Lesson Description

In this lesson, students learn about the role and functions of the Federal Reserve System. They participate in an activity to learn how the purchase or sale of U.S. Treasury securities affects the supply of money and credit in the economy. Finally, they discuss what the Fed learned about implementing monetary policy as a result of the Great Depression.

Concepts

Deflation
Federal Reserve System
Inflation
Monetary policy
Money supply (stock)
Open market operations
Price stability

Objectives

Students will:

- Explain the functions of the Federal Reserve.
- Define monetary policy.
- Explain that the Fed conducts monetary policy by buying and selling Treasury securities.
- Identify what the Fed learned about responding to financial crises such as the Great Depression.

Content Standards

National Standards for History

Era 8, Grades 9-12

- **Standard 1:** The causes of the Great Depression and how it affected American society.
- **Standard 1A:** The causes of the crash of 1929 and the Great Depression.

National Standards in Economics

- **Standard 11:** Money makes it easier to trade, borrow, save, invest and compare the value of goods and services.
  - Benchmark 1, Grade 12: The basic money supply in the United States consists of currency, coins and checking account deposits.
  - Benchmark 2, Grade 12: In many economies when banks make loans, the money supply increases; when loans are paid off, the money supply decreases.

- **Standard 19:** Unemployment imposes costs on individuals and nations. Unexpected inflation imposes costs on many people and benefits some others because it arbitrarily redistributes purchasing power. Inflation can reduce the rate of growth of national living standards because individuals and organizations use resources to protect themselves against the uncertainty of future prices.
    - Benchmark 1, Grade 4: Inflation is an increase in most prices; deflation is a decrease in most prices.
    - Benchmark 3, Grade 8: Inflation reduces the value of money.
    - Benchmark 7, Grade 12: The costs of inflation are different for different groups of people. Unexpected inflation hurts savers and people on fixed incomes; it helps people who have borrowed money at a fixed rate of interest.
- **Standard 20:** Federal government budgetary policy and the Federal Reserve System's monetary policy influence the overall levels of employment, output and prices.
    - Benchmark 8, Grades 9-12: Monetary policies are decisions by the Federal Reserve System that lead to changes in the supply of money and the availability of credit. Changes in the money supply can influence overall levels of spending, employment and prices in the economy by inducing changes in interest rates charged for credit and by affecting the levels of personal and business investment spending.
    - Benchmark 9, Grades 9-12: The major monetary policy tool that the Federal Reserve System uses is open market purchases or sales of government securities. Other policy tools used by the Federal Reserve System include increasing or decreasing the discount rate charged on loans it makes to commercial banks and raising or lowering reserve requirements for commercial banks.

National Council for the Social Studies Strands

- Time, continuity and change
- Power, authority and governance
- Production, distribution and consumption

Time Required

120 minutes

Materials

- Visuals 6.1, 6.2, 6.3, 6.4, 6.5 and 6.6
- A copy of Handouts 6.1, 6.5, 6.6, 6.7 and 6.8 (optional) for each student
- A copy of Visual 6.2 for each student
- A copy of Handout 6.2 for each group of students
- Seven copies of Handout 6.3, cut apart
- A copy of Handout 6.4, cut apart
- A copy of Handout 6.5: Answer Key

- A pair of scissors for each group of students
- A piece of 8 1/2” x 11” paper for each group of students
- Masking tape
- 35-40 uniform pencils or other small, uniform items (fun-sized candy bars or other small wrapped candy)
- Calculator
- Overhead pen
- An 8.5-by-11-inch construction-paper sign with “Federal Reserve Bank” written on it

Procedures

1. Discuss the following:
   - How many of you are able to ride a bike? In-line skate? Water ski? Snow ski? *(Answers will vary.)*
   - Do you remember falling when you learned to do these things? *(Yes)*
   - Why did you fall? *(Answers will vary.)*
   - Did you learn anything that helped you keep from falling later? *(Answers will vary. But students should point out things they learned about balance and movement that kept them from falling.)*

2 Display *Visual 6.1: Headline*. Explain that many people ask this question about the Great Depression. Although people cannot be certain, they hope that an economic downturn as severe as the Great Depression will not happen again. Just as individuals learn from various experiences, people hope that those responsible for monetary policy and the economy learned from the Great Depression. Point out that the Federal Reserve System is responsible for monetary policy (i.e., managing our nation’s money supply, formerly known as money stock), and the Fed learned a great deal about implementing monetary policy from the Great Depression experience and from events since then.

3. Explain that in today’s lesson, students will learn about the Federal Reserve System, the lessons policymakers have learned from the Great Depression and the role of the Federal Reserve in stabilizing the economy to prevent such an event from occurring again. Then students will participate in a simulation to demonstrate what monetary policy is and how the Fed uses monetary policy to stabilize prices, promote sustainable economic growth and prevent future depressions such as the Great Depression.

