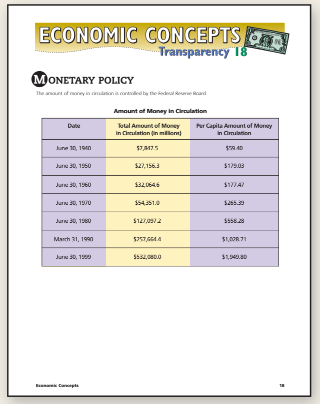
CHAPTER 15 Resource Manager

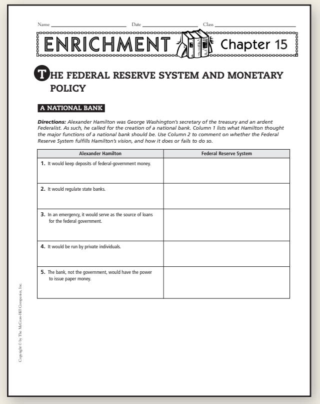
Teaching Transparency

Economic Concepts Transparency 18

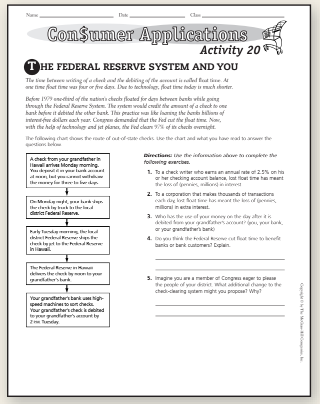


Application and Enrichment

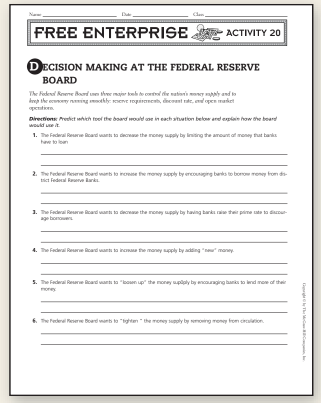
Enrichment Activity 15



Consumer Applications Activity 20

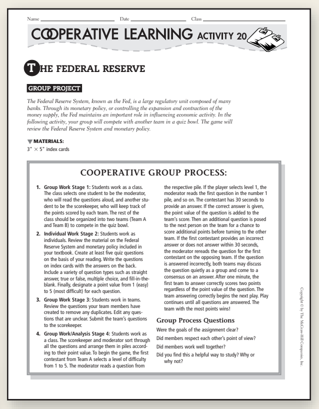


Free Enterprise Activity 20

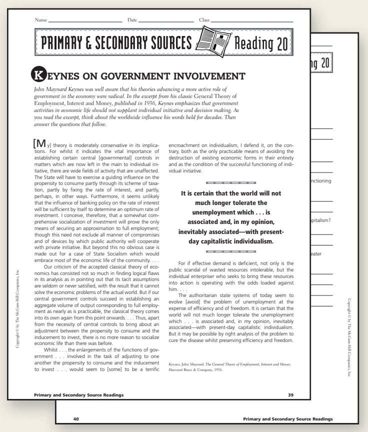


Application and Enrichment

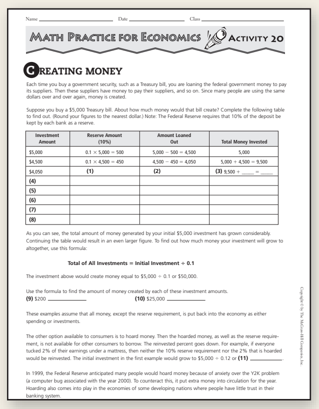
Cooperative Learning Simulations and Problems 20



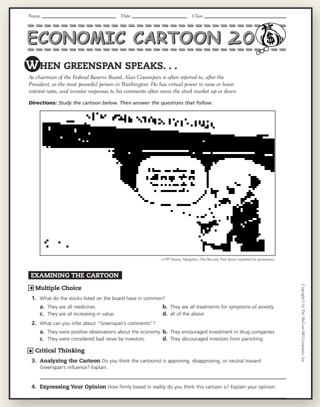
Primary and Secondary Source Reading 20



Math Practice for Economics Activity 20

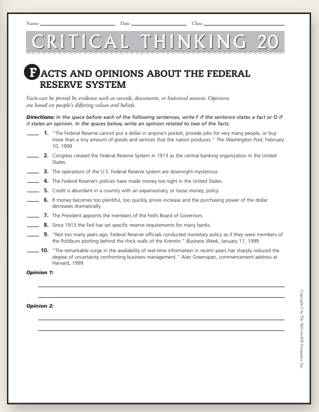


Economic Cartoons Activity 20

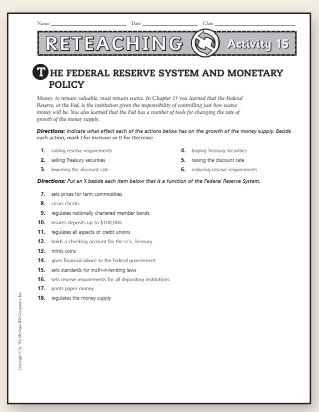


Review and Reinforcement

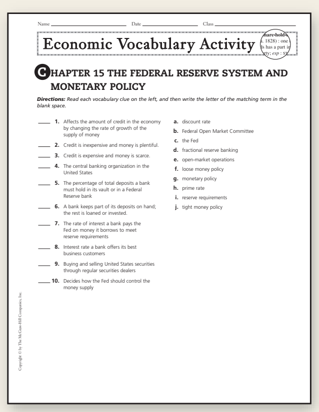
Critical Thinking Activity 20



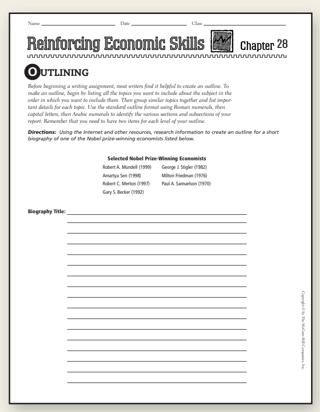
Reteaching Activity 15



Economic Vocabulary Activity 15



Reinforcing Economic Skills 28

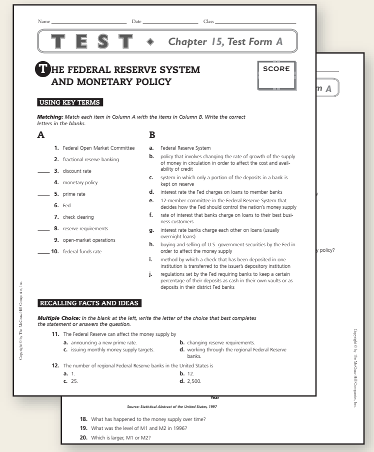


CHAPTER 15 Resource Manager

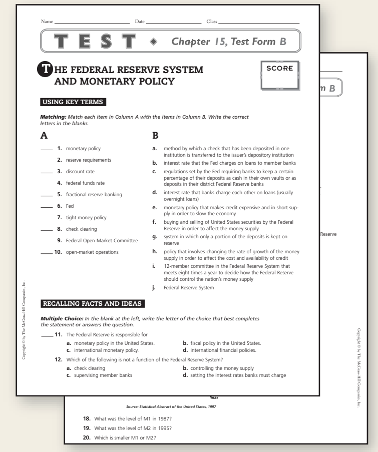
Assessment and Evaluation

GLENCOE'S ASSESSMENT ADVANTAGE

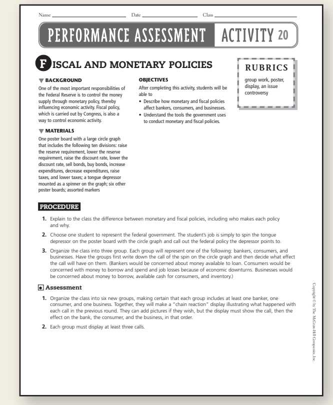
Chapter 15 Test Form A



Chapter 15 Test Form B



Performance Assessment Activity 20



ExamView® Pro Testmaker

Technology and Multimedia

- Vocabulary PuzzleMaker Software
- Interactive Tutor Self-Assessment Software
- ExamView® Pro Testmaker
- NBR *Economics & You* Video Program (English/Spanish)
- Presentation Plus!
- Glencoe Skillbuilder Interactive Workbook CD-ROM, Level 2
- Interactive Lesson Planner
- MindJogger Videoquiz
- Interactive Economics! CD-ROM
- Audio Program (English or Spanish)

ECONOMICS Online

You and your students can visit ett.glencoe.com—the Web site companion to **Economics Today and Tomorrow.** This innovative integration of electronic and print media offers your students a wealth of opportunities. The student text directs students to the Web site for the following options:

- **Chapter Overviews**
- **Student Web Activities**
- **Self-Check Quizzes**
- **Textbook Updates**

Answers are provided for you in the **Web Activity Lesson Plan.** Additional Web resources and Interactive Puzzles are also available.

Use the Glencoe Web site for additional resources. All essential content is covered in the Student Edition.

Spanish Resources

- Spanish Economic Concepts Transparency 18
- Spanish Vocabulary Activity 15
- Spanish Reteaching Activity 15
- Spanish Section Quizzes for Chapter 15
- Spanish Chapter 15 Audio Program, Activity, and Test

Additional Resources

Reading for the Student

A Day at the Fed, rev. ed. Federal Reserve Bank of New York, 1998. Takes the reader through a typical day at the New York Fed.

Reading for the Teacher

Mercantilists and Classicals: Insights from Doctrinal History. Federal Reserve Bank of Richmond, 1998. Traces the evolution of rival monetary doctrines.

Section Resources

Reading Objectives	Reproducible Resources	Technology/Multimedia Resources
Section 1 **Organization and Functions of the Federal Reserve System** • How is the Federal Reserve System in the United States organized? • What are the functions of the Fed?	Reproducible Lesson Plan 15-1 Daily Lecture Notes 15-1 Guided Reading Activity 15-1 Reading Essentials and Study Guide 15-1 Daily Focus Activity 63 Section Quiz 15-1* Reinforcing Economic Skills 28	Daily Focus Transparency 63 Vocabulary PuzzleMaker Interactive Tutor Self-Assessment Software MindJogger Videoquiz Interactive Economics! Presentation Plus! ExamView® Pro Testmaker
Section 2 **Money Supply and the Economy** • What are the differences between loose money and tight money policies? • What is the purpose of fractional reserve banking? • How does the money supply expand?	Reproducible Lesson Plan 15-2 Daily Lecture Notes 15-2 Guided Reading Activity 15-2 Reading Essentials and Study Guide 15-2 Daily Focus Activity 64 Section Quiz 15-2*	Daily Focus Transparency 64 Vocabulary PuzzleMaker Interactive Tutor Self-Assessment Software MindJogger Videoquiz NBR's *Economics & You** Interactive Economics! Presentation Plus! ExamView® Pro Testmaker
Section 3 **Regulating the Money Supply** • How can the Fed use reserve requirements to alter the money supply? • How does the discount rate affect the money supply? • How does the Fed use open-market operations? • What are some of the difficulties of carrying out monetary policy?	Reproducible Lesson Plan 15-3 Daily Lecture Notes 15-3 Guided Reading Activity 15-3 Reading Essentials and Study Guide 15-3 Daily Focus Activity 62 Section Quiz 15-3*	Daily Focus Transparency 62 Economic Concepts Transparency 18 Vocabulary PuzzleMaker Interactive Tutor Self-Assessment Software MindJogger Videoquiz NBR's *Economics & You** Interactive Economics! Presentation Plus! ExamView® Pro Testmaker

*Also available in Spanish

Blackline Master
Transparency
Software
CD-ROM
Videodisc
Audiocassette
Videocassette

CHAPTER 15 Resource Manager

ACTIVITY From the Classroom of

Howard D. Merrick, Jr.
Pottsville Area High School
Pottsville, Pennsylvania

Smart Borrowing and Investing

As our society gets ever more complex, students need to better understand the importance of smart borrowing and smart investing. Organize students into groups and have groups visit, phone, or e-mail various banks in the school district. Students should collect information on the types of loans available and their rates. They should also ask about the types of savings or investment plans and their rates. After students have evaluated the differences between various borrowing and savings plans, have them calculate the changes that would occur if the Fed raised or lowered interest rates.

Block Schedule

Activities that are particularly suited to use within the block scheduling framework are identified throughout this chapter by the following designation: BLOCK SCHEDULING

Easy Planning and Preparation!

Use Glencoe's **Presentation Plus!**, a Microsoft PowerPoint® application, to teach **The Federal Reserve System and Monetary Policy.** With this multimedia teacher tool, you can customize ready-made presentations. At your fingertips are interactive transparencies, on-screen lecture notes, audiovisual presentations, and links to the Internet and to other Glencoe multimedia.

