Workshop 6
The Building Blocks of Macroeconomics

Description

Macroeconomics is the study of the behavior of the economy as a whole—and the whole often behaves differently than the individual parts.

This workshop illustrates activities that teach about the basic measurement tools of any economy: gross domestic product (GDP), unemployment, and inflation. These measurement tools can seem abstract, but GDP and economic growth, unemployment, and inflation can have a profound effect on students' future welfare, their job opportunities, the level of their prospective earnings, and the prices they will pay for the things they buy.

Brett Hardin introduces macroeconomics to his students at Campbell High School in Smyrna, Georgia, using an economics newspaper he created, the *Econo Post*. Next, Anna Vanlandingham's class at Lake Mary High School in Florida learns the components of GDP to see how economists arrive at several definitions of economic growth. Brett Hardin's class discovers that there are actually several different types of unemployment and that statistics often do not capture the true costs of unemployment to the people who are unemployed. Eliot Scher's students at White Plains High School in New York learn about inflation by looking at the changing costs of everyday items. We return to Brett's class to explore the impact of inflation on certain types of employees and businesses. And in the final segment, Ted Hartsoe shows his students at Choate Rosemary Hall in Wallingford, Connecticut, how price indexes help us measure inflation.

Inflation creates winners and losers. Eliot Scher's class at White Plains High School in New York examines the effects of inflation, while Ted Hartsoe's students at Choate Rosemary Hall in Wallingford, Connecticut, develop a teenage price index to learn how inflation is measured.

Key Concepts

- Gross domestic product (GDP) is the market price of all final goods and services produced in one year. It is the most important measurement of production and output.
- Real GDP is adjusted for price changes; nominal GDP is not adjusted for price changes.
- Unemployment occurs when people who are willing and able to work cannot find jobs at satisfactory wage rates.
- The unemployment rate represents the percentage of the labor force that cannot find work on acceptable terms.
- Unemployment is classified into four categories: frictional, cyclical, structural, and seasonal.
- Inflation is a general increase in the overall price level, which is measured by price indexes.
- Generally, savers, lenders, and people on fixed incomes are hurt by unanticipated inflation, whereas borrowers gain from unanticipated inflation.

Voluntary National Content Standards in Economics

The activities shown in this workshop illustrate the following standards:

- 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)
- 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. (Content Standard 19)

Workshop Session

Getting Ready (5 minutes)

What implications does the following quotation have on what macroeconomic ideas should be taught to high school students?

> "There is a compelling reason for learning about economics which I tell my students. Economics is a large part of life in this country. If you read the daily newspaper, a large proportion of the stories in the paper are about economics. They are about economic policy, and they are about the behavior of the economy. To live in this country and not understand all this is just to miss a good deal of the excitement of being there." (Herbert Stein, Former Chair, President's Council of Economic Advisors)

Appoint a leader to lead the group in a discussion of the following questions about the quotation:

- What specific economic concepts must students understand if they are to understand the macroeconomy?
- Which economic indicators must students understand if they want to know how the economy is performing?

Watching and Discussing the Video (110 minutes)

1. View Section One (macroeconomics), Section Two (GDP), and Section Three (unemployment). (28 minutes)

2. Form groups and answer the questions in Lesson 6.1, "All About GDP." (23 minutes) Discuss the answers to the following questions:

   - What techniques did Anna Vanlandingham use to describe what is counted and what is not counted in GDP? Has anyone used other techniques?
   - Do worksheets like Lesson 6.1 or discussions like Anna's work better? Do you need both?
   - True, false, or uncertain, and why? "A woman diminishes GDP by marrying her cook."
   - Why is real GDP such an important economic indicator?
   - In what ways is real GDP a good measure of the economy?
   - In what ways does real GDP misrepresent economic activity?

3. In groups, discuss ways to teach about unemployment. (10 minutes) Discuss the answers to these questions:

   - How did Brett Hardin get across the different types of unemployment?
   - Brett used headlines to teach economic concepts. What techniques do you use to relate these economic concepts to what is going on in the economy today?
   - What difference does it make if students know the difference between structural and cyclical unemployment?
   - True, false, or uncertain, and why? "Employment and unemployment can rise together."

