# **Money and Banking**



### **Functions of Money**

- Medium of exchange: Money can be used for buying and selling goods and services.
- Unit of account: Prices are quoted in dollars and cents.
- Store of value: Money allows us to transfer purchasing power from present to future. It is the most liquid (spendable) of all assets, a convenient way to store wealth.

## **Supply of Money**

- Narrow definition of money:M1 includes currency and checkable deposits (see Table 13-1).
  - Currency (coins + paper money) held by public.
    - Is "token" money, which means its intrinsic value is less than actual value. The metal in a dime is worth less than 10¢.
    - All paper currency consists of Federal Reserve Notes issued by the Federal Reserve.
  - Checkable deposits are included in M1, since they can be spent almost as readily as currency and can easily be changed into currency.
    - Commercial banks are a main source of checkable deposits for households and businesses.
    - Thrift institutions (savings & loans, credit unions, mutual savings banks) also have checkable deposits.
  - Qualification: Currency and checkable deposits held by the federal government, Federal Reserve, or other financial institutions are not included in M1.
  - o Money Definition: M2 = M1 + some near-monies which include: (See Table 13-1)
    - Savings deposits and money market deposit accounts.

- Certificates of deposit (time accounts) less than \$100,000.
- Money market mutual fund balances, which can be redeemed by phone calls, checks, or through the Internet.
- o Money Definition: M3 = M2 + large certificates of deposit (time accounts) \$100,000 or more (See Table 13-1)
- Which definitions are used?M1 will be used in this text, but M2 is watched closely by the Federal Reserve in determining monetary policy.
  - M2 and M3 are important because they can easily be changed into M1 types of money and influence people's spending of income.
  - The ease of shifting between M1, M2, and M3 complicates the task of controlling spendable money supply.
  - The definition becomes important when authorities attempt to measure control and the money supply.
- Credit cards are not money, but their use involves short-term loans; their convenience allows you to keep M1 balances low because you need less for daily purchases.

## What "backs" the money supply?

- The government's ability to keep its value stable provides the backing.
- Money is debt; paper money is a debt of Federal Reserve Banks and checkable deposits are liabilities of banks and thrifts because depositors own them.
- Value of money arises not from its intrinsic value, but its value in exchange for goods and services.
  - o It is acceptable as a medium of exchange.
  - Currency is legal tender or fiat money. It must be accepted by law. (Note that
    checks are not legal tender but, in fact, are generally acceptable in exchange for
    goods, services, and resources.)
  - o The relative scarcity of money compared to goods and services will allow money to retain its purchasing power.
- Money's purchasing power determines its value. Higher prices mean less purchasing power. (Key Question #6) (See Figure 13-1)
- Excessive inflation may make money worthless and unacceptable. An extreme example of this was German hyperinflation after World War I, which made the mark worth less than 1 billionth of its former value within a four-year period.
  - o Worthless money leads to use of other currencies that are more stable.
  - o Worthless money may lead to barter exchange system.
- Maintaining the value of money
  - o The government tries to keep supply stable with appropriate fiscal policy.
  - o Monetary policy tries to keep money relatively scarce to maintain its purchasing power, while expanding enough to allow the economy to grow.

### The Demand for Money: Two Components

• Transactions demand, Dt, is money kept for purchases and will vary directly with GDP (Figure 13-1a).

- Asset demand, Da, is money kept as a store of value for later use. Asset demand varies
  inversely with the interest rate, since that is the price of holding idle money (Figure
  13-1b).
- Total demand will equal quantities of money demanded for assets plus that for transactions (Figure 13-1c).

## The Money Market: Interaction of Money Supply and Demand

- Key Graph 13-1c illustrates the money market. It combines demand with supply of money.
- Figure 13-2 illustrates how equilibrium changes with a shift in the supply of money.
- If the quantity demanded exceeds the quantity supplied, people sell assets like bonds to get money. This causes bond supply to rise, bond prices to fall, and a higher market rate of interest.
- If the quantity supplied exceeds the quantity demanded, people reduce money holdings by buying other assets like bonds. Bond prices rise, and lower market rates of interest result (see example in text).
- Monetary authorities can shift supply to affect interest rates, which in turn affect investment and consumption and aggregate demand and, ultimately, output, employment, and prices.(Key Question #7)
- Try Quick Quiz 13-2.

