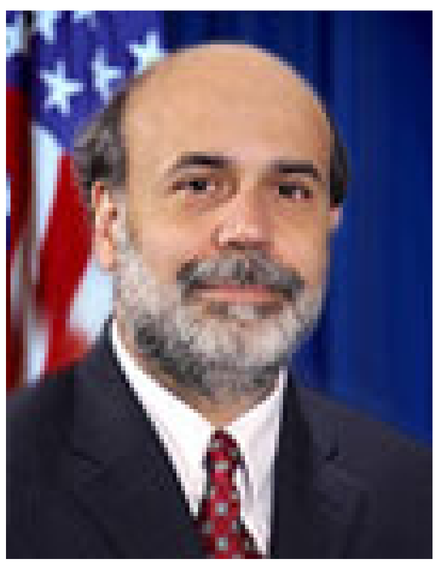
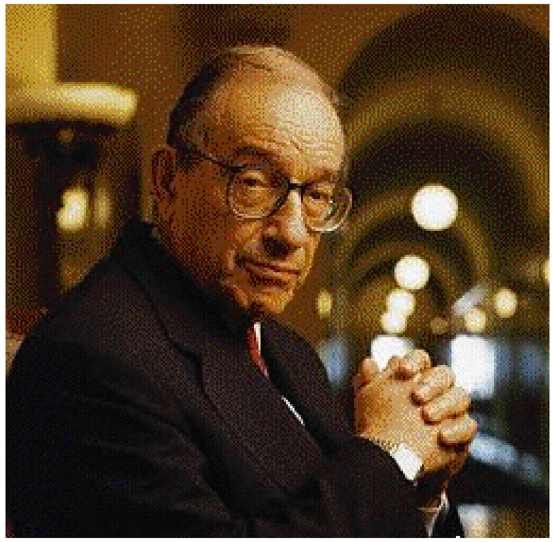
THE FEDERAL RESERVE SYSTEM

FEDERAL RESERVE CHAIRMAN - JANET YELLEN - February 1, 2014



FORMER FEDERAL RESERVE CHAIRMAN - BEN BERNANKE
February 2006 - February 2014



FORMER FEDERAL RESERVE CHAIRMAN - ALAN GREENSPAN
August, 1987 - January, 2006

THE FEDERAL RESERVE SYSTEM

The Federal Reserve is sometimes referred to as the Federal Reserve System. This is because it is primarily made up of three distinct units: 1) the Board of Governors, the federal government agency; 2) the Reserve Banks which serve as the operational arms; and 3) The Federal Open Market Committee (FOMC), the committee that sets monetary policy. Although the Federal Reserve System has three primary responsibilities: conducting monetary policy, supervising banks and providing payments services, we will focus on their responsibilities as it relates to monetary policy.

Board of Governors - The Federal Reserve System is the nation's central bank, established by an Act of Congress in 1913. The Fed is led by seven individuals known as the Board of Governors. Heading the Board is a chairman and vice-chairman, who are appointed by the President of the United States and approved by the Senate to serve four-year terms. The seven Governors are also appointed by the President and confirmed by the Senate. The terms of the appointments are staggered - a new Governor every two years - and terms of 14 years each. The seven governors, along with a host of economists and support staff, write the policies that make our banks financially sound and formulate the policies that make our nation economically strong.

Reserve Banks - The Federal Reserve System is divided into 12 districts. Each district is served by a regional Reserve Bank, most of which have one or more branches. Reserve Bank activities include storing banks' excess currency and coins, and processing and settling their checks and electronic payments. Every Reserve Bank has a President, and each Reserve Bank President is appointed to a five-year term by that Bank's Board of Directors, subject to final approval by the Fed's Board of Governors. Directors of each Reserve Bank are selected to provide a crosssection of interests within the region, including those of depository institutions, non-financial businesses, labor, and the public.