Interactive Lesson Planner
Planning has never been easier! Organize your week, month, semester, or year with all the lesson helps you need to make teaching creative, timely, and relevant—the way it is meant to be. The Interactive Lesson Planner opens Glencoe's **Chapter 15** resources, helps you build your schedule, and tracks your progress.

Key to Ability Levels

Teaching strategies have been coded for varying learning styles and abilities.
L1 BASIC activities for all students
L2 AVERAGE activities for average to above-average students
L3 CHALLENGING activities for above-average students
ELL ENGLISH LANGUAGE LEARNER activities

National Council on Economic Education

THE EconomicsAmerica AND EconomicsInternational PROGRAMS

Voluntary Standards Emphasized in Chapter 15

Content Standard 11 Students will understand that money makes it easier to trade, borrow, save, invest, and compare the values of goods and services.

Content Standard 20 Students will understand that federal government budgetary policy and the Federal Reserve System's monetary policy influence the overall levels of employment, output, and prices.

Resources Available from NCEE

- *Capstone: The Nation's High School Economics Course*
- *Civics and Government: Focus on Economics*
- *United States History: Eyes on the Economy, Vol. 2*
- *Personal Finance Economics: Wallet Wisdom*
- *Focus: High School Economics*

To order these materials, or to contact your State Council on Economic Education about workshops and programs, call 1-800-338-1192 or visit the NCEE Web site at http://www.nationalcouncil.org

NIGHTLY BUSINESS REPORT ECONOMICS & YOU

The Federal Reserve System and Monetary Policy

Chapter 22
Disc 1, Side 2

ASK: What analogy is made about the American economy and the Fed? *The American economy is likened to a car—and the Fed is the driver.*

Also available in VHS.

Chapter Overview

Chapter 15 describes or explains the organization and functions of the Fed, how and why the supply of money in the United States is regulated, and the differences between tight money policies and loose money policies.

GLENCOE TECHNOLOGY

Use **MindJogger Videoquiz** VHS to preview Chapter 15 content.

ECONOMICS Online

Introduce students to chapter content and key terms by having them access **Chapter 15—Chapter Overviews** at *ett.glencoe.com*

CHAPTER 15
The Federal Reserve System and Monetary Policy

Why It's Important

Who determines how much money exists in the United States? This chapter will explain who's in charge of the money supply and how they decide what amount to put into circulation.

To learn more about the money supply, view the **Economics & You** *Chapter 22 video lesson:* **The Federal Reserve System and Monetary Policy**

ECONOMICS Online

Chapter Overview Visit the *Economics Today and Tomorrow* Web site at ett.glencoe.com and click on ***Chapter 15—Chapter Overviews*** to preview chapter information.

CHAPTER LAUNCH ACTIVITY

Organize the class into small groups, and have groups research local banks' current mortgage rates and mortgage rates five years ago. Have groups note by how much the rates have changed and speculate on why this change occurred. Encourage groups to share their findings with the class. Conclude by informing students that in this chapter they will learn about the institution that influences all interest rates in the economy—the Federal Reserve System.

SECTION 1 Organization and Functions of the Federal Reserve System

COVER STORY

THE WASHINGTON POST, FEBRUARY 10, 1999

The Federal Reserve cannot put a dollar in anyone's pocket, provide jobs for very many people, or buy more than a tiny amount of goods and services that the nation produces. But the 86-year-old government bank can have an enormous impact on how you spend, invest, or borrow money. . . . That is because the Fed . . . is in charge of the nation's monetary policy, taking actions almost daily to help determine how much money is available, how easily it may be borrowed, and how costly it will be.

READER'S GUIDE

Terms to Know
- Fed
- monetary policy
- Federal Open Market Committee
- check clearing

Reading Objectives
1. How is the Federal Reserve System in the United States organized?
2. What are the functions of the Fed?

Congress created the Federal Reserve System in 1913 as the central banking organization in the United States. Its major purpose was to end the periodic financial panics (recessions) that had occurred during the 1800s and into the early 1900s. Over the years, many other responsibilities have been added to the Federal Reserve System, or **Fed,** as it is called. In this section, you'll learn how the Fed is organized to carry out its functions.

Fed: *the Federal Reserve System created by Congress in 1913 as the nation's central banking organization*

SECTION 1 RESOURCE MANAGER

Reproducible Masters
- Reproducible Lesson Plan 15–1
- Reading Essentials and Study Guide 15–1
- Guided Reading Activity 15–1
- Section Quiz 15–1
- Daily Focus Activity 63
- Daily Lecture Notes 15–1

Multimedia
- Daily Focus Transparency 63
- Vocabulary PuzzleMaker
- Interactive Tutor Self-Assessment Software
- ExamView® Pro Testmaker
- MindJogger Videoquiz
- Interactive Economics!
- Presentation Plus!

1 Focus

Overview

Section 1 describes the organization of the Federal Reserve System and outlines the Fed's functions.

BELLRINGER
Motivational Activity

Project **Daily Focus Transparency 63** and have students answer the questions.

This activity is also available as a blackline master.

Daily Focus Transparency 63

FOCUS ACTIVITIES Transparency 63

WHO IS MOVING COINS AND CURRENCY?

1. What role of the Federal Reserve is portrayed in this photograph?
2. What qualifications do you think the employee in the photograph needs to do his job?

Answers 1. controlling the nation's money supply (supplying the economy with currency and coins) 2. Students should be able to deduce that, since there is a need for extensive security, the employee would have to be able to pass a comprehensive background investigation. He would no doubt have to be free of any criminal record.

Daily Focus Transparencies

READER'S GUIDE

Answers to the **Reading Objectives** questions are on page 405.

Preteaching Vocabulary

Have students locate the definition of *Federal Open Market Committee* in the Glossary. Then call on volunteers to explain how actions by the FOMC might affect a family's finances. *(These actions will make it harder or easier to get loans.)*

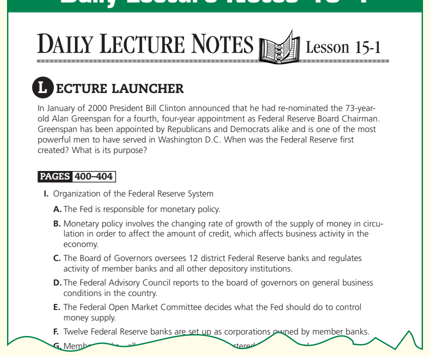
Vocabulary PuzzleMaker

2 Teach

Guided Practice

L2 Illustrating Ideas Refer students to **Figure 15.4** on page 404 and review with them the functions of the Federal Reserve System. Then have students work in pairs to create posters that illustrate and summarize these functions. Call on pairs to display their posters and teach the rest of the class about the functions of the Fed. **ELL**

Daily Lecture Notes 15–1


DAILY LECTURE NOTES Lesson 15-1

LECTURE LAUNCHER

In January of 2000 President Bill Clinton announced that he had re-nominated the 73-year-old Alan Greenspan for a fourth, four-year appointment as Federal Reserve Board Chairman. Greenspan has been appointed by Republicans and Democrats alike and is one of the most powerful men to have served in Washington D.C. When was the Federal Reserve first created? What is its purpose?

PAGES 400–404

I. Organization of the Federal Reserve System
   A. The Fed is responsible for monetary policy.
   B. Monetary policy involves the changing rate of growth of the supply of money in circulation in order to affect the amount of credit, which affects business activity in the economy.
   C. The Board of Governors oversees 12 district Federal Reserve banks and regulates activity of member banks and all other depository institutions.
   D. The Federal Advisory Council reports to the board of governors on general business conditions in the country.
   E. The Federal Open Market Committee decides what the Fed should do to control money supply.
   F. Twelve Federal Reserve banks are set up as corporations owned by member banks.

Visual Instruction FIGURE 15.1

Have students review **Figure 15.1**. Ask students to write captions and caption questions that will add to and test their knowledge of the Fed's organization. Have volunteers read their captions and questions to the class.

Organization of the Federal Reserve System

The Federal Reserve System is made up of a Board of Governors assisted by the Federal Advisory Council, the Federal Open Market Committee, 12 Federal Reserve district banks, 25 branch banks, and about 5,000 member banks. As its name states, the Fed is a system, or network, of banks. Power is not concentrated in a single central bank but is shared by the governing board and the 12 district banks. **See Figure 15.1.**

The Fed is responsible for monetary policy in the United States. **Monetary policy** involves changing the rate of growth of the supply of money in circulation in order to affect the amount of credit, thereby affecting business activity in the economy.

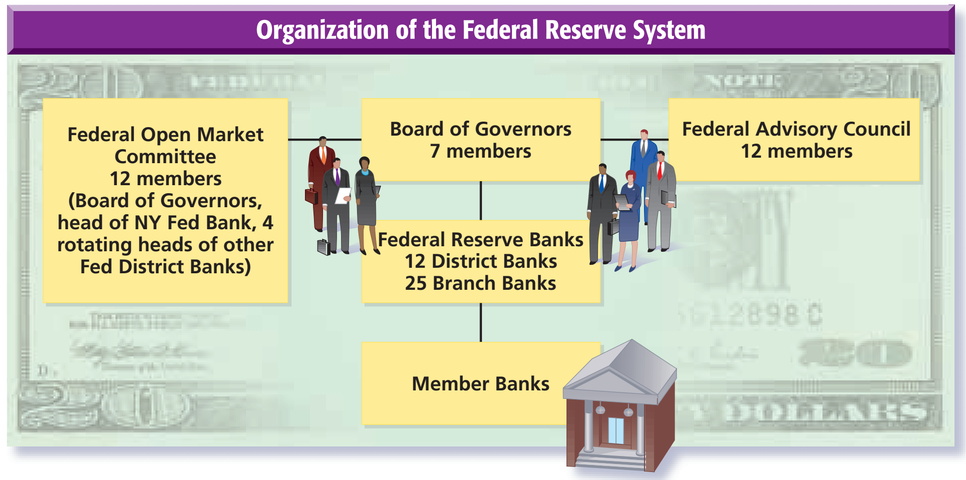
monetary policy: *policy that involves changing the rate of growth of the supply of money in circulation in order to affect the cost and availability of credit*

Board of Governors

The *Board of Governors* directs the operations of the Fed. It supervises the 12 Federal Reserve district banks and regulates certain activities of member banks and all other depository institutions.

FIGURE 15.1

Organization of the Fed Since the change in banking regulations in the early 1980s, nonmember banks are also subject to control by the Federal Reserve System.



Economic Connection to... History

The First Central Bank

The Bank of Amsterdam was established in Holland in 1609. At that time, Amsterdam was a center of world trade. More than 340 different kinds of silver coins and about 500 types of gold coins circulated throughout the city. Dutch merchants had little idea of how much these coins were worth, so the Bank of Amsterdam was set up under a charter from the city to standardize the currency.

The Bank of Amsterdam operated as Holland's central bank for more than 200 years. After making a series of bad loans, however, it failed and went out of business in 1819—almost 100 years *before* America's central bank was founded. ■

The 7 full-time members of the Board of Governors are appointed by the President of the United States with the approval of the Senate. The President chooses one member as a chairperson. Each member of the board serves for 14 years. The terms are arranged so that an opening occurs every 2 years. Members cannot be reappointed, and their decisions are not subject to the approval of the President or Congress. Their length of term, manner of selection, and independence in working frees members from political pressures.

ECONOMICS Online

Student Web Activity Visit the *Economics Today and Tomorrow* Web site at ett.glencoe.com and click on ***Chapter 15—Student Web Activities*** to see how the Federal Reserve System functions.

Federal Advisory Council

The Board of Governors is assisted by the *Federal Advisory Council (FAC).* It is made up of 12 members elected by the directors of each Federal Reserve district bank. The FAC meets at least 4 times each year and reports to the Board of Governors on general business conditions in the nation.

Federal Open Market Committee

The 12 members on the **Federal Open Market Committee (FOMC)** meet 8 times a year to decide the course of action that the Fed should take to control the money supply. The FOMC determines such economic decisions as whether to raise or lower interest rates. It is this committee's actions that have a resounding effect throughout the financial world.

Federal Open Market Committee: *12-member committee in the Federal Reserve System that meets 8 times a year to decide the course of action that the Fed should take to control the money supply*

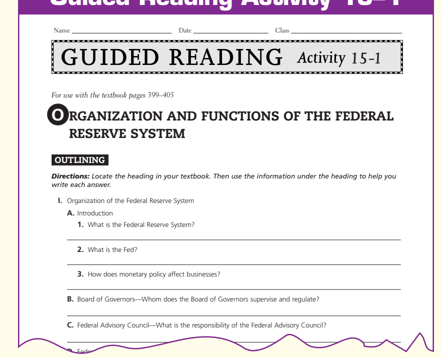
CHAPTER 15
SECTION 1, Pages 399–405

L2 Applying Ideas Tell students that you have just bought the latest computer game from Funand Games.com, and you have sent a check for $50 to the FunandGames order center. (Select a city in a Federal Reserve district other than your own—see Figure 15.2 on page 402 for possible locations—and tell students that is where FunandGames is headquartered.) Call on volunteers to describe the process by which your check would be cleared through the Federal Reserve System. Have students use points from these descriptions to write a paragraph titled "How a Check Clears."

