Fed Challenge Brief:

The Fed Funds Rate

Overview

When news reports say that the Federal Reserve has increase or decreased “interest rates”, the reports are talking about the federal funds rate. The Fed funds rate is the rate charged when a bank borrows overnight from another bank to meet its reserve requirement. The Fed does not set the Fed funds rate, but uses open market operations to adjust the rate up or down when it chooses. Changes in the Fed funds rate generally cause other interest rates to change in the same direction. Most often, monetary policy involves decisions regarding the Fed funds rate made by the FOMC.

Purpose

Federal funds serve as the foundation of the money markets in the United States. They serve as:

A basis for setting the interest rates on financial securities by their position in the overnight market for credit.

The market foundation for both current and expected interest rates.

The Federal Reserve’s key tool for monetary as well as regulatory functions.

What are Federal Funds?

What function does the market for federal funds serve?

Depository institutions are required by law to hold a fixed percentage of their deposits in reserves. The reserve requirement is set by the Federal Reserve Board of Governors.

Overnight trading of reserves allows banks to borrow and lend funds in order to meet the requirement. Reserves pay no interest, meaning the opportunity cost of lending is small. This makes the federal funds rate among the lowest of interest rates. The system allows banks to distribute reserves more efficiently.

Who borrows and lends fed funds?

Only institutions required to hold reserves (commercial banks, savings and loan associations, and credit unions) can borrow or lend federal funds. Lenders include these same institutions and, less frequently, U.S. government agencies and nonbank securities dealers.

In what ways are federal funds unique?

They provide short-term financing and are immediately available — accessible on a daily basis.

Reserve accounts bear no interest, but are lent between banks at a predetermined rate known as the *federal funds rate*.

The majority of federal funds transactions come in the form of overnight borrowing.

Fed funds are exempt from reserve requirements and interest rate ceilings.

The Target Federal Funds Rate

The Federal Reserve uses a federal funds rate target to affect the money supply. The Federal Open Market Committee of the Federal Reserve sets a target for the federal funds rate and maintains it by the purchase and sale of Treasury securities. The target federal funds rate is the single most important tool used in monetary policy and consequently receives much attention in the press.

Federal Funds Rate as a Market Setting Rate

The federal funds market is important to all money market participants. Many or most interest rates in the economy are tied directly or indirectly to the fed funds rate. Banks set the prime rate — the rate their most reliable borrowers receive — as the federal funds rate plus a small profit premium. Other rates are set by banks as the prime rate plus some risk premium. Thus, small movements in the federal funds rate can have large effects on interest rates ranging from mortgage rates to corporate bond rates.

Federal Funds and the Federal Reserve

Federal Reserve Centrality to the Fed Funds Market

The Federal Reserve is central to the existence and operation of the federal funds market in that:

The market arose out of the Federal Reserve System's role as intermediary of exchange between banks.

The Fed's reserve requirements influence the demand for reserves.

The Fed uses the fed funds market as its most important and most frequently employed instrument of monetary policy.

The Federal Reserve, Overnight Lending Markets, and Fed Funds Rate Determination

The Federal Reserve uses the fed funds market to exert a strong influence over interest rates on overnight borrowing. Over time, the Fed has employed different approaches for carrying out its fed funds policies, and there are several models of fed funds rate determination, including:

Total reserve targeting: This is the standard textbook treatment of the fed funds rate, though the Fed has never actually employed this method.

Federal funds rate targeting: This has been standard operating procedure in recent years.

Reserve targeting with a discount window: This procedure has been used in the past.
These approaches are described in greater detail on the opposite page.

Ties with Other Short-term Interest Rates
Fed funds are partial substitutes for other sources of short-term lending, including repurchase agreements (RPs) and discount window borrowing. As a result, the interest rates in each of these markets tend to influence one another and to move roughly parallel to one another.

Discount Rate and Fed Funds

The fed funds market and the discount market can be substitutes. As an alternative source of short-term funds, the discount window's existence can complicate fed funds rate targeting.

The Discount Rate

The discount rate is the explicit price Federal Reserve member banks and other depository institutions must pay to borrow directly from the Federal Reserve.

At times, the Fed has used the discount rate as a primary tool of monetary policy. Today, the discount rate is primarily used to signal a change in monetary policy, effected through the fed funds market.

Discount Window Borrowing

The discount rate typically remains below the federal funds rate. Ordinarily, this might induce banks to borrow from the Fed through the discount window rather than from other depository institutions through the fed funds market.

In practice, however, banks strongly prefer the fed funds market because market participants may view discount window borrowing as a sign that the borrower is having trouble raising funds in other markets and may be experiencing financial difficulty. Therefore it may trigger enhanced scrutiny by the Federal Reserve and by other market participants.

Thus, banks borrow through the discount window only up to the point that the non-interest costs (e.g. increased scrutiny) outweigh the lower interest rate. At that point, they turn to fed funds (or other sources).

Data and Resources

Federal Reserve Bank of St. Louis – FRED
www.stls.frb.org/fred/data/irates/fedfunds

Historical Fed Funds/Discount Rates 1971-Present – FRBNY
http://www.newyorkfed.org/markets/statistics/dlyrates/fedrate.html

Chicago Board of Trade – Federal Funds Futures Data
www.cbot.com

Board of Governor's Selected Interest Rates
www.federalreserve.gov/releases/H15/Current/

Consolidated Federal Funds Reports
www.census.gov/govs/www/cffr.html

"Federal Funds," Marvin S. Goodfriend, *in Instruments of the Money Market, 7th Edition*, Timothy Cook & Robert LaRoche, Federal Reserve Bank of Richmond, 1993
http://www.rich.frb.org/pubs/instruments/

Survey of Federal Funds for Research and Development
www.nsf.gov/sbe/srs/sffrd/start.htm

Fedpoint 15: Federal Funds – Federal Reserve Bank of NY
http://www.newyorkfed.org//publications/frame2.cfm?url=%2Faboutthefed%2Ffedpoint%2Ffed26%2Ehtml

The Daily Market for Federal Funds James D. Hamilton, *Journal of Political Economy*, Feb 1996.