

2 **Thinking Like An Economist**

**PRINCIPLES OF
MICROECONOMICS
FOURTH EDITION**

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PowerPoint® Slides
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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 models?
- § What are the elements of the Circular-Flow Diagram? What concepts does this 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?

CHAPTER 2 THINKING LIKE AN ECONOMIST 1

The Economist as Scientist

§ Economists play two roles:

§ In the first role, economists employ the **scientific method**:

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Assumptions & models

- § Assumptions simplify the complex world, make it easier to understand.
- § Example: When studying international trade, we might assume the world consists of two countries and two goods. Very unrealistic, but simplifies the problem and yields useful insights about the more complicated real world.
- § Economists use **models** to study economic issues. A model is

Some familiar models

Our first model: The Circular-Flow Diagram

§ The **Circular-Flow Diagram**:

§ Includes two types of “actors”:

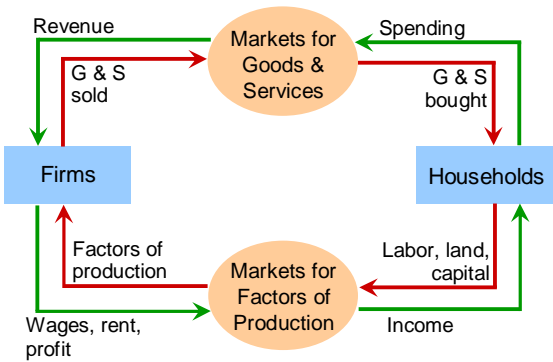
§ Includes two markets:

- the market for
- the market for

Factors of production

§ The **factors of production** are

FIGURE 1: The Circular Flow Diagram



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.

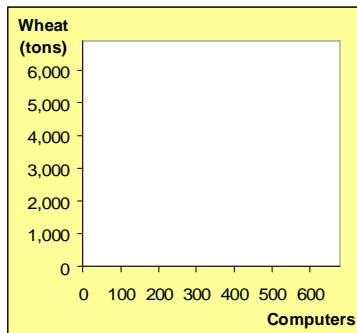
PPF Example

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

	Employment of labor hours		Production	
	Computers	Wheat	Computers	Wheat
A	50,000	0		
B	40,000	10,000		
C	25,000	25,000		
D	10,000	40,000		
E	0	50,000		

PPF Example

Point on graph	Production	
	Comp-uters	Wheat
A		
B		
C		
D		
E		

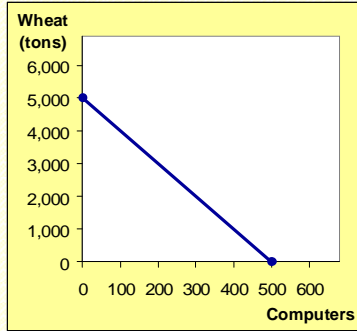


ACTIVE LEARNING 1: Points on the PPF

- 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?
- 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?

**ACTIVE LEARNING 1:
Answers**

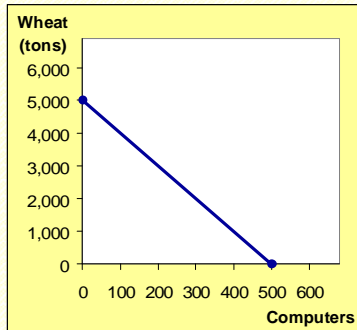
§ Point **F**:
100 computers,
3000 tons wheat



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**ACTIVE LEARNING 1:
Answers**

§ Point **G**:
300 computers,
3500 tons wheat



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The PPF: What we know so far

§ Points on the PPF (like **A – E**)

- possible
- efficient:

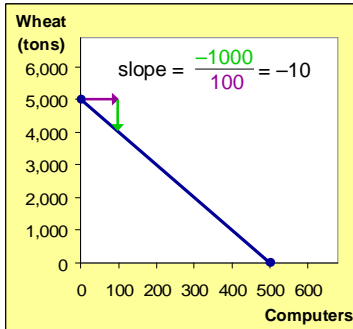
§ Points under the PPF (like **F**)

§ Points above the PPF (like **G**)

The PPF and Opportunity Cost

- § Recall: The **opportunity cost** of an item is what must be given up to obtain that item.
- § 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

The PPF and Opportunity Cost

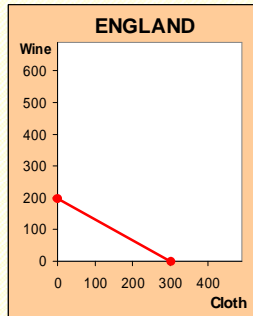
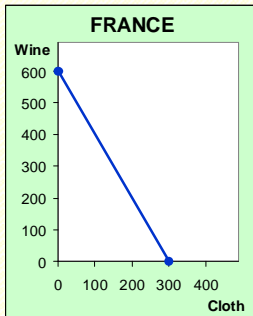


The slope of a line equals the “rise over the run” – the amount the line rises when you move to the right by one unit.

Here, the opportunity cost of a computer is 10 tons of wheat.

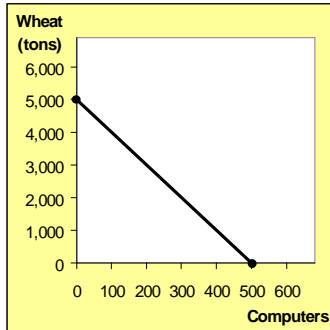
ACTIVE LEARNING 2: PPF and Opportunity Cost

In which country is the opportunity cost of cloth lower?



Economic growth and the PPF

With additional resources or an improvement in technology, the economy can



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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,

(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,

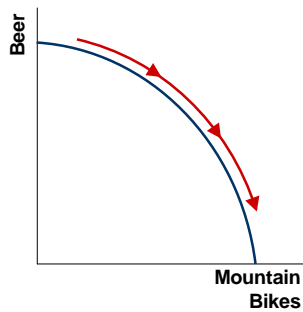
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Why the PPF might be bow-shaped

As the economy shifts resources from beer to mountain bikes:

- PPF becomes steeper
-

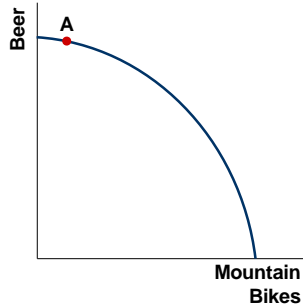


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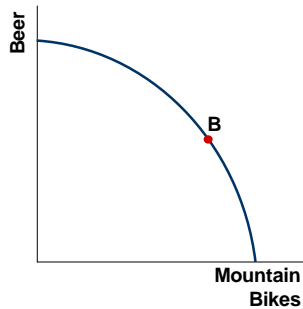
Why the PPF might be bow-shaped

At point **A**, most workers are producing beer, even those that are better suited to building mountain bikes. So, do not have to give up much beer to get more bikes.



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.



Why the PPF might be bow-shaped

- § So, PPF is bow-shaped when different workers have different skills, different opportunity costs of producing one good in terms of the other.
- § 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

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



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.

The Economist as Policy Advisor

- § As scientists, economists make **positive statements**,
- § As policy advisors, economists make **normative statements**,
- § 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 recently chaired.

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 gasoline will cause an increase in consumer demand for video rentals.

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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 % agreeing)

- § A ceiling on rents reduces the quantity and quality of housing available. (93%)
- § Tariffs and import quotas usually reduce general economic welfare. (93%)
- § 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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