

Workshop 7

Monetary and Fiscal Policy

Description

The government uses monetary and fiscal policy to manage the economy. Monetary policy and fiscal policy are tools to increase or decrease aggregate demand and, to some extent, increase aggregate supply. Fiscal policy is conducted by the President and Congress and consists of changes in government taxes and spending. Monetary policy is conducted by the Federal Reserve Board and consists of increasing or decreasing the money supply through open-market operations, changes in the discount rate, and changes in reserve requirements. Changes in the money supply affect interest rates, and changes in interest rates affect investment, consumption, unemployment, inflation, and economic growth.

Ted Hartsoe discusses fiscal policy tools with his students at Choate Rosemary Hall in Wallingford, Connecticut. In the next segment, Greg Smith's students at Hastings-on-Hudson High School in New York make posters to illustrate the tools the Federal Reserve uses to conduct monetary policy. Next, Eliot Scher's students at White Plains High School in New York role-play as members of the Federal Open Market Committee to analyze the goals and tasks of monetary policy. Then Ted Hartsoe uses a simulation with a balance sheet and pennies to illustrate money creation. Finally, Eliot Scher's students participate in their first "Fed Challenge" competition.

Key Concepts

- Aggregate demand is the sum of the consumer, investor, government, and foreign demand in the economy at various price levels.
- Aggregate supply is the sum of the goods and services that will be supplied at various price levels.
- Fiscal policy consists of changing government spending and tax revenues in order to promote full employment, price stability, and economic growth.
- Money is anything that is generally accepted as final payment for goods and services. Money serves as a medium of exchange, a standard of value, and a store of value.
- Monetary policy consists of changes in the supply of money and availability of credit initiated by the Federal Reserve in order to promote price stability, full employment, and economic growth.

Voluntary National Content Standards in Economics

The activities shown in this workshop illustrate the following standards:

- Money makes it easier to trade, borrow, save, invest, and compare the value of goods and services. (Content Standard 11)
- Interest rates, adjusted for inflation, rise and fall to balance the amount saved with the amount borrowed, which affects the allocation of scarce resources between present and future uses. (Content Standard 12)
- A nation's overall levels of income, employment, and prices are determined by the interaction of spending and production decisions made by all households, firms, government agencies, and others in the economy. (Content Standard 18)
- Federal government budgetary policy and the Federal Reserve System's monetary policy influence the overall levels of employment, output, and prices. (Content Standard 20)

Workshop Session

Getting Ready (20 minutes)

- Appoint a participant to make four signs on 8.5" x 11" sheets of paper. The signs should say, "Increase Aggregate Demand," "Decrease Aggregate Demand," "Increase Aggregate Supply," and "Decrease Aggregate Supply." Put the signs on the floor in different areas of the room. *Make sure there is space between the signs.*
- Have each participant choose an economic policy or an economic event from the list below. Each person will make a sign indicating his or her policy or event and hold it before the activity starts. Feel free to add or subtract policies and/or events in accordance with the number of participants. However policies or events are chosen, each participant should select one before making his or her sign and carrying it to the appropriate place on the floor.
 - Congress cuts taxes mainly for the poor.
 - Congress cuts the capital gains tax.
 - OPEC raises oil prices.
 - New technology increases productivity.
 - The Federal Reserve buys government securities.
 - The Federal Reserve sells government securities.
 - Government spending increases.
 - The Federal Reserve lowers the discount rate in order to lower other interest rates.
 - More people begin taking early retirement.
 - The money supply increases.
 - Education and training levels increase for most new workers.
 - A new invention makes solar energy the least expensive way to heat homes and fuel cars.
 - Consumers are pessimistic about the future.
- Each participant should stand by the sign on the floor that indicates his or her policy's or event's effect on aggregate demand or aggregate supply.
- Discuss what happened.
 - Did any participants go to the wrong sign? Why did they do this?
 - Did some participants have to split their personalities and go to two signs? What could account for this?
 - Can government control all the variables that affect aggregate demand and supply? Why or why not?