ECONOMICS Online

See the **Web Activity Lesson Plan** at *ett.glencoe.com* for an introduction, lesson description, and answers to the **Student Web Activity** for this chapter.

Guided Reading Activity 15–1


Name ______ Date ______ Class ______

GUIDED READING Activity 15-1

For use with the textbook pages 399–405

ORGANIZATION AND FUNCTIONS OF THE FEDERAL RESERVE SYSTEM

OUTLINING

Directions: *Locate the heading in your textbook. Then use the information under the heading to help you write each answer.*

I. Organization of the Federal Reserve System
   A. Introduction
      1. What is the Federal Reserve System?
      2. What is the Fed?
      3. How does monetary policy affect businesses?
   B. Board of Governors—Whom does the Board of Governors supervise and regulate?
   C. Federal Advisory Council—What is the responsibility of the Federal Advisory Council?

Meeting Special Needs

Attention Deficiency Presenting information in small segments is helpful for students with attention problems. Ask students to read Section 1 and self-monitor their attention to task. Then ask them if they think it is easier and more efficient to read through the whole section and then take notes, or to break the reading into smaller units and vary the activity with note taking. Point out that there is no "correct" method—the best approach is the one that works best for each student.

Refer to *Inclusion for the Social Studies Classroom Strategies and Activities* for students with different learning styles.

Cooperative Learning

Organize students into small groups. Have groups prepare a script and storyboards for a brief documentary about the organization and functions of the Fed. Point out that the documentary should include visuals explaining the organization and functions of the Fed, voice-over descriptions of these topics, and "interviews" with members of the Board of Governors and the FOMC on their roles. Ensure that group members assign tasks among themselves so that all are fully involved in the activity. Have groups present their scripts and storyboards to the rest of the class. If audiovisual equipment is available, some groups may wish to tape their documentaries. BLOCK SCHEDULING

Independent Practice

L2 Creating Resource Binders Have students work in groups to create Federal Reserve System resource binders for the classroom. Encourage groups to write to their Federal Reserve district bank and to the Board of Governors asking for informational materials. Suggest that they also visit the Federal Reserve Board of Governors Web site at **www.bog.frb.fed.us** and various district bank Web sites to download information. Direct groups to collate information in their binders according to subject—organization, functions, recent news, miscellaneous, and so on. Finally, have groups create a cover design for their binders. BLOCK SCHEDULING

Visual Instruction FIGURE 15.2

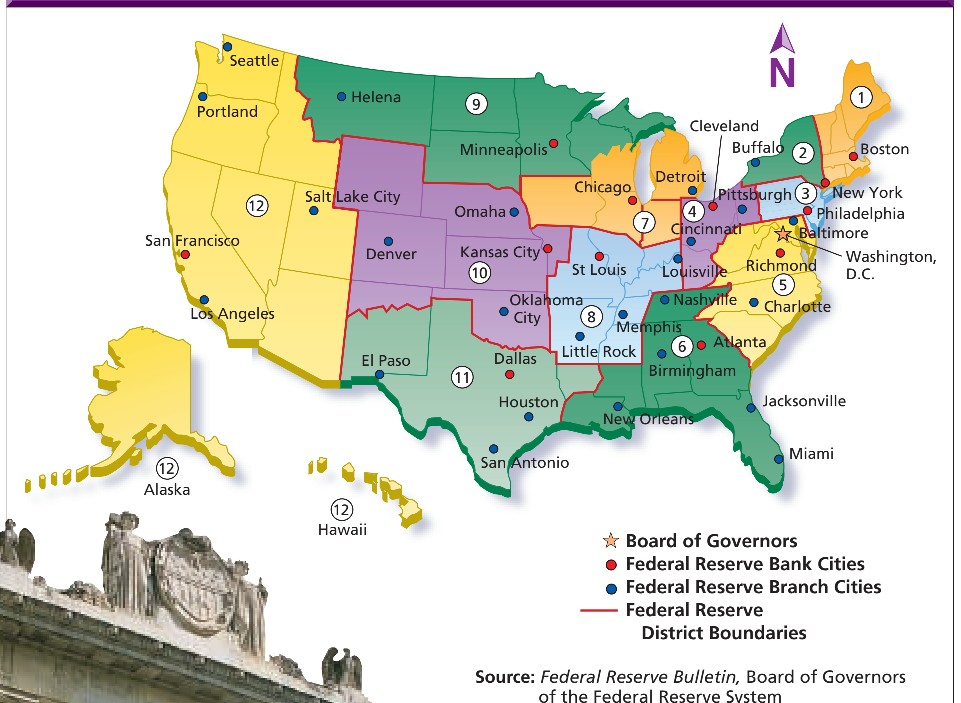
Answer: *Atlanta, Boston, Chicago, Cleveland, Dallas, Kansas City, Minneapolis, New York, Philadelphia, Richmond, San Francisco, St. Louis*

Federal Reserve Banks As shown in **Figure 15.2**, the nation is divided into 12 Federal Reserve districts, with each district having a Fed district bank. Each of the 12 district banks is set up as a corporation owned by its member banks. A 9-person board of directors—made up of bankers and businesspeople—supervises each Federal Reserve district bank.

The system also includes 25 Federal Reserve branch banks (also shown in **Figure 15.2**). These smaller banks act as branch offices and aid the district banks in carrying out their duties.

FIGURE 15.2

The Federal Reserve System The 12 Federal Reserve district banks that serve the nation's banks are distributed throughout the country. Trillions of dollars a year pass through the Fed as it processes billions of checks. Note that the Fed is headquartered in Washington, D.C. ***In what cities are the 12 Federal Reserve district banks located?***



Source: *Federal Reserve Bulletin*, Board of Governors of the Federal Reserve System

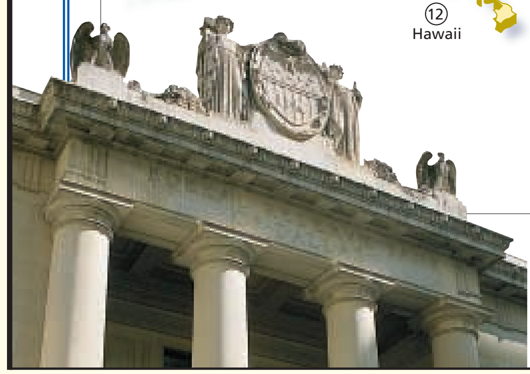
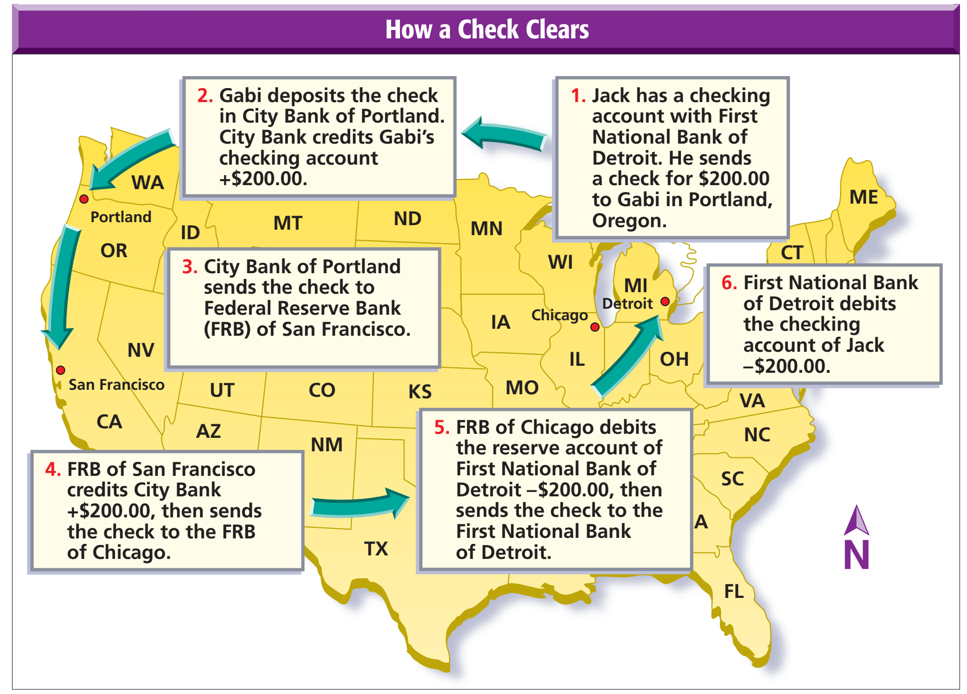


FIGURE 15.3

Check Clearing All depository institutions may use the Federal Reserve's check-clearing system. The reserve accounts mentioned in the diagram refer to a bank's account in its Federal Reserve district bank.



Member Banks All national banks—those chartered by the federal government—are required to become members of the Federal Reserve System. Banks chartered by the states may join if they choose to do so. To become a member bank, a national or state bank buys stock in its district's Federal Reserve bank.

In the past, only member banks were required to meet Fed regulations, such as keeping a certain percentage of their total deposits as cash in their own vaults or as deposits in their Federal Reserve district bank. Now all institutions that accept deposits from customers must keep reserves in their Fed district bank. See **Figure 15.3**. Fed services are also available to all depository institutions—member or nonmember—for a fee.

Today, the major advantage of membership in the Fed is that member banks, as stockholders in their district bank, receive

L3 Research Report Have students work individually or in small groups to research the central bank of another nation. Encourage students to research not only European central banks, but also those of nations in Africa, Asia, and South America. Have them present their findings in a research report that compares and contrasts their chosen bank with the Fed. Call on volunteers to present their findings to the class. Have the class identify any practices the Fed might borrow from other central banks. BLOCK SCHEDULING

INTERACTIVE ECONOMICS!

LESSON 8: MONETARY POLICY

Have students click on "An Introduction to Monetary Policy." After students read the tutorial, ask: **Who makes up the Federal Open Market Committee?** *(the Board of Governors, along with five presidents from the 12 district Fed banks)* **What do they discuss at their monthly meetings?** *(whether interest rates are too high or too low)*

Supplied in both CD-ROM and disk formats.

Visual Learning Activity

Maps Provide each student with an outline map of the United States. Then ask students to study the map in **Figure 15.2.** Remind students that the location and extent of the 12 Federal Reserve districts—and the location of the district banks—were established in 1913. Point out that there have been major shifts in population since that time. Ask students how they would change the 12 districts and where they would locate the district banks. Have them indicate their changes on the outline maps. Call on volunteers to display their maps and explain the reasons for their changes.

Critical Thinking Activity

Making Judgments On the board, draw a two-column chart with "Responsibility" and "Description" as column headings. Under the first heading, enter all the functions of the Fed. Call on volunteers to give a description or an example of each responsibility. Note student responses in the appropriate place in the chart. Then organize students into groups of three or four, and have group members discuss which of the responsibilities of the Fed they think is the most important for the American economy and why. Call on group representatives to present and explain each group's decision.

Visual Instruction FIGURE 15.4

Have students review the information in **Figure 15.4**. Then draw their attention to the point about banknote code numbers under the heading "Supplying Paper Currency." Have students study any paper currency they have. Ask them to identify the Federal Reserve Bank that issued each note.

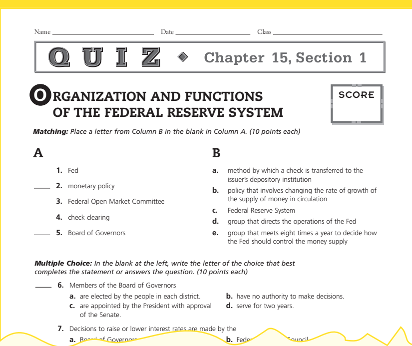
3 Assess

Meeting Lesson Objectives

Assign Section 1 Assessment as homework or an in-class activity.

Use **Interactive Tutor Self-Assessment Software** to review Section 1.

