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Principles of Economics

Sixth Edition

1

Ten Principles of Economics



*Premium
PowerPoint
Slides by
Ron Cronovich*

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

- What kinds of questions does economics address?
- What are the principles of how people make decisions?
- What are the principles of how people interact?
- What are the principles of how the economy as a whole works?

What Economics Is All About

- **Scarcity**: the limited nature of society's resources
- **Economics**: the study of how society manages its scarce resources, e.g.
 - how people decide what to buy, how much to work, save, and spend
 - how firms decide how much to produce, how many workers to hire
 - how society decides how to divide its resources between national defense, consumer goods, protecting the environment, and other needs

PRINCIPLE #1:

People Face Tradeoffs

All decisions involve tradeoffs. Examples:

- Going to a party the night before your midterm leaves less time for studying.
- Having more money to buy stuff requires working longer hours, which leaves less time for leisure.
- Protecting the environment requires resources that could otherwise be used to produce consumer goods.

PRINCIPLE #1:

People Face Tradeoffs

- Society faces an important tradeoff:
efficiency vs. equality
- **Efficiency**: when society gets the most from its scarce resources
- **Equality**: when prosperity is distributed uniformly among society's members
- Tradeoff: To achieve greater equality, could redistribute income from wealthy to poor. But this reduces incentive to work and produce, shrinks the size of the economic “pie.”

PRINCIPLE #2:

The Cost of Something Is What You Give Up to Get It

- Making decisions requires comparing the costs and benefits of alternative choices.
- The **opportunity cost** of any item is whatever must be given up to obtain it.
- It is the relevant cost for decision making.

PRINCIPLE #3:

Rational People Think at the Margin

Rational people

- systematically and purposefully do the best they can to achieve their objectives.
- make decisions by evaluating costs and benefits of **marginal changes**, incremental adjustments to an existing plan.

PRINCIPLE #4:

People Respond to Incentives

- **Incentive**: something that induces a person to act, i.e. the prospect of a reward or punishment.
- Rational people respond to incentives.

Examples:

- When gas prices rise, consumers buy more hybrid cars and fewer gas guzzling SUVs.
- When cigarette taxes increase, teen smoking falls.

PRINCIPLE #5:

Trade Can Make Everyone Better Off

- Rather than being self-sufficient, people can specialize in producing one good or service and exchange it for other goods.
- Countries also benefit from trade and specialization:
 - Get a better price abroad for goods they produce
 - Buy other goods more cheaply from abroad than could be produced at home

PRINCIPLE #6:

Markets Are Usually A Good Way to Organize Economic Activity

- **Market:** a group of buyers and sellers (need not be in a single location)
- “Organize economic activity” means determining
 - what goods to produce
 - how to produce them
 - how much of each to produce
 - who gets them

PRINCIPLE #6:

Markets Are Usually A Good Way to Organize Economic Activity

- A **market economy** allocates resources through the decentralized decisions of many households and firms as they interact in markets.
- Famous insight by Adam Smith in *The Wealth of Nations* (1776):

Each of these households and firms acts as if “led by **an invisible hand**” to promote general economic well-being.

PRINCIPLE #6:

Markets Are Usually A Good Way to Organize Economic Activity

- The invisible hand works through the price system:
 - The interaction of buyers and sellers determines prices.
 - Each price reflects the good's value to buyers and the cost of producing the good.
 - Prices guide self-interested households and firms to make decisions that, in many cases, maximize society's economic well-being.

PRINCIPLE #7:

Governments Can Sometimes Improve Market Outcomes

- **Market failure:** when the market fails to allocate society's resources efficiently
- Causes of market failure:
 - **Externalities**, when the production or consumption of a good affects bystanders (e.g. pollution)
 - **Market power**, a single buyer or seller has substantial influence on market price (e.g. monopoly)
- Public policy may **promote efficiency**.

PRINCIPLE #7:

Governments Can Sometimes Improve Market Outcomes

- Govt may alter market outcome to **promote equity**.
- If the market's distribution of economic well-being is not desirable, tax or welfare policies can change how the economic “pie” is divided.

PRINCIPLE #8:

A Country's Standard of Living Depends on Its Ability to Produce Goods & Services

- The most important determinant of living standards: **productivity**, the amount of goods and services produced per unit of labor.
- Productivity depends on the equipment, skills, and technology available to workers.
- Other factors (e.g., labor unions, competition from abroad) have far less impact on living standards.

PRINCIPLE #9:

Prices Rise When the Government Prints Too Much Money

- **Inflation**: increases in the general level of prices.
- In the long run, inflation is almost always caused by excessive growth in the quantity of money, which causes the value of money to fall.
- The faster the govt creates money, the greater the inflation rate.

