Chapter 2

Thinking Like an Economist

Two Roles Played by Economists

Economists have two roles:

1) Scientists: try to explain the world using the *scientific method* (developing and testing theories)
2) Policy advisors: try to improve situations

As scientists, economists make **positive statements**, which attempt to describe the world as it is (factual statements).

Positive statements can be confirmed or refuted with data and measurements. They may be *right* or *wrong.*

As policy advisors, economists make **normative statements**, which attempt to prescribe how the world should be (opinions).

Normative statements cannot be confirmed or refuted. You may agree or disagree.

Positive and Normative Statements

Which of these statements are “positive” and which are “normative”?

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 shoes.

Answers:

Economic Models

Economic Model: a highly simplified *graphical* representation of an economic situation

The goal of a model is to simply reality in order to increase our understanding.

Economists use models to study economic issues.

Models simplify reality by making assumptions.

Assumptions simplify the complicated reality and make it easier to understand.

Example: To study international trade, assume 2X2 economy: two countries and two goods.

It is unrealistic, but simple to learn and gives useful insights about relationships in the real world.

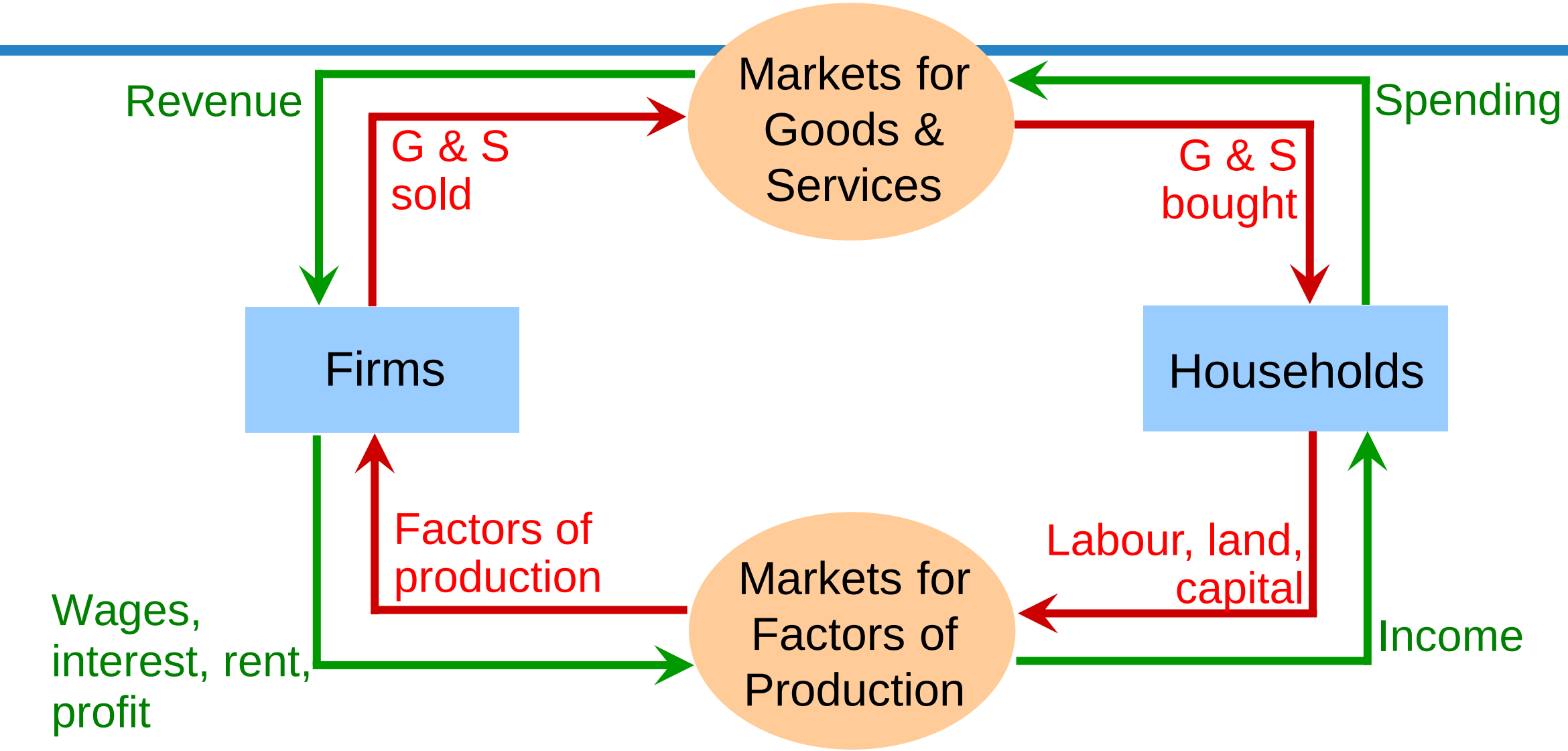
Model 1: The Circular-Flow Diagram

The circular flow diagram illustrates flows of G&S and money in an economy.
The model represents transactions and includes households, firms, and markets.

Household = a person or group that share an income
Firms = organizations that produce G&S to sell.
Markets = any situation in which people buy and sell
Goods and Services Markets: firms sell, households buy
Factor markets exchange factors of production (land, labour, capital): firms buy, households sell.

E.g. The labour market

FIGURE 1: The Circular-Flow Diagram



Model 2: The Production Possibility Frontier

The **Production Possibilities Frontier (PPF)**: a graph that shows the combinations of two goods the economy can possibly produce given available resources and technology.

Example:

- Two goods: computers and wheat
- One resource: labour (measured in hours)
- The economy has 50,000 labour hours per month available for production.

Assumptions: 1. All resources are used
2. Resources and technology are fixed

PPF Example

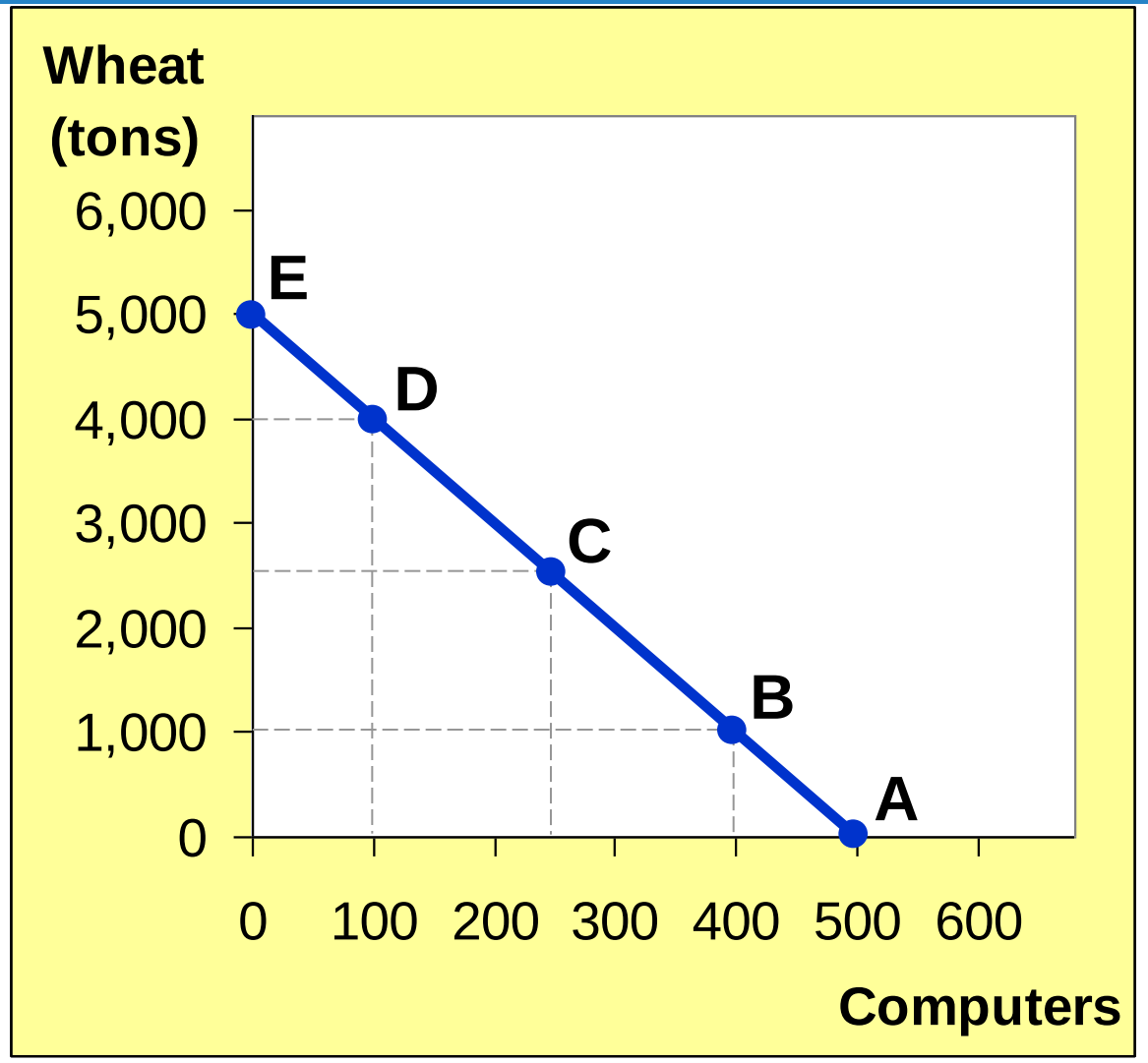
3. Producing one computer requires 100 hours labour.