FOMC - The FOMC is the Fed's chief monetary policymaking body. The FOMC meets in Washington eight times a year and has 12 members: the seven members of the Board of Governors, the President of the Federal Reserve Bank of New York, and four of the other Reserve Bank Presidents, who serve in rotation. The remaining Reserve Bank Presidents contribute to the Committee's discussions and deliberations. The President of the Federal Reserve Bank of New York serves on a continuous basis; the Presidents of the other Reserve Banks serve on a rotating basis for one-year terms beginning on January 1st of each year.

The FOMC has two basic goals: 1) to promote "maxium" output and employment (high GDP and low unemployment); and 2) to promote "stable" prices (low inflation). These goals are prescribed in a 1977 amendment to the Federal Reserve Act. In order to achieve these goals, the Fed uses one of three tools of Monetary Policy:

Three Tools of Monetary Policy

The FOMC uses three tools to influence growth of the money supply: 1) Open Market Operations, which is the buying and selling of Treasury securities on the open market; 2) the discount rate, the rate that the Fed charges banks for overnight loans and 3) reserve requirements, the percentage of deposits that banks must hold "on reserve" with the Fed.

Open Market Operations - The Purchase or sale of US Government securities in the "open market," also known as the secondary market, is the Federal Reserve's most flexible and common means of carrying our its daily objectives. Open market operations allow the Fed to adjust directly the supply of reserves in the banking system. Through this adjustment to reserve supply, open market operations influence the Federal Funds rate, the interest rate that institutions pay when they borrow reserves overnight from each other. Banks borrow reserves in the Federal Funds market in order to meet reserve requirements set by the Federal Reserve, and to ensure adequate balances in their accounts at the Fed to cover checks and electronic payments that the Fed processes on their behalf. Changes in the Federal Funds rate often have a strong impact on other short-term rates.

Fed Funds is sometimes quoted as a "target" rate or an "effective rate." The target rate is the "headline" rate referred to when the Fed cuts/raises interest rates. The Fed, via open market operations, will try to adjust the money supply such that banks charge each other the target rate. However, on a daily basis, Fed Funds may trade slightly lower or higher than the target rate. The weighted average rate that Fed Funds trade during any given date is called the effective Fed Funds rate.

Discount Rate - Banks can also borrow needed funds from the Federal Reserve Banks at their "discount window." The interest rate they must pay on this borrowing is called the discount rate. The total quantity of discount window borrowing tends to be small because they Fed discourages such borrowing except to meet occasional short-term reserve deficiencies. All depository institutions that maintain transaction accounts or non-personal time deposits subject to reserve requirements are entitled to borrow at the discount window.

Usually, the discount rate is lower than the Federal Funds rate; the Fed does not allow banks to borrow at the discount window for profit. Thus, it monitors discount window and Federal Funds activity to make sure that banks are not borrowing from the Fed in order to lend at a higher rate in the private money markets.