PRINCIPLE #10:

Society Faces a Short-run Tradeoff Between Inflation and Unemployment

- In the short-run (1–2 years), many economic policies push inflation and unemployment in opposite directions.
- Other factors can make this tradeoff more or less favorable, but the tradeoff is always present.

CHAPTER 2

Thinking Like an Economist

*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:
 1. Scientists: try to explain the world
 2. Policy advisors: try to improve it
- In the first, economists employ the **scientific method**, the dispassionate development and testing of theories about how the world works.

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

Our First Model:

The Circular-Flow Diagram

- The **Circular-Flow Diagram**: 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”

Factors of Production

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

FIGURE 1: The Circular-Flow Diagram

Households:

- Own the factors of production, sell/rent them to firms for income
- Buy and consume goods & services

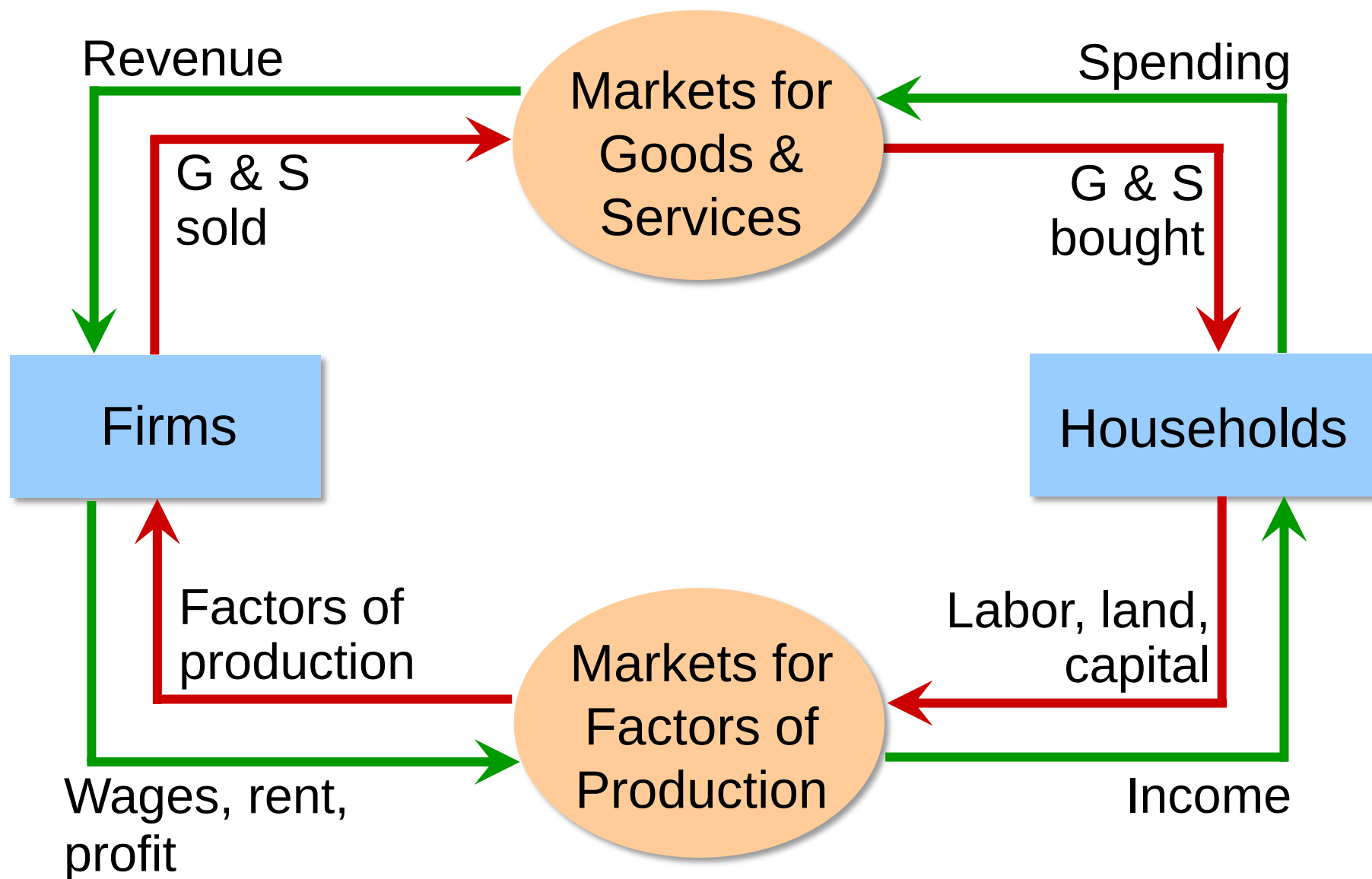
Firms

Households

Firms:

- Buy/hire factors of production, use them to produce goods and services
- Sell goods & services

FIGURE 1: The Circular-Flow Diagram



Our Second Model:

The Production Possibilities Frontier

- The **Production Possibilities Frontier (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.

