**CHAPTER 2**

**THE FEDERAL RESERVE AND ITS POWERS**

**CHAPTER OVERVIEW AND LEARNING OBJECTIVES**

* This chapter summarizes the background, structure, and purposes of the Federal Reserve System. Affectionately known in the financial world as “the Fed”, this uniquely American establishment may be the world’s single most important financial institution.
* As the nation’s *central bank*, the Fed has broad responsibilities for regulating the financial system, controlling the money supply, and influencing interest rates.
* The *tools of monetary policy* are among several design features which set the Fed apart from other financial institutions, other regulatory bodies, and even other countries’ central banks.

**CAREER PLANNING NOTE: WORKING AT THE FED**

To do its work, the Fed needs accountants, bank examiners, economists, financial experts, information systems professionals, lawyers, statisticians, and of course, guards. Here are “Careers” links to the Board of Governors in Washington, D.C. and to the 12 Federal Reserve Banks across the country:

 Board of Governors http://www.federalreserve.gov/careers/

 New York http://www.newyorkfed.org/careers/

 Atlanta http://www.frbatlanta.org/atlantafed/employment/intro\_index.cfm

 Boston http://www.bos.frb.org/about/employment/index.htm

 Chicago http://www.chicagofed.org/about\_the\_fed/current\_job\_opportunities.cfm

 Cleveland http://www.clevelandfed.org/hr/index.cfm

 Dallas http://www.dallasfed.org/careers/

 Kansas City http://www.kansascityfed.org/home/subwebs.cfm?subweb=110

 Minneapolis http://www.minneapolisfed.org/info/career/

 Philadelphia http://www.philadelphiafed.org/employment/

 Richmond http://www.richmondfed.org/about\_us/our\_jobs/

 St. Louis http://www.stlouisfed.org/about/job\_opps.html

 San Francisco http://www.frbsf.org/federalreserve/careers/

**READING THE *WALL STREET JOURNAL***

The *Journal’s* front page summarizes the lead business and financial stories of the day in the second column. Actions or pronouncements of the Fed are usually “above the fold”, especially if the Federal Open Market Committee—the Fed’s principal monetary policymaking body—has acted the day before. The FOMC meets 8 times a year (see the schedule at <http://www.federalreserve.gov/fomc/> )—so watch for *Journal* items about the Fed around those times. Monetary policy and financial regulation are also frequent topics on the “op-ed” (opinion-editorial) page, inside the back of section “A”. Look in Section “C” for the “Money Rates” table, which lists the Federal Reserve Discount Rate, the “Fed Funds” rate, and other “benchmark” interest rates in the financial system. Periodically the “Money Rates” table is accompanied by “Federal Reserve Data”, a summary of the components and values of the different measures of the money supply.

**TOPIC OUTLINE AND KEY TERMS**

**I. A *central bank* is a unique and powerful financial institution.** It—

 A. supervises a nation’s money supply and payments system;

 B. regulates other financial institutions, especially depository institutions;

 C. is a “lender of last resort” when the financial system has liquidity problems; and

 D. is the national government’s “fiscal agent”, i.e., depository bank.

**II. The origins of the Fed derive from inadequacies of the 19th-century financial system.**

**A. Two early central banking institutions did not survive the politics of their time.**

 1. The first Bank of the United States was chartered in 1791.

a. Alexander Hamilton, first Treasury Secretary, was a main proponent.

b. Opponents (e.g.Thomas Jefferson) feared concentrations of wealth.

 c. Congress let the 20-year charter lapse in 1811.

 2. The second Bank of the United States was chartered in 1816.

 a. It became a major issue in presidential politics.

 b. Andrew Jackson vetoed a bill to recharter the Bank in 1832.

 **B. Between 1832 and 1914, nothing resembling a central bank operated in the U.S.**

1. Commercial banks funded themselves in 2 problematic ways:

 a. Uninsured deposits (The FDIC was not created until 1933); and

 b. Banknotes—IOUs or promissory notes of banks.

(1) Banknotes functioned as an early form of paper money.

(2) Banknotes carried the default risk of the issuing bank.

 i. Not all banknotes were equally acceptable everywhere.

ii. Many banknotes exchanged only at a *discount*.

iii. A bank’s notes became worthless if the bank failed.

 2. Until the 1860s, the quantity and quality of money varied widely in the U.S.

a. Issue of banknotes was largely unregulated.

b. People hoarded *hard currency*—gold or silver coins—when they lost confidence in paper money.

c. Unsound money exacerbated cycles of “boom and bust”.

