ACTIVITY 39
The Federal Reserve System and Monetary Policy

The amount of money in an economy is important because it affects the level of spending in a country. Too much spending can cause inflation while too little spending can cause unemployment and declining levels of production. In the United States, Congress has assigned the responsibility for controlling our money supply to the Federal Reserve System.

The Federal Reserve System, or Fed, has functioned as the central bank of the United States since 1913. It consists of a seven-member Board of Governors in Washington, DC, plus twelve regional banks throughout the country.

As a central bank, the Fed manages the money supply by influencing the lending activity of commercial banks and other financial institutions. Another major part of its direct influence comes about through its relations and dealings with commercial banks from which the effects spill over to the financial system as a whole.

Monetary Policy

The deliberate actions of the Fed to expand or contract the money supply are called *monetary policy*. The purpose of monetary policy is to maintain or change the trend of economic output, employment, and prices at desired levels. A policy of the Fed designed to expand the growth of money and credit in the economy is known as an *expansionary* (or easy) monetary policy. A policy to restrict the growth of money and credit in the economy is known as a *contractionary* (or tight) monetary policy. The creation of too much money can cause inflation, and the creation of too little money can cause recession.

The Fed has three primary tools with which to carry out monetary policy. These are open market operations, the discount rate, and reserve requirements.

Open Market Operations

Open market operations refer to the Fed's buying and selling of U.S. government securities in order to add to or subtract from the reserves of the nation's commercial banking system. The operations are conducted by the Federal Open Market Committee, which consists of the seven members of the Fed Board and five Federal Reserve Bank presidents. Government securities, such as U.S. Treasury bills, notes, and bonds, are issued by the U.S. Treasury in return for money borrowed from individuals and businesses in order to finance government spending. If the Federal Reserve wants to put money into the economy, it buys some of these government securities by writing a check on itself. If, for instance, the Fed buys $10,000 worth of government securities with such a check, it creates the $10,000 used to pay for them. The sellers are not $10,000 richer, since they no longer own the securities, but the money supply grows because there is $10,000 of new money in the economy. If the Fed wants to pursue a contractionary monetary policy, it sells some of the government securities it owns. The money that is paid to the Fed for the securities is removed from the economy so the money supply shrinks. Open market operations are the most frequently used tool of monetary policy.

Open market operations and other monetary tools of the Fed affect interest rates. The Fed does not directly set interest rates. However, if the Fed sells securities on the open market, the growth of the money supply is reduced. Interest rates are determined by supply and demand in a way very similar to any other price. If the supply of money decreases, interest rates rise. On the other hand, if the Fed buys securities and expands the growth of the money supply, interest rates decrease.

One of the interest rates most associated with the Fed's monetary policy is the federal funds rate. Federal funds are reserve balances of financial institutions at the twelve regional Federal Reserve Banks. If a financial institution cannot meet its reserve requirement, it can bor-

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row funds from other financial institutions. The *federal funds rate* is the rate of interest it must pay for these funds. Although newspapers often say the Federal Open Market Committee raised or lowered the federal funds rate, this is not true. What the Fed did was to change the rate of growth of the money supply, and the open market transaction used to implement this policy changed the federal funds rate. An expansionary monetary policy will tend to lower the federal funds rate. A contractionary monetary policy will tend to raise the federal funds rate. The federal funds rate is different from the discount rate.

The Discount Rate

The Fed directly sets the discount rate. The *discount rate,* the second tool of monetary policy, is the interest rate the Fed charges banks that borrow money. If a bank borrows from the Federal Reserve, the Fed credits the loan to the bank's reserves. In other words, the amount of the loan is added to the bank's reserves held at the Fed. This process increases the amount of money and credit in the economy. The Fed does not automatically allow a bank to borrow from it whenever the bank wants to. The Fed can refuse to make such a loan. If the discount rate is low and the Fed does not discourage banks from borrowing from it, the Fed will foster an expansionary monetary policy. If the discount rate is high and the Fed discourages banks from borrowing from it, the Fed will foster a tight monetary policy. The discount rate is probably the least strong of the three principal tools of monetary policy, but the Federal Reserve does use a change in it to indicate an overall tightening or loosening of monetary policy.

Reserve Requirements

The third important tool of monetary policy consists of changing the *reserve requirements* for bank deposits. The Federal Reserve requires that banks keep as reserves a certain fraction of the deposits they hold. These reserves must be kept as balances at Federal Reserve Banks or as cash the banks have on hand (i.e., vault cash). Banks that fail to meet their reserve requirements are subject to monetary penalties. These required reserves cannot be lent to borrowers.

If the Fed wants to pursue a contractionary monetary policy, it can raise reserve requirements, thereby restricting the amount of funds banks can lend. If the Fed wants to pursue an expansionary monetary policy, it can lower reserve requirements. Let's say you deposit $10,000 at your local bank and the reserve requirement on deposits is 15 percent. This means that your bank would have to keep $1,500 on reserve at the Fed (.15 x $10,000 = $1,500). It could lend the other $8,500 to borrowers. If the Fed were to lower its reserve requirement to 10 percent, then the bank could lend $500 more of your $10,000 deposit, or a total of $9,000. Such an expansion of bank lending causes the money supply in the economy to increase. However, if the Fed were to raise its reserve requirement to 20 percent, the bank could lend only $8,000 of your $10,000 deposit, thus curbing the possible increase in the money supply. Changes in reserve requirements can be a very powerful tool of monetary policy, but this tool is used infrequently precisely because it is so powerful. Most often, the Fed desires to make gradual or minor changes in policy, aims for which changes in reserve requirements are not suitable.

1. Describe the organization of the Federal Reserve System.

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2. What is monetary policy?

3. What happens to interest rates if the Fed follows a contractionary, or tight, monetary policy?

4. What happens to interest rates if the Fed follows an expansionary, or easy, monetary policy?

5. What is the federal funds rate?

6. Why do observers pay close attention to the federal funds rate?

7. Circle the correct symbol (↑ for increase, ↓ for decrease). What would happen to the money supply and to interest rates if the Fed:
   a. Sold government securities on the open market.
      Money supply ↑ ↓
      Interest rates ↑ ↓
   b. Bought government securities on the open market.
      Money supply ↑ ↓
      Interest rates ↑ ↓
   c. Raised the reserve requirement.
      Money supply ↑ ↓
      Interest rates ↑ ↓
   d. Lowered the reserve requirement.
      Money supply ↑ ↓
      Interest rates ↑ ↓
   e. Raised the discount rate.
      Money supply ↑ ↓
      Interest rates ↑ ↓
   f. Lowered the discount rate.
      Money supply ↑ ↓
      Interest rates ↑ ↓

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8. In the table *Tools of Monetary Policy* indicate how the Federal Reserve would use each of the three monetary policy tools to pursue an expansionary policy and a contractionary policy.

Tools of Monetary Policy

Monetary tool	Expansionary policy	Contractionary policy
Open market operations		
Discount rate		
Reserve requirements		

9. a. What kind of monetary policy would the Fed probably follow if the country had an annual inflation rate of 15 percent?

   b. Why?

10. a. What kind of monetary policy would the Fed probably follow if the country were in a severe recession with high unemployment and falling prices?

    b. Why?