4. View Section Four (inflation), Section Five (effects of inflation), and Section Six (measuring inflation). (29 minutes)

Workshop Session, cont'd.

5. Form groups and answer the questions in Lesson 6.2, "Who Is Hurt and Who Is Helped by Inflation?" (20 minutes) Discuss the answers to the following questions:

- How did Brett engage the students in actively learning about who is helped and who is hurt by inflation?
- Inflation is a rise in the general price level—not the rise of a single price. How did Eliot Scher and Ted Hartsoe get this idea across to their students? Did the students get it?

Closure (5 minutes)

Citizens must understand how economic activity is measured and how government policies affect economic growth, unemployment, and inflation if they are to vote for candidates who propose alternative economic policies. Yet macroeconomic policy can seem rather abstract and remote to students. How can they be shown the effects of macroeconomic decisions on their own lives? Brainstorm and discuss ideas for showing how these macroeconomic policies affect students' lives. Some possible answers are:

- Affect present and future job opportunities
- Affect future earning
- Affect the prices of things they buy
- Enable them to predict the economic consequences of proposed government policies and make informed choices among political candidates and public policy proposals

Lesson 6.1: All About GDP

"All About GDP" is from *Advanced Placement Economics: Macroeconomics: Student Activities,* by John S. Morton, National Council on Economic Education, 1996.

Part A. Is This Counted as Part of GDP?

Which of the following are *included* and which are *excluded* in calculating this year's GDP? Explain your decisions.

1. A monthly check received by an economics student who has been granted a government scholarship.
2. A farmer's purchase of a new tractor.
3. A plumber's purchase of a used truck.
4. The cashing of a U.S. government bond.
5. The services of a mechanic in fixing the radiator on his car.
6. A Social Security check paid by the government to a retired store clerk.
7. An increase in business inventories.
8. The government's purchase of a new submarine for the Navy.
9. A barber's income from cutting hair.
10. Income received from the sale of Nike stock.

Part B. GDP: Is It Counted and Where?

For each of the following items, write one of the following in the space provided.

C if the item is counted as *consumption.*

I if the item is counted as *investment.*

G if the item is counted as *government.*

N if the item is *not counted* in GDP.

1. You spend $7.00 to attend a movie. _______
2. A family pays a contractor $100,000 for a house he built for them this year. _______
3. A family pays $75,000 for a house built three years ago. _______
4. An accountant pays a tailor $175 to sew a suit for her. _______
5. The government increases its defense expenditures by $1,000,000,000. _______

6. The government makes a $90 Social Security payment to a retired person. _______

7. You buy General Motors stock for $1,000 in the stock market. _______

8. At the end of a year, a flour-milling firm finds that its inventories of grain and flour are $10,000 above the amounts of its inventories at the beginning of the year. _______

9. A homemaker works hard caring for her spouse and two children. _______

10. Ford Motor Company buys new auto-making robots. _______

11. You pay $300 a month to rent an apartment. _______

12. Apple Computer Company builds a new factory. _______

13. R.J. Reynolds Company buys control of Nabisco _______.

14. You buy a new Toyota that was made in Japan. _______

15. You pay tuition to attend college. _______

Part C. Why Are Things Counted or Not Counted in GDP?

1. We count only the final retail price of a new good or service in GDP. Why?

2. A purely financial transaction will not be counted in GDP. Why not?

3. When a homeowner does home improvement work, the value of the labor is not counted in GDP. Why not?

Suggested Solutions—Lesson 6.1: All About GDP

Part A. Is This Counted as Part of GDP?

1. **No,** transfer payment
2. **Yes,** investment
3. **No,** used good
4. **No,** transfer payment
5. **No,** not a market activity
6. **No,** transfer payment
7. **Yes,** investment
8. **Yes,** government expenditure
9. **Yes,** a consumer service
10. **No,** purely financial transaction

Part B. GDP: Is It Counted and Where?

1. **C**
2. **I**
3. **N**
4. **C**
5. **G**
6. **N**
7. **N**
8. **I**
9. **N**
10. **I**
11. **C**
12. **I**
13. **N**
14. **N**
15. **C**

Part C. Why Are Things Counted or Not Counted in GDP?

