

The Federal Reserve and Monetary Policy

Overview

In this lesson, students will gain an overview of the Federal Reserve and monetary policy. Students will learn how the FED manipulates the money supply through open market operations, changing the discount rate and changing the reserve requirements. Students will first acquire knowledge about monetary policy from a comic book and video. The students will then take on the role of the Federal Reserve Chairperson in an online monetary policy interactive simulation.

Grade

10

NC Essential Standards for American History: The Founding Principles, Civics & Economics

- FP.E.3.2- Explain how fiscal policy and the monetary policy influence overall levels of employment, interest rates, production, price level and economic growth
- FP.E.3.3- Analyze organizations in terms of their roles and functions in the United States economy

Essential Questions

- What is the role of the Federal Reserve in regulating the United States Economy?
- What is monetary policy?
- What are the tools of monetary policy?
- What is the appropriate response by the Federal Reserve to combat inflation or recession?

Materials

- “The Story of Monetary Policy” comic book
 - Comic books are available as a free, printable .pdf at <http://ia600508.us.archive.org/16/items/gov.frb.ny.comic.monetary/gov.frb.ny.comic.monetary.pdf>.
- “The Story of Monetary Policy” Guided reading questions (*Handout 1*), attached
- “In Plain English: Making Sense of the Federal Reserve” DVD
 - A free copy of the DVD can be obtained at <http://www.stlouisfed.org/inplainenglish/> and will take approximately two-three weeks to arrive
- DVD Player
- “In Plain English: Making Sense of the Federal Reserve” Viewer Questions, attached
- Computers with internet access (one-two students per computer)
- Interactive Simulation questions (*Handout 2*), attached
- Create a comic book assignment and Rubric (*Handout 3*), attached
- Sample EOC Questions and Answer Key, attached

Duration

1- 1.5 block period(s)

Preparation

Students should have a basic knowledge of the definition and functions of money and the structure and operations of the banking system. Students should also have been introduced to how banks create money through loans, the structure of the Federal Reserve, as well as the business cycle, unemployment, and inflation. For lessons on these topics, see the Carolina K-12’s Database of K-12 Resources at k12database.unc.edu

Procedure

Warm Up: Federal Reserve and Monetary Policy

1. As a warm up, ask students to following questions:
 - When there is a fire, what government officials/agencies might show up to help affected citizens? What do these individuals do to help put out the fire?
 - When there is a hurricane, what government officials/agencies might show up to help affected citizens? What do these individuals do to help with the disaster relief?
 - What if another country tried to invade the US, what government officials/agencies could help defend citizens? What would the individuals do to stop the invasion?
 - What are some disasters that could occur with the economy? How are people affected by economic disasters as compared to the ways people are affected by the disasters discussed above? What government agencies help with these economic “disasters?”
2. Tell students that they will be learning about how the **Federal Reserve** deals with economic disasters such as a **recession** or **high inflation**. Ask the class to share what they already know regarding the Federal Reserve System (ideally from a previous lesson). Students should recall the four parts of the Federal Reserve System: the **Board of Governors**, the **Federal Open Market Committee (FOMC)**, the **Federal Reserve banks**, and the **member banks**.

Project the definition of “**Monetary Policy**”:

- **Monetary Policy** is the process by which the government, central bank, or monetary authority of a country controls the supply of money, availability of money, and rate of interest. The goal of **monetary policy** is either to encourage the growth of an economy or ensure stability in the value of a nation’s money.
3. Pass out copies of “The Story of Monetary Policy” comic book and guided reading questions (*Handout 1*). Have students read the comic book and complete guided reading questions. Once students have completed the reading and questions, discuss answers as a class.

Viewing “In Plain English”

4. Students will view the short film “In Plain English: Making Sense of the Federal Reserve”. The movie lasts approximately 15 minutes.

Instruct students to take notes during the video. After viewing the film, host a class discussion regarding the structure of the **Federal Reserve System** and the **Federal Open Market Committee** using the questions below. (Teachers can either have the questions on the board, print student copies, or just verbally present the questions after the video has concluded. Much of the information will be a review from previous lesson and comic book.)

- What are the three parts of the Federal Reserve System?
- Which part of the Federal Reserve System constitutes the centralized national authority?
- Which part of the Federal Reserve System represents regional independence?
- Which part of the Federal Reserve System sets monetary policy?
- How does each meeting of the FOMC meeting end?
- How many districts are there in the Federal Reserve System?
- What is the official economic term for managing the nation’s money supply?
- What is one long-term goal of the Fed?

