ECONOMICS 201: WEEK 1 OPPORTUNITY COST

Scarcity Opportunity Cost Production Possibilities Graph

SCARCITY: Assumptions

The idea of scarcity is very important in Economic theory. It is based on some crucial assumptions

Human Beings have <u>unlimited</u> wants.

Want ≠ Need

All Economic decisions are maximization decisions.

More is better

SCARCITY: Assumptions

Resources

Labor

Capital

- Tools, equipment, etc.
- Knowledge, skills

Land

Natural Resources

Resources – a general term that refers to things that are used to produce goods and services.

SCARCITY: Assumptions

At any given point in time,

• all resources are *fixed*.

Over time,

availability of resources may change.

For example, we can *make* more capital.

SCARCITY: Definition

Fixed resources +

Unlimited Wants

= Scarcity

Or

"We can't always have what we want."

https://www.youtube.com/watch?v=bs5PDs0w-wo

OPPORTUNITY COST

Very <u>important concept</u> in Economic theory. Every choice has an opportunity cost. Example:

- You have only \$10 in your pocket. You can buy <u>either</u> \$10 worth of gasoline <u>or</u> a \$10 lunch. You cannot have both.
- You choose the gasoline. Your opportunity cost is the lunch.
- You choose the lunch. Your opportunity cost is the gasoline.

OPPORTUNITY COST

Your opportunity cost is your <u>best</u> alternative.

Example:

- You have only \$10 in your pocket. You can buy <u>either</u> \$10 worth of gasoline <u>or</u> a very good \$10 lunch <u>or</u> a lousy \$10 lunch.
- You choose the gasoline. Your opportunity cost is the very good lunch.

PRODUCTION POSSIBILITIES GRAPH

Purpose

 to show opportunity costs associated with social or individual choices.

Social Choices

- Consumer goods vs. Military goods
- Consumer goods vs. Capital goods
- The environment vs. economic concerns.

Individual Choices

Gasoline vs. Lunch

EXAMPLE: STUDY TIME



Assume you decide you only have 10 hours a week to study both subjects.

EXAMPLE: STUDY TIME



The graph shows your choices with the **limited** resource of 10 hours:

EXAMPLE: STUDY TIME



The graph shows your choices with the limited resource of 10 hours:

CONSTANT OPPORTUNITY COSTS

The study time example assumed that 1 hour of study time always produced the same output (measured by grades).

- 1 hour of study time was equally productive for Accounting or for Economics.
- 1 hour of study time was equally productive whether it was the first hour of studying or the 10th hour of studying.
 - In short, opportunity costs were assumed to be constant.
- Not very realistic.

INCREASING OPPORTUNITY COST

Some resources are better suited to some purposes than others.

- Farm land in Florida or California is used for oranges and other crops that are sensitive to frost.
- Farm land in areas with heavier rainfall or extensive irrigation is used to produce alfalfa and other crops that need lots of water.
 - In short, opportunity costs are not constant.

INCREASING OPPORTUNITY COSTS

The resources best suited to production will be used first.

- Farm land in Florida or California will be used to produce oranges first.
- Farm land in Minnesota and North Dakota will be used to produce oranges last.

Increasing production of wheat means giving up some oranges.

- The first land converted from oranges to wheat will be in Minnesota – relatively low opportunity cost.
- The last land converted from oranges to wheat will be in Florida – higher opportunity cost.
 - In short, opportunity costs increase as production expands.

INCREASING OPPORTUNITY COST

Slope is flat at A. Low opportunity cost of producing more wheat.

The principle of increasing marginal opportunity cost states that opportunity costs increase as you produce more of one product.

Slope is steep at B. High opportunity cost of producing more wheat.

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PRODUCTION POSSIBILITIES FRONTIER

- Any point on the curve is efficient.
- Any point within the curve is inefficient.
 i.e. could produce more with given resources.
- Any point outside the PPC is unattainable at present point in time.



1. Which points are **possible** for this economy to produce?



2. Which point represents the maximum possible production of CDs?



2. Which point represents the maximum possible production of Pizzas?

LITTLE QUIZ. . .

Production Possibilities for Tuneland

Cars	Toys
50	0
40	250
30	450
20	600
10	700
0	750

4. What is the opportunity cost of increasing the production of cars from 30 to 40?

ANSWERS TO LITTLE QUIZ

- 1. A, B, C, D
- **2.** A
- **3.** C
- 4. 200 toys

PRODUCTION POSSIBILITIES

Economic Growth



