



Alternative Policy Weapons?

With short-term interest rates at historic lows and increased concern about deflation (not disinflation, but *deflation*), many analysts have expressed concern that the Fed will not be able to conduct monetary policy if the federal funds rate—which the Fed currently targets in the conduct of policy—falls to zero. Others claim that the Fed has other weapons in its arsenal that it could turn to in the event that the federal funds rate drops to zero. One claim is that the Fed could conduct monetary policy by buying government securities or other assets instead of targeting the funds rate. There is a sense in which this argument is correct and a sense in which it is not. The point of this discussion is to make this distinction clear.

The Fed has used a variety of short-run operating objectives over the years—free reserves, excess reserves, nonborrowed reserves, and (since the mid-to-late 1980s) the federal funds rate. While the operating objective has changed, the primary tool for achieving the objective essentially has been open market operations, i.e., buying and selling government securities.

The federal funds market rate is the rate paid for balances held at the Fed by banks (and other institutions) when those balances are traded. These balances are part of the banking system's reserves and are used to effect payments and meet statutory reserve requirements. The federal funds rate is determined by the supply of and demand for these balances. The Fed influences the funds rate by using open market operations to alter the supply of reserve balances relative to demand. For example, if the Fed wishes to reduce the funds rate, all other things the same, it must increase the supply of reserves.¹ Hence, open market operations are not another weapon in the Fed's arsenal, but the *only* weapon in its arsenal.

There is a sense in which open market operations and targeting the funds rate might be viewed as alternative

weapons, however. Consider the following example. Assume that the Fed is targeting the funds rate and that the market funds rate is currently at the target level. Now assume that there is a decline in interest rates due, say, to a drop in the demand for credit. This puts downward pressure on the funds rate. If the Fed does not wish to change its funds rate target, it must reduce the supply of reserves by selling government securities. With the funds rate target unchanged, some would say that monetary policy has not changed. From the perspective of open market operations, however, the Fed has tightened monetary policy.

Open market operations and the funds rate target need not be viewed as alternative weapons even in this case, however. Economists would generally argue that monetary policy became *tighter* in the above example not only because the Fed sold government securities, but because it kept the funds rate above the level that it would have moved to in the absence of these actions. According to this view, monetary policy is tight (easy) when the Fed attempts to keep the funds rate above (below) the level that would exist in the absence of policy actions, which might be called the *equilibrium* federal funds rate. From this perspective, monetary policy can be viewed either in terms of open market operations or the funds rate target relative to the equilibrium level. In one case, the degree to which monetary policy is tight or easy is measured by the difference between the target and equilibrium funds rates; in the other, it is measured by the magnitude of open market operations. If the federal funds rate were to reach zero, open market purchases of government securities would not cause the funds rate to fall further. Hence, it would make no sense to characterize policy in terms of the funds rate. Open market operations could continue to serve as the policy tool, however, and the Fed could continue to ease policy by buying government securities.

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¹The Fed must change the supply of reserves even in cases where the funds rate responds immediately to the announcement of a target change. (See Taylor, John B. "Expectations, Open Market Operations, and Changes in the Federal Funds Rate." *Federal Reserve Bank of St. Louis Review*, July/August 2001, 83(4), pp. 33-47.)

As of July 14, 2003, the St. Louis Adjusted Monetary Base and Reserve Series have been revised. For more information, visit research.stlouisfed.org, click the "Monetary Aggregates" link in the "Economic Research" section of the left-hand column, and scroll down to the "Federal Reserve Bank of St. Louis Monetary Base and Reserves" section.