#### The Federal Reserve and the Banking System

- The Federal Reserve System (the "Fed") was established by Congress in 1913 and holds power over the money and banking system.
  - o Figure 13-3 gives framework of Fed and its relationship to the public.
  - The central controlling authority for the system is the Board of Governors and has seven members appointed by the President for staggered 14-year terms. Its power means the system operates like a central bank.
  - Assistance and Advice:
    - Federal Open Market Committee includes the seven governors plus five regional Federal Reserve Bank presidents whose terms alternate. They set policy on buying and selling of government bonds, the most important type of monetary policy, and meet several times each year.
    - Three advisory councils exist: Federal Advisory Council includes twelve prominent commercial bankers, one from each Fed district, who act as advisors to the Board, Thrift Institutions Advisory Council advises on thrift institution matters, the Consumer Advisory Council advises on more general issues. (See Figure 13-4)
    - The system has twelve districts, each with its own district bank and two or three branch banks. They help implement Fed policy and are advisory. (See Figure 13-4)
    - Each is quasi-public: It is owned by member banks but controlled by the government's Federal Reserve Board, and any profits go to the U.S. Treasury.

- They act as bankers' banks by accepting reserve deposits and making loans to banks and other financial institutions.
- About 8,600 commercial banks existed in 2001. They are privately owned and consist of state banks (three-fourths of total) and large national banks (chartered by the Federal government).
- Thrift institutions consist of savings and loan associations and mutual savings banks. They are regulated by the Treasury Dept. Office of Thrift Supervision, but they may use services of the Fed and keep reserves on deposit at the Fed. See Figure 13-4.
- o Global Perspective 13-1 gives the world's ten largest banks.
- Functions of the Fed and money supply:
  - The Fed issues "Federal Reserve Notes," the paper currency used in the U.S. monetary system.
  - The Fed sets reserve requirements and holds the reserves of banks and thrifts not held as vault cash.
  - o The Fed may lend money to banks and thrifts, charging them an interest rate called the discount rate.
  - The Fed provides a check collection service for banks (checks are also cleared locally or by private clearing firms).
  - o Federal Reserve System acts as the fiscal agent for the Federal government.
  - o The Federal Reserve System supervises member banks.
  - Monetary policy and control of the money supply is the "major function" of the Fed.
- Federal Reserve independence is important but is also controversial from time to time. Advocates of independence fear that more political ties would cause the Fed to follow expansionary policies and create too much inflation, leading to an unstable currency such as that in other countries (see Last Word for this chapter).

### **Recent Developments in Money and Banking**

- Relative decline of banks and thrifts: Several other types of firms offer financial services.
- Consolidation among banks and thrifts:Because of failures and mergers, there are fewer banks and thrifts today.Since 1990, there has been a decline of 5000 banks.
- Convergence of services provided has made financial institutions more similar: See text on new laws of 1996 and 1999 that made many changes possible.
- Globalization of financial markets:Significant integration of world financial markets is
  occurring and recent advances in computer and communications technology suggest the
  trend is likely to accelerate.
- Electronic transactions: Internet buying and selling, electronic cash and "smart cards" are examples.
  - In the future, nearly all payments could be made with a personal computer or "smart card."
  - Unlike currency, E-cash is "issued" by private firms rather than by government. To control the money supply the Fed will need to find ways to control the total amount of E-cash, including that created through Internet loans.

#### **LAST WORD: The Global Greenback**

- Two-thirds of all U.S. currency is circulating abroad.
  - o Russians hold about \$40 billion because dollar value is stable.
  - o Argentina holds \$7 billion and fixes its own peso exchange rate to dollar reserves.
- U.S. profits when dollars stay overseas: It costs us 4¢ to print each dollar and to get the dollar; foreigners must sell Americans \$1 worth of products. Americans gain 96¢ over cost of printing the dollar. It's like someone buying a travelers check and never cashing it.
- Black markets and illegal activity overseas also are usually conducted in dollars because they are such a stable form of currency.
- Overall, the "global greenback" is a positive economic force. It is a reliable medium of exchange, measure, and store of value that facilitates transactions everywhere and there is little danger that all the dollars will return to U.S.