

CHAPTER
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Thinking Like an Economist

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The Economist as Scientist

- Economists play two roles:
 1. Scientists: try to explain the world
 2. Policy advisors: try to improve it
- In the first, economists employ the (), the dispassionate development and testing of theories about how the world works.

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Assumptions & Models

- 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.
- (): a highly simplified representation of a more complicated reality. Economists use models to study economic issues.

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Some Familiar Models



A road map

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Some Familiar Models

A model of human anatomy from high school biology class



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Some Familiar Models



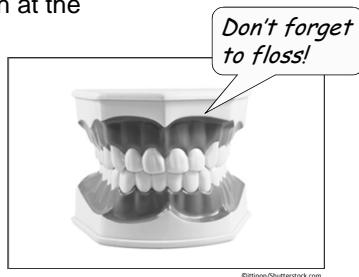
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A model airplane

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Some Familiar Models

The model teeth at the dentist's office



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Our First Model:

The Circular-Flow Diagram

- The (): a visual model of the economy, shows how dollars flow through markets among households and firms
- Two types of “actors”:

 - households
 - firms

- Two markets:

 - the market for goods and services
 - the market for “factors of production”

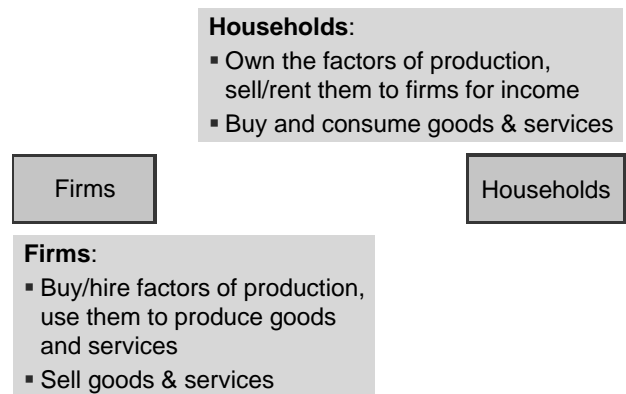
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Factors of Production

- (): the resources the economy uses to produce goods & services, including
 - labor
 - land
 - capital (buildings and machines used in production)

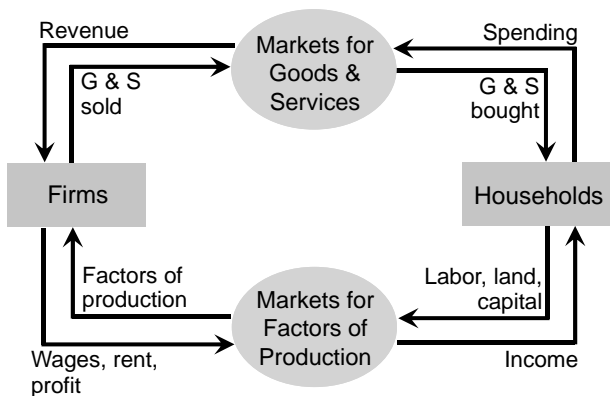
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FIGURE 1: The Circular-Flow Diagram



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FIGURE 1: The Circular-Flow Diagram



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Our Second Model:

The Production Possibilities Frontier

- The () (PPF): a graph that shows the combinations of two goods the economy can possibly produce given the available resources and the available technology
- Example:
 - Two goods: computers and wheat
 - One resource: labor (measured in hours)
 - Economy has 50,000 labor hours per month available for production.

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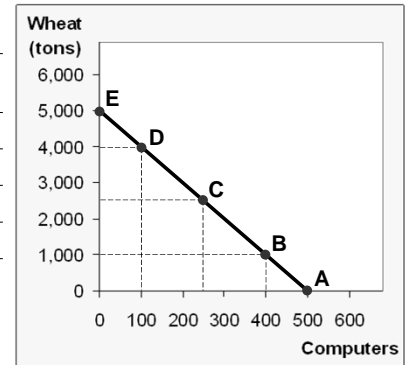
PPF Example

- 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	500	0
B	40,000	10,000	400	1,000
C	25,000	25,000	250	2,500
D	10,000	40,000	100	4,000
E	0	50,000	0	5,000

PPF Example

Point on graph	Production	
	Com-puters	Wheat
A	500	0
B	400	1,000
C	250	2,500
D	100	4,000
E	0	5,000



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The PPF: What We Know So Far

Points on the PPF (like **A – E**)

- possible
- efficient: all resources are fully utilized

Points under the PPF (like **F**)

- possible
- not efficient: some resources underutilized (e.g., workers unemployed, factories idle)

Points above the PPF (like **G**)

- not possible

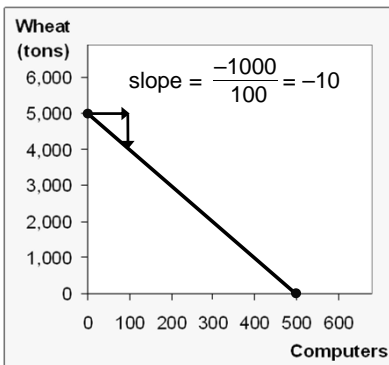
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The PPF and Opportunity Cost

- Recall: The () 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 opportunity cost of one good in terms of the other.