4. Producing one ton of wheat requires 10 hours labour.

	Employment of labour 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	
	Computers	Wheat
A	500	0
B	400	1,000
C	250	2,500
D	100	4,000
E	0	5,000



PPF Example

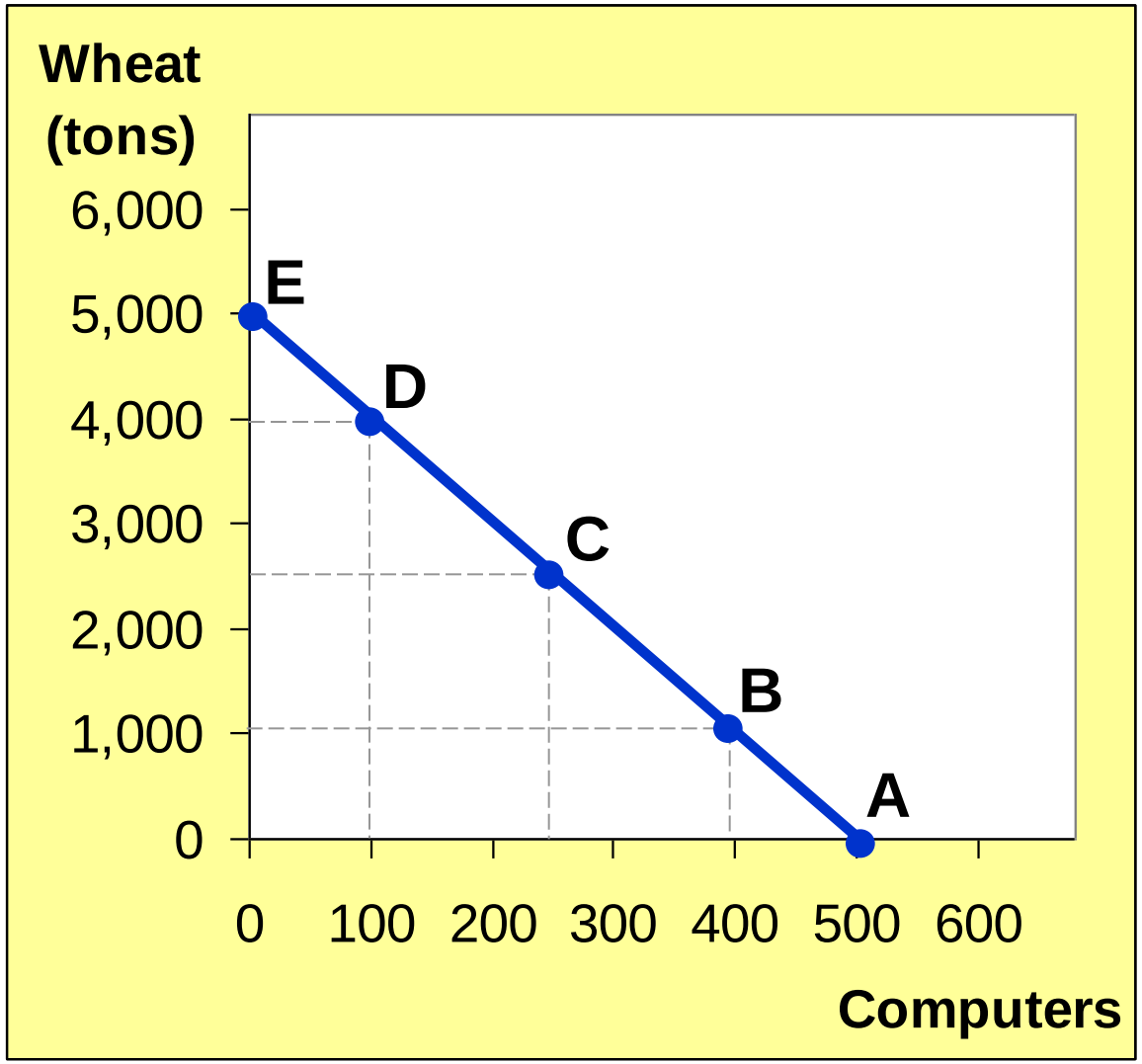
On the graph, find the point that represents 100 computers and 3000 tons of wheat. Label it as **F**.