4. Explain that the Federal Reserve and its chairman are often in the news. However, there are many people who do not understand what the Federal Reserve System is and what it does. Distribute a copy of *Handout 6.1: The Federal Reserve and Its Role in the Economy* to each student and divide the students into small groups. Display *Visual 6.2: Questions about the Federal Reserve* and distribute a copy of Visual 6.2 *to* each student. Tell each group to answer the questions based on the reading. Students should be prepared for a class discussion.

5. Allow time for groups to work, then discuss the following questions. Tell the students they should take notes as the questions on the visual are discussed.

   - What is the **Federal Reserve System,** and when was it established? *(The Federal Reserve is the central bank of the United States. It was established in 1913.)*
   - What are three functions of the Fed? *(The Fed is responsible for monetary policy, managing the payments system, and banking supervision and regulation.)*
   - What is monetary policy? *(Monetary policy involves actions the Fed takes to affect the supply of money and credit in the economy.)*
   - If the Fed was established in 1913, why didn't it do something to stop the Great Depression? *(The Fed was a young institution, and it was using the economic understandings of the time to stabilize the economy in order to achieve goals such as stable prices and sustainable growth.)*
   - What was the predominant economic thinking in the 1920s that influenced the Fed and other economists' thinking during the Great Depression? *(Economic understandings included the following: The U.S. government should have a balanced budget. A balanced budget would prevent the government from using fiscal policy to stimulate the economy. The economic understanding also emphasized the need to avoid inflation, and there wasn't much concern about deflation. The gold standard was also stressed as important to the monetary system.)*
   - What does "laissez-faire" mean? *("Laissez-faire" means that the market economy should stabilize itself over time without the involvement of government fiscal policy and, by extension, monetary policy.)*

6. Point out that by studying the Great Depression, the Fed learned that price stability—not just a lack of inflation—is critical to the health of the economy. **Price stability** means the absence of inflation and the absence of deflation. **Inflation** is a rise in the average price level over time. **Deflation** is a decrease in the average price level over time. Discuss the following:

   - If you were planning to buy the latest MP3 player, and the price of MP3 players had increased by $10 each day that you looked at an advertisement or visited the store, what might you do? *(Answers will vary, but students are likely to say that they would buy the MP3 player now to avoid paying more tomorrow.)*
   - If the prices for most goods and services were rising every month, how would people respond? *(Buy goods and services today rather than waiting.)*
   - If you were planning to buy a new car, and the price of the car fell by $500 each day that you looked at an advertisement or visited the car dealer, what might you do? *(Answers will vary, but students are likely to say that they would put off buying the car today in order to wait for the price to fall even more.)*
   - If the prices for most goods and services were falling every month, how would people respond? *(postpone buying goods and services in hopes of buying at a lower price in the future)*

7. Explain that an increase or decrease in the price of one good does not mean that the economy is experiencing inflation or deflation. The examples, however, do illustrate the response that people have to inflation and deflation.

8. Divide the students into groups. Distribute a copy of *Handout 6.2: Inflation/Deflation Card Sort*, a pair of scissors, a roll of cellophane tape and a piece of paper to each group. Tell the students to cut cards apart and to organize the statements into two columns—one labeled "deflation" and the other "inflation." Students should organize the statements so that the statements they associate with inflation are in the inflation column and the statements that they associate with deflation are in the deflation column. Once students have their columns organized, they should tape the columns to the paper. Display *Visual 6.3: Inflation/Deflation Card Sort—Answer Key*. Allow student groups to check their charts.

Discuss the following.

- When average price level is rising, why would people buy now instead of waiting to buy in the future? *(They expect prices to be even higher in the future, so they buy now while the price is lower.)*
- How does this response perpetuate the problem of inflation? *("Buying now" increases demand and bids up prices—much like bidders at an auction.)*
- What happens if people's wages don't rise at the same rate (as fast) as prices rise? *(People can't buy as many goods and services as they could in the past.)*
- Why do businesses and households have difficulty planning for future expenditures during inflationary periods? *(Because they are uncertain about future prices, they don't know how much they will need for future purchases; so, they try to purchase now when the price is lower.)*
- How does inflation rob the purchasing power of people's savings? *(If people save money and prices rise, the money they have saved won't buy as much in the future.)*
- When the average price level is falling, why do people postpone purchases? *(They expect prices to fall in the future. They think that if they wait, the good or service will cost even less than it does today.)*
- How does this response perpetuate the problem? *(Because people are waiting to buy, fewer goods and services are sold today. Inventories accumulate and prices fall more as businesses try to reduce prices to sell their goods.)*
- Why do business revenues fall during deflationary periods? *(Businesses are selling fewer goods and services because people are waiting to purchase—and when people do purchase, the goods are at lower prices. Selling less and selling at lower prices cause business revenues to fall.)*
- Why do businesses lay off workers? *(When their revenues fall, businesses can't afford to hire as many workers at the same wage, or they must lower wages.)*
- If fewer people are employed and/or those who are employed earn less, what happens to people's incomes and the amount of goods and services they buy? *(Their incomes fall, and they buy fewer goods and services.)*
- What happens to prices as a result? *(Prices fall even more.)*

9. Explain that maintaining stable prices—no inflation or no deflation—is best for the economy. Tell the students that they are going to participate in a simulation to demonstrate how the Fed is able to affect the supply of money and credit in the U.S. economy in order to stabilize prices. Different students in the class will have different roles in the simulation.