Preparing for and Conducting the Interactive Simulation

5. Next, lead students in an interactive simulation of monetary policy in which students take on the role of the Federal Reserve chairperson and alter the Federal Funds rate to appropriately address unemployment and inflation.

The simulation is available at: <http://www.frbsf.org/education/activities/chairman/index.html>. Once there, scroll down to “Fed Chairman Game”. Click on this link and follow directions on the green screen to begin. Game directions will be on the left-hand side of the screen. Instructor should prompt students to do the following:

- Increase the Federal Funds rate in response to higher inflation.
- Decrease the Federal Funds rate in response to higher unemployment.
- If both inflation and unemployment are rising, student will have to choose between trade-off of economic growth and price stability.

Review your expectations for appropriate use of technology and behavior in the computer lab. Remind students to try their best and take the simulation seriously. Circulate around the room to assist and regulate student activities while using the internet. Students should complete the reflection questions from *Handout 2* (attached) while they play. As the Handout directs, students should play 3 separate rounds.

Note: The teacher may choose to have students share computers during the simulation and work as partners in deciding appropriate monetary policy measures,

Debriefing the Interactive Simulation

6. After the simulation has ended, have students applaud themselves for their hard work and debrief using their responses from Handout 2.
 - What was your experience like when assuming the role of Chairman of the Federal Reserve?
 - At what points do you feel you were successful at the game and why? When were you unsuccessful and why? What factors made some students more successful than others?
 - What happened to **inflation** when you increased the Federal Funds rate? Decreased?
 - What happened to **unemployment** when you increased the Federal Funds rate? Decreased?
 - In your opinion, is it more important for the Federal Reserve to try to prevent inflation or unemployment? Explain
 - What skills/knowledge/abilities do you think it would be important for the Chairman of the Federal Reserve to have?
 - In what ways was the interactive simulation realistic? In what ways was the interactive simulation unrealistic?
 - Why is it important for the Chairperson to make the correct decision regarding monetary policy?
 - What groups of people would benefit from lower interest rates? What groups of people would be hurt by lower interest rates?
 - What groups of people would benefit from higher interest rates? What groups of people would be hurt by higher interest rates?
 - What types of jobs would most likely be lost during a **recession**? Why does the government try to prevent unemployment from increasing?
7. As a culminating activity, have the students create their own comic book detailing what they have learned about the Federal Reserve System. See the attached *Handout 3* for directions and a grading rubric.

Additional Activities

- Have the students visit <http://www.newyorkfed.org/aboutthefed/fedpoint/fed32.html> for detailed descriptions of monetary policy and the 3 instruments of monetary policy.

Differentiation

Students with Special Needs

- Decrease the number of pages from the comic book that students are required to read and allow students more time to read.

- Provide students with a graphic organizer rather than Guided Reading questions, such as the one at the following site: <http://www.eduplace.com/graphicorganizer/pdf/cluster.pdf>.
- Allow students to work as partners during the interactive simulation.

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- To improve note taking and summarizing ability, do not provide students with Handout 1. Instead, have students read comic book and choose which topics they think are essential to understanding the Federal Reserve System and monetary policy.
- Have students create a non-linguistic representation while reading from “The Story of Monetary Policy”. They should create a graphic organizer that represents the essential topics from the reading. Allow time for the students to share how they organized the information.
- Have the students research FOMC meetings from the past year and write short reports about the decisions of the FOMC regarding the federal funds rate. Students should explain why the FOMC decided to increase, decrease, or leave the federal funds rate constant.

Handout 1: The Story of Monetary Policy Guided Reading Questions

While reading "The Story of Monetary Policy," answer the following questions:

1. What is real GDP per capita (Examine all three parts: 1) real, 2) GDP, 3) per capita)?
2. What is monetary policy? What is money?
3. Why do we want the economy to grow? (2 reasons)
4. Who choose the members of the Board of Governors?
5. What is inflation? What groups are hurt by inflation?
6. What can cause inflation? What is hyperinflation?
7. What is a recession? How can slow money growth and tight credit lead to a recession?
8. What happens if the money supply grows too rapidly?
9. Describe the two main part of the Federal Reserve System: the Board of Governors and the district banks.
10. Why are Federal Reserve member chosen for 14 years?
11. How does a central bank's independence from political pressure affect its success at fighting inflation?
12. Who are the voting members of the FOMC
13. What is the job of the FOMC? What are open market operations?
14. What is the Federal Funds rate? Who is responsible for executing the FOMC's monetary policy?
15. What other tools can the Federal Reserve use to change the money supply? Describe each.