3. The National Banking Acts of the early 1860s were the first systematic federal regulation of money and banking.

 a. Three legacies of the National Banking Acts are still with us:

(1) *National banks*, chartered by the U.S. Treasury.

(2) *Comptroller of the Currency*, main regulator of national banks.

 (3) *Legal tender* status for a federally standardized currency.

b. The Acts were an effort to make the money supply more sound.

(1) National banks had to back their banknotes with slightly greater holdings of U.S. government bonds (so that they could redeem at face value even if the bank failed).

 (2) State banks had to pay a 10% federal tax on their banknotes.

 c. The early National Banking apparatus failed to address 3 related issues:

(1) *Demand deposits* (checking accounts) became highly popular as a result of the tax on state banknotes

(2) *Pyramiding of reserves* was allowed.

Banks could count deposits at other banks as reserves, so a “run” on one could cause others to run short as well.

(3) *Call loans* were the conventional form of bank financing.

 These loans were due when “called in” by the bank. Banks

 low on reserves called in loans, causing borrowers to withdraw their own deposits or default, causing more bank illiquidity and more “calls”. Panic would spread, dragging the economy into recession.

**C. By the early 20th century, recurring panic and recession had strengthened political consensus for the idea of a permanent central bank.**

1. The Crash of 1907 brought various factions closer in willingness to compromise.

 2. Debate shifted from whether to have a central bank to how to structure one.

 **D. The Federal Reserve Act of 1913 embodied several political compromises.**

1. Federal Reserve Notes became the standard and “elastic” national currency.

 2. 12 regionally autonomous Federal Reserve Banks shared power.

 3. The goals of the Act were to establish--

 a. a permanent way to adjust a national money supply to economic cycles;

 b. a “lender of last resort” to keep banks liquid in times of financial crisis;

c. an efficient payments system for negotiating checks nationwide; and

 d. more vigorous supervision of banks.

**III. Today’s Fed has 4 main organizational elements.**

**A. The 12 Federal Reserve Banks have many operational functions but less autonomy.**

1. Each Federal Reserve Bank provides basic services in its district—

 a. processing checks and electronic payments;

 b. issuing Federal Reserve Notes;

 c. holding reserve deposits of banks and other deposit-type institutions;

 d. monitoring regional economic conditions;

 e. advising the Board of Governors; and

 f. helping make monetary policy.

2. The Federal Reserve Banks are part of a coordinated national monetary policy.

 a. The Board of Governors now has power to—

 (1) enforce a uniform Discount Rate; and

 (2) appoint top officers of each Federal Reserve Bank.

b. The Banks are represented on the Federal Open Market Committee

 **B. Several thousand member commercial banks “own” the Federal Reserve Banks.**

 1. Member banks represent the “dual banking system” in the U.S.

 a. All National Banks *must* be members of the Federal Reserve System.

 b. Relatively few state banks *choose* to join the Federal Reserve System.

 2. Member banks buy stock in the Federal Reserve Bank for their district. They—

 a. collect dividends set by the Fed but do not otherwise share profits.

b. elect 6 of 9 Federal Reserve Bank directors but have no other vote or say.

 3. Membership is not the distinction it once was. As of 1980—

a. Fed services are available to any depository institution for a fee, and

b. Reserve requirements apply to all U.S. depository institutions.

**C. The Board of Governors runs the Fed.**

1. The 7 Governors are appointed by the President and confirmed by the Senate.

 a. No 2 Governors can be from the same Federal Reserve District.

 b. Governors have 14-year terms of office, expiring every 2 years.

 c. Governors’ terms are nonrenewable.

 2. One Governor serves as Chairman.

 a. The Chairman has a 4-year term and may be reappointed.

b. When a new Chairman is named, the old one traditionally leaves (regardless of the time left in the underlying appointment as a Governor).

**D. The Federal Open Market Committee sets monetary policy under the Board of Governors’ control.**

 1. The FOMC has 12 members—8 permanent and 4 rotating.

a. The 7 Governors are permanent members of the FOMC.

b. The President of the Federal Reserve Bank of New York has a permanent seat because the New York Fed operationally executes FOMC directives.

c. Presidents of 4 other Federal Reserve Banks rotate through 1-year terms.

2. The FOMC’s actions substantially influence 2 major financial sector variables:

 a. The size of the money supply, and

 b. The level of short-term interest rates.

**IV. Significant powers are concentrated in today’s centralized Fed.**

 **A. The Chairman is a powerful figure in monetary policy.**

 1. He sets the agenda and chairs the meetings of both the Board and the FOMC.

 2. He is the public face and voice of the Fed.

 **B. The Board regulates key aspects of banking and finance beyond monetary policy.**

 (See Exhibit 2.5 and Chapter 16).