1. If everything were counted, there would be double counting.
2. It is not a part of the nation's output or production of goods and services.
3. GDP counts only market transactions.

Lesson 6.2: Who Is Hurt and Who Is Helped by Inflation?

"Who Is Hurt and Who Is Helped by Inflation?" is from *Advanced Placement Economics: Macroeconomics: Student Activities,* by John S. Morton, National Council on Economic Education, 1996.

Describe groups that are hurt by inflation and groups that benefit from inflation. Circle:

H if the person or group is *hurt* by inflation.

G if the person or group *gains* from inflation.

U if it is *uncertain* if the person or group is affected by inflation or if the effects are unclear.

Then explain why you answered as you did.

1. Banks extend many fixed-rate loans.

   H G U Why?

2. A farmer buys machinery with a fixed-rate loan to be repaid over a 10-year period.

   H G U Why?

3. Your family buys a new home with an adjustable-rate mortgage.

   H G U Why?

4. Your savings from your summer job are in a savings account paying a fixed rate of interest.

   H G U Why?

5. A widow lives entirely on income derived from fixed-rate corporate bonds.

   H G U Why?

6. A retired couple lives entirely on income from a pension the woman receives from her former employer.

   H G U Why?

7. A retired man lives entirely on income from Social Security.

   H G U Why?

8. A retired bank official lives entirely on income from stock dividends.

   H G U Why?

9. The federal government has a $5,000,000,000 debt.

H G U Why?

10. A firm signs a contract to provide maintenance services at a fixed rate for the next five years.

H G U Why?

11. A state government receives revenue mainly from a progressive income tax.

H G U Why?

12. A local government receives revenue from fixed-rate license fees charged to businesses.

H G U Why?

13. Your friend rents an apartment with a three-year lease.

H G U Why?

14. A bank has loaned millions of dollars for home mortgages at a fixed rate of interest.

H G U Why?

15. Parents are putting savings for their child's college education in a bank savings account.

H G U Why?

16. What conclusions can you draw about who is helped and who is hurt by inflation?

17. If you were certain that the inflation rate would be 10% a year for the next 10 years, how might your behavior change?

Suggested Solutions—
Lesson 6.2: Who Is Hurt and Who Is Helped by Inflation?

1. **H.** The bank is paid back with inflated money, which buys less.
2. **G.** The farmer pays back the loan with cheaper money.
3. **U.** During inflation, nominal interest rates rise. If the real interest rate (the final interest rate after inflation is deducted) rises, the family will be hurt. If the real interest rate falls, the family will be helped.
4. **H.** Inflation makes the dollars worth less, and you cannot take advantage of higher nominal interest rates, which would rise with inflation. Even if you could switch accounts, the rise in rates should come after the increase in inflation.
5. **H.** For the same reasons as question 4. If interest rates rise, the widow will have to sell the bond for less than she paid for it or hold it to maturity.
6. **U.** If the couple does not have a cost-of-living allowance (COLA), they will be hurt. If they do have a COLA, they may not be hurt.
7. **U.** Social Security does have a COLA, but it is limited. A large increase in the rate of inflation would hurt him.
8. **H.** Stock dividends usually increase with inflation, while bond interest payments are fixed.
9. **G.** This debt will be paid back with cheaper money.
10. **H.** Costs will go up, but income will not.
11. **G.** Income increases during inflation, and this will increase marginal tax rates.
12. **H.** Tax revenues will not increase, but government costs will.
13. **G.** Particularly if there is no change in rent paid.
14. **H.** If the fixed rate of interest is not at or above the inflation rate, the bank will be hurt because borrowers will pay the loan back with cheaper money.
15. **H.** Bank savings accounts rarely keep ahead of inflation. If the interest rate is not above the inflation rate, they will be hurt. Stocks can be a better choice.
16. Debtors and owners of real assets such as real estate are helped. Lenders and savers are hurt.
17. You would use debt to purchase real assets, such as houses, land, buildings, gold, etc., particularly if you could borrow at interest rates that did not reflect the higher inflation.