Chapter 12, The Federal Reserve System and Money Supply Management

I. Money, Credit and the Government
   A. The Treasury is the government’s FISCAL (budget) entity
      1. Treasury is a Cabinet level department (Department of the Treasury)
      2. Treasury is concerned with collecting revenues (IRS!!) and paying the bills.
      3. In the past, expenditures have exceeded revenues and DEFICITS have resulted.
      4. Deficits are financed by borrowing
         a. Treasury borrows by selling securities (Treasury bills, bonds and notes) to
            investors (banks, insurance companies, mutual fund managers, etc.) at a sealed
            bid auction held every Monday afternoon. Securities are promises by the
            government to pay $X in the future, typically 3 or 6 months for T-bills (longer
            for bonds and notes), in exchange for cash today. Securities purchasers are
            asking, “What am I willing to pay today to receive $10,000 in three months?”
            Treasury gets that amount.
         b. Treasury first "ranks" the sealed bids, then begins borrowing with those willing
            to give it the most money, and stops when it has enough of what it wants. The
            more bills, bonds and notes the Treasury sells, the lower is the amount of cash
            it receives, and the higher the return to the securities purchasers. These returns
            are thus "market-driven" short and long-term rates of interest.
   B. The Federal Reserve System is the government’s MONETARY entity
      1. The FRS is an independent entity, independent of Congress and the President.
      2. Organization of the FRS
         a. Twelve Fed district banks (the most important is the New York district bank)
         b. Board of Governors
            1) Seven members with staggered 14-year terms
            2) Chair (currently Alan Greenspan) is appointed by the President
         c. Fed Open Market Committee
            1) Seven Board members
            2) Five bank presidents, including New York (other four alternate)
      3. Functions of the FRS (see text, pp. 296-297)
   C. Money Supply Management (money creation is by banks...)
      1. Open Market Operations:
         a. To increase money supply Fed buys securities on the open market, making
            dollar deposits in accounts of banks in payment for the securities. It exchanges
            an increase in an asset for an increase in a liability. These deposits are purely
            excess reserves, which banks can now loan out, thus increasing the money
            supply through the money multiplier. As the Fed buys more securities, it
            drives up the price of the securities, thereby driving down the return on the
            security, lowering interest rates. Thus increases in the money supply lowers
            interest rates directly and through the increase in bond prices.
         b. To decrease money supply Fed sells securities on open market....
      2. Changes in the required reserve ratio (rrr): raising rrr lowers money supply.......
      3. Changes in the discount rate: raising the discount rate lowers money supply........
II. Credit Markets

A. Money Demand
   1. Is negatively related to interest rates (opportunity costs....)
   2. Shifts right with rising real GDP
   3. Shifts right with higher price levels
   4. Shifts left with financial innovation (credit cards, interest checking)

B. Money Supply is upward sloping w.r.t. interest rates. At higher interest rates, banks will be somewhat prone to loan more.

C. Money Supply and Money Demand
   1. MS and MD intersect to generate equilibrium interest rate
   2. Equilibrium explained in terms of dis-equilibrium (as in supply/demand)

D. Increases in the Money Supply (actually, in the rate of growth of the money supply)
   1. Leads to lower interest rates (ceteris paribus)
   2. Leads to increases in Total Expenditure
      a. Increased Consumption via decreased savings
      b. Increased Investment as a negative function of the interest rate
      c. Increased Net Exports
         1) Lower dollar value as investors look for higher returns elsewhere
         2) Exports increase, Imports decrease with cheaper dollar
   3. Increase in Total Expenditures is a rightward shift of Aggregate Demand
      a. Price level rises
      b. RGDP rises
   4. Thus an increase in the Money Supply has impacts on all major macroeconomic variables.
      a. Interest rates
      b. RGDP
      c. Unemployment (as RGDP increases)
      d. Prices
      e. Exchange rates
      f. Trade balance
   5. The Fed controls the economy by controlling the Money Supply and interest rates. Thus the interest rate is both an “outcome” variable and a policy tool.