What would we say about this point?

Next, find the point that represents 300 computers and 3500 tons of wheat. Label it as **G**.

What would we say about this point?

All points along the curve are possible and efficient.



The PPF and Opportunity Cost

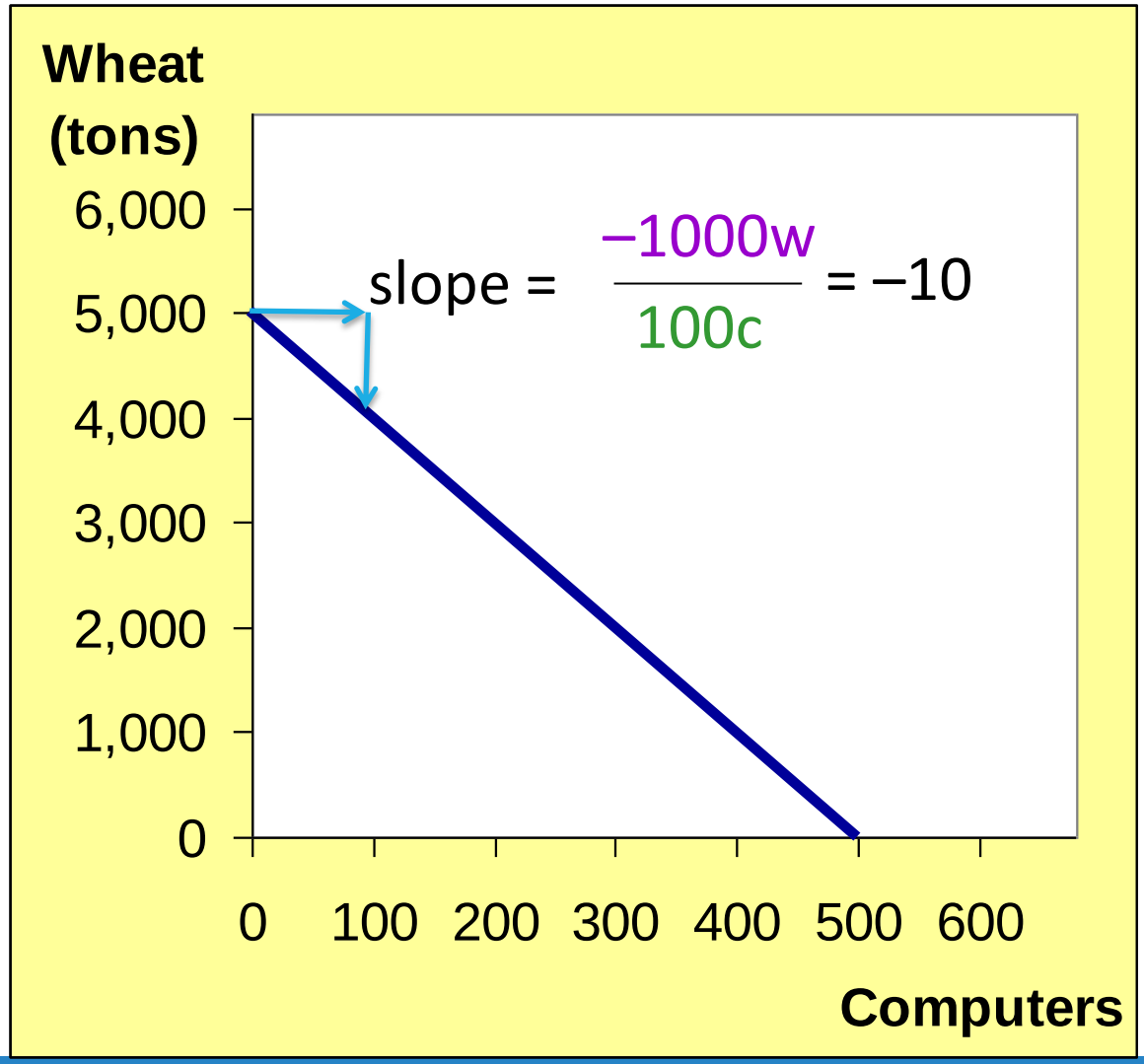
Recall: The **opportunity cost** of a good is what must be given up to get the good.

