

# In this chapter, look for the answers to these questions:

- § What are economists' two roles? How do they differ?
- § What are models? How do economists use them?
- § What are the elements of the Circular-Flow Diagram? What concepts does the diagram illustrate?
- § How is the Production Possibilities Frontier related to opportunity cost? What other concepts does it illustrate?
- § What is the difference between microeconomics and macroeconomics? Between positive and normative?

### The Economist as Scientist

- § Economists play two roles:
- § In the first, economists employ the scientific method,

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<b>Assumptions</b> 8	& N	lod	e	S
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- § Assumptions simplify the complex world, make it easier to understand.
- § Example: To study international trade, assume two countries and two goods.

  Unrealistic, but simple to learn and gives useful insights about the real world.
- § Model:

Economists use models to study economic issues.

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### **Some Familiar Models**

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### **Our First Model:**

The Circular-Flow Diagram

- § The Circular-Flow Diagram:
- § Two types of "actors":
- § Two markets:
  - § the market for
  - § the market for

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# **Factors of Production** § Factors of production: THINKING LIKE AN ECONOMIST FIGURE 1: The Circular-Flow Diagram Markets for Goods & Services Households Firms Markets for Factors of Production THINKING LIKE AN ECONOMIST **Our Second Model: The Production Possibilities Frontier** § The Production Possibilities Frontier (PPF): § Example: § Two goods: computers and wheat § One resource: labor (measured in hours) § Economy has 50,000 labor hours per month available for production. THINKING LIKE AN ECONOMIST 12

### **PPF Example**

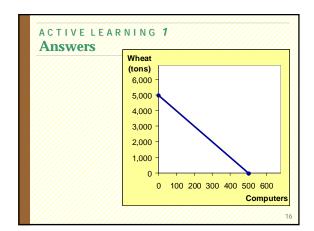
- § Producing one computer requires 100 hours labor.
- § Producing one ton of wheat requires 10 hours labor.

	Employr labor h		Production		
	Computers	Wheat	Computers	Wheat	
Α	50,000	0			
В	40,000	10,000			
С	25,000	25,000			
D	10,000	40,000			
Е	0	50,000			

PPF Example										
Point	Produ	uction	Wheat (tons)							
on graph	Com- puters	Wheat	6,000 -							
A	p 0.00.0		5,000 -							
В			4,000 -							
С			3,000 - 2,000 -							
D			1,000							
Е			0			_		_	_	
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# ACTIVE LEARNING 1 Points off the PPF

- A. On the graph, find the point that represents (100 computers, 3000 tons of wheat), label it F. Would it be possible for the economy to produce this combination of the two goods? Why or why not?
- B. Next, find the point that represents (300 computers, 3500 tons of wheat), label it G. Would it be possible for the economy to produce this combination of the two goods?



### The PPF: What We Know So Far

Points on the PPF (like  $\mathbf{A} - \mathbf{E}$ )

Points under the PPF (like F)

Points above the PPF (like G)

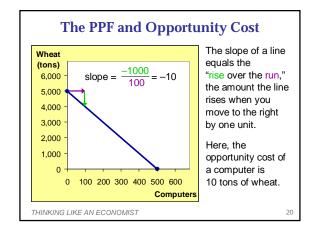
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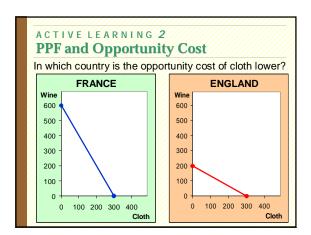
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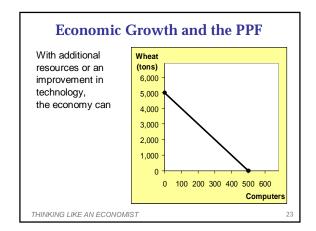
### The PPF and Opportunity Cost

- § Recall: The opportunity cost of an item is
- § Moving along a PPF involves shifting resources (e.g., labor) from the production of one good to the other.
- § Society faces a tradeoff: Getting more of one good requires sacrificing some of the other.
- § The slope of the PPF tells you

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### The Shape of the PPF

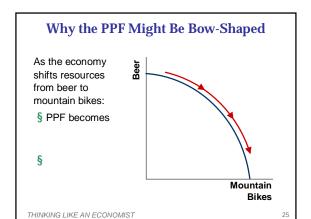
- § The PPF could be a straight line, or bow-shaped
- § Depends on
  - § If opp. cost remains constant, PPF is

(In the previous example, opp. cost of a computer was always 10 tons of wheat.)

§ If opp. cost of a good rises as the economy produces more of the good, PPF is

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# At point A, most workers are producing beer, even those that are better suited to building bikes. So, do not have to give up much beer to get more bikes. Mountain Bikes THINKING LIKE AN ECONOMIST

### Why the PPF Might Be Bow-Shaped At B, most workers are producing bikes. The few left in beer are the best brewers. Producing more bikes would require shifting some of the best brewers away from beer production, would cause a big

drop in beer output. THINKING LIKE AN ECONOMIST

Mountain

Bikes

### Why the PPF Might Be Bow-Shaped

- § So, PPF is bow-shaped when different workers
- § The PPF would also be bow-shaped when there is some other resource, or mix of resources with varying opportunity costs (E.g., different types of land suited for different uses).

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### The PPF: A Summary

- § The PPF shows all combinations of two goods that an economy can possibly produce, given its resources and technology.
- § The PPF illustrates the concepts of tradeoff and opportunity cost, efficiency and inefficiency, unemployment, and economic growth.
- § A bow-shaped PPF illustrates the concept of

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## **Microeconomics and Macroeconomics** § Microeconomics is the study of § Macroeconomics is the study of § These two branches of economics are closely intertwined, yet distinct - they address different questions. THINKING LIKE AN ECONOMIST The Economist as Policy Advisor § As scientists, economists make positive statements, which attempt to § As policy advisors, economists make normative statements, which attempt to § Positive statements can be confirmed or refuted, normative statements cannot. § Govt employs many economists for policy advice. E.g., the U.S. President has a Council of Economic Advisors, which the author of this textbook chaired from 2003 to 2005. ACTIVE LEARNING 3 Identifying positive vs. normative Which of these statements are "positive" and which are "normative"? How can you tell the difference? a. Prices rise when the government increases the quantity of money. b. The government should print less money. c. A tax cut is needed to stimulate the economy. d. An increase in the price of burritos will cause an increase in consumer demand for video rentals.

### Why Economists Disagree

- § Economists often give conflicting policy advice.
- § They sometimes disagree about the validity of alternative positive theories about the world.
- § They may have different values and, therefore, different normative views about what policy should try to accomplish.
- § Yet, there are many propositions about which most economists agree.

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# **Propositions about Which Most Economists Agree** (and % who agree)

- § A ceiling on rents reduces the quantity and quality of housing available. (93%)
- § Tariffs and import quotas usually reduce general economic welfare. (93%)
- § The United States should not restrict employers from outsourcing work to foreign countries. (90%)
- § The United States should eliminate agriculture subsidies. (85%)

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# Propositions about Which Most Economists Agree (and % agreeing)

- § The gap between Social Security funds and expenditures will become unsustainably large within the next fifty years if current policies remain unchanged. (85%)
- § A large federal budget deficit has an adverse effect on the economy. (83%)
- § A minimum wage increases unemployment among young and unskilled workers. (79%)
- § Effluent taxes and marketable pollution permits represent a better approach to pollution control than imposition of pollution ceilings. (78%)

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