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The PPF and Opportunity Cost



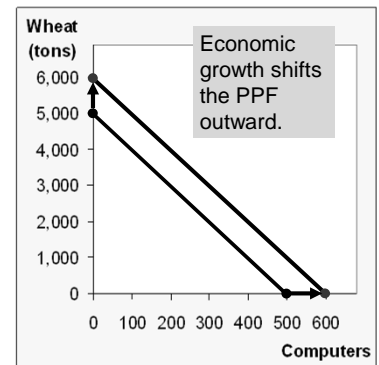
The slope of a line equals the “**rise over the run**,” the amount the line rises when you move to the right by one unit.

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

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Economic Growth and the PPF

With additional resources or an improvement in technology, the economy can produce more computers, more wheat, or any combination in between.



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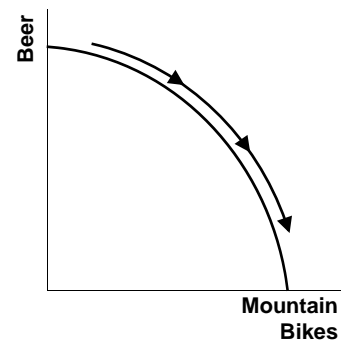
The Shape of the PPF

- The PPF could be a straight line or bow-shaped.
- Depends on what happens to opportunity cost as economy shifts resources from one industry to the other.
 - If opp. cost remains constant, PPF is a straight line.
(In the previous example, opp. cost of a computer was always 10 tons of wheat.)
 - If opp. cost of a good rises as more of the good is produced, PPF is bow-shaped....

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Why the PPF Might Be Bow-Shaped

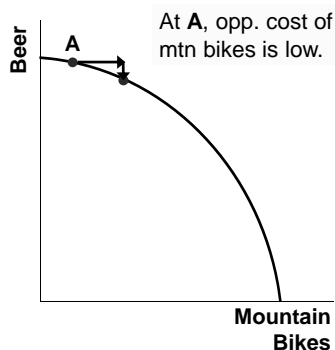
- As the economy shifts resources from beer to mountain bikes:
- PPF becomes steeper
 - opp. cost of mountain bikes increases



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Why the PPF Might Be Bow-Shaped

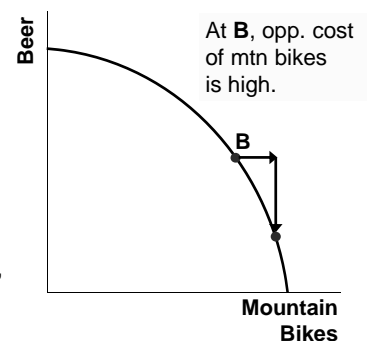
At point **A**, most workers are producing beer, even those who are better suited to building bikes. So, do not have to give up much beer to get more bikes.



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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, causing a big drop in beer output.



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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).

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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 increasing opportunity cost.

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Microeconomics and Macroeconomics

- () is the study of how households and firms make decisions and how they interact in markets.
- () is the study of economy-wide phenomena, including inflation, unemployment, and economic growth.
- These two branches of economics are closely intertwined, yet distinct—they address different questions.

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The Economist as Policy Advisor

- As scientists, economists make (), which attempt to describe the world as it is.
- As policy advisors, economists make (), which attempt to prescribe how the world should be.
- 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.

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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 % 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%)

continued...

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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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FYI: Who Studies Economics?

- Ronald Reagan, President of the United States
- Barbara Boxer, U.S. Senator
- Sandra Day-O'Connor, Former Supreme Court Justice
- Anthony Zinni, Former General, U.S. Marine Corps
- Kofi Annan, Former Secretary General, United Nations
- Meg Whitman, Chief Executive Officer, eBay
- Steve Ballmer, Chief Executive Officer, Microsoft
- Arnold Schwarzenegger, Former Gov. of California, Actor
- Ben Stein, Political Speechwriter, Actor, Game Show Host
- Mick Jagger, Singer for the Rolling Stones
- John Elway, NFL Quarterback
- Tiger Woods, Golfer
- Diane von Furstenburg, Fashion Designer

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