Watching and Discussing the Video (95 minutes)

1. View Section One (fiscal policy) and Section Two (monetary policy). (16 minutes)
2. The participants should form small groups and answer the questions in Lesson 7.1, "The Tools of Fiscal Policy." (16 minutes)

Workshop Session, cont'd.

3. In the same small groups, participants should discuss ways to help students understand expansionary and contractionary fiscal policy. (5 minutes)

- How did Ted get the monetary and fiscal policy ideas across to his students?
- What teaching strategies do you use to accomplish this goal?

4. View Section Three (open-market operations), Section Four (how money works), Section Five (Fed Challenge practice), and Section Six (Fed Challenge). (43 minutes)

5. In small groups, read Lesson 7.2, "Money, Interest, and Monetary Policy," and discuss the following questions. (15 minutes)

- How does the activity with popcorn seeds and kidney beans illustrate inflation?
- How does the money-creation activity (Activity 2) compare to Ted's activity on money creation? What activities do you use to illustrate money creation?
- Greg Smith's students use posters to illustrate the effects of monetary policy. What makes this activity effective? What activities do you use to show the effects of monetary policy?
- Eliot Scher uses "The Fed Challenge" competition to teach monetary policy. What are the advantages and disadvantages of using a competition like this in a one-semester high school economics course?

Facilitator: Because the lesson is long, you may want to assign this to participants to read before coming to the workshop session.

Closure (5 minutes)

Is the following statement true, false, or uncertain. Why?

"The President can fix the economy."

Lesson 7.1: The Tools of Fiscal Policy

"The Tools of Fiscal Policy" is from *Advanced Placement Economics: Macroeconomics: Student Activities*, by John S. Morton, National Council on Economic Education, 1996.

Changes in federal taxes and federal government spending designed to affect the level of aggregate demand (and in some cases aggregate supply) in the economy are called *fiscal policy*.

Aggregate demand is the total amount of spending on goods and services in the economy during a stated period of time. Aggregate demand consists of consumer spending, government spending, and investment spending.

Aggregate supply consists of the total amount of goods and services available in the economy during a stated period of time.

During a recession, aggregate demand is usually too low to bring about full employment of resources. Government can increase aggregate demand by spending more, cutting taxes, or doing both. These actions often result in budget deficits because the government spends more than it collects in taxes. Increasing government spending without increasing taxes or decreasing taxes without decreasing government expenditures should increase aggregate demand. Such an expansionary fiscal policy should increase employment, inflation, or both.

If the level of aggregate demand is too high, government can reduce its spending, increase taxes, or do both. These actions should result in a larger budget surplus or a smaller budget deficit than existed before. Such a contractionary fiscal policy should lower the level of aggregate demand, and the economy will experience less employment of its resources, less inflation, or both.

Part A.

Decide whether each of the following fiscal policies of the federal government is expansionary or contractionary. Write *expansionary* or *contractionary* and explain the reasons for your choice.

1. The government cuts business and personal income taxes and increases its own spending.

2. The government increases the personal income tax, Social Security tax, and corporate income tax. Government spending stays the same. _____
3. Government spending goes up while taxes remain the same. _____
4. The government reduces the wages of its employees while raising taxes on consumers and business. Other government spending remains the same. _____

Lesson 7.1, cont'd.

Part B.

Test your understanding of fiscal policy by completing the first four questions in the table "Effects of Fiscal Policy." All your choices for each situation must be consistent, that is, you should choose either an expansionary or contractionary fiscal policy. Fill in the spaces as follows:

Column A: Objective for Aggregate Demand

Write *increase* if you wish to increase aggregate demand.

Write *decrease* if you wish to decrease aggregate demand.

Column B: Action on Taxes

Write *increase* if you wish to increase taxes.

Write *decrease* if you wish to decrease taxes.

Column C: Action on Government Spending

Write *increase* if you wish to increase government spending.