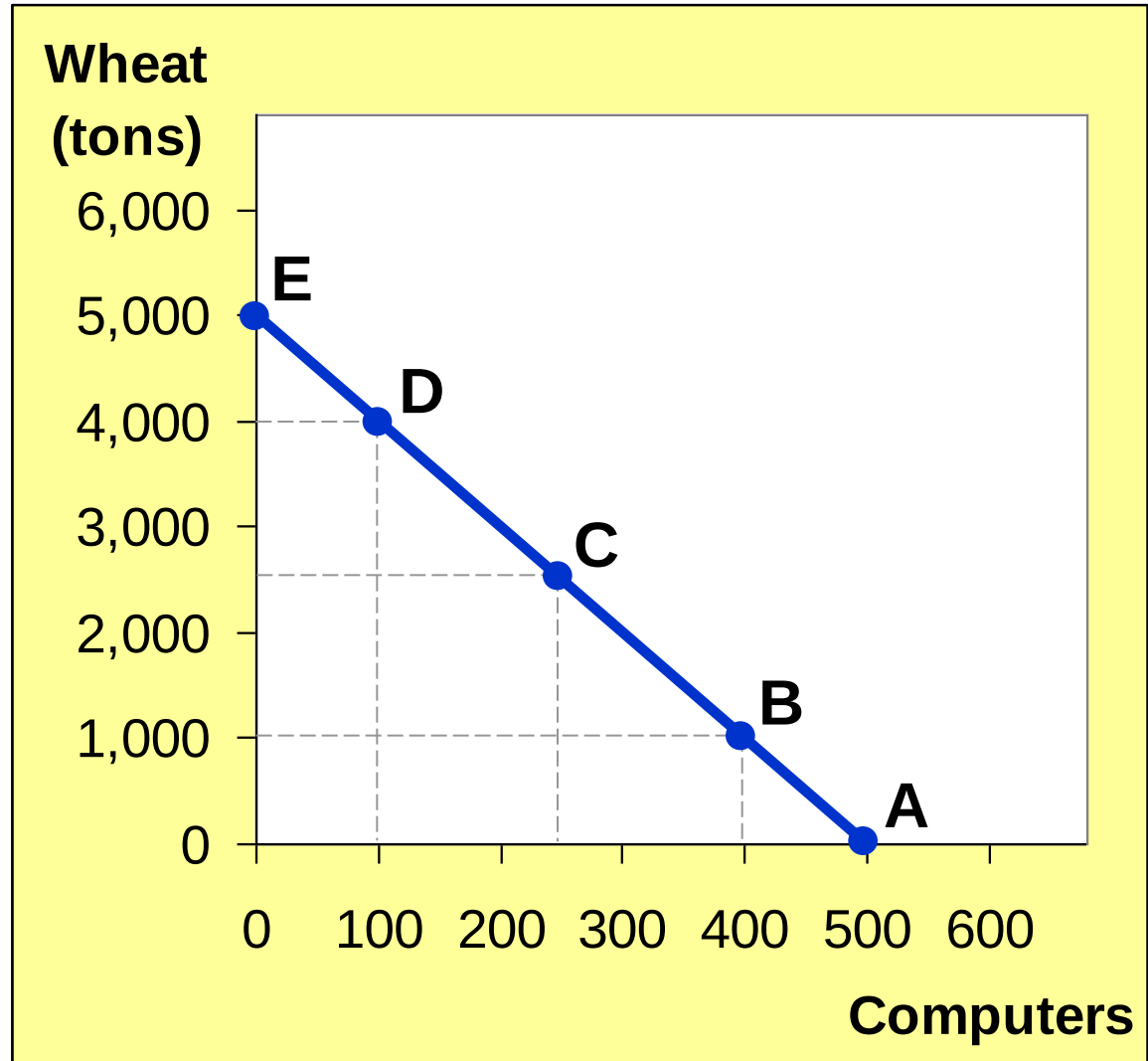
PPF Example

- 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



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)

