The effective federal funds rate hovered near target until August 9, then deviated relatively far from target after that date. For the 1998 episode, the pre-crisis effective federal funds rate was somewhat more volatile than in the current episode. In both cases, volatility rose sharply at the height of the crisis. The standard deviation of the difference between the effective federal funds rate and the target during the 1998 post-crisis data is 28 basis points through the end of 1998. The post-crisis standard deviation for the current episode so far is only 18 basis points. By this measure, the 1998 post-crisis period was more volatile.

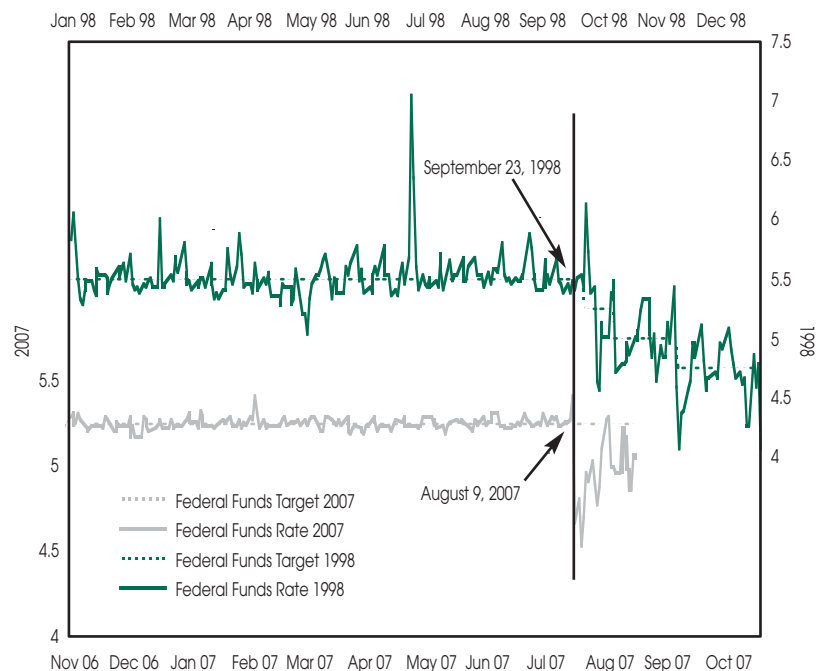
The increase in the standard deviation post-crisis versus pre-crisis, though, has been much larger in the current episode. The 1998 pre-crisis standard deviation was about 15 basis points,

excluding a particularly large deviation on June 30 of that year. The ratio of the post- to pre-crisis standard deviation is then 28/15, or approximately 1.9; volatility definitely increased, almost doubling after the onset of the crisis. In the more recent experience, though, the ratio of the post- to pre-crisis standard deviation is 18/3, or 6.0. This is perhaps what many have in mind in considering the 2007 event—volatility increased by a factor of six after the onset of the crisis.

However, this increase occurred mainly because the pre-crisis standard deviation is so small: only 3 basis points in this calculation. This could be viewed as a testament to the Fed's ability to maintain the effective federal funds rate close to target during tranquil times. With such a small pre-crisis standard deviation, most disruptions are going to seem relatively large. From a historical perspective, the 18-basis-point standard deviation of recent weeks is not particularly disturbing.

—James B. Bullard and Geetanjali Pande

Effective Federal Funds Rate Versus Target During Two Crises



Views expressed do not necessarily reflect official positions of the Federal Reserve System.