Write *decrease* if you wish to decrease government spending.

Column D: Effect on Budget

Write *toward deficit* if you wish to increase the deficit (or reduce the surplus).

Write *toward surplus* if you wish to reduce the deficit (or increase the surplus).

Effects of Fiscal Policy

	(A) Objective for Aggregate Demand	(B) Action on Taxes	(C) Action on Government Spending	(D) Effect on Budget
1. The national unemployment rate rises to 12%.				
2. Inflation is strong and its rate is now 14% per year.				
3. Surveys show consumers are losing confidence in the economy, retail sales are weak, and business inventories are increasing rapidly.				
4. Business sales and investment are expanding rapidly, and economists believe strong inflation lies ahead.				
5. Inflation persists while unemployment stays high.				

Suggested Solutions—Lesson 7.1: The Tools of Fiscal Policy

Part A.

1. **Expansionary.** A personal tax cut increases consumer demand. A business tax cut increases investment demand. An increase in government spending increases government demand.
2. **Contractionary.** The tax increases reduce consumer and investment demand. Government demand remains the same.
3. **Expansionary.** Higher government spending without a corresponding rise in tax receipts increases total demand in the economy.
4. **Contractionary.** Lowering government employees' wages decreases government demand. Higher taxes decrease consumer and investment demand.

Part B.

Effects of Fiscal Policy

	(A) Objective for Aggregate Demand	(B) Action on Taxes	(C) Action on Government Spending	(D) Effect on Budget
1. The national unemployment rate rises to 12%.	Increase	Decrease	Increase	Toward deficit
2. Inflation is strong and its rate is now 14% per year.	Decrease	Increase	Decrease	Toward surplus
3. Surveys show consumers are losing confidence in the economy, retail sales are weak, and business inventories are increasing rapidly.	Increase	Decrease	Increase	Toward deficit
4. Business sales and investment are expanding rapidly, and economists believe strong inflation lies ahead.	Decrease	Increase	Decrease	Toward surplus
5. Inflation persists while unemployment stays high.	This question is designed to show that traditional fiscal policy doesn't provide solutions to the problems presented by the simultaneous presence of inflation and excessive unemployment. Use this question to examine the principal alternatives to demand management economics, which are given in the discussion above.			

Lesson 7.2: Money, Interest, and Monetary Policy

"Money, Interest, and Monetary Policy" is from *Focus: High School Economics*, by Michael W. Watts, Sarapage McCorkle, Bonnie T. Meszaros, and Mark C. Schug, National Council on Economic Education, 2001.

Introduction

Growth of the money supply is related to inflation. This lesson examines how money supply growth rates can lead to inflation when they outpace the growth in output. To maintain price stability and steady rates of economic growth, the Federal Reserve System tries to control the supply of money. Changes in the money supply lead to changes in interest rates which, in turn, affect the availability of credit and national levels of spending and output.

Concepts

- Money supply
- Inflation
- Open market operations
- Reserve requirements
- Discount rate
- Interest rate

Content Standard

- Federal government budgetary policy and the Federal Reserve System's monetary policy influence the overall levels of employment, output, and prices.

Benchmarks

In the long run, inflation results from increases in a nation's money supply that exceed increases in its output of goods and services.

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.

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.

Objectives

- Students describe how changes in the money supply can affect the average level of prices.
- Students explain how the Federal Reserve System uses the major tools of monetary policy to regulate the economy's money supply.
- Students explain the chain of events that occur in the economy when the Federal Reserve System engages in a specific monetary policy.

Lesson Description

Students participate in two simulations. In the first, they discover the effects of excessive money creation on product prices. In the second simulation, they learn how the Federal Reserve System uses different tools of monetary policy to adjust the amount of money in the economy. Then they learn how monetary policies affect the economy as a whole.

Lesson 7.2, cont'd.

Time Required

Two class periods. Day One: procedures 1-15. Day Two: procedures 16-22 through Assessment.

