Monetary Policy and the Interest Rate

• By increasing or decreasing the money supply, the Federal Reserve can set the interest rate.

• In practice, the Federal Open Market Committee (FOMC) sets a target federal funds rate.
  
  • The **Open Market Desk** then adjusts the money supply through open-market operations.
Effect of an Increase in the Money Supply on the Interest Rate

An increase in the money supply... 

...leads to a fall in the interest rate.
Setting the Federal Funds Rate

(a) Pushing the Interest Rate Down to the Target Rate

...drives the interest rate down.

An open-market purchase of Treasury bills...

Interest rate, \( r \)

\( MS_1 \) \( MS_2 \)

\( E_1 \) \( E_2 \)

\( r_1 \) \( r_T \)

\( M_1 \) \( M_2 \)

Quantity of money

\( M_D \)
Setting the Federal Funds Rate

(b) Pushing the Interest Rate Up to the Target Rate

An open-market sale of Treasury bills...

...drives the interest rate up.
Long-Term Interest Rates

- Long-term interest rates are typically higher than short-term rates in order to compensate buyers for the higher risk they face.

- Long-term rates usually move with short-term rates, but not always.
Monetary Policy and Aggregate Demand

- **Expansionary monetary policy** is monetary policy that increases aggregate demand.

- **Contractionary monetary policy** is monetary policy that reduces aggregate demand.
Expansionary and Contractionary Monetary Policy

**Expansionary**
- Increase money supply
- Lower interest rate
- Higher investment spending raises income
- Higher consumer spending (via multiplier)
- Increase in aggregate demand and AD curve shifts to the right

**Contractionary**
- Decrease money supply
- Higher interest rate
- Lower investment spending reduces income
- Lower consumer spending (via multiplier)
- Decrease in aggregate demand and AD curve shifts to the left

(Charts showing AD curves: AD1 to AD2 for Real GDP)