

Study Guide  
**Chapter 11 Monetary Policy and Central Bank**

**1. Central Bank**

- oversee the country's financial system (regulate the banks)
- lender of last resort
- Bankers bank (take reserve deposits from commercial banks, and make loan to them)
- Conduct monetary policy
- The Federal Reserve System (also called the Fed)

**2. Money market**

1) money demand

- relationship between interest rate and the quantity of money demanded.
- If price level increases, money demand increases; MD shifts to the right; vice versa.
- If income level increase, money demand increases; MD shifts to the right; vice versa

2) money supply

- is a vertical line because it is controlled by the Fed.

The Fed controlled money supply by exercising the following 3 monetary policies.

Policy 1. Open-market operation

The Fed increases money supply by buying government bonds from the open market; and decreases money supply by selling government bonds in the open market.

Policy 2. Change the discount rate

The Fed increases money supply by lowering the discount rate; and decreases money supply by increasing the discount rate.

Policy 3. Change the reserve ratio

The Fed increases money supply by lowering the reserve ratio; and decreases money supply by increasing the reserve ratio.

3) Money market equilibrium.

When MS meets MD, the equilibrium interest rate established.

### 3. Monetary Policy

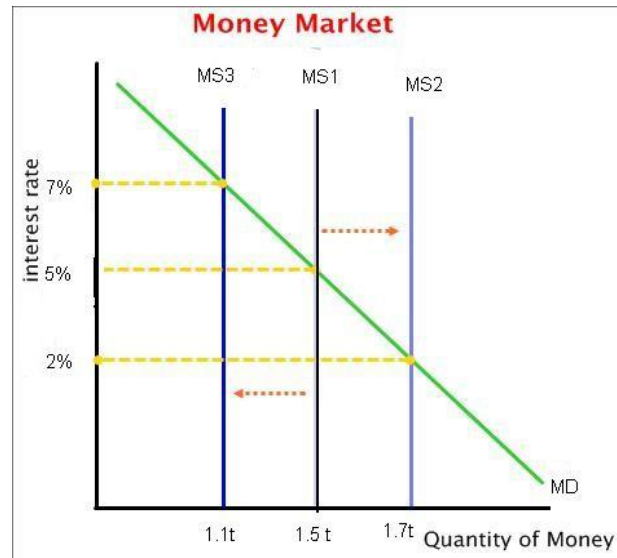
The Fed can lower the interest rate by increasing money supply through buying government bonds from the open market; lower the discount rate; or lower the reserve ratio.

For example, in Figure 1, if the money supply is \$1.5 trillion, the equilibrium interest rate is 5%.

In practice if the Fed wants to lower the interest rate to 2%, it usually increase the money supply by buying government bonds and/or lower the discount rate.

Now, if the Fed wants to increase the interest rate to 7%, what should it do?

Figure 11-1.



### 4. Economic goals for monetary policy

1) The purpose for the Fed to change the market interest rate is to influence investment and ultimately affect GDP.

2) Firms tend to borrow more loans to invest if interest rate is low; vice versa.

3) If the economy is in **recession**, actual GDP is below the potential GDP, the goal is to push the GDP up.

Thus the Fed should increase money supply; the interest rate would decrease; leading investment to increase; aggregate demand and GDP would increase.

On the other hand, if the economy is **overheating**, the Fed should increase the interest rate by reducing money supply. Investment would decline and so as aggregate demand. Inflation would be cool down.