Materials

- Popcorn seeds and kidney beans—enough to give each student 10 seeds and 5 beans
- Three identical bags of candy
- Activity 1: Money Matters Simulation Questions, one per student
- Activity 2: Money Creation, 10 copies cut in thirds, and 10 additional copies of the \$10,000 bill
- A paper tent sign with the word “BANK” written on both sides
- Visual 1: Monetary Policy and the Demand for Loanable Funds

Procedures

1. Ask students how many of them would be better off with more money. (Most will raise their hands.) Tell them that may be true for each of them, but it may not be true for everyone. Explain that the “fallacy of composition” (what’s true for the individual is also true for the whole) is a common pitfall in economic thinking. Announce that you will conduct a simulation to determine if everyone is better off if everyone receives more money. You will hold three auctions for three identical bags of candy, one sold in each round.
2. Give each student five popcorn seeds, and explain that for this activity each seed is worth 10 cents. Calculate the size of the classroom **money supply** (50 cents x number of students) and write it on the chalkboard. Sell the first bag of candy to the highest bidder, collect the “money” from the winning bidder, and write the price paid (in a dollar equivalent) on the chalkboard. Don’t be concerned if some students pool their “money” during the bidding; this adds to the excitement of the auction.
3. Distribute the remaining popcorn seeds (5 per student), reminding students that each seed is worth 10 cents, including any they did not spend in the first auction. Write the size of the money supply on the board ($\$1 \times$ the number of students, minus the amount paid by the winner of the first auction). Conduct the second auction. Give the second bag of candy to the highest bidder, collect the price from the winning bidder, and write the price on the board.
4. Expand the money supply again to include the popcorn seeds students still have *and* the kidney beans that you distribute now (5 per student). The kidney beans are valued at \$1 each. Calculate the money supply and write the number on the board ($\$6 \times$ the number of students, minus what was paid by the winners of the first two auctions). Auction the third bag of candy to the highest bidder, and write the price on the board. Note that the rapid increase in the classroom money supply, when the amount of goods available to be consumed in each period remained constant, drove up the price of candy. Explain that the same thing would have happened if there had been more than one kind of good auctioned in each round, as long as the total quantity of goods in each round remained fixed while the money supply increased rapidly.
5. Ask students to explain the fallacy of composition in thinking that everyone will be better off if everyone has more money, based on their experience with the simulation. (*There was a larger money supply, but there was still the same amount of goods. The amount of money alone had no impact on the amount of goods available, only on the price of the goods.*) Ask for a term that students might have heard to describe this situation. (*Inflation*)
6. Define **inflation** as an increase in the average price of goods and services in the economy. Explain that, during the second and third auctions, students witnessed the fundamental long-run source of inflation in an economy—the supply of money growing faster than the supply of goods and services available for purchase. This is often described as too much money chasing too few goods.

Lesson 7.2, cont'd.

7. Distribute a copy of Activity 1 to each student to reinforce the understanding of inflation developed in the auctions. Have students complete the worksheet independently, and then discuss students' answers in class. (Answers are provided below.) Point out that the long-run growth in the production of goods and services in the U.S. economy averages 2% to 4% a year. A long-term growth in the money supply of about the same rate would have a neutral effect on prices, assuming people don't change their spending and saving behavior for other reasons. (Over the long run, however, people do change their spending and saving behaviors as a result of institutional factors, such as being paid more or less frequently, and to some extent as a result of changes in other factors such as income levels and interest rates.)