Section Quiz 15–1



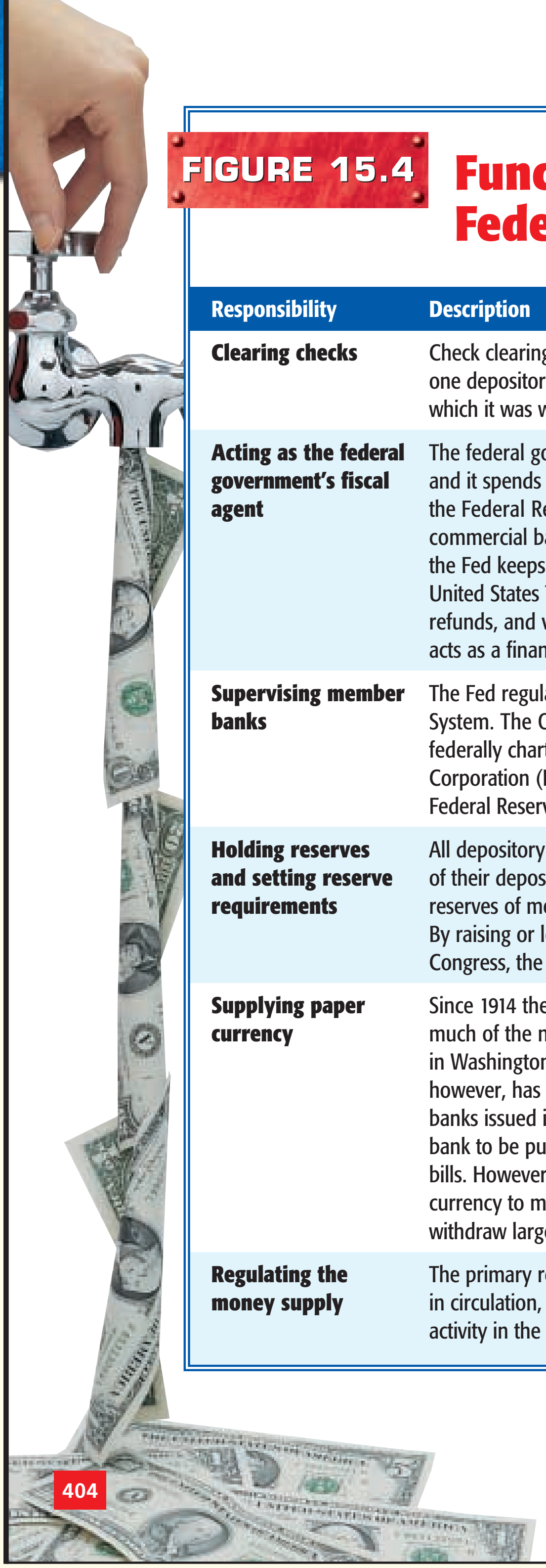


FIGURE 15.4 Functions of the Federal Reserve

Responsibility	Description
Clearing checks	Check clearing is the method by which a check that has been deposited in one depository institution is transferred to the depository institution on which it was written. **Figure 15.3** explains this process.
Acting as the federal government's fiscal agent	The federal government collects large sums of money through taxation, and it spends and distributes even more. It deposits some of this money in the Federal Reserve banks and distributes the rest among thousands of commercial banks. As the federal government's fiscal, or financial, agent, the Fed keeps track of these deposits and holds a checking account for the United States Treasury. Checks for such payments as Social Security, tax refunds, and veterans' benefits are drawn on this account. The Fed also acts as a financial adviser to the federal government.
Supervising member banks	The Fed regulates the state banks that are members of the Federal Reserve System. The Office of the Comptroller of the Currency (OCC) regulates federally chartered commercial banks. The Federal Deposit Insurance Corporation (FDIC) regulates state banks that are not members of the Federal Reserve System.
Holding reserves and setting reserve requirements	All depository institutions are required by law to keep a certain percentage of their deposits in reserve. Each of the 12 Federal Reserve banks holds reserves of member and nonmember depository institutions in its district. By raising or lowering the percentage required, within the limits set by Congress, the Fed can change the amount of money in circulation.
Supplying paper currency	Since 1914 the Fed has been responsible for printing and maintaining much of the nation's paper money. All Federal Reserve notes are printed in Washington, D.C., at the Bureau of Printing and Engraving. Each note, however, has a code number indicating which of the 12 Federal Reserve banks issued it. The money is shipped from the bureau to the appropriate bank to be put into circulation. Much of this money simply replaces old bills. However, each Fed bank must have on hand a sufficient amount of currency to meet the demand—especially during holidays when depositors withdraw large amounts of currency.
Regulating the money supply	The primary responsibility of the Fed is determining the amount of money in circulation, which, in turn, affects the amount of credit and business activity in the economy.

dividends on their stock in the district bank. Member banks also are able to vote for 6 of the district bank's 9 board members.

Functions of the Fed

The Federal Reserve has a number of functions, as shown in **Figure 15.4.** Among them are check clearing, acting as the federal government's fiscal agent, supervising member state banks, holding reserves, supplying paper currency, and regulating the money supply. The most important function of the Fed is regulating the money supply, which you'll learn about in Section 3. As you already noted in **Figure 15.3** on page 403, however, **check clearing**—the transferring of funds from one bank to another when you write or deposit a check—is also an important and complex function.

__check clearing:__ method by which a check that has been deposited in one institution is transferred to the issuer's depository institution

Consumer Protection The Fed also sets standards for certain types of consumer legislation, mainly truth-in-lending legislation. By law, sellers of goods and services must make some kinds of information available to people who buy on credit. This information includes the amount of interest and size of the monthly payment to be paid. The Federal Reserve System decides what type of financial information must be supplied to consumers.

Practice and assess key skills with *Skillbuilder Interactive Workbook, Level 2.*

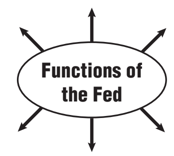
SECTION 1 Assessment

Understanding Key Terms

1. **Define** Fed, monetary policy, Federal Open Market Committee, check clearing.

Reviewing Objectives

2. How is the Fed organized?
3. **Graphic Organizer** Create a diagram like the one below to explain the functions of the Fed.



Applying Economic Concepts

4. **Monetary Policy** Explain why you agree or disagree with the following statement: The independence of the Federal Reserve System is essential to the health of the economy.

Critical Thinking Activity

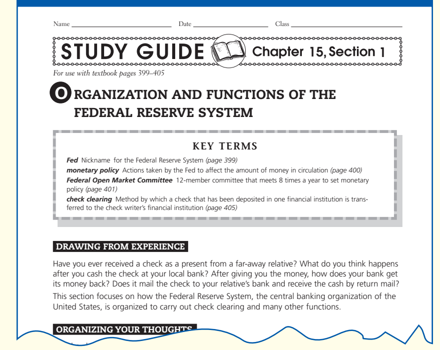
5. **Summarizing Information** Learn more about the functions of the Fed district banks. Choose one of the 12 banks, then use the Internet to reach its home page. Write a summary of the information presented on the bank's Web site.

CHAPTER 15
SECTION 1, Pages 399–405

Reteach

Have students use information from **Figures** 15.1, 15.2, and 15.4 to write questions on the organization and functions of the Fed. Call on three or four volunteers to quiz the rest of the class with their questions.

Reading Essentials and Study Guide 15–1



4 Close

Have students speculate on what might happen to the American banking system if the government ordered the Fed to stop operations.

Extending the Content

Combating Counterfeiters Paper currency from the Fed was one of the easiest to counterfeit. As a result, the Fed oversaw a complete overhaul of the design of American banknotes in the late 1990s.Counterfeiters copied the $20 bill more than any other bill. The new $20 bill provides a vivid example of the Fed's anticounterfeiting approach. First, the portrait of Andrew Jackson is much larger and off-center. Second, a small "20" printed in the bottom right-hand corner of the bill's face turns from green to black as the bill is moved. Holding the bill to the light reveals a watermark portrait of Jackson on the right-hand side and a watermark line on the left-hand side saying "USA TWENTY."

SECTION 1 Assessment Answers

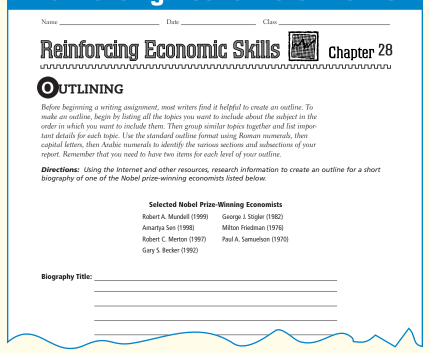
1. All definitions can be found in the Glossary.
2. The Fed consists of the Board of Governors, the Federal Advisory Council, the Federal Open Market Committee, Federal Reserve banks, and member banks.
3. functions of the Fed: clearing checks, acting as the federal government's fiscal agent, supervising member banks, holding reserves and setting reserve requirements, supplying paper currency, and regulating the money supply
4. Answers will vary, but most students may agree that the independence of the board ensures that it will act in the best interests of the economy and not in the interest of a particular region, political party, or business.
5. Summaries will vary. To ensure that all 12 district banks are covered, you might want to assign banks to students.

Study & Writing Skills

Outlining

Help students' understanding of the outlining process by asking the following questions: **What is the relationship of a subtopic to a main idea?** *Subtopics support main ideas.* **What are supporting details?** *They are facts that support subtopics.* Then point out that main ideas, subtopics, and supporting details may be organized in several different ways—by chronological order, by importance, by concept, and so on. Work through the **Practicing the Skill** section with students. Conclude by assigning the **Application Activity.**

Reinforcing Economic Skills 28



GLENCOE TECHNOLOGY

Glencoe Skillbuilder Interactive Workbook, Level 2

This interactive CD-ROM reinforces student mastery of essential social studies skills.

Study & Writing Skills

Outlining

Outlining may be used as a starting point for a writer. The writer begins with the rough shape of the material and gradually fills in the details in a logical manner. You may also use outlining as a method of note taking and organizing information as you read.

- Read the text to identify the main ideas. Label these with Roman numerals.
- Write subtopics under each main idea. Label these with capital letters.
- Write supporting details for each subtopic. Label these with Arabic numerals.
- Each level should have at least two entries and should be indented from the level above.
- All entries should use the same grammatical form, whether phrases or complete sentences.

Learning the Skill

There are two types of outlines—informal and formal. An informal outline is similar to taking notes—you write words and phrases needed to remember main ideas. A formal outline has a standard format. To formally outline material, follow the steps on the left.

Practicing the Skill

On a separate sheet of paper, copy the following outline for a main idea of Section 1. Then use your textbook to fill in the missing subtopics and details.

I. Organization of the Fed
  A. Board of Governors
    1. Directs operations of Fed
      a. Supervises 12 Fed district banks
      b. Regulates member banks and depository institutions
    2. ______________
  B. Federal Advisory Council
    1. ______________
    2. ______________
  C. ______________
  D. ______________
II. Functions of the Fed
  A. ______________
    1. ______________
    2. ______________
  B. ______________

Practice and **assess** key skills with ***Skillbuilder Interactive Workbook, Level 2.***

Application Activity

Following the guidelines above, prepare an outline for Section 2 of this chapter.

SECTION 2

Money Supply and the Economy

COVER STORY

BUSINESS CREDIT, JULY–AUGUST 1995

To many people, the operations of the U.S. Federal Reserve System are more than confusing, they can be downright mysterious. Sure, our politicians and newscasters can often be heard referring to "the Fed," but how many of us really understand this complex part of the American government and economy?

READER'S GUIDE

Terms to Know
- loose money policy
- tight money policy
- fractional reserve banking
- reserve requirements

Reading Objectives
1. What are the differences between loose money and tight money policies?
2. What is the purpose of fractional reserve banking?
3. How does the money supply expand?

As you learned in Section 1, the jobs of the Fed today range from processing checks to serving as the government's banker. As you read this section, you'll learn that the Fed's most important function, however, involves control over the rate of growth of the money supply.

Loose and Tight Money Policies

You may have read a news report in which a business executive complained that money is "too tight." You may have run across a story about an economist warning that money is "too

1 Focus

Overview

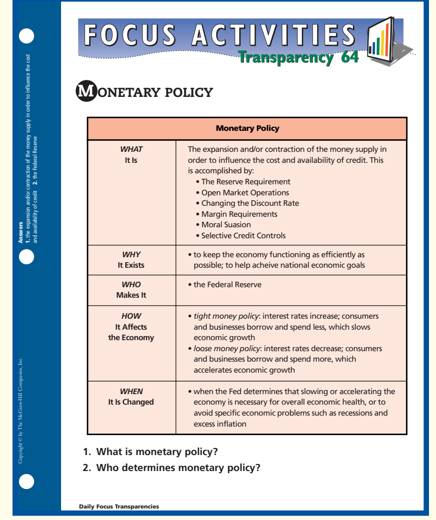
Section 2 explains the difference between loose money policies and tight money policies, and how fractional reserve banking is used to increase the money supply.

BELLRINGER
Motivational Activity

Project **Daily Focus Transparency 64** and have students answer the questions.

This activity is also available as a blackline master.

Daily Focus Transparency 64



READER'S GUIDE

Answers to the **Reading Objectives** questions are on page 410.

Preteaching Vocabulary

Have students locate and read the definitions of the **Terms to Know** in the Glossary. Then have students use each term correctly in a sentence.