 **C. The Fed’s independence enhances its power.**

 1. There are no direct channels of political or fiscal pressure on the Fed.

a. The Fed is a creature of Congress, but not directly under its authority.

b. The Board is appointed by but not answerable to the President.

c. There is no fiscal pressure on the Fed; it funds itself.

 (1) Its income exceeds its expenses by around $20 billion per year.

 (2) Congress thus has no “power of the purse” over the Fed.

2. Ultimately, however, the Fed is independent *within*, not *of* the government.

 a. What Congress creates, Congress can modify or destroy.

 b. The Fed remains independent because most politicians want it that way.

(1) They mostly agree that monetary policy is not a partisan issue.

(2) An independent Fed can absorb blame if the economy falters.

(3) An independent Fed can take necessary but unpopular steps.

**V. The Fed’s balance sheet reflects its relationship to the money supply and financial system.**

 **A. The Fed’s liabilities are the basis of the money supply.**

 1. The “monetary base” chiefly comprises the Fed’s 2 largest permanent liabilities.

 a. *Federal Reserve Notes* in circulation, the Fed’s largest liability, are—

(1) *legal tender*—lawful payment for any debt valued in US dollars.

(2) *fiat money*—backed by nothing but the issuer’s faith and credit.

b. *Deposits of financial institutions* are the Fed’s second largest liability.

(1) All U.S. depository institutions must keep *reserves* with the Fed.

 (2) Reserves bear no interest and are used to—

i. clear checks, wire transfers, and other payment items;

 ii. control the rate of growth of the money supply; and

iii. provide liquidity in the event of financial crisis.

 (3) *Total Reserves* equal *Required Reserves* plus *Excess Reserves*.

i. *Required reserves* are minimum reserves required.

ii. *Excess reserves* are those exceeding required reserves.

iii. Required reserves are idle; excess reserves are available to lend or invest.

2. The Fed’s other liabilities correspond to its other functions.

a. *U.S. Treasury Deposits:* the federal government’s “checking accounts”.

b. *Deferred Availability Cash Items* *(DACI)* : uncleared payment items from depository institutions.

**B. The Fed’s capital accounts comprise 3 items.**

1. *Capital Paid In:* Federal Reserve Bank stock held by member commercial banks.

 2. *Surplus:* retained net earnings of the Federal Reserve System.

 3. *Other Capital Accounts:* unallocated net earnings year-to-date.

 **C. The Fed’s assets change as monetary policy changes.**

1. *Discount Window Loans* to depository institutions are the Fed’s smallest asset.

a. Institutions may borrow from their district’s Federal Reserve Bank for—

1. Adjustment credit, to cover short-term liquidity shortages;
2. Seasonal credit, to help them through seasonal fluctuations; or
3. Extended credit, to support institutions in exceptional circumstances.

 b. The “Discount Rate” is the rate the Fed charges on such loans.

 2. *U.S. Government Securities* are the Fed’s largest asset.

a. The Fed holds both kinds of U.S. government securities:

(1) *Treasuries*, debt securities issued by the U.S. Treasury; and

(2) *Agencies*, debt securities of other federally backed issuers.

b. The Fed uses its securities holdings to conduct *Open Market Operations.*

3. *Cash Items in Process of Collection* (“CIPC”) are cleared payment items from depository institutions for which funds have not yet been received.

 a. CIPC minus DACI equals “float”, a net extension of credit by the Fed.

b. The Fed plays a major role in check clearing.

c. Clearing moves reserves around, but does not increase or diminish them.

**VI. The Fed has 3 major “Tools of Monetary Policy”.**

**A*. Open market operations*: the most useful—and thus most important—tool.**

 1. The Fed buys and sells U.S. government securities on the secondary market.

2. Open market trades directly change the level of reserves in the banking system.

a. The Fed pays for a purchase by crediting new reserves to the seller.

(1) Only the central bank can unilaterally create new money.

(2) As new reserves are credited, the monetary base grows.

b. The Fed collects for a sale by taking existing reserves from the buyer.

(1) As existing reserves return to the Fed, the money supply shrinks.

(2) These *dollar-for-dollar reserve effects* make open market operations flexible and precise.

3. Price effects from open market operations can influence short-term interest rates.

a. Buying pushes prices of securities upward and pulls yields downward.

 b. Selling pulls prices downward and pushed yields upward.

4. The FOMC decides whether, when, and how much to buy or sell.

 a. The FOMC deliberates 8 times a year about the economy.

