example from 20 to 10 percent. More money could be loaned to Bill, Maria, and others, and the money supply could reach $10,000. If the Fed raises the reserve requirement to 40 percent, however, less money would be loaned, and the money supply would be smaller. The effects of different reserve requirements are shown in **Figure 15.5.**

Historically, the Fed has been reluctant to use the reserve requirement as a policy tool, in part because other monetary policy tools work better. Even so, the reserve requirement can be a very powerful tool should the Fed decide to use it. **Figure 15.6** summarizes the impact of a change in the reserve requirement on the money supply in the manner just described, along with the impact of the other monetary tools described below.

Open Market Operations

The second and most popular tool of monetary policy is **open market operations**—the buying and selling of government securities in financial markets. Open market operations are one of the methods the Federal Reserve can use to influence short-term interest rates. Open market operations involve the purchase or sale of government securities by the Federal Reserve. When the Fed purchases government securities, it increases the supply of money, putting downward pressure on interest rates. When the Fed sells government securities, it decreases the supply of money, putting upward pressure on interest rates. Open market operations affect the amount of excess reserves in the banking system and, therefore, the ability of banks to support new loans.

Suppose the Fed decides to increase the money supply. To do so, it buys government securities from a dealer who specializes in large-volume transactions of those securities. The Fed pays for the securities by writing a check drawn on itself. The dealer then deposits the check with his or her bank. The bank forwards the check to the Fed for payment. At this

THE GLOBAL ECONOMY

The Euro: Today and in the Future

In 2002 European industry transferred to a single currency, the euro. Monetary union means that industries can build plants, sell products, and raise capital in other European markets without worrying about currency fluctuations.

Retooling was costly, however. Most multinational corporations invested millions of dollars. Some converted their entire operations to the *euro* system immediately. Other companies instituted the changes in phases. In step 1, for example, companies adapted their computers to bill customers and pay suppliers in euros. At the same time, they maintained dual accounting in euros and national currencies. Step 2 included converting transactions such as budget allocations and payments between subsidiaries into euros. Step 3 included the changeover of human resource functions, including payroll and benefits and paying taxes in eurodollars.

The changeover to the euro proved to be a technical success. European consumers adopted the new currency swiftly. However, according to some financial leaders, the ultimate test of the euro will be economic growth and lower unemployment. Using the single currency as an instrument to conquer inflation will not be enough.

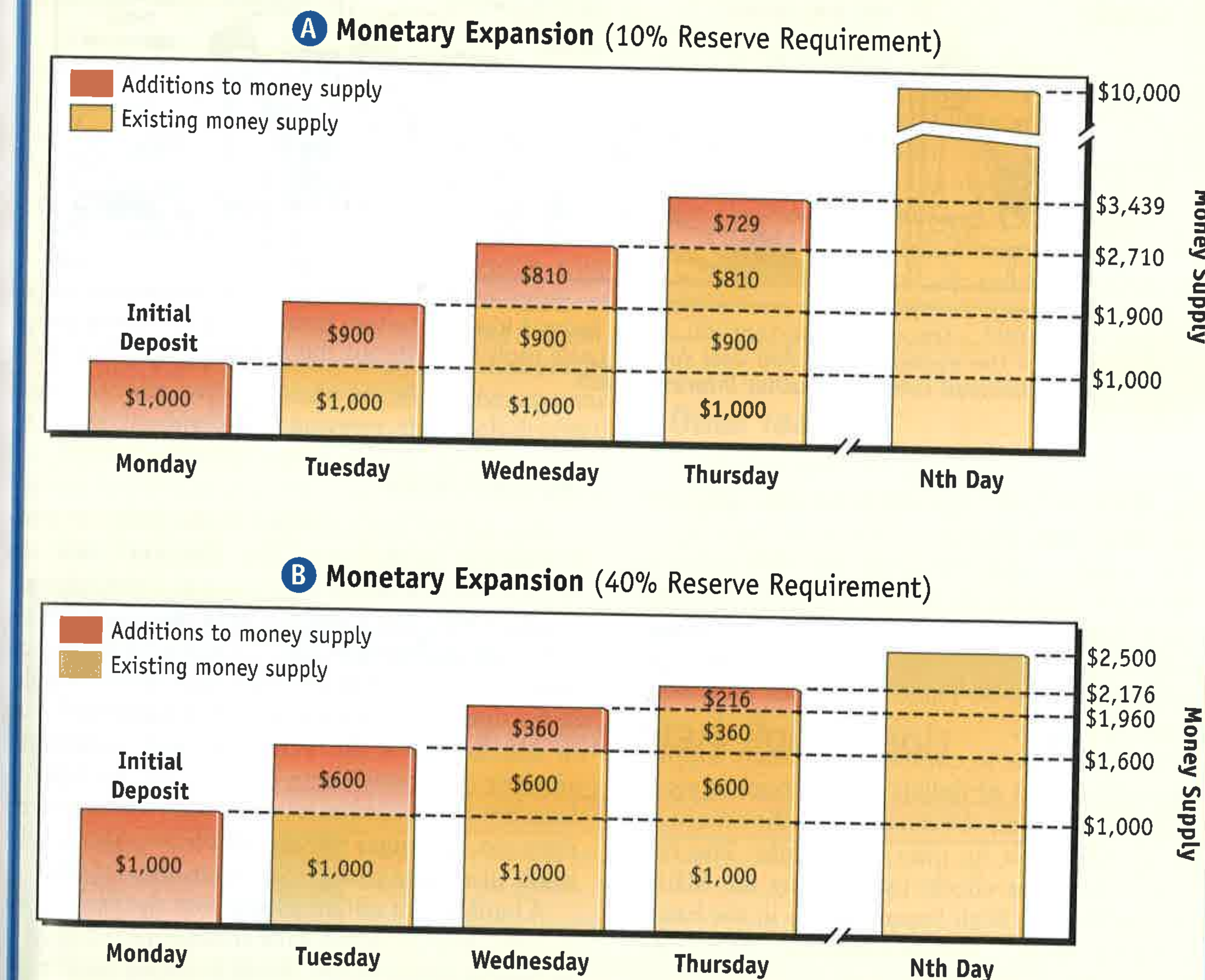
Critical Thinking

1. **Analyzing Information** What is the purpose of the euro?
2. **Sequencing Information** What steps were involved in the transition to the euro?
3. **Analyzing Information** According to some financial experts, what results will determine whether the euro is a success?

ECONOMICS AT A GLANCE

Figure 15.5

The Reserve Requirement as a Tool of Monetary Policy



Understanding Percentages If the Fed wants to control the size of the money supply, it can change the reserve requirement. A low requirement, such as 10 percent, can be used to expand the money supply. A higher requirement, such as 40 percent, has the opposite effect.

Low reserve requirement:
$1,000 ÷ .10 = $10,000

High reserve requirement:
$1,000 ÷ .40 = $2,500

What is the size of the money supply if the Fed sets the reserve requirement at 25 percent?