10/9 Research Activity Updates: Energy Modeling Lab.

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Research Activity Hear-

38 PART I INTRODUCTION

SUMMARY

- Economists try to address their subject with a scientist's objectivity. Like all scientists, they make appropriate assumptions and build simplified models to understand the world around them. Two simple economic models are the circular-flow diagram and the production possibilities frontier.
- The field of economics is divided into two subfields: microeconomics and macroeconomics. Microeconomists study decision making by households and firms and the interaction among households and firms in the marketplace. Macroeconomists study the forces and trends that affect the economy as a whole.
- A positive statement is an assertion above how the world is. A normative statement is an assertion about how the world ought to be an assertion about how the world ought to be When economists make normative statements they are acting more as policy advisers that scientists.
- Economists who advise policymakers offer conflicting advice either because of differences in scientific judgments or because of differences in values. At other times, economists are united in the advice they offer, but policymakers may choose to ignore it.

KEY CONCEPTS

circular-flow diagram, p. 24 production possibilities frontier, p. 26

microeconomics, p. 29 macroeconomics, p. 29

positive statements, p. 31 normative statements, p. 31

QUESTIONS FOR REVIEW

- 1. How is economics a science?
- 2. Why do economists make assumptions?
- 3. Should an economic model describe reality exactly?
- 4. Name a way that your family interacts in the factor market and a way that it interacts in the product market.
- 5. Name one economic interaction that isn't covered by the simplified circular-flow diagram.
- 6. Draw and explain a production possibilities frontier for an economy that produces milk and
- cookies. What happens to this frontier if disease kills half of the economy's cows?
- 7. Use a production possibilities frontier to describe the idea of "efficiency."
- 8. What are some topics that are addressed in macroeconomics?
- 9. What is the difference between a positive and a normative statement? Give an example of each.
- 10. Why do economists sometimes offer conflicting advice to policymakers?

PROBLEMS AND APPLICATIONS

- 1. Draw a circular-flow diagram. Identify the parts of the model that correspond to the flow of goods and services and the flow of dollars for each of the following activities.
 - a. Selena pays a storekeeper \$1 for a quart of milk.
- b. Stuart earns \$4.50 per hour working at a fast food restaurant.
- c. Shanna spends \$30 to get a haircut.
- d. Sally earns \$10,000 from her 10 percent ownership of Acme Industrial.

- 2. Imagine a society that produces military goods and consumer goods, which we'll call "guns" and "butter."
 - a. Draw a production possibilities frontier for guns and butter. Using the concept of opportunity cost, explain why it most likely has a bowed-out shape.
 - b. Show a point that is impossible for the economy to achieve. Show a point that is feasible but inefficient.
 - c. Imagine that the society has two political parties, called the Hawks (who want a strong military) and the Doves (who want a smaller military). Show a point on your production possibilities frontier that the Hawks might choose and a point the Doves might choose.
 - d. Imagine that an aggressive neighboring country reduces the size of its military. As a result, both the Hawks and the Doves reduce their desired production of guns by the same amount. Which party would get the bigger "peace dividend," measured by the increase in butter production? Explain.
- 3. The first principle of economics discussed in Chapter 1 is that people face trade-offs. Use a production possibilities frontier to illustrate society's trade-off between two "goods"—a clean environment and the quantity of industrial output. What do you suppose determines the shape and position of the frontier? Show what happens to the frontier if engineers develop a new way of producing electricity that emits fewer pollutants.
- 4. An economy consists of three workers: Larry, Moe, and Curly. Each works ten hours a day and can produce two services: mowing lawns and washing cars. In an hour, Larry can either mow one lawn or wash one car; Moe can either mow one lawn or wash two cars; and Curly can either mow two lawns or wash one car.
 - a. Calculate how much of each service is produced under the following circumstances, which we label A, B, C, and D:
 - All three spend all their time mowing lawns. (A)
 - All three spend all their time washing cars. (B)

- All three spend half their time on each activity. (C)
- Larry spends half his time on each activity, while Moe only washes cars and Curly only mows lawns. (D)
- b. Graph the production possibilities frontier for this economy. Using your answers to part (a), identify points A, B, C, and D on your graph.
- c. Explain why the production possibilities frontier has the shape it does.
- d. Are any of the allocations calculated in part (a) inefficient? Explain.
- 5. Classify the following topics as relating to microeconomics or macroeconomics.
 - a. Susan's decision about how much income to save
 - b. the impact of a decrease in national saving on a country's economic growth
 - c. the impact of an increase in the price of computer chips on the market for personal computers
 - d. the impact of an increase in government purchases on the unemployment rate
 - e. the decision by McDonald's to hire fewer workers because of an increase in the minimum wage
- 6. Classify each of the following statements as positive or normative. Explain.
 - a. An increase in inflation temporarily reduces unemployment.
 - b. The government should increase the rate of inflation in order to reduce the unemployment rate.
 - c. The government should increases taxes to pay for universal health care.
 - d. An increase in taxes causes people to work fewer hours.
 - e. The price of a new car is too high.
- 7. If you were president, would you be more interested in your economic advisers' positive views or their normative views? Why?

For further information on topics in this chapter, additional problems, applications, examples, online quizzes, and more, please visit our website at www.cengage.com/international.