Answers to Activity 1

- a. What happened to the price of the item auctioned between the first and third auctions? (*It increased.*)
 - b. What happened to the amount of "money" in the classroom between the first and third auctions? (*It increased.*)
 - c. What gave the seeds and beans value? (*They could be used to buy something. The money's real value depended on the amount of goods it could buy.*)
 - d. When the students had more money to spend, what happened in the successive auctions? (*Prices increased.*)
 - e. What do you think would have happened to the price if the number of items offered for sale in the third auction increased from one to 100? (*Decrease in average price*)
 - f. Under what conditions is increasing the supply of money inflationary? (*When the increase in the money supply greatly exceeds the increase in the number of goods and services available*)
 - g. Under what conditions is increasing the supply of money not inflationary? (*When the increase in the money supply is not greater than the increase in the number of goods and services, or if people choose not to spend their larger money holdings*)
8. Summarize that when the money supply increases, it is important that it grow at an appropriate rate—not too fast and not too slow. Explain that the students will participate in an activity to show how the Federal Reserve System can determine, at least to a large extent, how fast or how slowly the U.S. money supply grows. **Note to teacher:** Students can learn more about the Federal Reserve System at www.FederalReserveEducation.org.
9. Inform students that an independent agency of the federal government, the Federal Reserve System (the Fed), is responsible for regulating the U.S. money supply. In doing this, the Fed influences **interest rates** (the price of loanable funds) in the economy. To demonstrate how the Fed regulates the money supply, divide the class into thirds. Using materials prepared from Activity 2, give each student in the first group a \$10,000 U.S. Treasury bond; each student in the second group \$10,000 in currency; and each student in the third group \$10,000 in a checking account.
10. Explain that the students with bonds have each lent money to the U.S. Treasury. The Treasury bond is an IOU from the government, acknowledging the debt and promising to repay the bondholder, with interest, at a certain time. The bond is *not* money, however, because it can't be widely used to purchase goods and services from people or in stores. Students with \$10,000 in a checking account or in currency have money that *can* be used to buy goods and services; only the forms in which they hold the money differ. Point out that students have probably seen people buy things with currency and checks, but not with bonds.
11. Ask all students with money (checking deposits or currency) to raise their hands. Count the number of hands and multiply by \$10,000 to determine the initial amount of money in the classroom. Write this number on the chalkboard under the heading of "Money Supply."

Lesson 7.2, cont'd.

12. Tell four students with bonds to assume that they want to buy something, so they must get money by selling their bonds. Tell four students with money (currency or checks) to assume that they now want to buy bonds in order to earn interest. Have the eight students exchange their bonds and money. Ask the class if there has been any change in the amount of money in the classroom. (*No—different people hold money and bonds, but the total amounts have not changed. Demonstrate with another show of hands, counting those who hold currency and checks.*)

13. Tell four more students with bonds that they have decided they want to get money by selling their bonds. Announce that you will act as the Federal Reserve System in the rest of the activity. The Fed has decided to buy these four bonds. Give each of the four students \$10,000 in currency in exchange for the \$10,000 bond. Explain that the Federal Reserve System buys bonds when it engages in an expansionary monetary policy. Explain the following:

- a. What has happened now to the amount of money in the classroom? (*It increased by \$40,000. Demonstrate with another show of hands.*)
- b. Where did the money come from? (*The Federal Reserve*)
- c. Where does the Federal Reserve get the money? (*The Fed created the money out of thin air, in effect printing money, although in practice it simply pays with a check, not by issuing additional currency.*)
- d. When the Fed buys bonds, it engages in expansionary monetary policy. Why is it called “expansionary”? (*The money supply increases, or expands.*)

14. Reverse procedure 13; that is, have the Fed sell bonds to four students in exchange for money (currency or checks) from the students. Once again, ask all students with money to raise their hands. Count hands and multiply by \$10,000 to show that when the Fed sells bonds, that reduces, or contracts, the money supply.

15. Tell students that the Fed buying and selling government bonds is called **open market operations**, and that this is the most important tool used by the Fed to regulate the money supply. Open market operations are used on a week-to-week basis to make both large and small adjustments to the nation’s money supply.

16. Ask all students with checking account money to raise their hands. Multiply the number of hands by \$10,000, and write this number on the chalkboard under the heading “Bank Deposits.” Have a pile of currency equal to this amount with the sign marked “BANK” beside it. Tell the students that the bank has their money on deposit and would like to lend some of it.