Handout 1: The Story of Monetary Policy Guided Reading Questions- ANSWER KEY

1. What is real GDP per capita (Examine all three parts: 1) real, 2) GDP, 3) per capita)?
Real means without inflation. GDP stands for gross domestic product, a measure of the size of an economy. Per capita means per person.
2. What is monetary policy? What is money?
Monetary Policy is the process by which the government, central bank, or monetary authority of a country controls the supply of money, availability of money, and rate of interest.
3. Why do we want the economy to grow? (2 reasons)
Increases standard of living for citizens living in a nations; Allows more people to find employment.
4. Who choose the members of the Board of Governors?
The US president.
5. What is inflation? What groups are hurt by inflation?
Inflation is an overall increase in the average price level. People on fixed incomes and people that have saved money are hurt by inflation.
6. What can cause inflation? What is hyperinflation?
An increase in the cost of resources or an increase in the demand for goods can cause inflation. Hyperinflation is inflation that is occurring at a very rapid rate.
7. What is a recession? How can slow money growth and tight credit lead to a recession?
A recession is a period of at least six months of decreasing real GDP. People will reduce spending if there is less money moving through the economy.
8. What happens if the money supply grows too rapidly?
Inflation can occur.
9. Describe the two main part of the Federal Reserve System: the Board of Governors and the district banks.
The Board of Governors is the central authority of the Federal Reserve System that meets in Washington, DC. The District Banks are the regional authorities responsible for regulating and supervising member banks.
10. Why are Federal Reserve member chosen for 14 years?
Board members have long term lengths to give them independence from political pressure.
11. How does a central bank's independence from political pressure affect its success at fighting inflation?
The more independent a central bank is, the more effective it is in carrying on monetary policy.
12. Who are the voting members of the FOMC
The Board of Governors and a rotating group of district bank presidents.
13. What is the job of the FOMC? What are open market operations?
The FOMC sets monetary policy. Open market operations are the buying and selling of government securities to increase or decrease the money supply.
14. What is the Federal Funds rate? Who is responsible for executing the FOMC's monetary policy?
The Federal Funds rate is the interest rate at which banks charge each other for short-term overnight loans. The trading desk at the New York Federal Reserve Banks.
15. What other tools can the Federal Reserve use to change the money supply? Describe each.
*Discount window: interest rate the Federal Reserve charges member banks for overnight loans
Reserve requirement: percentage of deposit that member banks must keep in reserve. The rest of a deposit may be then loaned out.*

Handout 2: Federal Reserve Interactive Simulation

A. *After playing once, answer the following questions in complete sentences:*

1. What is the federal funds rate?
2. How does the FOMC change the federal funds rate?
3. When did you decide to raise rates? Why? What was the result?
4. When did you decide to lower rates? Why? What was the result?
5. What was the federal funds rate when the game began? What was the highest it reached? What was it at the end of the game?
6. How did you do as the chairman of the Fed?

B. *Play the game again and answer the following questions in complete sentences:*

1. What happened differently this time?
2. When did you decide to raise rates? Why? What was the result?
3. When did you decide to lower rates? Why? What was the result?
4. How did you do as the chairman of the Fed this time?

C. *Play the game once more and answer the following questions in complete sentences:*

1. What happened differently this time?
2. When did you decide to raise rates? Why? What was the result?
3. When did you decide to lower rates? Why? What was the result?
4. How did you do as the chairman of the Fed this time?