   - Select one student to serve as the treasurer. Give the treasurer the currency from *Handout 6.3: Currency* and *Visual 6.4: Classroom Money Supply*, a calculator and an overhead pen. *(Note: A $100 note is the largest denomination of currency printed today.)*
   - Select seven or eight students and have the treasurer give each of them five $1,000 bills from Handout 6.3.
   - Select eight to 10 students and give each of them one, two or three pencils of the same kind or give them another uniform item. (Small pieces of the same candy may be substituted.) (*If using candy, tell the students that they may not eat the candy—yet!)*
   - Select five or six students and give each of them a card from *Handout 6.4: Bank Accounts* representing $5,000 in a checking account at a bank.
   - Retain one Bank Account card for use in Procedure 21.

10. Tell the students that they represent individuals and organizations in the economy. Tape the construction-paper sign on your desk and explain that the Federal Reserve has a portfolio. A "portfolio" is a list or collection of financial assets that an individual or company holds. In this case, the pencils represent assets—things of value that were purchased from pencil producers. Show the students the portfolio of pencils (candy bars or other uniform items) that were purchased from pencil producers—a bag or bowl of pencils. Ask the students why pencils (candy) would be something students buy. *(They need pencils for class, sometimes it is important to have more than one pencil, they could resell pencils later.)*

11. Explain that the **money supply** is the amount of money available in an economy. The basic money supply in the United States is the amount of currency, coins and checking account deposits. There is currently a supply of money in the classroom economy, represented by the cash students have in their hands and the checkable deposits they have in banks. Have the treasurer display Visual 6.4 and stand by the visual ready to record information. Discuss the following:

   - Raise your hand if you have cash.
   - How much does each of you have? *($5,000)*

12. Have the treasurer calculate how much cash people have by multiplying the number of hands raised by $5,000. Tell the treasurer to record the amount of cash students in the classroom have on the visual in the first row of the first column.

13. Ask the students to raise their hands if they have checking account deposits of $5,000. Tell the treasurer to calculate how much money people have in checking accounts (checkable deposits) by multiplying the number of hands raised by $5,000. Tell the treasurer to record the amount in the second row of the first column on the visual.

14. Explain that the money supply in the classroom is the sum of the cash and the checking account deposits. Tell the treasurer to write that total in the third row of the first column.

15. Tell the students that the Federal Reserve, the central bank of the United States, has been charged with enacting monetary policy to help stabilize the economy. The term **monetary policy** refers to what the Federal Reserve does to influence the amount of money and credit in the U.S. economy. What happens to money and credit affects interest rates (the price of credit) and, ultimately, the performance of the U.S. economy.

16. After studying the economy, the decision-makers at the Federal Reserve have decided to sell some valuable assets from the Fed's portfolio (pencils and candy). Explain that these pencils are valuable and that people in the classroom economy like to own these valuable assets. Ask the students who are interested in buying pencils to raise their hands. From among this group, ask if any are willing and able to pay $5,000 for a pencil. Sell as many pencils at this price as possible. Lower the price by $1,000 at a time as needed until you are able to sell a total of five pencils. Tell the treasurer to accept cash and make change or accept checking account balances—marking through $5,000 on the card and writing the new account balance.

17. Repeat steps 11-13 as follows.
    - Raise your hand if you have cash. How much cash does each of you have? *(Answers will vary.)*
    - Add the amount of cash each student has, and have the treasurer record the total in the first row of the second column on the visual.
    - Raise your hand if you have a checking account deposit.
    - Add the amount of deposit each student has, and have the treasurer record the totals in the second row of the second column on the visual.

18. Remind students that the money supply in the classroom society is the sum of the cash and checking account deposits. Tell the treasurer to write that total in the third row of the second column on Visual 6.4. Ask the class what happened to the money supply as a result of the Federal Reserve selling its pencils. *(The money supply decreased.)*

19. Distribute a copy of *Handout 6.5: The Flow of Things* to each student. Ask students to work with a partner to answer the questions. Use *Handout 6.5: The Flow of Things—Answer Key* to discuss the answers.

20. Tell students to turn the handout over and use it to take notes. Display *Visual 6.5: Reversing the Flow* and discuss the questions as follows. If the Federal Reserve were to buy (rather than sell) pencils from the class, the money supply would increase because the Fed would pay the people who sell pencils by placing money in the sellers' checking accounts at banks.

21. Demonstrate by choosing a student who has more than one pencil. Pay that student for a pencil by giving him or her a $5,000 checkable deposit card. Display Visual 6.4 again for a moment and show the students that the $5,000 checkable deposit would be added to the money supply—increasing the money supply. Display Visual 6.5 again, and continue discussing the questions as follows:

    - Because people sold pencils in exchange for money, they would have more to spend and would be able to buy more goods and services.
    - As people purchase more goods and services, businesses are encouraged to produce more goods and services.
    - To produce more goods and services, producers will need more natural resources, human resources and capital resources.
    - If producers need more workers, (human resources) then they will employ more workers. As a result, the unemployment rate will likely fall, wages will likely rise and people will be able to buy more goods and services.