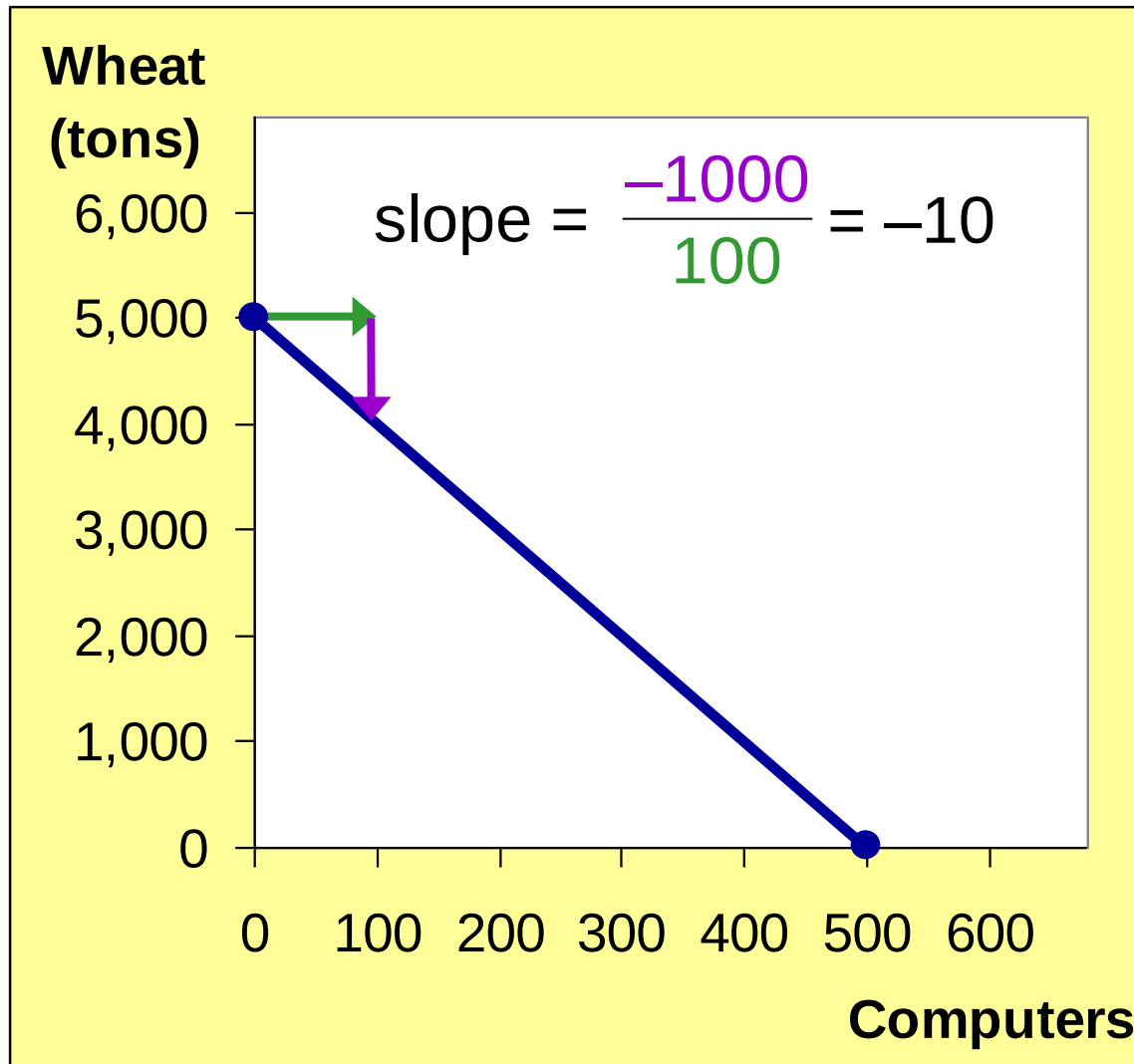
Points above the PPF (like **G**)

- not possible

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 opportunity cost of one good in terms of the other.

