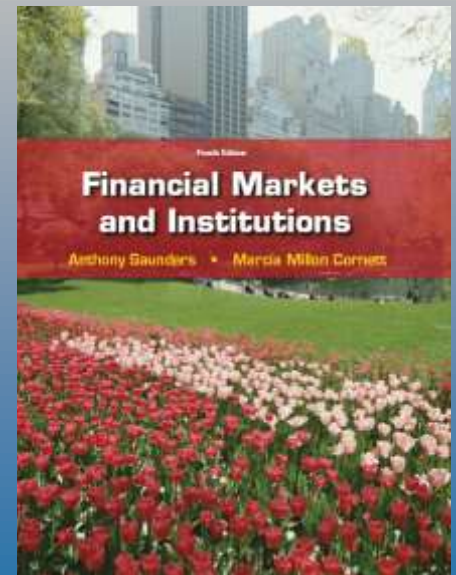


Chapter Four

The Federal Reserve
System, Monetary Policy,
and Interest Rates



The Federal Reserve

- **Founded by Congress under the Federal Reserve Act in 1913**
- **Subject to oversight by Congress under its authority to coin money**
- **An independent central bank—its decisions do not have to be ratified by the President**

Functions of the Federal Reserve

- **Conduct monetary policy**
- **Supervise and regulate depository institutions**
- **Maintain financial system stability**
- **Provide payment and other financial services to the U.S. government, the public, FIs, and foreign official institutions**

Structure of the Federal Reserve

- **Divided into 12 Federal Reserve districts, each with a main Federal Reserve Bank**
- **Federal Reserve Banks operate under the general supervision of the Board of Governors of the Federal Reserve**
- **The Office of the Comptroller of the Currency (OCC) charters national banks, which are members of the Federal Reserve System (FRS)**
- **FRS member banks “own” the 12 Federal Reserve Banks**

Board of Governors of the FRS

- **Seven member board headquartered in Washington, DC**
- **President appoints and Senate confirms members to nonrenewable 14-year terms**
- **President appoints and Senate confirms Chairman and vice-chairman to renewable 4-year terms**
- **Formulates and conducts monetary policy and supervises and regulates banks**

Federal Open Market Committee (FOMC)

- **FOMC consists of 12 members**
 - seven members of the Board of Governors
 - the president of the Federal Reserve Bank of NY
 - the presidents of four other Federal Reserve Banks (on a rotating basis)
- **The monetary policy-making body of the FRS**
- **Policies seek to promote full employment, economic growth, price stability, and a sustainable pattern of international trade**

Federal Open Market Committee (FOMC)

- **The FOMC sets ranges for growth of monetary aggregates and the fed funds rate, and also directs FR operations in FX markets**
- **Open market operations are the main policy tool used to achieve monetary targets**
 - involve the purchase and sale of U.S. government and federal agency securities
 - are implemented by the Federal Reserve Board Trading Desk of the New York Federal Reserve Bank

Federal Reserve Banks

- **Assist in the conduct of monetary policy**
 - set and change the discount rate (must be approved by the Board of Governors)
 - make discount window loans to depository institutions
- **Supervise and regulate FRS member banks**
 - conduct examinations and inspections of member banks
 - issue warnings when banking activity is unsafe or unsound
 - approve bank mergers and acquisitions
- **Provide government services**
 - act as the commercial banks of the U.S. Treasury