22. Point out that the Federal Reserve System does not keep a portfolio of pencils. However, it does keep a portfolio of Treasury securities—U.S. government treasury bills and bonds. Explain that these are valuable assets that people and organizations like to have because these assets pay interest to those who own them.

23. Explain that the Federal Reserve System is able to sell Treasury securities from its portfolio that are eventually purchased (through securities dealers) by individuals, banks, pension funds, corporations and other organizations. Conversely, the Fed can also buy Treasury securities from the portfolios of securities dealers.

24. Point out that the effects of these sales or purchases by the Fed ripple through the economy, as discussed above and on Handout 6.5.

25. Explain that when the Federal Reserve buys or sells Treasury securities, it is implementing monetary policy—changing the money supply and the amount of credit in the economy to promote stable prices and economic growth. The process of selling and buying Treasury securities is called **open market operations**.

26. Explain that if the economy is experiencing inflation, the Fed would engage in contractionary monetary policy by selling securities from its portfolio—contracting the money supply much like what happened when the Fed sold pencils in the classroom. If the economy is experiencing deflation, the Fed would engage in expansionary monetary policy—buying securities for its portfolio and expanding the money supply.

27. Explain that "expansionary monetary policy" refers to the Fed buying securities in order to increase the growth of the money supply and the amount of credit available. "Contractionary monetary policy" refers to the Fed selling securities in order to decrease the growth of the money supply and the amount of credit available.

28. Remind students that when the Fed sold pencils, it took money from people's accounts; when it bought pencils, it put money into people's accounts in banks. The money people have in their bank accounts is the money that banks lend to other people and businesses. So, if the Fed sells pencils, there is less money in people's accounts, and banks can lend less. Therefore, there is less credit available. If the Fed buys pencils, there is more money in people's accounts and banks can lend more. Explain that when the Fed changes the amount of money in the economy, it affects how much money banks have to lend—that is, how much credit is available.

29. Explain that when banks make loans, they create money. If Mary has $5,000 in her checking account at the bank, her bank can lend part of that money—say, $4,500—to John so he can buy a car. The $5,000 is still recorded as a deposit in Mary's account, but in addition John has $4,500 in his account. Has the money supply increased? *(Yes.)* The money supply increased when the bank made the loan because the total amount of money in checking accounts increased from $5,000 to $9,500.

30. Explain that it is the Fed's job to try to keep the right amount of money and credit available in the economy to keep prices stable (avoid inflation or deflation) and to maintain economic growth.

31. Distribute a copy of *Handout 6.6: Great Depression Statistics* to each student. Explain that these statements describe events that took place during the Great Depression. Divide the students into pairs and tell them to use the information from the front and back of Handout 6.5 to answer the question at the bottom of Handout 6.6. Tell students to be prepared to share their answers with the class.

32. Ask students to raise their hands if they think the Fed should have taken expansionary action. Ask students to raise their hands if they think the Fed should have engaged in contractionary actions. Ask individual students to offer support for their answers. Explain that the Fed should have taken expansionary action—buying Treasury securities—because, if more money were available, banks could make loans, enabling businesses and people to borrow. Businesses could use the borrowed funds to employ workers. People with jobs have income, which increases their demand for goods and services. If necessary, review the content from Handout 6.5.

33. Explain that the Fed did undertake some expansionary actions during the Great Depression. However, given the magnitude of events that contributed to the economic downturn during the 1930s, in retrospect, economic historians think that the Fed's policies were not expansionary enough. Economic historians and Federal Reserve economists have reviewed the events of the Great Depression and analyzed the Fed's responses. And those responsible for monetary policy in the Federal Reserve System have had the opportunity to learn from these analyses.

34. Remind students that this lesson began with the idea that people learn from experiences they have and mistakes they make, and what they learn may prevent them from making the same mistakes in the future. Display Visual 6.6 and remind students that the Federal Reserve—the organization responsible for monetary policy—learned a lot about implementing monetary policy as a result of the Great Depression. By studying the Great Depression and the actions of the Federal Reserve and other institutions, economists have come to understand:

- the importance of money, credit, and a safe and sound financial system in maintaining a stable economy;
- that ensuring a strong economy requires sound economic policies to make certain that fluctuations in prices, production and employment do not grow into major economic events; and
- that price stability is the key goal for monetary policy because fluctuations in the price level—either deflation or inflation—can cause financial instability and hinder economic growth.

35. Point out that since the Great Depression, the Federal Reserve System has learned how to more effectively stabilize the economy. Although the Fed's record is not perfect, generally its monetary policy has resulted in moderating economic conditions so that the United States has not experienced another economic event as catastrophic as the Great Depression.