The PPF and Opportunity Cost



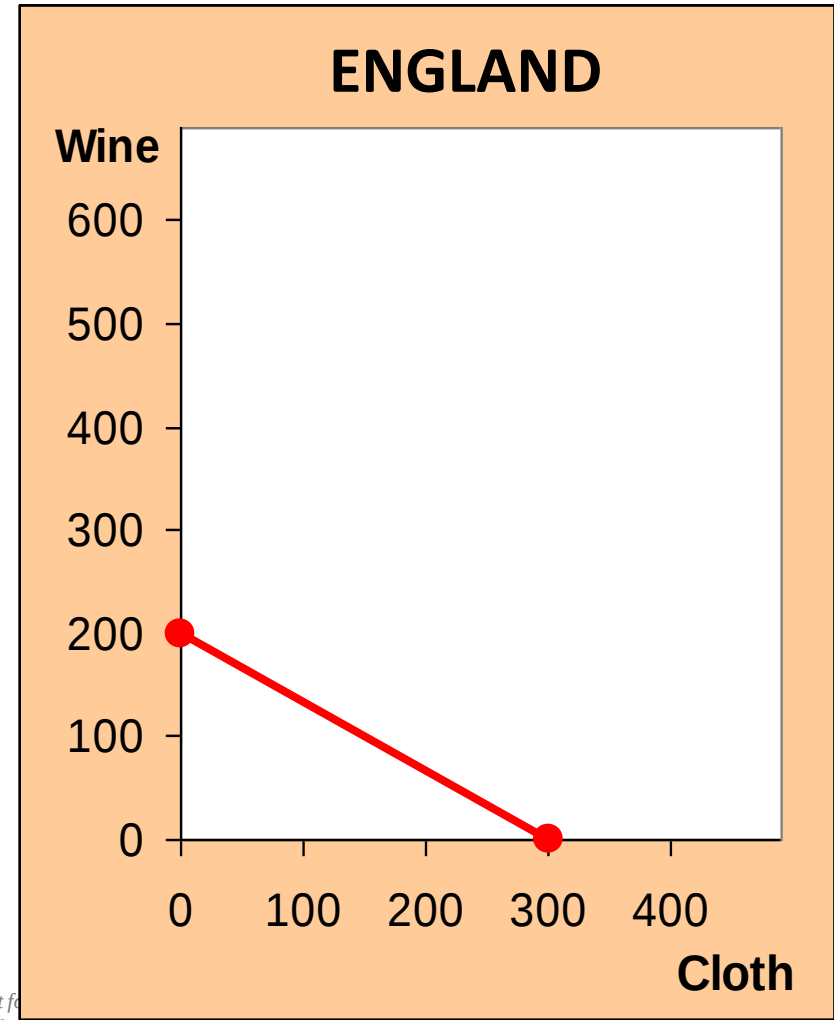
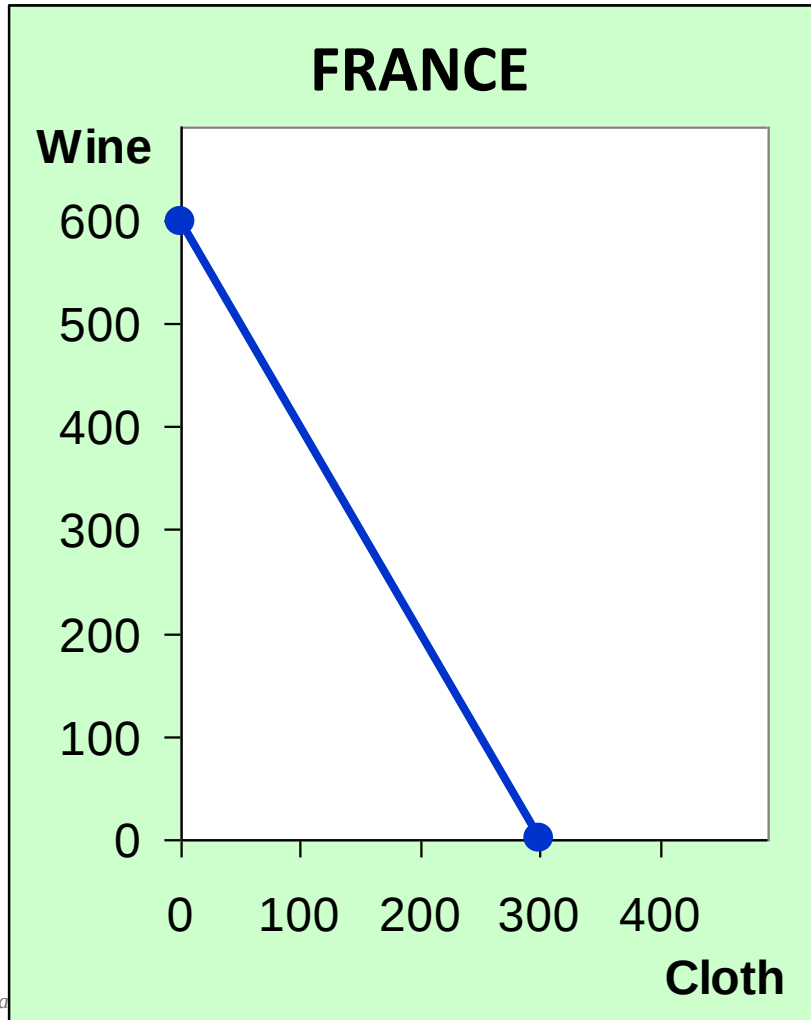
The slope of a line equals the “**rise** over the **run**,” the amount the line rises when you move to the right by one unit.