Vocabulary PuzzleMaker

Answers to *Practicing the Skill*

Answers may be similar to the following:
A2. Appointed by President with approval of Senate
B1. Assists Board of Governors
B2. Reports to Board on general business conditions
C. Federal Open Market Committee
D. Federal Reserve Banks
IIA. Acts as federal government's fiscal agent
A1. Keeps track of deposits
A2. Holds a checking account for the U.S. Treasury
B. Clears checks

Application Activity Wording of outlines may differ from student to student. Ensure that students follow the guidelines when outlining Section 2.

SECTION 2 RESOURCE MANAGER

Reproducible Masters
- Reproducible Lesson Plan 15–2
- Reading Essentials and Study Guide 15–2
- Guided Reading Activity 15–2
- Section Quiz 15–2
- Daily Focus Activity 64
- Daily Lecture Notes 15–2

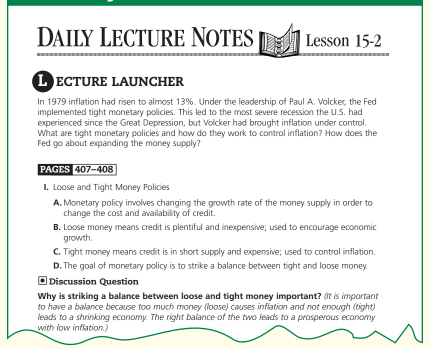
Multimedia
- Daily Focus Transparency 64
- Vocabulary PuzzleMaker
- Interactive Tutor Self-Assessment Software
- ExamView® Pro Testmaker
- MindJogger Videoquiz
- NBR's *Economics & You*
- Interactive Economics!
- Presentation Plus!

2 Teach

Guided Practice

L1 Understanding Ideas Draw a three-column chart with "Deposit," "Required Reserves," and "Excess Reserves" as column headings. Enter $100 in the Deposit column, and tell students that the reserve requirement is 20 percent. Have students enter the loans that can be made until the initial $100 deposit is depleted.

Daily Lecture Notes 15–2


DAILY LECTURE NOTES Lesson 15-2

LECTURE LAUNCHER

In 1979 inflation had risen to almost 13%. Under the leadership of Paul A. Volcker, the Fed implemented tight monetary policies. This led to the most severe recession the U.S. had experienced since the Great Depression, but Volcker had brought inflation under control. What are tight monetary policies and how do they work to control inflation? How does the Fed go about expanding the money supply?

PAGES 407–408

I. Loose and Tight Money Policies

A. Monetary policy involves changing the growth rate of the money supply in order to change the cost and availability of credit.

B. Loose money means credit is plentiful and inexpensive; used to encourage economic growth.

C. Tight money means credit is in short supply and expensive; used to control inflation.

D. The goal of monetary policy is to strike a balance between tight and loose money.

Discussion Question

Why is striking a balance between loose and tight money important? *(It is important to have a balance because too much money (loose) causes inflation and not enough (tight) leads to a shrinking economy. The right balance of the two leads to a prosperous economy with low inflation.)*

Visual Instruction FIGURE 15.5

Answer: *tight money policy; because this policy causes business activity to slow*

NIGHTLY BUSINESS REPORT **ECONOMICS & YOU**

The Federal Reserve and Monetary Policy

Chapter 22
Disc 1, Side 2

ASK: Why would the Fed impose a tight money policy? *to control inflation*

---

loose." In these cases, the terms *tight* and *loose* are referring to the monetary policy of the Fed. *Monetary policy,* as you recall, involves changing the rate of growth of the money supply in order to affect the cost and availability of credit.

Credit, like any good or service, has a cost. The cost of credit is the interest that must be paid to obtain it. As the cost of credit increases, the quantity demanded decreases. In contrast, if the cost of borrowing drops, the quantity of credit demanded rises.

Figure 15.5 shows the results of monetary policy decisions. If the Fed implements a **loose money policy** (often called "expansionary"), credit is abundant and inexpensive to borrow. If the Fed follows a **tight money policy** (often called "contractionary"), credit is in short supply and is expensive to borrow.

A loose money policy is implemented to encourage economic growth. You may be wondering why any nation would want a tight money policy, however. The answer is to control inflation. If money becomes too plentiful too quickly, prices increase and the purchasing power of the dollar decreases.

loose money policy: *monetary policy that makes credit inexpensive and abundant, possibly leading to inflation*

tight money policy: *monetary policy that makes credit expensive and in short supply in an effort to slow the economy*

Fractional Reserve Banking

Before you can understand how the Fed regulates the nation's money supply, you need to understand the basis of the United States banking system and the way money is created. The banking system is based on what is called **fractional reserve banking.**

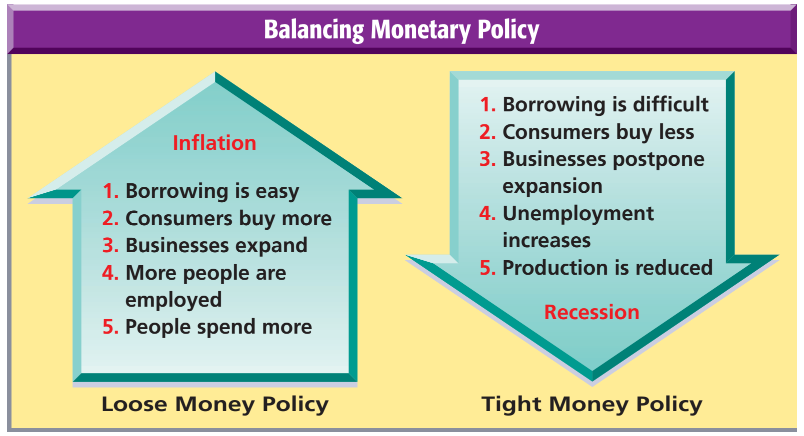
Since 1913 the Fed has set specific **reserve requirements** for many banks. This means that they must hold a certain percentage of their total deposits either as cash in their own vaults or as deposits in their Federal Reserve district bank. Banks must hold

fractional reserve banking: *system in which only a fraction of the deposits in a bank is kept on hand, or in reserve; the remainder is available to lend*

reserve requirements: *regulations set by the Fed requiring banks to keep a certain percentage of their deposits as cash in their own vaults or as deposits in their Federal Reserve district bank*

FIGURE 15.5

Loose Money Versus Tight Money Look at the chart and determine the differences between loose money policy and tight money policy. ***Which of these policies can lead to a recession? Why is this possible?***



these reserves in case one or more banking customers decide to withdraw large amounts of cash from their checking accounts. Currently, most financial institutions must keep 10 percent of their checkable deposits as reserves with the Fed.

Money Expansion

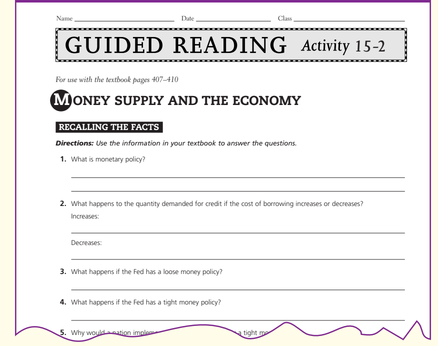
Currency is a small part of the money supply. A larger portion consists of funds that the Fed and customers have deposited in banks. Because banks are not required to keep 100 percent of their deposits in reserve, they can use these new reserves to create what is, in effect, new money. See **Figure 15.6.**

FIGURE 15.6 **Expanding the Money Supply**

- The chart shows how $1,000 in new reserves expands to $5,000 by simple loans. In Round 1, the Fed deposits $1,000 in Bank A. With a 20 percent reserve requirement, Bank A must hold $200 of the new deposit on reserve. This leaves the bank with $800 of excess reserves.
- In Round 2, Mr. Jones applies to Bank A for an $800 loan to buy a computer. Bank A finds him creditworthy and credits his account with $800. Mr. Jones writes a check to Computer World, which deposits the money at Bank B. Bank B's reserves increase by $800. Of this amount, $160 (20 percent of $800) are required reserves, and the remaining $640 are excess reserves.
- In Round 3, Bank B—to earn profits—loans its excess reserves to Ms. Wang, who wants to borrow $640. She, in turn, buys something from Mr. Diaz, who does his banking at Bank C. He deposits the money from Ms. Wang. Bank C now has $640 in new deposits, of which $128 are required reserves. Bank C now loans $512 of excess reserves to Mrs. Fontana, who buys something from Mrs. Powers, and so on.

Round	Deposited by	Amount of Deposit	Required Reserves (20%)	Excess Reserves (80%)	Loaned to	Paid to
1	the Fed (Bank A)	$1,000	$200	$800	Mr. Jones	Computer World
2	Computer World (Bank B)	$800	$160	$640	Ms. Wang	Mr. Diaz
3	Mr. Diaz (Bank C)	$640	$128	$512	Mrs. Fontana	Mrs. Powers
4	Mrs. Powers (Bank D)	$512	$102.40	$409.60	Mr. Gibbs	Mr. Santana
5	Mr. Santana (Bank E)	$409.60	$81.92	$327.68		
6	All Others					
Eventual Totals		$5,000	$1,000			

Guided Reading Activity 15–2


Name ______ Date ______ Class ______

GUIDED READING Activity 15-2

For use with the textbook pages 407–410

MONEY SUPPLY AND THE ECONOMY

RECALLING THE FACTS

Directions: *Use the information in your textbook to answer the questions.*

1. What is monetary policy?

2. What happens to the quantity demanded for credit if the cost of borrowing increases or decreases?
Increases:
Decreases:

3. What happens if the Fed has a loose money policy?

4. What happens if the Fed has a tight money policy?

Independent Practice

L2 Illustrating Ideas Have students illustrate tight money policy and loose money policy. As an example, suggest drawings of Uncle Sam tightening and loosening a vice on a bag of money. Call on volunteers to display and explain their images.

INTERACTIVE ECONOMICS!

LESSON 8: MONETARY POLICY

Have students complete the "Economics Lab," which discusses the fractional reserve system.

Supplied in both CD-ROM and disk formats.

3 Assess

Assign Section 2 Assessment as homework or an in-class activity.

Use **Interactive Tutor Self-Assessment Software** to review Section 2.

Meeting Special Needs

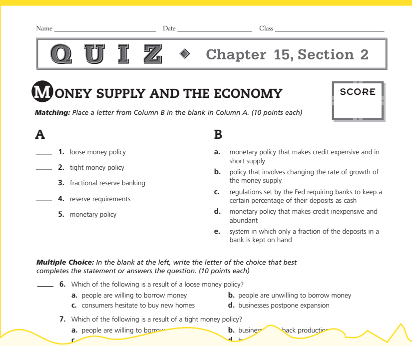
Inefficient Readers Students with decoding problems may skip unfamiliar words. Often, however, they can comprehend words based on the context. Ask students to scan Section 2 for words that are unfamiliar. Have students write these words in their notebooks. Then encourage students to guess at the meaning of the words based on the context.

Refer to *Inclusion for the Social Studies Classroom Strategies and Activities* for students with different learning styles.

Cooperative Learning

Organize students into small groups, and have groups review newspapers and magazines for stories about monetary policy. Have groups make copies of the articles they find and use them to create a collage. For each article, have groups note if it describes a loose monetary policy or a tight monetary policy. Encourage groups to display their collages around the classroom. BLOCK SCHEDULING

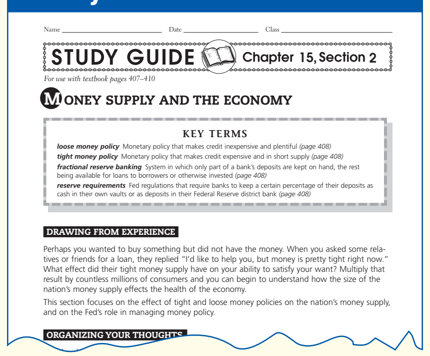
Section Quiz 15–2



Reteach

Have students write two paragraphs, one explaining the difference between tight money policy and loose money policy, the other explaining how fractional reserve banking helps to expand the money supply.

Reading Essentials and Study Guide 15–2



4 Close

Have students determine whether a high reserve requirement or low reserve requirement is desirable for economic growth.

Suppose Bank A sells a government bond to the Fed and receives $1,000. This is $1,000 in "new" money because the Fed simply creates it by writing a check. With a 20 percent reserve requirement, the bank must hold $200 of that money in reserve. The bank is free to lend the remaining $800.

Suppose a customer asks the same bank for an $800 loan. The bank creates $800 simply by transferring $800 to the customer's checking account. The bank must keep in reserve 20 percent of this new deposit—$160—but now it can lend the remaining $640. This $640 is, in turn, treated as a new deposit. Eighty percent of it—$512—can again be lent. The process continues, with each new deposit giving the bank new funds to continue lending. The original $1,000 becomes $5,000.