NOTE: If you want additional resources for teaching about the Federal Reserve, including a free DVD, visit our In Plain English site *at www.stlouisfed.org/publications/pleng/.*

Closure

36. To review the key points, distribute a copy of Handout 6.7 and tell students to work with a partner and use class notes to answer the questions.

Answers:

1. *The Fed is the nation's central bank. It was established in 1913.*
2. *The Fed writes regulations and supervises banks, the Fed manages the payments system and the Fed conducts monetary policy.*
3. *Monetary policy refers to actions by the Fed that involve the use of open market operations to affect the amount of money and credit in the economy.*
4. *The Fed conducts monetary policy to stabilize prices.*
5. *Inflation is a rise in the average price level.*
6. *Deflation is a decline in the average price level.*
7. *The Fed conducts monetary policy by buying and selling U.S.Treasury securities.*
8. *When the Fed buys securities, the amount of money and credit in the economy increases.*
9. *Buying securities is expansionary.*
10. *The Fed would sell securities to reduce the amount of money and credit in the economy.*
11. *Selling securities is contractionary monetary policy.*
12. *The Fed should use sound economic policies to make certain that changes in prices, production and employment do not grow into major economic problems.*
13. *Price stability—the absence of inflation or deflation—is the key goal of monetary policy.*

Assessment

37. Ask students to use notes taken during class to write a newspaper headline and an article explaining to the readers:

    - what the Federal Reserve System is,
    - when it was established,
    - what the three functions of the Fed are,
    - what monetary policy is,
    - how the Fed conducts monetary policy, and
    - what the key goal of monetary policy is.
    - Answers should include the following: *The Federal Reserve System is the central bank of the United States. It acts as the bankers' bank—the bank for the federal government—and it manages the money supply of the United States. Monetary policy involves decisions the Fed makes that affect how much money and credit are available in the U.S. economy. The Fed conducts monetary policy by buying and selling U.S. Treasury securities. The key goal of monetary policy is price stability—the absence of inflation or deflation.*

38. **Challenge:** Distribute a copy of *Handout 6.8: Assessment* to each student. Tell students to read the article and answer the questions on the handout.

Answers:

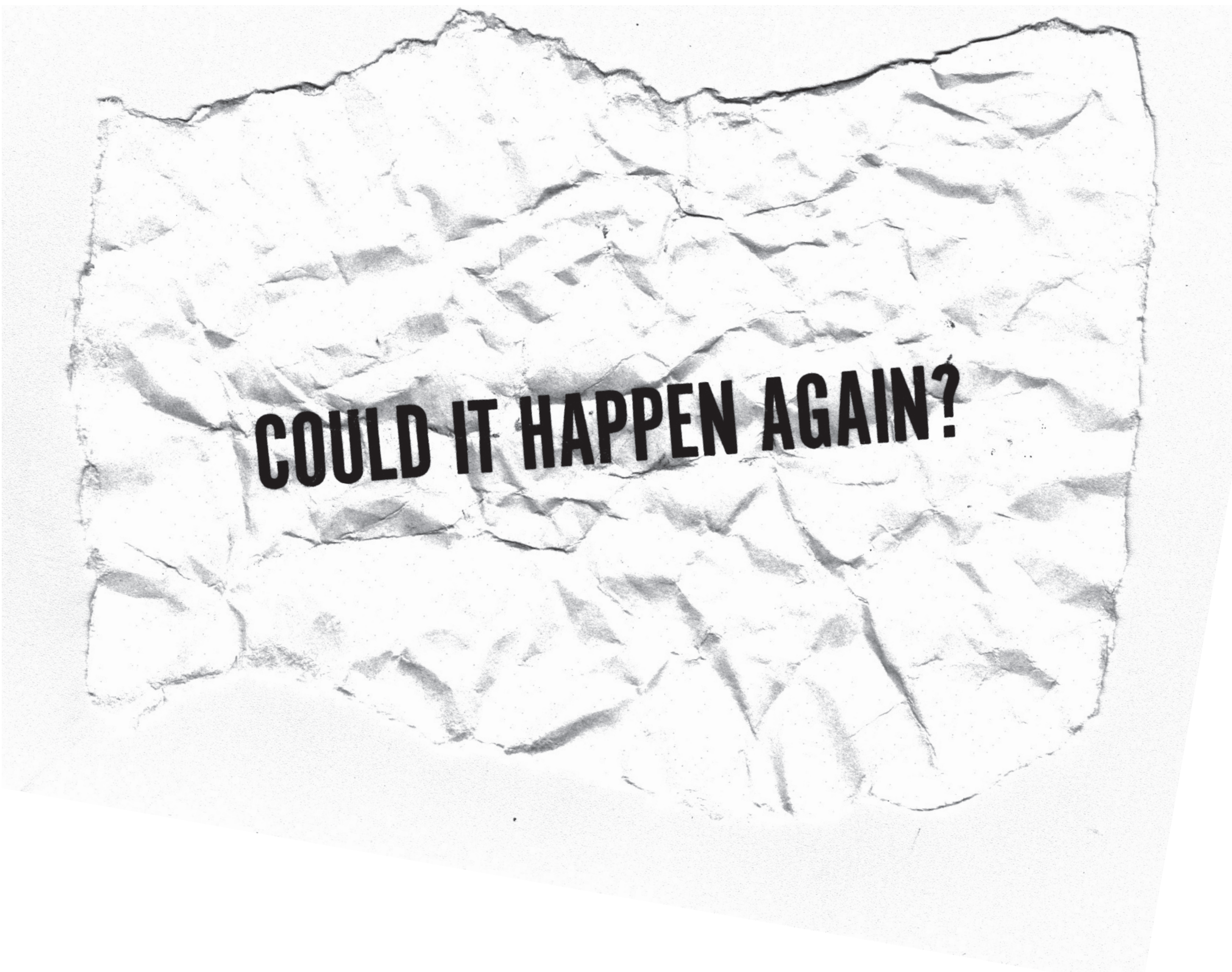
1. Liquidity is the ability of a bank or business to pay its debts or to convert its assets into cash with little loss of value.