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

ACTIVE LEARNING 2

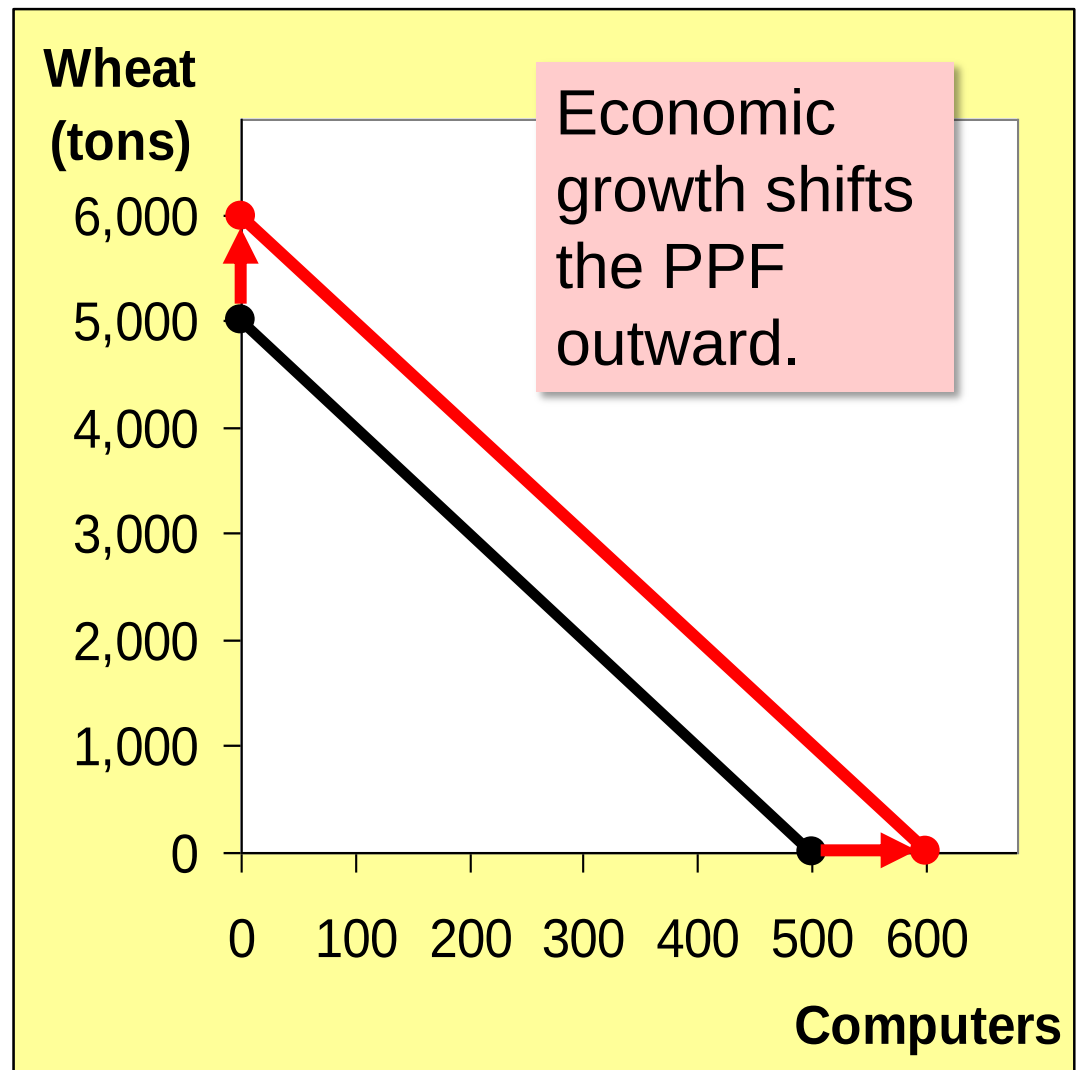
PPF and Opportunity Cost

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 produce more computers, more wheat, or any combination in between.