Of course, a bank usually does not lend and receive back the same money. Its customers will probably withdraw money and spend it or deposit it in another bank. As the money finds its way into a second and third bank, and so on, each bank can use the non-required reserve portion of the money to make more loans. This process is known as the *multiple expansion of the money supply.*

Practice and **assess** key skills with *Skillbuilder Interactive Workbook, Level 2.*

SECTION 2 Assessment

Understanding Key Terms

1. **Define** loose money policy, tight money policy, fractional reserve banking, reserve requirements.

Reviewing Objectives

2. **Graphic Organizer** Create a chart to describe the effect of loose money and tight money policies on the actions listed below.

Effect on . . .	Loose Money Policy	Tight Money Policy
Borrowing		
Consumer buying		
Businesses		
Employment		
Production		

3. What is the purpose of fractional reserve banking?
4. How does the money supply expand?

Applying Economic Concepts

5. **Monetary Policy** If there is a 10 percent reserve requirement, by how much does the money supply expand if the Fed injects $100 of new money? By how much does it expand if the reserve requirement is raised to 20 percent?

Critical Thinking Activity

6. **Synthesizing Information** Analyze **Figure 15.6** on page 409. Create a similar scenario showing the expansion of the money supply. Begin the expansion by depositing $200 into Bank A. Assume that the reserve requirement is 20 percent.

SECTION 2 Assessment Answers

1. All definitions can be found in the Glossary.
2.

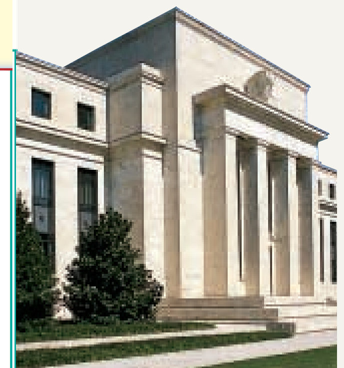
Effect on . . .	Loose Money Policy	Tight Money Policy
Borrowing	Increases	Decreases
Consumer buying	Increases	Decreases
Businesses	Expand	Contract
Employment	Rises	Falls
Production	Increases	Decreases

3. Banks hold a certain percentage of total deposits in reserve to meet Fed requirements, and this helps regulate the money supply.
4. Since banks have to keep only a fraction of deposits in reserve, they are able to lend the excess reserves, thus expanding the money supply.
5. $1,000; $500
6. The money supply will expand by $1,000.

BusinessWeek
SPOTLIGHT ON THE ECONOMY

Why the Fed's Open-Mouth Policy Works

Check It Out! In this chapter you learned that the Federal Open Market Committee decides whether to raise or lower interest rates to control inflation. In this article, read to learn how the FOMC announces its decisions.



Not too many years ago, Federal Reserve officials conducted monetary policy as if they were members of the Politburo plotting behind the thick walls of the Kremlin. The Fed's reasoning: Secrecy was essential if central bankers were to avoid political pressure from those who would like to influence Fed policy on interest rates.

But for the past five years, Fed Chairman Alan Greenspan has been dismantling those Kremlin walls, brick by brick. On May 18, we saw the results of his efforts. Instead of waiting six weeks or more to let the markets know what it thought, the policy-setting Federal Open Market Committee broadcast the outcome of its meeting immediately: Yes, the Fed will adopt a tightening bias in light of rising inflation risks. The markets, which had reeled on news of a surprisingly high consumer price index for April, took the news in stride—relieved to see that the Fed was not yet ready to raise rates.

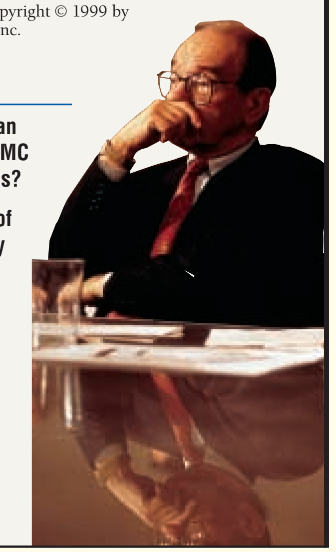
It all worked beautifully. Alan Greenspan, who is a great believer in free markets, loves it when traders do the Fed's work—raising and lowering bond yields to keep the domestic economy on course. As the reaction to the Fed's May 18 announcement shows, the markets are fully capable of taking direction from the Fed.

. . . Now, everyone from home buyers in North Dakota to executives in Florida . . . gets the same information—and the right information—at exactly the same time.

—Reprinted from January 11, 1999 issue of *Business Week* by special permission, copyright © 1999 by The McGraw-Hill Companies, Inc.

Think About It

1. **How did Alan Greenspan change the way the FOMC announces its decisions?**
2. **What are the benefits of a transparent monetary policy?**



BusinessWeek SPOTLIGHT

Teach

Direct students to read the excerpt and note how Fed Chairman Alan Greenspan changed the way that the Fed announces its decisions. Then have students discuss why they think Greenspan made these changes. *Most students will suggest that by being more open and prompt in announcing the Fed's decisions, Greenspan hopes to stop businesses and investors from speculating on what the decisions might be and taking actions that might be harmful to the economy.*

BusinessWeek ONLINE

To find up-to-date news and analysis on the economy, business, technology, markets, entrepreneurs, investments, and finance, have students search feature articles and special reports on the *Business Week* Web site.
www.businessweek.com

Sidelight

The Internet has helped speed up the release of information on the Fed's actions. Shortly after decisions have been made, they are placed on the Press Releases page of the Federal Reserve Board of Governors Web site: ***www.bog.frb.fed.us***

Answers to *Think About It*

1. Greenspan ended the secrecy surrounding FOMC decision making and has cut the waiting time between making a decision and announcing it.
2. Everyone—from home buyers to business executives—gets the right information at the same time.

1 Focus

Overview

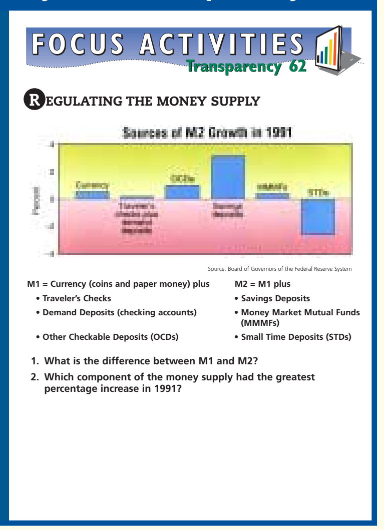
Section 3 discusses the methods the Fed uses to regulate the money supply—the reserve requirement, the discount rate, and open-market operations—and explains the difficulties associated with instituting monetary policy.

BELLRINGER
Motivational Activity

Project **Daily Focus Transparency 62** and have students answer the questions.

This activity is also available as a blackline master.

Daily Focus Transparency 62



READER'S GUIDE

Answers to the **Reading Objectives** questions are on page 417.

Preteaching Vocabulary

Have students skim the section to locate the in-text definitions of the **Terms to Know**. Then have them write a brief explanation of the differences among the terms *discount rate, prime rate,* and *federal funds rate.*

Vocabulary PuzzleMaker

SECTION 3

Regulating the Money Supply

READER'S GUIDE

Terms to Know

- discount rate
- prime rate
- federal funds rate
- open-market operations

Reading Objectives

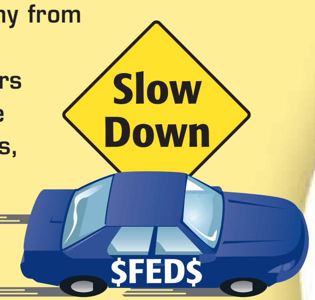
1. How can the Fed use reserve requirements to alter the money supply?
2. How does the discount rate affect the money supply?
3. How does the Fed use open-market operations?
4. What are some of the difficulties of carrying out monetary policy?

COVER STORY

THE COLUMBUS DISPATCH, JULY 1, 1999

Like a driver applying a quick tap of the brakes, the Federal Reserve yesterday raised the cost of borrowing to keep the U.S. economy from running ahead too fast.

As a result, consumers can expect to pay a little more when buying homes, cars, and other big-ticket items, as well as when carrying credit-card balances.



The main goal of the Federal Reserve is to keep the money supply growing steadily and the economy running smoothly without inflation. As you'll learn in this section, the Fed uses several tools to achieve a smoothly running economy.

Changing Reserve Requirements

The Federal Reserve can choose to control the money supply by changing the reserve requirements of financial institutions. The lower the percentage of deposits that must be kept in reserve, the more dollars are available to loan. The reverse is also true.

Figure 15.7 explains how changes in the reserve requirement affect the nation's money supply.

As *Part C* of **Figure 15.7** shows, the Fed may raise reserve requirements. To build up its reserves to meet the new requirement, a bank has several possibilities. It can call in some loans, sell off securities or other investments, or borrow from another bank or from the Federal Reserve. Obviously, because all banks would have to increase their reserves, this action would decrease the amount of money in the economy. Raising reserve requirements, then, could be used to help slow down the economy if it were expanding too rapidly.

Even small changes in the reserve requirement can have major effects on the money supply. As a result, some believe that this tool is not precise enough to make frequent small adjustments to the money supply. In recent years, changing the reserve requirement has not been used to regulate the money supply.

FIGURE 15.7 Raising and Lowering Reserve Requirements

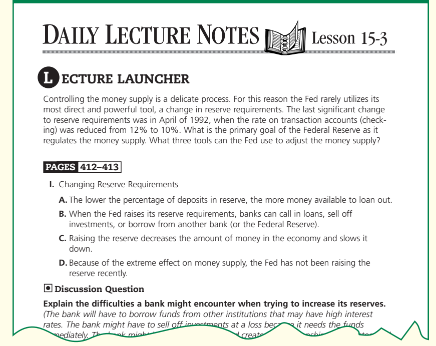
Bank Deposits	Reserve Requirement	$ Amount Bank May Loan	Fed Action
Part A $1,000,000	10% (10% × $1,000,000 = $100,000)	$900,000	Suppose a bank has $1 million in deposits, and the reserve requirement is 10 percent. The bank must keep at least $100,000 in reserves.
Part B $1,000,000	5% (5% × $1,000,000 = $50,000	$950,000	If the Fed wanted to increase the money supply, it could lower the reserve requirement to 5 percent, for example. The bank would then need to keep only $50,000 in reserves. It could lend out the other $950,000. This additional $50,000 would expand the money supply many times over as it was lent and redeposited. This could help pull the economy out of a recession.
Part C $1,000,000	15% (15% × $1,000,000 = $150,000)	$850,000	Suppose instead that the Fed wanted to decrease the money supply, or at least slow down its rate of growth. It could do this by increasing the reserve requirement from 10 to 15 percent. The bank in this example would then need to keep $150,000 on reserve—$50,000 more than with a 10% reserve requirement.

2 Teach

Guided Practice

L1 Organizing Ideas Write *How the Fed Regulates the Money Supply* on the board. Beneath this title, draw a two-column chart with "Action" and "Impact on Money Supply" as column headings. Call on volunteers to add actions and outcomes to the appropriate columns. Have students copy the completed chart into their notebooks for review purposes.

Daily Lecture Notes 15–3



Visual Instruction FIGURE 15.7

Have students review the information in **Figure 15.7**. Then ask the following questions: Which action—the one in Part B or the one in Part C—might the Fed take to halt a downturn in business activity? *(the one in Part B)* Which action—the one in Part B or the one in Part C—might the Fed take to bring inflation under control? *(the one in Part C)*

SECTION 3 RESOURCE MANAGER

Reproducible Masters

- Reproducible Lesson Plan 15–3
- Reading Essentials and Study Guide 15–3
- Guided Reading Activity 15–3
- Section Quiz 15–3
- Daily Focus Activity 62
- Daily Lecture Notes 15–3

Multimedia

- Daily Focus Transparency 62
- Economic Concepts Transparency 18
- Vocabulary PuzzleMaker
- Interactive Tutor Self-Assessment Software
- ExamView® Pro Testmaker
- MindJogger Videoquiz
- NBR's *Economics & You*
- Interactive Economics!

Meeting Special Needs

Mixed Learners Some students learn best visually, while others are auditory learners. Many are "mixed" learners, who use a combination of visual and auditory cues to learn. Ask students to look at and then think about the information in **Figure 15.7.** Have them read the paragraphs on pages 412 and 413 under the heading "Changing Reserve Requirements." Point out that references in the text to **Figure 15.7** act as a method of combining different cues to facilitate learning.

Refer to *Inclusion for the Social Studies Classroom Strategies and Activities* for students with different learning styles.

L2 Understanding Ideas On the board, write several actions that the Fed might take—the Fed lowers the discount rate; the Fed raises the reserve requirement; and the Fed sells Treasury bills, for example. Have students transform each action into a newspaper headline. In brief articles to accompany the headlines, have students outline the impact of each action on the economy.