2. The Fed took the following steps to provide liquidity following 9/11:

- *The Fed used open market operations to inject money and credit into the banking system by buying Treasury securities in record amounts.*
- *The Fed loaned money directly to banks through its discount window. By Sept. 12, 2001, it had loaned a record $46 billion.*
- *The Fed urged banks to restructure loans of their customers who had temporary liquidity problems—i.e., temporary problems making loan payments due to the 9/11 crisis and its aftermath.*
- *The Fed extended check float by crediting receiving banks but delaying debiting the paying banks.*
- *The Fed established agreements with foreign central banks so that they had sufficient dollars to meet their banks' demand for dollars.*
- *The Federal Open Market Committee (FOMC) reduced the federal funds target rate by 0.5 percent (to 3.0 percent), which decreased the interest rate that banks have to pay to borrow from each other to cover short-term needs for liquidity.*

3. The Fed responded quickly and used a variety of tactics to increase significantly the amount of liquidity in the U.S. economy. These actions helped ensure the smooth functioning of the payments and financial system.

Visual 6.1: Headline



Visual 6.2: Questions about the Federal Reserve

1. **What is the Federal Reserve System, and when was the Federal Reserve System established?**

2. **What are three functions of the Fed?**

3. **What is monetary policy?**

4. **If the Fed was established in 1913, why didn't it do something to stop the Great Depression?**

5. **What were economic understandings in the 1920s that influenced the Fed and other economists' thinking during the Great Depression?**

6. **What did "laissez-faire" mean?**

Visual 6.3: Inflation/Deflation Card Sort—Answer Key

Inflation	Deflation
People buy today rather than wait.	People wait to buy until tomorrow.
"Buying now" increases demand and pushes prices up.	Demand for goods and services continues to decline, as do prices.
People continue to buy rather than wait, as prices continue to rise.	People postpone purchases, fewer goods and services are sold, and inventories accumulate.
If wages don't rise at the same rate as prices, people can't buy as many goods and services as they could in the past.	Businesses do not earn as much revenue and may have to lay off workers, which contributes to higher unemployment.
It robs the purchasing power of people's savings.	People have less income to spend and, therefore, purchase less.
People and businesses have difficulty planning for the future.	People and businesses have difficulty planning for the future.

Visual 6.4: Classroom Money Supply

Money Supply in the Classroom Economy		
	Round 1	Round 2
Cash in Students' Hands	$	$
Deposits in Students' Checking Accounts	$	$
Total	$	$

Visual 6.5: Reversing the Flow

1. What would happen to the money supply if the Federal Reserve were to buy pencils from the class, rather than sell pencils to the class?

2. As a result, would people be able to buy more or fewer goods and services?

3. If people buy more goods and services, would producers be encouraged to produce more or fewer goods and services?

4. To produce more goods and services, will producers need more or fewer natural resources—things found in or on the earth; human resources—people working in the economy; and capital resources—things produced by people and used to produce other goods and services?

5. If producers need more workers, what may happen to unemployment rates, wages and people's ability to purchase goods and services?

Visual 6.6: What the Federal Reserve System Learned

As a result of the experience of the Great Depression and an analysis of its events, the Federal Reserve System learned:

- **the importance of money, credit, and a safe and sound financial system in maintaining a stable economy;**

- **that ensuring a strong economy requires sound economic policies to make certain that fluctuations in prices, output and employment do not grow into major economic catastrophes; and**

- **that price stability is the key goal for monetary policy because fluctuations in the price level—either deflation or inflation—can cause financial instability and hinder economic growth.**

Handout 6.1: The Federal Reserve and Its Role in the Economy

The Federal Reserve System was established in 1913. It is the central bank of the United States. The Federal Reserve conducts monetary policy. Monetary policy involves decisions the Fed makes to affect our nation's supply of money and credit in order to achieve goals for the economy, such as full employment, stable prices and moderate long-term interest rates. The Fed writes regulations and supervises banks to ensure that the banking system is safe, sound and able to respond to a financial crisis. The Fed manages the payments system; that is, the Fed offers financial services to banks and the U.S. government to foster competition, innovation and efficiency in the marketplace.