17. Explain that the amount the bank can lend depends on the reserve requirements set for banks by the Federal Reserve. The **reserve requirement** is the amount of deposits that a bank must keep “on reserve.” These funds may not be lent. Point out that if the reserve requirements were 100%, none could be lent; if it were 25%, 75% could be lent. Announce that in this simulation, the Fed’s reserve requirement for banks is initially 50%. (The actual reserve requirement is much less than 50%.) Then lend half the bank’s checking account deposits to a student, by giving the student that much money in a checking account. Have the student sign an IOU for the amount of the loan. Explain that banks don’t keep every dollar deposited in the bank in the vault—they make loans to earn money for the bank and its depositors, charging interest on those loans. Because depositors don’t all show up at the bank at the same time trying to withdraw their money, banks can use most of their deposits to make loans, subject to the Fed’s reserve requirements and following sound banking practices, which are monitored by other state or federal banking agencies.

Ask the class the following questions:

- a. How much money is in the classroom now? (*Count all currency and checking account balances.*)
- b. By how much has the money supply increased? (*By the amount of the loan*)
- c. What action caused the increase in the money supply? (*The bank’s loan*)
- d. If the Federal Reserve cut the reserve requirement, what could the bank do? (*Make more loans and expand the money supply even more*)

Lesson 7.2, cont'd.

Summarize by explaining that actions by the Federal Reserve that change the reserve requirement will influence the money supply. A decrease in the reserve requirement is an **expansionary monetary policy**. An increase in the reserve requirement is a **contractionary monetary policy**.

18. Announce that the bank made too many loans yesterday and is \$500,000 short of meeting its reserve requirement. Explain that the Federal Reserve lends money to banks in these circumstances, so they can meet their reserve requirements, but it charges banks interest on these loans. The interest on these loans to banks from the Federal Reserve is known as the **discount rate**. Ask if the bank would borrow this money from the Federal Reserve if it had no better way to meet its reserve requirements? *(Yes, although banks usually try to avoid such loans. But the higher the Federal Reserve sets the discount rate, the more it costs banks to borrow, and the greater their incentive to limit their lending to meet their reserve requirements. Therefore, raising the discount rate is a contractionary monetary policy; lowering the discount rate is an expansionary monetary policy.)*

19. Tell students that although the reserve requirement and the discount rate are monetary policy tools the Federal Reserve sometimes uses, open market operations are the monetary policy tool most frequently used by the Fed. By buying and selling government securities (bonds), the Fed changes the nation's money supply. Changes in the money supply affect the market for loanable funds.

20. Display Visual 1. Explain that this graph shows the effect of a change in the money supply on the quantity of loanable funds demanded by individuals, businesses, and government agencies (local, state, or federal) that want to borrow money. The interest rate is the price of loanable funds. Those who lend money receive interest; those who borrow pay interest.

21. Remind students that when the Fed buys bonds (as in the classroom situation), the money supply increases. Discuss the following.

- a. When the supply of loanable funds increases, what happens to the interest rate? *(It decreases.)*
- b. Would people who want to buy cars, houses, and durable goods be more or less encouraged to borrow money? *(More)*
- c. Would businesses that want to build factories or purchase equipment be more or less encouraged to borrow money? *(More)*
- d. If people and businesses borrow more money at the lower interest rate, what will happen to the level of spending in the economy? *(It will increase.)*
- e. If people are spending more money, what will businesses want to do? *(Produce more goods and services)*
- f. If businesses begin to produce more goods and services, what is happening in the economy? *(The real gross domestic product is increasing; that is, more output is produced and more people have jobs.)*
- g. If the money supply increases faster than the rate at which output is growing, what will result? *(Inflation)*
- h. What happens if the Fed sells bonds? *(The money supply decreases, interest rates rise, spending and production of goods and services decrease)*

22. Discuss the following: When would the Fed want to conduct an expansionary monetary policy? *(When the economy is facing a recession, or not growing as rapidly as the Fed believes it should)* When would the Fed want to conduct a contractionary monetary policy? *(When the economy is experiencing high rates of inflation, or growing more rapidly than the Fed believes it should)*

Lesson 7.2, cont'd.