NIGHTLY BUSINESS REPORT — ECONOMICS & YOU

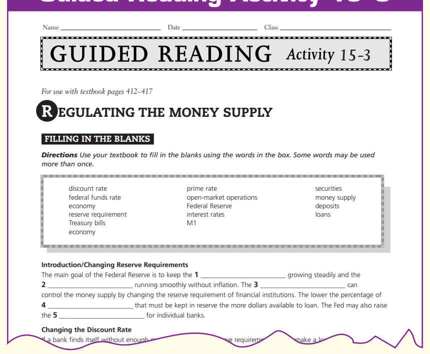
The Federal Reserve System and Monetary Policy

Chapter 22
Disc 1, Side 2

ASK: What technique does the Fed use to slow down the economy, and how does it work? *The Fed attempts to slow down the economy by raising interest rates. This makes money more expensive to borrow and encourages consumers and businesses to postpone purchases.*

Also available in VHS.

Guided Reading Activity 15–3



Changing the Discount Rate

Sometimes a bank will find itself without enough reserves to meet its reserve requirement. This situation may occur if customers unexpectedly borrow a great deal of money or if depositors suddenly withdraw large amounts. The bank must then borrow funds to meet its reserve requirement. One of the ways it can do this is to ask its Federal Reserve district bank for a loan. The district bank, like any other bank, charges interest. The rate of interest the Fed charges its member banks is called the **discount rate.**

discount rate: *interest rate that the Fed charges on loans to member banks*

If the bank does borrow from the Fed, this newly created money would then be available for lending to individuals or businesses, thus increasing the money supply. If the discount rate is high, the bank passes its increased costs on to customers in the form of higher interest rates on loans. For example, it might raise its **prime rate**—the interest rate it charges its best business customers. High discount rates, by discouraging borrowing, might keep down the growth of the money supply.

prime rate: *rate of interest that banks charge on loans to their best business customers*

In contrast, if the discount rate is low, even a bank with sufficient reserves might borrow money. The loan will raise the bank's reserves and increase its ability to make loans. Thus, a reduction in the discount rate may increase the total money supply.

Changing the discount rate, like changing the reserve requirement, is rarely used by the Fed as a tool of monetary policy. Rather, either through its chairman or its Federal Open Market Committee, the Fed periodically states that it is going to change "the" interest rate. Because there are many interest rates in the economy, which one does the Fed mean?

Global Economy

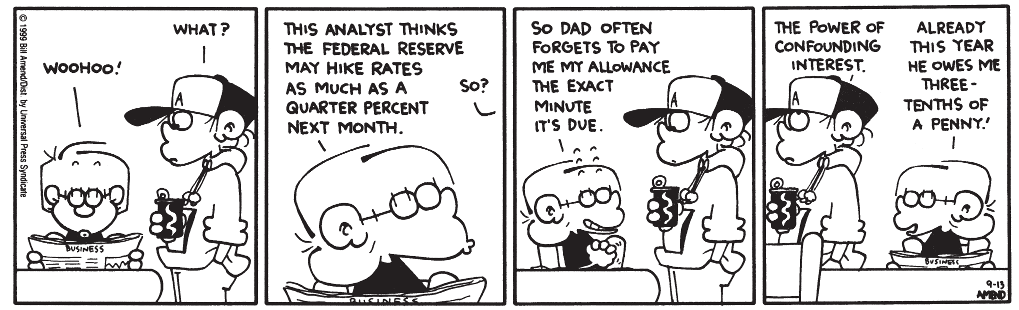
Worldwide Influence

Decisions made by the Federal Open Market Committee (FOMC) may have an impact far beyond the American economy. Immediately after the FOMC announces its actions, American financial markets respond. Traders consider how these actions will affect the economy, and they buy or sell stocks and bonds accordingly. As a result, stock and bond prices rise or fall, sometimes sharply.

By the end of the business day in the United States, financial markets in Asia are opening. Traders and investors there read the Fed's actions and note the response of the American markets, often following the example of their American counterparts. A comparable situation develops a few hours later in Europe, when financial markets open there. As one American financial expert has noted, "The Fed has become the dominant central bank in the world." ■

FIGURE 15.8

Federal Funds Rate When the media discusses a rate hike or reduction by the Fed, they are referring to the federal funds rate, or the interest rate that banks charge each other for overnight loans. ***How does an increase in the federal funds rate affect you as a banking customer?***



Federal Funds Rate The interest rate the Fed is referring to is the **federal funds rate.** This is the interest rate that banks charge each other for short-term loans (usually overnight). Why would one bank need to borrow from another? Suppose a customer walks into Bank A late in the day and withdraws a large amount. In order to provide funds to the customer, the bank must dip into its required reserves. Before the banking day ends, Bank A must raise its reserves to the required amount or pay a penalty to the Fed.

federal funds rate: *interest rate that banks charge each other on loans (usually overnight)*

Bank A could borrow money from the Fed as discussed earlier, but the discount rate may be too high. Instead, Bank A approaches Bank B for a loan. Bank B happens to have excess reserves that day, so it loans Bank A the money it needs at the federal funds rate. This federal funds market is active—billions of dollars of reserves are borrowed and loaned each business day.

If the Fed causes the federal funds rate to drop from 5.25 percent to 5 percent, banks will borrow more and, thus, lend more. This increases business activity in the economy. In contrast, the chairman of the Fed may publicly state the opposite—that the Fed is causing the federal funds rate to rise from, say, 5.5 percent to 5.75 percent. At this higher rate, banks will reduce their borrowing from other banks as well as raise the interest rates they charge their own customers. Economic activity will contract. See **Figure 15.8.**

Visual Instruction FIGURE 15.8

Answer: *Banks raise the interest rates they charge their own customers.*

Project **Economic Concepts Transparency 18** and have students discuss the accompanying questions.

Did You Know

The Fed also makes short-term hard currency loans to regulate the money supply. In the last week of 1999, for example, the Fed made about $20 billion in short-term loans to member banks. Fed officials wanted to make sure that banks had enough reserves in case customers, uncertain of the impact of the computer "millennium bug," withdrew large amounts of cash.

Independent Practice

L2 Constructing Graphs Have students research the average prime interest rates for the last 25 years. Direct students to present their findings in graph form. Ask students to indicate on their graphs the periods when the Fed might have been following a loose money policy and when the Fed might have been following a tight money policy.

Cooperative Learning

Organize students into groups of four. Have groups investigate and write illustrated reports explaining how the Fed's actions affected the overall economy during and immediately after World War I, during the 1920s, during the Great Depression, and during and immediately after World War II. Have group members assign time periods among themselves. Direct each group to combine its reports into a booklet titled "A History of Federal Reserve Policies." BLOCK SCHEDULING

Free Enterprise Activity

Remind students that one method used by the Fed to regulate the nation's money supply is the purchase and sale of government securities. Ask students to conduct research on one kind of government security, the Treasury bill (T-bill). Direct them to find out values, maturities, and interest rates of these securities. Finally, have students examine the advantages and disadvantages of buying T-bills. Ask students to present their findings in brief illustrated reports.

INTERACTIVE ECONOMICS!

LESSON 8: MONETARY POLICY

Have students click on the Advanced Topic "The Reserve Requirement." Then have them click on "Math Practice" and complete the problems.

Supplied in both CD-ROM and disk formats.

Global Economy

Varying Discount Rates

Discount rates vary from nation to nation. At the end of 1999, when the discount rate in the United States stood at 4.75 percent, the discount rate in Canada was 5.0 percent, Great Britain's was 6.0 percent, and Japan's was 0.5 percent.

3 Assess

Meeting Lesson Objectives

Assign Section 3 Assessment as homework or as an in-class activity.

Use **Interactive Tutor Self-Assessment Software** to review Section 3.

open-market operations: *buying and selling of United States securities by the Fed to affect the money supply*

Open-Market Operations

Buying and selling government securities, called **open-market operations,** is the major tool the Fed uses to control the money supply. As you may remember from Chapter 10, securities are government IOUs such as Treasury bills, notes, and bonds. The term *open market* is used because these securities are bought and sold in the open market through dealers who specialize in buying and selling government securities. An open market is one that is open to private businesses and not controlled or owned by the government.

When the Fed buys securities—such as Treasury bills—it pays for them by making a deposit in the account of the security dealer's bank. This deposit increases the bank's reserves and therefore the amount of money it can lend, thus increasing the money supply. Remember the *multiple expansion of money* that you learned about in Section 2? When the Fed adds even a relatively small amount of new reserves into the banking system, banks can create money by holding on to required reserves and loaning out the rest.

In contrast, when the Fed sells Treasury bills to a dealer, the dealer's bank must use its deposits to purchase the securities. This action means that banks have fewer reserves to support loans and must reduce their lending. The multiple expansion of money works in reverse by taking more money out of circulation than just the initial withdrawal.

Difficulties of Monetary Policy

Economists sometimes describe the Fed's control over the money supply as similar to a driver's control over a car. Like a driver, the Fed can accelerate or brake, depending on what phase of the business cycle the economy is in. In reality, the Fed cannot control the money supply as quickly and as surely as a driver can control a car.

One problem is the difficulty in gathering and evaluating information about M1 and M2. As you know, the money supply is measured in terms of M1—currency, traveler's checks, and checkable accounts—and M2—which is M1 plus certain near moneys. In recent years, new savings and investment opportunities have appeared. Keeping track of the growth of M1 and M2 becomes more difficult as money is shifted from savings accounts into interest-paying checkable accounts or from checkable accounts into money market deposit accounts. The increased use of credit cards and electronic transfer funds has also changed the way money circulates through the economy.

Throughout its history, the Fed's monetary policies have been criticized. In some instances of rising inflation, the Fed increased the amount of money in circulation, thereby worsening inflation. During other periods when the economy was slowing down and going into recession, the Fed decreased the money supply. This action made the recession worse.

To prevent such misjudgments, some critics of the Fed have requested that the money supply simply be increased at the same rate every year. They recommend that the Fed *not* engage in monetary policy.

Although the Fed is protected from direct political pressure, it nonetheless still receives conflicting advice from many directions. In addition, the Fed is not the only force working to affect the economy. The spending and taxing policies of the federal government are also at work. The Fed's task is to consider all of these factors as it plots a course for the growth of the economy as well as one that ensures price stability.

Careers

Accountant

Job Description
- Prepare, analyze, and verify financial reports and taxes
- Prepare budgets and manage assets

Qualifications
- Bachelor's degree in accounting
- Passage of CPA (Certified Public Accountant) exam often required

Starting Salary: $29,400

Job Outlook: Average

–Occupational Outlook Handbook, 1998–99

Practice and assess key skills with *Skillbuilder Interactive Workbook, Level 2.*

SECTION 3 Assessment

Understanding Key Terms

1. **Define** discount rate, prime rate, federal funds rate, open-market operations.

Reviewing Objectives

2. How can the Fed use reserve requirements to alter the money supply?
3. How does the discount rate affect the money supply?
4. What are some of the difficulties of carrying out monetary policy?
5. **Graphic Organizer** Create a diagram like the one in the next column to show how the Fed uses open-market operations to change the money supply.

Fed Buys Securities → ☐ → ☐ → ☐

Fed Sells Securities → ☐ → ☐ → ☐

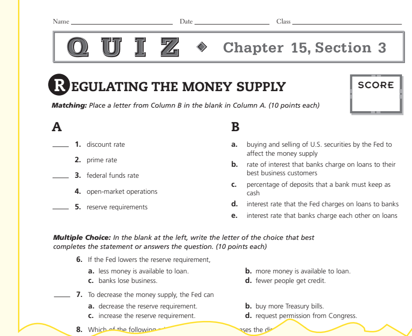
Applying Economic Concepts

6. **Monetary Policy** If you were responsible for controlling the nation's money supply, which tool would you use? Why?

Critical Thinking Activity

7. **Synthesizing Information** Imagine that you are the chairman of the Fed. Write a paragraph to the general public explaining why you are raising the federal funds rate. Include the words "inflation" and "recession" in your explanation.

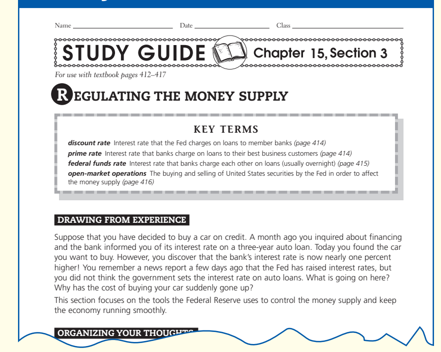
Section Quiz 15–3



Reteach

Refer students to the Section Objectives on page 412. Have them use information in the section to answer these questions.

Reading Essentials and Study Guide 15–3



4 Close

Call on students to identify and explain the various methods the Fed uses to regulate the money supply.

