

# The Economizing Problem: Scarcity and Choice

## Chapter Outline

1. Economizing Problem – the problem to be solved
2. Production Possibilities Frontier – one model to solve the problem
  - a. Assumptions
  - b. The Model
  - c. Economic Growth
3. Comparative Advantage and the Gains from Trade

## Economizing Problem

1. Scarcity of Resources – most goods are scarce (except air)
2. Unlimited Wants – everyone wants more (more is better than less)  
→ CHOICES must be made

The choices can be made by Prices, Governments

**Opportunity Cost** – the value of the next best alternative forgone  
Opportunity costs arise because of **SCARCITY**.

Example: The local mall has free parking, but the mall is always very busy, and it takes 30 minutes to find a parking space. Today when you found a vacant spot, Harry also wanted it. Is parking really free at this mall? If not, what did it cost you to park today? When you parked your car today, did you impose any costs on Harry? Explain.

## Employment and Efficiency

### Resources

1. **Land** – natural resources
2. **Labor** – physical and mental resources
3. **Capital** – manufactured goods that aid in production

**Full Employment** – all resources available are used in the production process

**Full Production** – resources are used in such a way as to provide maximum satisfaction

**Efficiency** –

1. the most wants in society possible are satisfied in such a way as to those who get the most benefit from a good gets it
2. maximizes societies welfare given your resources
3. there is no way to reallocate goods to make any individual better off without decreasing the welfare of any other individual

GOAL: Efficiency

## Production Possibilities Curve

Assumptions: Needed to simplify things in order to help understand what is happening

1. 2 goods
2. fixed resources
3. fixed technology
4. productive efficiency and full employment

## Productive Possibilities Frontier

1. Shows all possible choices given the assumptions
2. Shows all possible combinations of 2 goods or services that can be produced in a society given their fixed resources and technology with productive efficiency and full employment.

### Example:

There are 30 people in the class. In 10 minutes, the following holds:

- 10 students can produce either 1 page read or 1 page written
- 10 students can produce either 2 pages read or 1 page written
- 10 students can produce either 3 pages read or 1 page written

Example: Draw a PPC and show what a point on, in, and outside the curve means.

**Opportunity Cost** – value of best alternative forgone

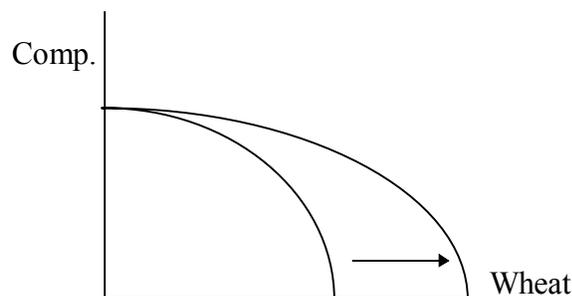
opportunity cost of good x = amount of good y forgone / change in good x

if move along PPF, find that there is increasing opportunity cost (which arises from scarcity)

**Law of Increasing Opportunity Cost** – For each additional unit of a good produced (written pages) the opportunity cost (pages read given up) increases.

- Why?
- Because the most efficient use of the resource in production of a good is used first.

Example: A new technology is developed that helps harvest wheat faster.



Economic Growth (Causes):

1. Capital accumulation (human, capital goods)
2. Technological progress (change, ideas)

Contraction of PPF (Causes):

1. Droughts
2. Floods
3. Earthquakes

### Comparative Advantage and the Gains from Trade

**Absolute Advantage** – a producer can produce the good with fewer resources than another producer.

**Comparative Advantage** – a producer can produce the good at a lower opportunity cost than another producer.

**Gains from trade** – amount by which more can be produced through specialization and trade, than each can being self-sufficient

\* If each producer produces the product, that each has a comparative advantage in the production of then, the overall production is increased.

Example: Suppose Ford can produce either produce:

10 trucks and 0 SUV's or

0 trucks and 10 SUV's in a day (or any combination there of).

Likewise Chrysler can produce either:

6 trucks and 0 SUV's or

0 trucks and 10 SUV's in a day.

Suppose each company spent  $\frac{1}{2}$  their day producing each good. Therefore, Ford would produce 5 trucks and 5 SUV's. Chrysler would produce 3 trucks and 5 SUV's. The world production would then be 8 trucks and 10 SUV's per day. Could world production be increased through specialization and trade? Explain.

Ford has a comparative advantage in the production of trucks (opportunity cost = 1) and Chrysler has a comparative advantage in the production of SUV's (opportunity cost =  $\frac{10}{6}$ ). Therefore, when Ford produces only trucks and Chrysler produces only SUV's then total production will increase. Total production in this case will be 10 trucks and 10 SUV's, which is an increase of 2 trucks.