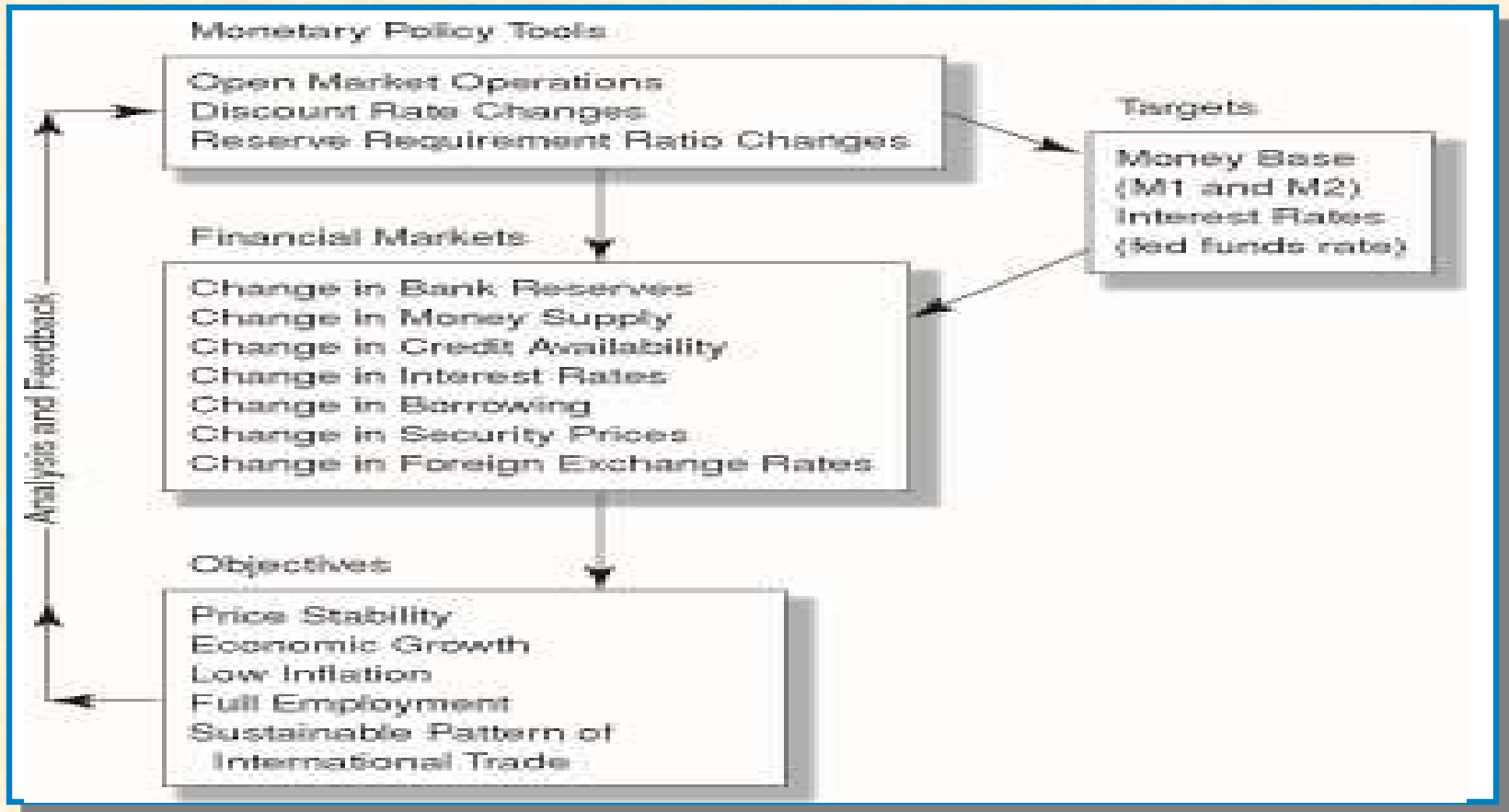
Federal Reserve Banks

- **Issue new currency**
 - collect and replace currency in circulation as necessary
- **Clear checks**
 - act as a central clearing system for U.S. banks
 - clear ~25% of all checks written in the U.S.
- **Provide wire transfer services**
 - Fedwire
 - Automated Clearinghouse (ACH)
- **Perform banking sector and economic research**
 - used in the formulation of monetary policy

Balance Sheet of the Federal Reserve

- **Major assets**
 - Treasury securities
 - Treasury currency
 - gold and foreign exchange
 - loans to domestic banks
- **Major liabilities**
 - reserves
 - currency in circulation
 - currency in circulation + reserves = money base

Please insert Table 4-5 here.



Monetary Policy

- **Monetary policy affects the macroeconomy by influencing the supply and demand for excess bank reserves**
 - influences the money supply and the level of short-term and long-term interest rates
 - affects foreign exchange rates, the amount of money and credit in the economy, and the levels of unemployment, output, and prices

Monetary Policy

- **Open market operations**
 - policy directive of the FOMC is forwarded to the Federal Reserve Board Trading Desk at the Federal Reserve Bank of New York
 - Trading Desk manager buys or sells U.S. Treasury securities in the over-the-counter (OTC) market, which keeps the fed funds rate near its desired target

Monetary Policy

- **Open market operations (cont'd)**
 - FRBNY acts through the Trading Desk to implement policy directives each business day
 - operations may be permanent or temporary
 - may use repurchase agreements for temporary increases or decreases in excess reserves

Monetary Policy

- **The discount rate is the rate Federal Reserve Banks charge on loans to depository institutions in their district**
- **The Federal Reserve rarely uses the discount rate as a policy tool**
 - discount rate changes are strong signals of the Federal Reserves intentions
 - there is no guarantee that banks will borrow

Monetary Policy

- **Reserve requirements are the reserve assets depository institutions must keep to “back” transaction deposits**