 (1) The “green book” is a 2-year national economic forecast.

(2) “Beige books” are economic reports from the 12 Districts.

(3) The “blue book” offers 3 alternative monetary policy scenarios.

b. The FOMC issues *policy directives* to the Open Market Desk at the Federal Reserve Bank of New York.

(1) The desk buys or sells specific dollar amounts of securities.

 (2) Trades are executed by securities dealers on an approved list.

(3) Reserves flow into or out of special bank accounts kept by them.

**B. *The Discount Rate*: the interest rate at which the Fed lends to depository institutions.**

1. As the Fed lends “at The Window”, the money supply increases.

 2. Changes in the Discount Rate theoretically affect incentives to borrow.

3. The main significance of the Discount Rate has changed through history.

a. Banks in the early 20th century relied on The Window.

b. Today, the Discount Rate is less a direct control, more a signal.

(1) Institutions no longer resort first or regularly to The Window. i. They now have many choices for raising loanable funds.

ii. They are wary of potential regulatory scrutiny.

(2) Changes in the Discount Rate indicate the Fed’s intent.

i. Raising the rate means the Fed wants a smaller money supply and higher rates.

ii. Lowering the rate means the Fed wants a larger money supply and lower rates.

 4. The Discount Rate and the *Fed Funds Rate* (Chapter 3) are *not* the same thing.

a. Fed Funds are a Fed-sponsored mechanism for depository institutions to lend to each other.

b. The Fed targets and influences the Fed Funds rate, but does not dictate it.

 c. The Fed Funds rate is almost always lower than the Discount Rate.

**C. *Reserve Requirements*: the least-used tool of monetary policy.**

1. Depository institutions must reserve a set percentage of certain types of deposits.

a. Most reserves are held at the Federal Reserve Bank for that District.

 b. Reserves may also be held as vault cash.

 2. The Depository Institutions Deregulation and Monetary Control Act of 1980—

a. subjects all U.S. depository institutions to uniform reserve requirements;

 b. sets limits within which the Fed is to specify a required reserve ratio.

 3. Reserve requirements are a structural control on the money supply.

 a. Changes in reserve requirements have dramatic effects.

 b. Reserve requirements are not useful for “fine-tuning” monetary policy.

**COMPLETION QUESTIONS**

1. The primary purpose of a central bank is to control a nation’s \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ .

2. The Fed’s largest single liability is \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

3. A Fed asset not related to monetary policy is “\_ \_ \_ \_” -- \_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_ \_\_\_\_\_\_\_\_\_\_ \_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ .

4. The \_\_\_\_\_\_\_\_ \_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ controls monetary policy.

5. The FOMC or \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ has \_\_\_ members.

6. The document by which the FOMC instructs the trading desk is called a \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ .

7. Among U.S. commercial banks, all \_\_\_\_\_\_\_\_\_\_\_\_ banks are members of the Federal Reserve System while some \_\_\_\_\_\_\_\_\_\_\_\_ banks are members.

8. Total reserves equal required reserves plus \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ .

9. There are \_\_\_\_ federal reserve banks.

10. Borrowing from the Fed is called “\_\_\_\_\_ \_\_\_ \_\_\_\_ \_\_\_\_\_\_\_\_\_”.

**TRUE-FALSE QUESTIONS**

T F 1. Congress is powerless over the Fed.

T F 2. Excess reserve balances pay interest; required reserve balances do not.

T F 3. Open Market Operations are the primary tool of monetary policy today.

T F 4. The Fed can control the level of M1 by controlling the level of total bank reserves.

T F 5. A Fed governor has a lifetime appointment.

T F 6. As the Fed expands the monetary base , bank loans and investments are likely to expand also.

T F 7. Although decentralized in geography, today’s Fed is highly centralized in its power structure.

T F 8. Reserve requirements are not a *viable* tool of monetary policy.

T F 9. The “monetary base” comprises the Fed’s most important assets.

T F 10. The Federal Reserve Bank of New York is the “headquarters” of open market operations.

**MULTIPLE-CHOICE QUESTIONS**

1. Which of the following Fed actions does not *directly* increase total reserves in the banking system?

a. Lowering the Discount Rate

b. Lowering reserve requirements

c. Buying U.S. Government securities on the open market

d. None of the above

2. If the Fed wanted to increase the money supply immediately but just slightly, it would *most* likely

a. Buy securities on the open market

b. Lower the Discount Rate

c. Lower reserve requirements

d. Any of the above would be suitable for this purpose.