The Shape of the PPF

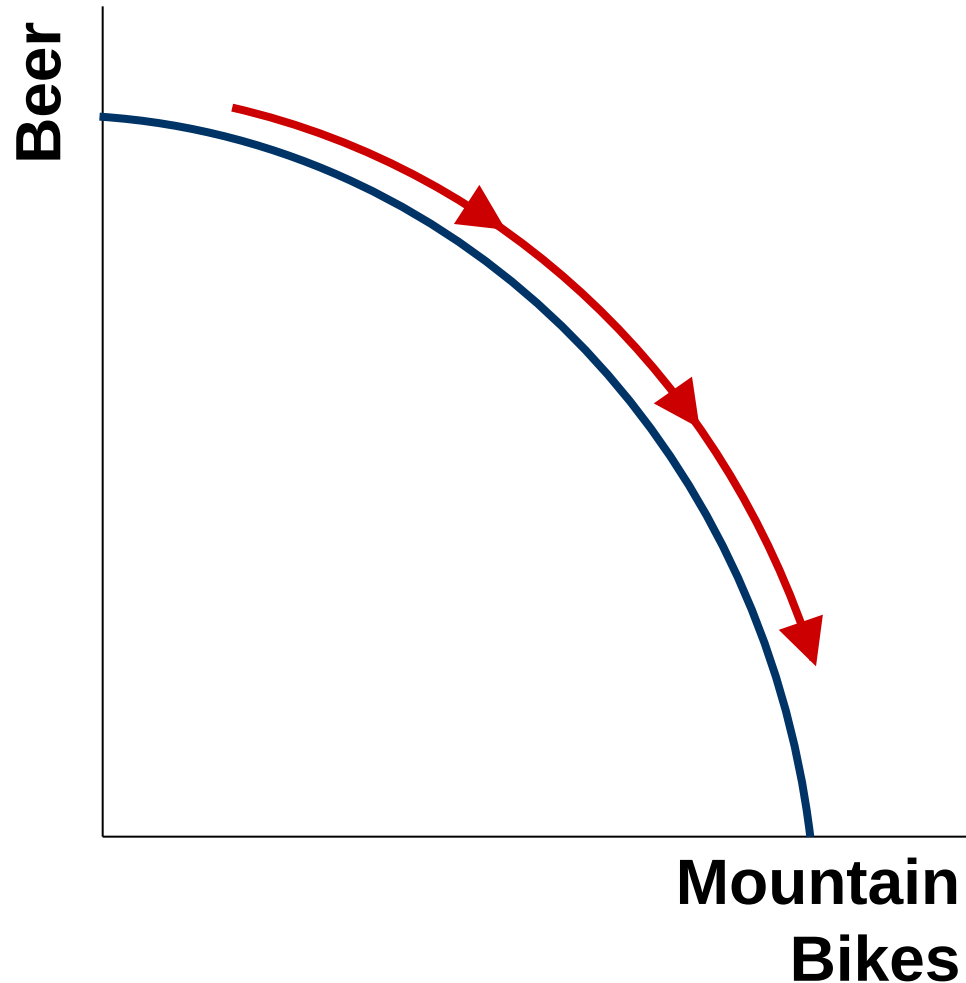
- The PPF could be a straight line or bow-shaped
- Depends on what happens to opportunity cost as economy shifts resources from one industry to the other.
 - If opp. cost remains constant, PPF is a straight line.

(In the previous example, opp. cost of a computer was always 10 tons of wheat.)
 - If opp. cost of a good rises as the economy produces more of the good, PPF is bow-shaped.

Why the PPF Might Be Bow-Shaped

As the economy shifts resources from beer to mountain bikes:

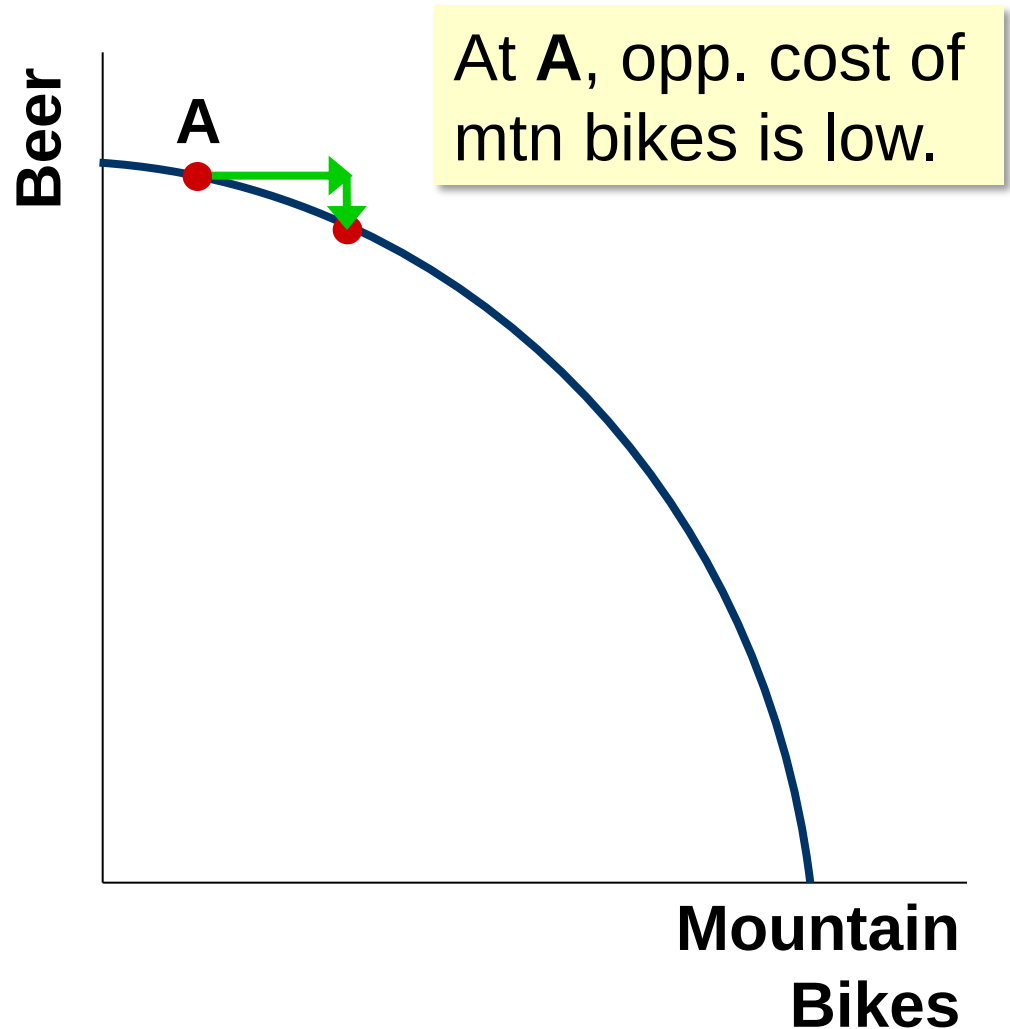
- PPF becomes steeper
- opp. cost of mountain bikes increases