- reserve assets include vault cash and deposits at Federal Reserve Banks

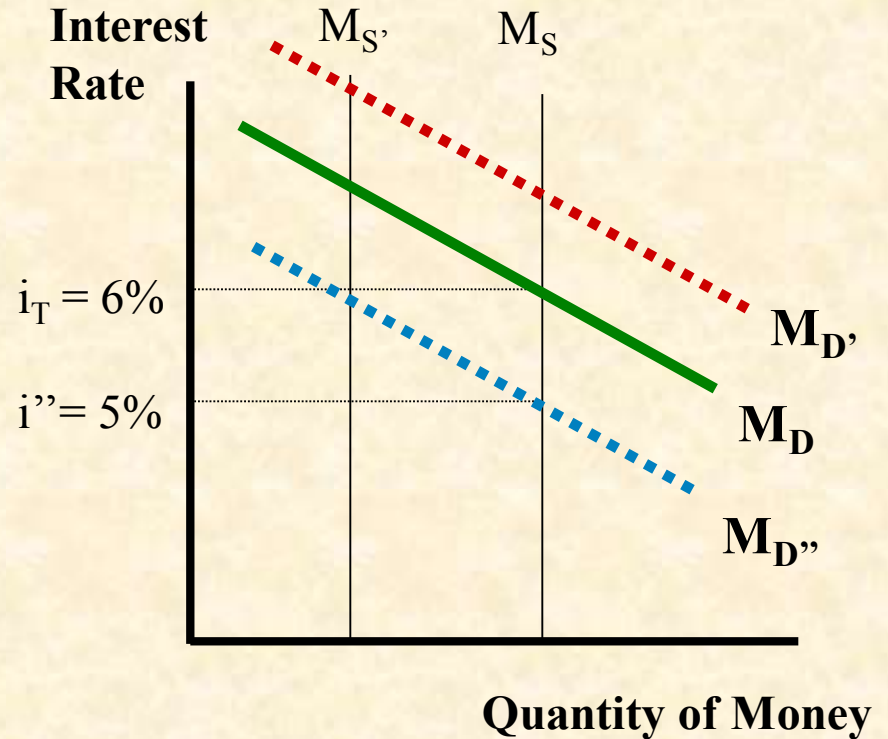
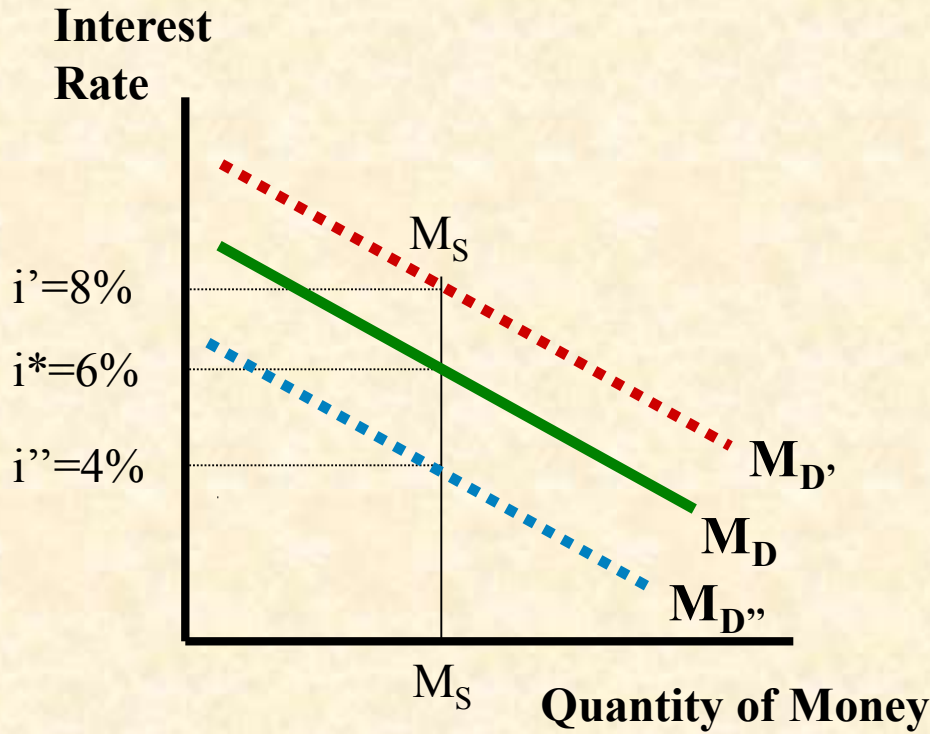
- **The multiplier effect**

$$\Delta \text{ in money supply} = \left(\frac{1}{\text{new reserve requirement ratio}} \right) \times \Delta \text{ in reserves}$$

Monetary Policy

- **Expansionary monetary policy**
 - open market purchases of securities by the Fed
 - discount rate decreases
 - reserve requirement ratio decreases
- **Contractionary monetary policy**
 - open market sales of securities by the Fed
 - discount rate increases
 - reserve requirement ratio increases

Money Supply versus Interest Rate Targeting



International Monetary Policy

- **The Federal Reserve generally allows foreign exchange rates to fluctuate freely**
- **Foreign exchange intervention**
 - commitments between countries about the institutional aspects of their intervention in the foreign exchange markets
 - similar to open market purchases and sales of Treasury securities

Major Foreign Central Banks

- **The Bank of Japan**
 - loose monetary policy is fueling an economic recovery
- **The European Central Bank**
 - recently switched from targeting the money supply to targeting inflation
- **The People's Bank of China**
 - interest rates are becoming a more important policy tool as China moves to a market oriented financial system