To get more of a good society must sacrifice some of the other good because resources must be reallocated.

The slope of the PPF tells you the opportunity cost of one good in terms of the other.

The opportunity cost per computer is

The opportunity cost per ton wheat is

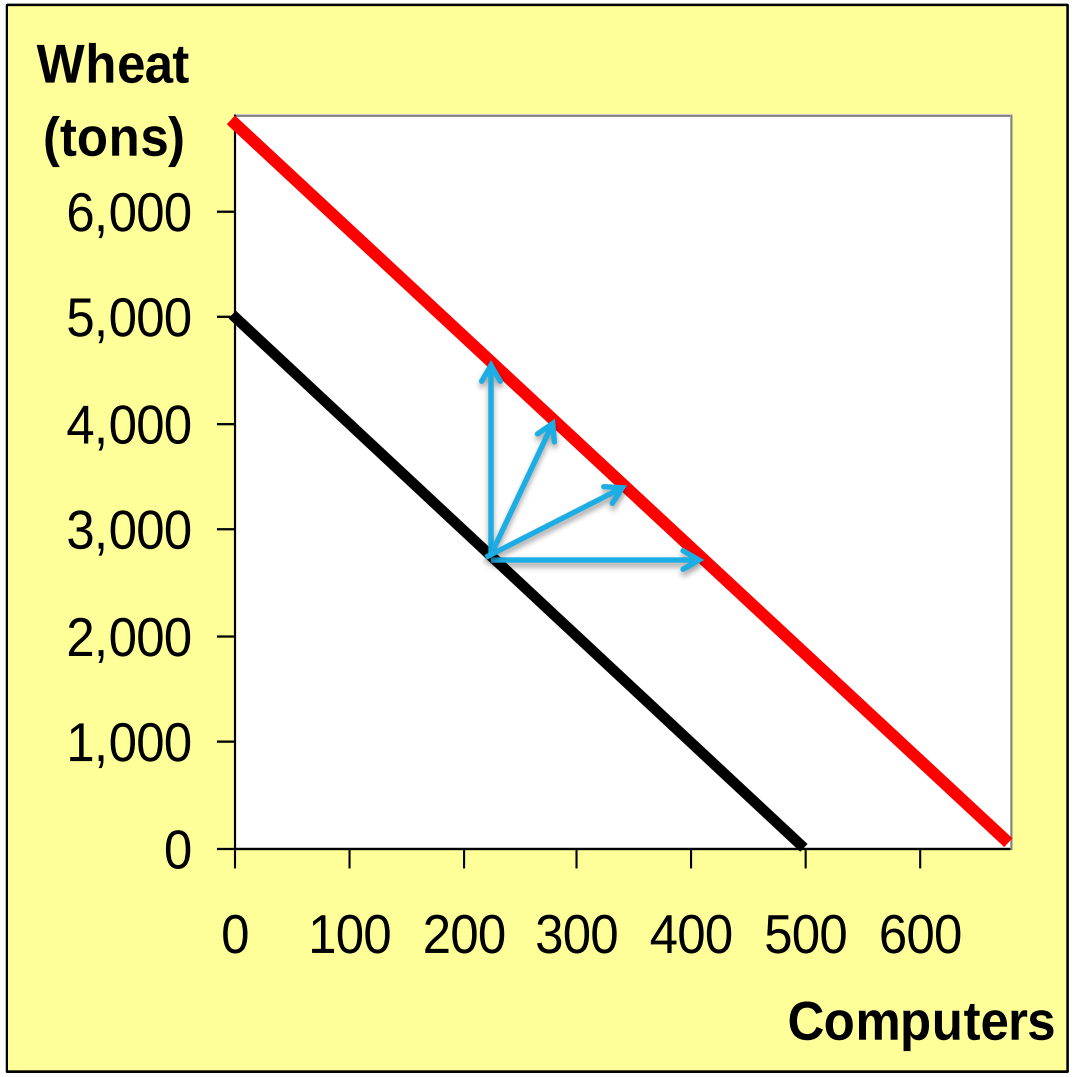


Economic Growth and Expanding the PPF

Economies can produce more goods if there is either

1. More resources
2. Better technology

This economy could produce more wheat, more computers, or more of both.

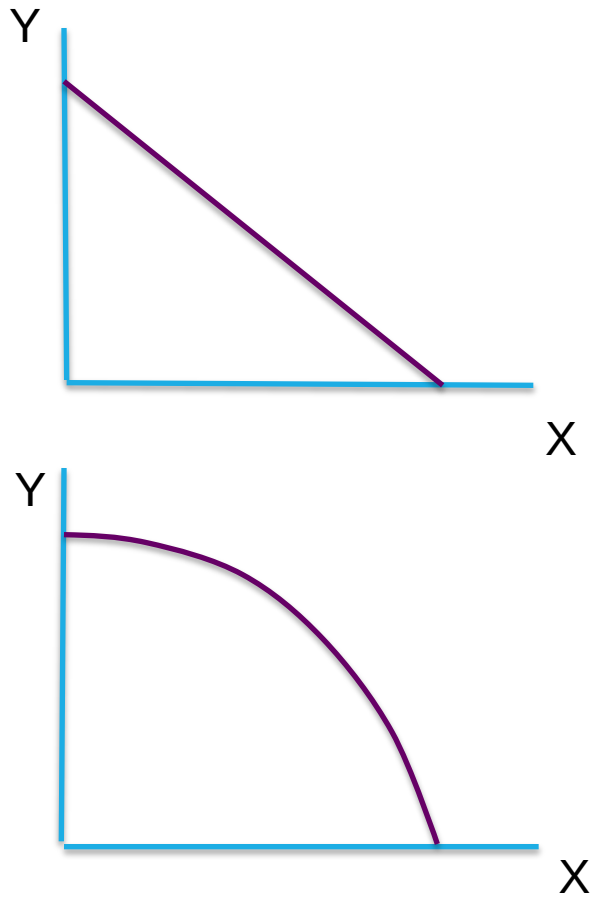


The Shape of the PPF

The PPF could be a straight line or bow-shaped.

It depends on what happens to opportunity cost as economy shifts resources from one industry to the other.

- If the opportunity cost remains constant, the slope is constant, so the PPF is a straight line.
- If the opportunity cost of a good rises as the economy produces more of the good, the slope rises, so the PPF is bow-shaped.



Why the PPF Might Be Bow-Shaped

Resources are not equally productive in both goods.

If only a small amount of a good is produced, the most productive resources are used → not many resources are needed, so the opportunity cost is small.

As more and more of the good is produced, resources that are less productive have to be used → more resources are needed → larger opportunity cost.

The increasing opportunity cost is the increasing slope of the PPF.