Handout 3: Comic Book Assignment

Assignment: You will create a comic book about the Federal Reserve System and monetary policy. The comic book should display a coherent story with complimentary illustrations. You will integrate six (6) vocabulary words with their correct definitions from today’s lesson. The vocabulary words you can choose from are:

- Federal Reserve System
- Board of Governors
- Federal Reserve Banks
- FOMC
- Fractional Reserve Banking
- Monetary Policy
- Open-market operations
- Reserve requirement
- Discount rate
- Expansionary monetary policy (Easy-money)
- Contractionary monetary policy (Tight-money)
- Recession
- Inflation

Rubric for Comic Book Assignment

CATEGORY	4	3	2	1
Organization	The comic is well-organized with a coherent story line. There is a clear beginning, middle, and end.	The comic book is organized with a story line. There is a beginning, middle and end.	The comic book is not organized and has very little story. There is no clear beginning, middle, and end.	The comic has no organization or story line.
Grammar	There are no grammatical mistakes in the comic book.	There are few grammatical mistakes in the comic book.	There are multiple grammatical mistakes in the comic book.	There are many grammatical mistakes in the comic book.
Content - Accuracy	All facts in the comic book are accurate.	Most of the facts in the comic book are accurate.	Some of the facts in the comic book are accurate.	None of the facts in the comic book are accurate.
Attractiveness & Organization	The comic has exceptionally attractive formatting and well-organized information.	The comic book has attractive formatting and well-organized information.	The comic book has well-organized information.	The comic book 's formatting and organization of material are confusing to the reader.
Graphics/ Pictures	Graphics go well with the text and there is a good mix of text and graphics.	Graphics go well with the text, but there are so many that they distract from the text.	Graphics go well with the text, but there are too few and the comic book seems "text-heavy".	Graphics do not go with the accompanying text or appear to be randomly chosen.
Vocabulary	The author correctly uses 6 vocabulary words.	The author correctly used 4-5 vocabulary words.	The author correctly used 2-3 vocabulary words.	The author correctly used less than 2 vocabulary words.

Practice EOC Multiple Choice Questions

1. Monetary policy in the United States is the responsibility which government institution?
 - A) U.S. Treasury.
 - B) Federal Reserve.
 - C) Internal Revenue Service.
 - D) Office of Management and Budget.
2. Which **best** describes the fundamental objective of monetary policy?
 - A) a rapid pace of economic growth.
 - B) a money supply which is based on the gold standard.
 - C) a full-employment, noninflationary level of total output.
 - D) a balanced-budget consistent with full-employment.
3. Which **best** explains how the Federal Reserve alters the amount of the nation's money supply?
 - A) reducing the liabilities of the banking system.
 - B) controlling the assets of the nation's largest banks.
 - C) minting coins and printing currency that is distributed to banks.
 - D) manipulating the size of excess reserves held by commercial banks
4. Which statement **most accurately** explains the role of the Open Market Committee of the Federal Reserve System (FED)?
 - A) provides advice on banking policy to the FED.
 - B) monitors regulatory banking laws for member banks.
 - C) sets policy on the sale and purchase of government bonds by the FED.
 - D) follows the actions and operations of financial markets to keep them open and competitive.
5. Which action would **most likely** increase the excess reserves of commercial banks?
 - A) The central banks sell bonds to the public.
 - B) The central banks sell bonds to commercial banks.
 - C) The central banks buy bonds from commercial banks.
 - D) The Board of Governors increases the discount rate.
6. The economy is experiencing high unemployment and a low rate of economic growth and the Fed decides to pursue an easy money policy. Which action by the Fed would be most consistent with this policy?
 - A) buying government securities
 - B) selling government securities
 - C) raising the reserve ratio
 - D) raising the discount rate
7. What consumer behavior is the Federal Reserve Board trying to encourage when it implements a loose monetary policy?
 - A) increased saving and reduced spending
 - B) decreased saving and increased spending
 - C) increased saving and spending
 - D) decreased saving and spending

8. Which of the following are true statements about the federal funds rate?

I. It is the same thing as the discount rate.

II. It is the interest rate that banks charge each other for short-term loans.

III. It is influenced by open market operations.

A) I only

B) II only

C) III only

D) I and II only

E) II and III only

9. Which of the following does the Federal Reserve use **most often** to combat recession?

A) Selling securities

B) Buying securities

C) Reducing the reserve requirement

D) Increasing the discount rate

E) Increasing the federal funds rate

Practice EOC Multiple Choice Questions- ANSWER KEY

1. **B)** Federal Reserve.
2. **C)** a full-employment, noninflationary level of total output.
3. **D)** manipulating the size of excess reserves held by commercial banks
4. **C)** sets policy on the sale and purchase of government bonds by the FED.
5. **C)** The central banks buy bonds from commercial banks.
6. **A)** buying government securities
7. **B)** decreased saving and increased spending
8. **E)** II and III only
9. **B)** Buying securities