Although the Federal Reserve System was in place during the Great Depression and did conduct monetary policy, it was not able to achieve its goals of full employment and stable prices. Therefore, economists at the Fed—as well as university professors of economics and business economists—have analyzed the Fed's response to the Great Depression and continue to examine and debate this topic.

As we talk about the Fed during the Great Depression, one thing to keep in mind is that the Fed was created by Congress in 1913. When the stock market crash occurred in 1929, the Fed was 16 years old—a teenage institution. And, like teenagers, the Fed lacked experience. Institutions, like people, change over time—in part because of the lessons they learn. Thus, the Fed's role in stabilizing the economy, the Fed's operating procedures and its understanding of monetary policy have evolved from 1913 to the present.

Think of the Fed as a medical doctor performing surgery on the economy. Do surgeons know more today that enables them to perform complicated surgeries than they did in 1913? Imagine a medical doctor in 1929 doing open-heart surgery. You'd have to use your imagination, because open-heart surgeries and heart transplants were not done in 1929. Similarly, the way in which the Fed conducts monetary policy today is much more effective than in 1929.

Economic understanding in the 1920s included a belief in a balanced budget for the U.S. government that limited fiscal policy. Fiscal policy is government spending and taxing to influence the economy. A balanced budget would prevent the government from adding excess spending to stimulate a sluggish economy.

Economic understanding at that time also included a belief that inflation was bad for the economy, which had the effect of focusing the actions of the Federal Reserve on preventing inflation. Inflation was understood to include asset prices, as well as prices of goods and services, but concerns about deflation were taken much less seriously. Economic understanding of the day stressed the benefits of a monetary system based on the gold standard.

In addition, a *laissez-faire* mentality existed which meant that the government and fiscal policy and, by extension, monetary policy were not proactive in stabilizing the economy because it was generally believed that the market economy should stabilize itself over time.

Handout 6.2: Inflation/Deflation Card Sort

Inflation	Deflation
People wait to buy until tomorrow.	"Buying now" increases demand and pushes prices up.
People buy today rather than wait.	It robs the purchasing power of people's savings.
People and businesses have difficulty planning for the future.	People and businesses have difficulty planning for the future.
If wages don't rise at the same rate as prices, people can't buy as many goods and services as they could in the past.	People postpone purchases, fewer goods and services are sold, and inventories accumulate.
Businesses do not earn as much revenue and may have to lay off workers, which contributes to higher unemployment	People have less income to spend and, therefore, purchase less.
Demand for goods and services continues to decline, as do prices.	People continue to buy rather than wait as prices continue to rise.

Handout 6.3: Currency

Handout 6.4: Bank Accounts

You have $5,000 in a checking account.	You have $5,000 in a checking account.
You have $5,000 in a checking account.	You have $5,000 in a checking account.
You have $5,000 in a checking account.	You have $5,000 in a checking account.
You have $5,000 in a checking account.	You have $5,000 in a checking account.
You have $5,000 in a checking account.	You have $5,000 in a checking account.

Handout 6.5: The Flow of Things

For each statement, circle the correct answer:

1. If people in the society have less money in their checking accounts and less cash in their pockets, what happens to the amount of goods and services they purchase?

   Increases or Decreases

2. If people buy fewer goods and services, would it encourage producers to produce more or fewer goods and services?

   More or Fewer

3 If producers produce fewer goods and services, what will happen to their needs for natural, human and capital resources?

   Increase or Decrease

4. If producers need fewer workers, what may happen to unemployment rates and people's ability to purchase goods and services?

   Unemployment rates: Increase or Decrease

   Wages: Increase or Decrease

   People will buy: More or Fewer goods and services

Handout 6.5: The Flow of Things—Answer Key

1. If people in the society have less money in their checking accounts and less cash in their pockets, what happens to the amount of goods and services they purchase?

   (Increase or ***Decrease****)*

2. If people buy fewer goods and services, would it encourage producers to produce more or fewer goods and services?

   (More or ***Fewer****)*

3 If producers produce fewer goods and services, what will happen to their need for natural, human and capital resources?

   (Increase or ***Decrease***. ***Producers would use fewer total resources, including natural resources, capital resources—such as tools and equipment—and human resources —workers—if they decrease their output.****)*

4. If producers need fewer workers, what may happen to unemployment rates and people's ability to purchase goods and services?

   (Unemployment rates may: ***Increase*** or Decrease)

   (Wages may: Increase or ***Decrease****)*

   (People will buy: More or ***Fewer*** goods and services)

Handout 6.6: Great Depression Statistics

During the Great Depression:

- The amount of goods and services produced in the United States fell by one-third.
- The unemployment rate rose to 25 percent of the labor force.
- The stock market lost 80 percent of its value.
- Some 7,000 banks closed temporarily or failed.
- The economy experienced deflation—i.e., generally falling prices.