Closure

1. If the money supply is growing faster than the production of goods and services in our economy, what will be the result? (*Inflation—too many dollars chasing too few goods*)
2. What is inflation? (*An increase in the average price of goods and services in the economy*)
3. What is the primary role of the Federal Reserve System? (*To regulate the money supply in order to keep inflation and unemployment low, and promote steady economic growth*)
4. What are open market operations of the Fed? (*Buying and selling bonds or other financial securities issued by the federal government*)
5. If the Fed sells government bonds, what type of monetary policy is it pursuing? (*Contractionary*)
6. If the Fed buys government bonds, what type of monetary policy is it pursuing? (*Expansionary*)
7. What is the reserve requirement? (*The percentage of deposits commercial banks must keep “on reserve” with the Fed, which are not available for loans*)
8. Is a decrease in the reserve requirement contractionary or expansionary? (*Expansionary*)
9. What is the discount rate? (*The interest rate paid by commercial banks if they borrow from the Fed*)
10. Which monetary policy tool does the Fed use most often? (*Open market operations*)
11. Describe the chain of events in the economy when the Fed engages in an expansionary monetary policy using open market operations. (*The Fed purchases government bonds, the money supply increases, interest rates fall, people and businesses borrow and spend more money, the production of goods and services [real GDP] increases*)

Assessment

1. Tell students to assume the role of members of the Federal Reserve Board. They are charged with controlling the nation's money supply to achieve full employment and stable prices in the economy. In groups of 12 students (corresponding to the size of the Fed's Open Market Committee, the FOMC), have the students prepare a proposal recommending monetary policy actions designed to correct problems with spending, employment, and average prices caused by high interest rates. Specifically, different groups should assume one of the following scenarios for the economy or, if time permits, have each group consider all three scenarios:
 - a. The national economy is sluggish as a result of tight (contractionary) monetary policies over the past two years.
 - b. The economy is growing rapidly. Many economists believe there will be shortages of skilled labor and key industrial inputs, such as steel and electric power.
 - c. The economy is experiencing 10% inflation per year.

Have each group identify and list the most likely problems with spending, employment, and average prices under the different scenarios. What monetary policy does each group propose? How does each group expect the monetary policy it proposes to solve the problems the group identified with spending, employment, and average prices? Have the groups present their recommendations to the full class, compare their reasoning, and try to agree on the most appropriate set of monetary policies for each scenario.

2. Have students read the business section of any large daily newspaper and find articles on interest rates. Have students, individually or in small groups, speculate on the actions that the Fed might have taken to produce the effect on interest rates described in the article. Have some students present the results of their investigations to the rest of the class for discussion.

Money Matters Simulation Questions

- a. What happened to the price of the item auctioned between the first and third auctions?

- b. What happened to the amount of “money” in the classroom between the first and third auctions?

- c. What gave the seeds and beans value?

- d. When the students had more money to spend, what happened in the successive auctions?

- e. What do you think would have happened to the price if the number of items offered for sale in the third auction increased from one to 100?

- f. Under what conditions is increasing the supply of money inflationary?

- g. Under what conditions is increasing the supply of money not inflationary?

Money Creation

\$10,000
U.S. Treasury Bond
Face Value Will Be Paid on July 31, 2011
7 1/2% Interest Paid Quarterly

\$10,000 THE UNITED STATES OF AMERICA \$10,000
\$10,000
\$10,000 TEN THOUSAND DOLLARS \$10,000

Your Name & Address	Check # 0001
Pay to the Order of	Date
YOU	\$ 10,000.00
<i>Ten thousand and no/100</i>	dollars
Your Bank For: 653276014	Signature 223600122 0001

Monetary Policy and the Demand for Loanable Funds