Why the PPF Might Be Bow-Shaped

At point **A**,
most workers are
producing beer,
even those who
are better suited
to building bikes.

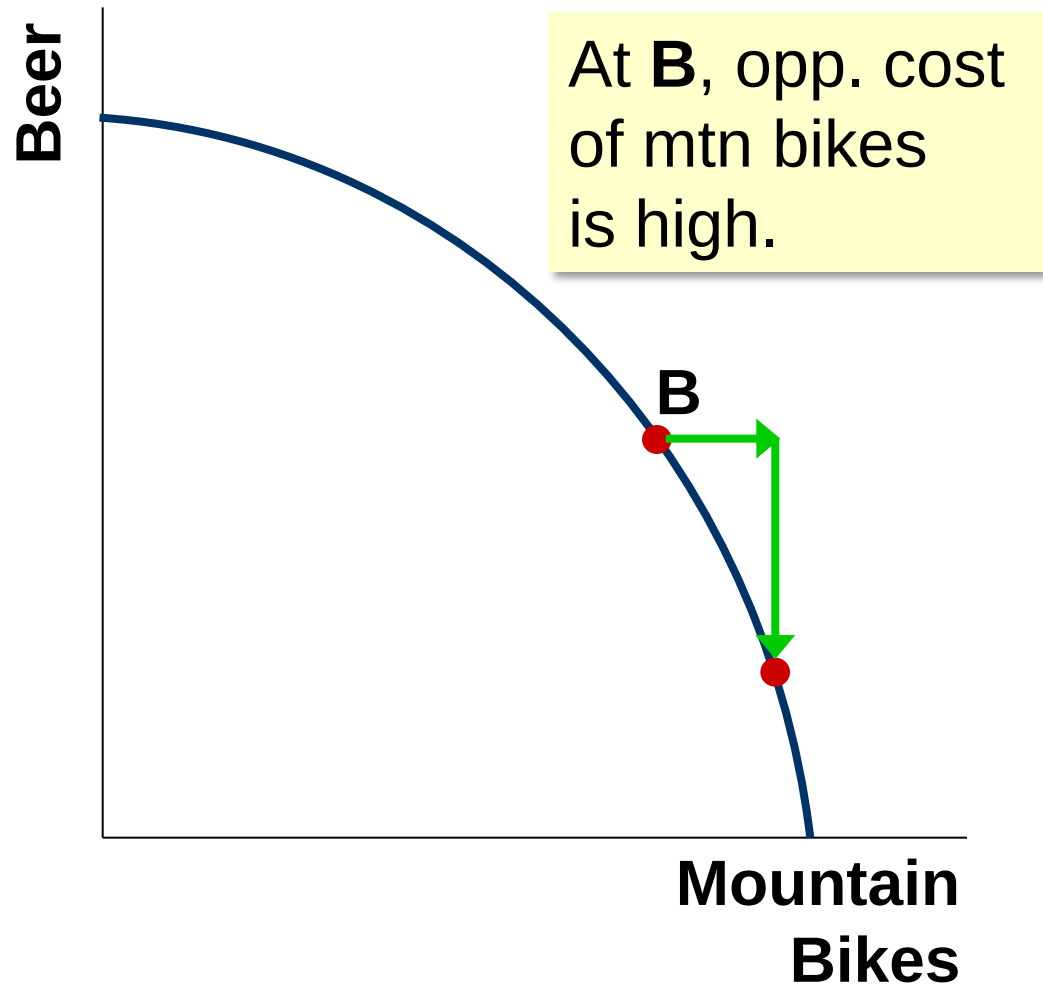
So, do not have to
give up much beer
to get more bikes.



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.



Microeconomics and Macroeconomics

- **Microeconomics** is the study of how households and firms make decisions and how they interact in markets.
- **Macroeconomics** 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.

The Economist as Policy Advisor

- As scientists, economists make **positive statements**, which attempt to describe the world as it is.
- As policy advisors, economists make **normative statements**, 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.

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.

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%)