Using the information above and from Handout 6.5, answer the following question:

What kind of policy should the Fed pursue—contractionary or expansionary? Why?

Handout 6.7: Review

Working with a partner and using your notes from class, answer the following questions. Use the back of the page if needed.

1. What is the Federal Reserve, and when was it established?

2. What are three roles of the Federal Reserve?

3. What is monetary policy?

4. Why does the Fed conduct monetary policy?

5. What is inflation?

6. What is deflation?

7. How does the Fed conduct monetary policy?

8. What happens to the amount of money and credit in the economy if the Fed buys securities?

9. Is this expansionary or contractionary monetary policy?

10. What open market operation would the Fed use to reduce the amount of money and credit in the economy?

11. Is this expansionary or contractionary monetary policy?

12. What did the economists who studied the Great Depression—and, as a result, the Federal Reserve System—learn about stabilizing the economy?

13. What is widely accepted as the key goal of monetary policy?

Handout 6.8: Assessment

Directions: Read the article about the actions of the Federal Reserve following the 9/11/2001 crisis. Answer the questions that follow.

The Sept. 11 terrorist attack on the World Trade Center and the Pentagon posed an immediate threat to the entire economy by disrupting the payments and financial system. The most immediate economic effect of the attacks was a temporary inability to clear checks, caused by the suspension of flights. In addition, the New York Stock Exchange and other financial markets closed for a week. The attack increased businesses' and people's demand for liquidity. "Liquidity" is the ability of a bank, business or individual to meet current financial obligations (repay loans) or the ease with which an asset can be quickly and readily converted to cash with little loss of value. Many people, perhaps in fear of further attacks, withdrew money from their banks.

The Federal Reserve's response to the immediate effects of the attacks was to provide liquidity—the ability to make payments—to firms and individuals. It was particularly important to provide liquidity to financial firms that constantly buy and sell assets, because these firms must make payments with either funds from recently sold assets or money borrowed from banks. During crises, banks avoid making such loans. An interruption in bank lending to financial firms could potentially have started a chain reaction of bankruptcies that would have brought the financial system to a halt. This would have disrupted the whole economy. **To avoid such a disaster, the Fed provided emergency liquidity in five ways:**

1. **The Fed uses open market operations to control liquidity.** Every day, the trading desk at the Federal Reserve Bank of New York enters the market to buy or sell Treasury securities. If the Fed buys Treasury securities, money is put into the banking system, increasing liquidity. If the Fed sells Treasury securities, money is taken out of the banking system, decreasing liquidity. In the days after Sept. 11, the Fed increased liquidity by buying Treasury securities in record amounts. On Wednesday, Sept. 12, the Fed injected $38 billion, and on Thursday, the Fed injected $70 billion into the economy.
2. **The Federal Reserve lent money directly to banks through the discount window.** The "discount window" is an expression used to describe the Federal Reserve's ability to extend credit or loans directly to eligible depository institutions, typically overnight. On a normal business day in 2001, these loans totaled about $54 million. By Sept. 12, the Fed lent a record $46 billion.
3. **As a regulator, the Federal Reserve—along with the Comptroller of the Currency—urged banks to restructure loans for borrowers with temporary liquidity problems.** To assist such restructuring, the Fed stood ready with additional funds.
4. **Because transportation problems prevented checks from being cleared in a timely manner, the Federal Reserve extended almost $23 billion in check float.** "Float" describes the amount of money that has been credited to check depositors but has not yet been debited from the check writer. For example, if Miguel writes a check to Shauna for $25 and Shauna deposits the check, then—for a brief period of time—the money is credited to Shauna's account before it is debited from Miguel's account.

   When check clearing is delayed, funds in the process of collection appear in the accounts of the institution that received the checks for deposit (Shauna's bank) and the institutions upon which the checks were written (Miguel's bank). Float inflates, for a brief period of time, the amount of money in the banking system.

5. **The Fed took steps to boost liquidity for foreign banks with offices or subsidiaries in the United States.** To enable foreign central banks to provide these resources in U.S. dollars, the Fed quickly established "swap lines" with the European Central Bank, the Bank of England and the Bank of Canada. Swap lines are like lines of credit. They allow foreign central banks to temporarily exchange currency.

In addition, the Federal Open Market Committee—the monetary policymaking body of the Fed— reduced the federal funds rate target by 0.5 percent to 3.0 percent on Monday, Sept. 17. The federal funds rate is the interest rate that banks pay when they borrow money from one another. This action was an effort to boost confidence prior to the reopening of the New York Stock Exchange later that morning.

As in previous periods of financial stress (e.g., the stock market crash of 1987, the Russian default of 1998 and the Y2K scare), the Federal Reserve's actions helped ensure the smooth functioning of the payments and financial systems, thereby minimizing the economic repercussions of the tragedy.

Directions: Use information from the article above to answer the following questions:

1. What is liquidity?

2. What steps did the Federal Reserve System take to provide liquidity in the financial system following 9/11?

3. What does the Fed's reaction to 9/11 suggest about how the Fed has learned to respond to economic and financial crises?

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