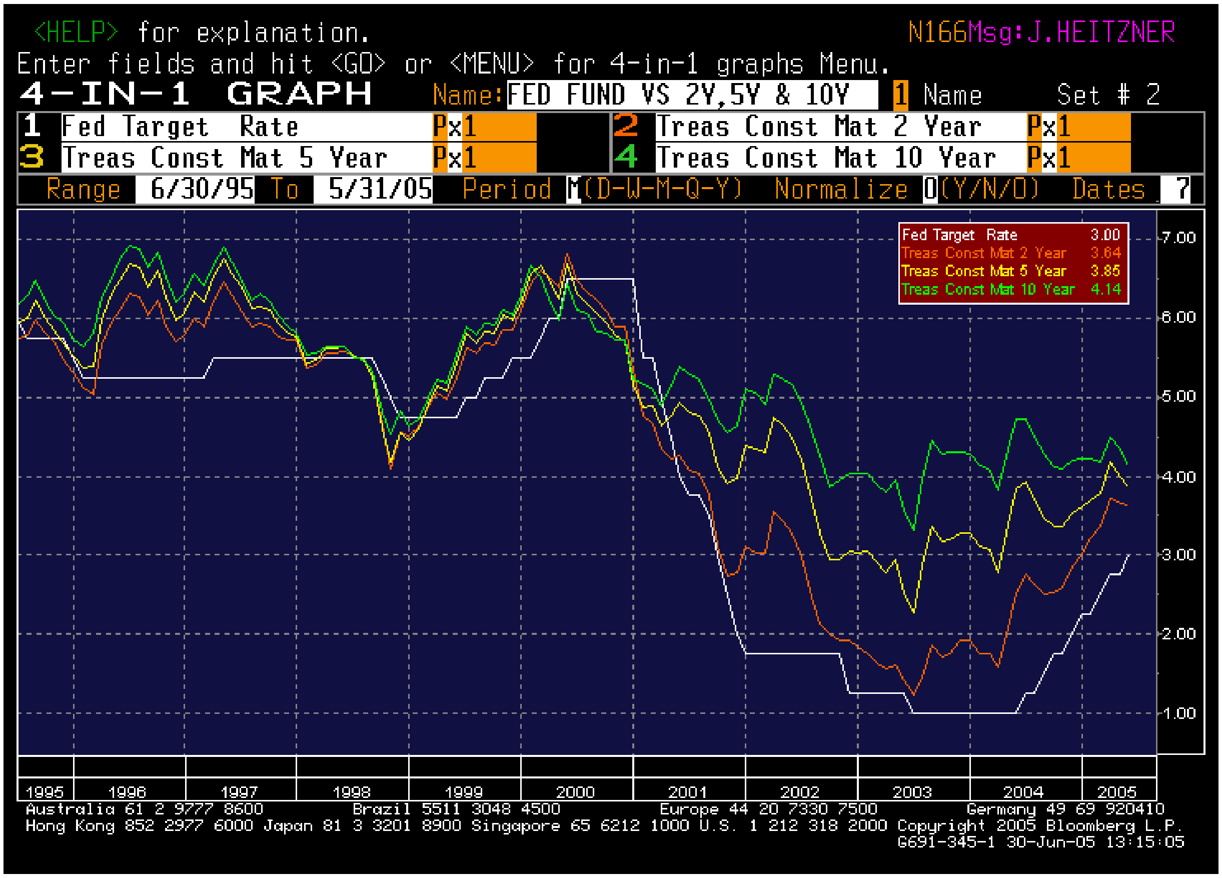
Reserve Requirements - Depository institutions are required to maintain reserves in certain proportions against various types of their "checkable" or "transaction" deposits. The FOMC has the authority to alter the amount that depository institutions must hold in reserves. A reduction in reserve requirements will tend to exert downward pressure on interest rates. Reserve requirements are not frequently altered.

MONEY RATES: Can be found in the *Money Rates* section of the Wall Street Journal.

Federal Funds Rate - The interest rate that banks loan to each other in $1 million blocks to satisfy Federal Reserve requirements. Usually overnight loans. Every Wednesday, banks calculate what they should have on deposit with the Fed. A percentage of each deposit is required to be held with the Fed. Currently between 2 and 3%, the bank matches what is on deposit with the Wednesday deposit balances. If they are short, they will borrow the money from a another commercial bank to meet the requirement. The lending bank charges the Fed Funds rate for the overnight loan. On Thursday, they can pay off the loan and all this can happen again next week.

Here is a look at how the Fed has hiked interest rates over time. Notice that the Federal Funds Rate is normally referenced when the business or investment community discusses rates. Fed Funds is actually bank property as described above.

This is a graph sent to me in late June, 2005 illustrating the Fed. Funds Target rate (white line); from this graph we can see that Fed Funds have been as high as 6 1/2% (around year -2000) and the rapid decline that we saw in 2001 as the Fed lowered interest rates 11 times in that year alone in an attempt to stimulate the economy. Fed Funds stayed relatively unchanged until 2004-2005.



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4-IN-1 GRAPH
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4 Treas Const Mat 10 Year Px1
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