Extending the Content

Buying Treasury Securities Many investors buy Treasury securities directly from commercial banks. To avoid the fee that commercial banks charge on such transactions, however, some investors buy directly from a Federal Reserve district bank or one of its branches. Interested buyers must submit an offer for the securities they want to buy. The submission must be made on the appropriate forms and accompanied by payment—either cash or certified check.

SECTION 3 Assessment Answers

1. All definitions can be found in the Glossary.
2. When the Fed raises the reserve requirement, banks must hold more of their deposits in reserve, and this decreases the money supply. When the Fed lowers the reserve requirement, banks must hold less of their deposits in reserve, and this increases the money supply.
3. A reduction in the discount rate increases the money supply, while an increase in the discount rate decreases the money supply.
4. It is difficult to gather and evaluate information on M1 and M2. The Fed often receives conflicting advice on actions to take. The Fed is not the only force working to affect the economy.
5. Diagram should show that when the Fed buys government securities on the open market, it increases the money supply by putting more money into circulation, and when the Fed sells government securities, it decreases the money supply by taking money out of circulation.
6. Some students will suggest the federal funds rate, since it is the tool that has an immediate impact on the economy. Others may suggest open-market operations, since it is the major tool that the Fed uses to control the money supply.
7. Have students share their paragraphs.

People & Perspectives

Background

Point out that Greenspan assumed control of the Fed shortly before the stock market crash of 1987. Greenspan has often taken aggressive action to curb the threat of inflation. This earned him harsh criticism from many quarters. However, the United States has experienced a period of sustained growth and low inflation throughout Greenspan's tenure at the Fed.

Teach

Have students search the Internet for articles on Alan Greenspan and his policies. Tell students that a good starting point for their search might be the Federal Reserve Board of Governors Web site at www.bog.frb.fed.us. By using the menu on the left of the page, they can access speeches made by Greenspan. Have students write brief synopses of the articles they find. Call on volunteers to share their synopses with the rest of the class.

People & Perspectives

- Chairman of the Federal Reserve Board since 1987
- Chairman of the Council of Economic Advisers under President Gerald Ford
- Member of the Economic Policy Advisory Board under President Ronald Reagan

Alan Greenspan

ECONOMIST (1926–)

As Chairman of the Federal Reserve Board, Alan Greenspan monitors developments in the United States economy—the impact of new technologies, for example. In this excerpt, Greenspan discusses the economic impact of information technology.

"The American economy, clearly more than most, is in the grip of what the eminent Harvard professor, Joseph Schumpeter, many years ago called 'creative destruction,' the continuous process by which emerging technologies push out the old. Standards of living rise when incomes created by the productive facilities employing older, increasingly [outdated], technologies are marshaled to finance the newly produced capital assets that embody cutting-edge technologies.

. . . Of course, large remnants of imprecision still persist, but the remarkable surge in the availability of real-time information in recent years has sharply reduced the degree of uncertainty confronting business management. This has enabled businesses to remove large swaths of now unnecessary inventory, and dispense with [redundant use of] worker[s] and capital. . . . As a consequence, growth in output per work hour has accelerated, elevating the standard of living of the average American worker.

. . . Moreover, technological innovations have spread far beyond the factory floor and retail and wholesale distribution channels. Biotech, for example, is revolutionizing medicine and agriculture, with far-reaching consequences for the quality of life not only in the United States but around the world."

Checking for Understanding

1. What does Greenspan mean by the term "creative destruction"?
2. How, according to Greenspan, have technological innovations fundamentally changed the economy?

Answers to *Checking for Understanding*

1. the continuous process by which new technologies push out old technologies
2. Technological innovations have enabled businesses to use workers and capital more efficiently, accelerating growth in output per work hour and elevating the standard of living of the average American worker.

CHAPTER 15 Summary

ECONOMICS Online

Chapter Overview Visit the *Economics Today and Tomorrow* Web site at ett.glencoe.com and click on ***Chapter 15—Chapter Overviews*** to review chapter information.

SECTION 1 Organization and Functions of the Federal Reserve System

- Congress created the Federal Reserve System, or **Fed,** in 1913 as the central banking organization in the United States.
- The Fed is made up of a Board of Governors assisted by the Federal Advisory Council, the **Federal Open Market Committee,** 12 district banks, 25 branch banks, and thousands of member banks.
- Among the Fed's functions are **check clearing,** acting as the federal government's fiscal agent, supervising member state banks, holding reserves, supplying paper currency, and carrying out **monetary policy.**

SECTION 2 Money Supply and the Economy

- The most important function of the Fed is monetary policy, or controlling the rate of growth of the money supply.
- With a **loose money policy,** credit is abundant and inexpensive to borrow. With a **tight money policy,** credit is in short supply and is expensive to borrow.
- The banking system is based on **fractional reserve banking,** in which banks hold a certain percentage of their total deposits either as cash in their vaults or in Fed banks.
- After banks meet the **reserve requirement,** they can loan out the rest to create what is, in effect, new money.

SECTION 3 Regulating the Money Supply

- The Fed can control the money supply by changing the reserve requirements of financial institutions. Lowering the requirement allows banks to loan more, thus increasing the money supply.
- Other tools the Fed can use are changing the **discount rate** and **federal funds rate,** which also affect the **prime rate.** By making borrowing more expensive, banks and consumers are discouraged from spending, which halts the growth of the money supply.
- The main tool the Fed uses to control the money supply is **open-market operations**—buying and selling government securities. By depositing money in the banking system (buying securities), the money supply grows. By withdrawing money from the banking system (selling securities), the money supply decreases.

Economics Journal

Federal Reserve System Have students track the paper currency that they handle in one week. Ask them to record the value and issuing Federal Reserve Bank of each note. At the end of the week, have students collate their data in one table to see from which Federal Reserve Banks the various denominations originated. Then direct each student to present the class findings in the form of a bar graph or map of the Federal Reserve System.

CHAPTER 15 Summary

NIGHTLY BUSINESS REPORT — ECONOMICS & YOU

The Federal Reserve System and Monetary Policy

Chapter 22
Disc 1, Side 2

If you do not have access to a videodisc player, the ***Economics & You*** programs are also available in VHS.

Use the **Chapter 15 Summary** to preview, review, condense, or reteach the chapter.

Preview/Review

Vocabulary PuzzleMaker Software reinforces the key terms used in Chapter 15.

Interactive Tutor Self-Assessment Software allows students to review Chapter 15 content.

Condense

Have students listen to the Chapter 15 **Audio Program** (also available in Spanish) in the TCR. Assign the Chapter 15 Audio Program Activity and give students the Chapter 15 Audio Program Test.

Reteach

Have students complete **Reteaching Activity** 15 in the TCR (Spanish Reteaching Activities are also available).

ECONOMICS Online

Have students visit the *Economics Today and Tomorrow* Web site at ett.glencoe.com to review Chapter 15 and take the Self-Check Quiz.

GLENCOE TECHNOLOGY

MindJogger Videoquiz

Use MindJogger to review Chapter 15 content.

Identifying Key Terms

1. b
2. i
3. f
4. j
5. a
6. c
7. g
8. h
9. e
10. d

Recalling Facts and Ideas

1. It directs the operations of the Federal Reserve System.
2. 12 Federal Reserve Banks and 25 branch banks
3. Department of the Treasury
4. loose money policy and tight money policy
5. A fraction of the money is kept on reserve and the rest is available for loans.
6. because the Fed sets specific reserve requirements for banks
7. changing the discount rate and using open-market operations
8. raise reserve requirements, increase the discount rate, and sell securities on the open market
9. because money is shifted among savings accounts, interest-bearing checkable accounts, and money market deposit accounts, and because of the increased use of credit cards and electronic transfers
10. because sometimes its actions have worsened the situation—either inflation or recession—they were designed to combat

CHAPTER 15 Assessment and Activities

ECONOMICS Online

Self-Check Quiz Visit the *Economics Today and Tomorrow* Web site at ett.glencoe.com and click on ***Chapter 15—Self-Check Quizzes*** to prepare for the Chapter Test.

Identifying Key Terms

Write the letter of the definition in Column B that correctly defines each term in Column A.

Column A

1. Fed
2. prime rate
3. tight money policy
4. reserve requirements
5. monetary policy
6. open-market operations
7. discount rate
8. loose money policy
9. federal funds rate
10. check clearing

Column B

a. means of changing the growth rate of the money supply
b. central banking system in the United States
c. purchases and sales of United States securities by the Fed
d. method by which a check deposited in one bank is transferred to another bank
e. the interest paid by banks when they borrow reserves among themselves
f. situation in which credit is expensive to borrow
g. the interest paid by banks when they borrow from a Fed district bank
h. situation in which credit is inexpensive to borrow
i. the interest rate that banks charge their best customers for loans
j. rule that banks keep a certain percentage of their deposits as cash

Recalling Facts and Ideas

Section 1

1. What does the Board of Governors do within the Fed?
2. How many Fed banks and branches are there?
3. Which agency of the federal government supplies paper currency to the economy?

Section 2

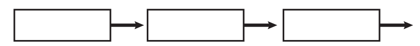
4. What are the two basic types of monetary policies?
5. In a 10 percent fractional reserve banking system, what happens to the money supply when the Fed injects $100 of new money into the American economy?
6. Why do banks have to keep money in reserve accounts?

Section 3

7. The Fed can change the money supply in circulation by changing reserve requirements. What are two other methods that it can use to do this?
8. If the Fed wants to decrease the money supply, what can it do?
9. Why is it difficult for the Fed to gather and evaluate information about M1 and M2?
10. Why do some of the Fed's critics think the Fed should not engage in monetary policy?

Thinking Critically

1. **Understanding Cause and Effect** Create a flowchart like the one below to show how the banking system creates money.



2. **Making Comparisons** What is the advantage for banks to be members of the Federal Reserve today? How does this differ from the past?
3. **Identifying Alternatives** How do you think the Fed would operate differently if it were under the control of the executive branch?

Applying Economic Concepts

Monetary Policy Look at **Figure 15.2** on page 402. Use the map to answer the following questions.

1. In what federal district do you live?
2. What is the Federal Reserve Bank city of district 9?
3. What is the Federal Reserve Bank city of district 4? What are district 4's branch cities?
4. What are the branch cities of district 11?
5. To what district bank would checks written in Hawaii go first?

Cooperative Learning Project

Working in groups, imagine that you are members of the Federal Open Market Committee. Eight times a year, you meet to discuss whether changes in the supply of money are necessary. The research staff presents information about the state of the economy. Write a list of the different types of information you think the members of the FOMC should have during their meetings.

Reviewing Skills

Outlining Reread and outline Section 3 of this chapter, using the following as your skeleton:

I. Regulating the Money Supply
   A. Changing reserve requirements
   B. Changing the discount rate
   C. Open-market operations
   D. The difficulties of monetary policy

After outlining the information, develop a convincing argument in favor of one monetary tool over the use of the other two monetary tools. Summarize your argument and present that summary in a short speech to the class using your outline.

Technology Activity

Using the Internet On the Internet, check the most recent issue of the *Federal Reserve Bulletin* for the current reserve requirements and discount rate. Check the same month's issue for the last four years to see how often they have changed and by how much. Track these data on a chart.

Analyzing the Global Economy

Select a nation and research its central banking organization. Does the country have a "central bank"? If so, how does it regulate the money supply? If not, what controls does the country have in place to avoid inflation or recessions? Present your findings to the class.

CHAPTER 15
Assessment and Activities

Reviewing Skills

I. Regulating the Money Supply
   A. Changing reserve requirements
   B. Changing the discount rate
      1. Prime rate
      2. Federal funds rate
   C. Open-market operations
      1. Buying government securities
      2. Selling government securities
   D. Difficulties of Monetary Policy
      1. Gathering and evaluating information on M1 and M2
      2. Criticism of Fed policies
      3. Conflicting advice on policies
      4. Fed not only force working to affect economy

Arguments and monetary policy tools will vary.

Technology Activity

Have students share and compare their charts.

Analyzing the Global Economy

Encourage students to present their findings in an illustrated report.

Chapter Bonus Test Question

ASK: When the reserve requirement is 5 percent, how much of a $1,000 deposit will be available for loans? *$950* **If the reserve requirement is 7 percent, how much of this deposit may be used for loans?** *$930*

Thinking Critically

1. The format of flowcharts may vary, but should resemble the illustration in Figure 15.6.
2. Member banks, as stockholders in their district bank, may vote for bank's board members and receive dividends on stock.
3. Answers may vary but should suggest that the Fed's actions would be more influenced by shifting political trends.

Applying Economic Concepts

1. Your Fed district
2. Minneapolis
3. Cleveland; Cincinnati, Pittsburgh
4. El Paso, Houston, San Antonio
5. San Francisco

Cooperative Learning Project

Answers will vary but might include such items as changes in money supply, discount rate, reserve requirement, and Treasury securities issues and trading.