3. Reserve requirements apply to

a. National banks b. State banks c. Savings-and-loan associations d. all of the preceding

4. The Federal Reserve Banks are

a. Important and autonomous components of a “decentralized central bank”

b. Important components of the Fed, but no longer very autonomous

c. Neither important nor autonomous

d. All permanently voting members of the FOMC

5. Which of the following is in the correct historical order?

a. Second Bank of the United States, Federal Reserve Act, Crash of 1907

b. Crash of 1907, Federal Reserve Act, National Banking Acts

c. First Bank of the United States, Crash of 1907, National Banking Acts

d. Second Bank of the United States, National Banking Acts, Federal Reserve Act

6. The Fed’s non-monetary or regulatory powers do not include

a. Margin requirements

b. Interest rate disclosures on deposits

c. Investigation and prosecution of counterfeiting

d. Bank holding companies

7. Increases in the Fed’s assets

a. decrease the monetary base

b. increase the monetary base

c. have no effect on the monetary base.

d. none of the above

8. Who among the following does not have a permanent vote on the FOMC?

a. President, Federal Reserve Bank of New York

b. Chairman, Board of Governors

c. President, Federal Reserve Bank of Los Angeles

d. Members of the Board of Governors

9. The Discount Window

a. is a common way for depository institutions to raise loanable funds

b. relates to the Fed’s “lender of last resort” function

c. is a relatively recent innovation in the design of the Federal Reserve System

d. is available only during emergencies

10. The Fed’s most important duty is to

a. regulate national banks

b. clear checks

c. establish the nation’s monetary policy

d. stimulate the economy

**SUPPLEMENTARY ASSIGNMENT**

Return to [www.federalreserve.gov/](http://www.federalreserve.gov/) . Click “About the Fed”, then “Frequently Asked Questions”. Browse some of the topics, then reflect on answers especially surprising or informative. Go back to the home page and click “Publications and Educational Resources”, then “Annual Report”. Scroll down to “Federal Reserve System Audits” and click open the PDF. Look over the first few pages of this section. Did you know that the Fed submits to an external audit? Page past the Board’s financial statements until you find the “Federal Reserve Banks Combined Statements of Condition”. This is the system balance sheet, and these are actual year-end figures for those accounts you’re learning about in Chapter 2. What is each one as a percentage of total assets? Which ones changed most significantly from the prior year?

**SOLUTIONS TO COMPLETION QUESTIONS**

1. money supply

2. Federal Reserve Notes in circulation

3. CIPC—Cash Items in Process of Collection

4. Board of Governors

5. Federal Open Market Committee; 12

6. Policy Directive

7. national; state

8. excess reserves

9. 12

10. “going to the Window”

**SOLUTIONS TO TRUE-FALSE QUESTIONS**

1. F Congress grants the Fed independence. Congress created the Fed and may alter or abolish it.

2. F No reserve balances pay interest.

3. T Dollar-for-dollar effects of open market operations make them flexible and precise, thus much

 more useful than the other tools.

4. T Open market operations change the level of bank reserves dollar-for-dollar; banks lend or invest the

 excess reserves into the money supply.

5. F Fed governors have 14-year appointments.

6. T Excess reserves fund new lending and investing.

7. T The Fed’s history is one of progressive centralization of power.

8. T Reserve requirements, too powerful for anything but structural control, are seldom adjusted.

9. F The monetary base comprises 2 liabilities of the Fed—depository institution reserves, and Federal

 Reserve Notes in circulation.

10. T The FRB of New York is the location of the Trading Desk.

**SOLUTIONS TO MULTIPLE-CHOICE QUESTIONS**

1. a Lowering the discount rate does not *directly* increase reserve levels; depository institutions must

 first choose to borrow at the Window.

2. a Open market operations are flexible and precise. Discount rate adjustments do not directly change

 the money supply, and reserve requirement adjustments are too dramatic.

3. d The Monetary Control Act of 1980 subjects all depository institutions to reserve requirements.

4. b The FRBs are important operating components in the system, but no longer enjoy the

 autonomy originally intended for them. The Fed’s power structure has become highly centralized.

5. d Banks of US 1791-1836; National Banking Acts 1862-64; Federal Reserve Act 1913.

6. c Counterfeiting, not mentioned in Exhibit 2.5, is in fact the responsibility of the Secret Service.

7. d The Fed finances asset increases by issuing Federal Reserve Notes or crediting reserve balances.

8. c Only New York has a permanent vote. And there is no Federal Reserve Bank of Los Angeles.

9. b The Window is seldom-used nowadays, but is available in ordinary circumstances as well as

 emergencies and is an original design feature of the Fed.

10. c The Fed’s most important function is monetary policy.