

# Principles of Macroeconomics

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## ECON 2002.01 - Chapter 2 Scarcity and the World of Trade-Offs

### Introduction

Suppose that you are a passenger on an airline flight, and the captain announces an early arrival at your destination. Immediately, you begin to contemplate how you might use that extra hour.

But soon enough, you hear the bad news: there are no empty gates, and you will have to wait at least an hour to exit the plane. As you abandon your plans for that extra hour, you realize that you have incurred an opportunity cost.

In this chapter, you will learn how opportunity costs affect economic decisions.

### Learning Objectives

- Evaluate whether even affluent people face the problem of scarcity
- Understand why economists consider wants but not needs
- Explain why the scarcity problem induces individuals to consider opportunity costs
- Discuss why obtaining increasing increments of any particular good entails giving up more and more units of other goods
- Explain why society faces a trade-off between consumption goods and capital goods
- Distinguish between absolute and comparative advantage

### Chapter Outline

- Scarcity
- Wants and Needs
- Scarcity, Choice, and Opportunity Cost
- The World of Trade-Offs
- The Choices Society Faces
- Economic Growth and the Production Possibilities Curve
- The Trade-Off Between the Present and the Future
- Specialization and Greater Productivity
- Comparative Advantage and Trade Among Nations

### Production Possibilities Curve (Frontier)

1. Scarcity (Trade-Offs)
2. Law of Increasing Opportunity Costs (The more you want of anything, the more you'll have to give up of other things)
3. A Perfectly Efficient Economy Produces on the Curve, Instead of Inside it
4. Economic Growth Means Pushing the Frontier Outward
  - a. Higher production
  - b. More skilled workers
  - c. Better ways to produce goods

## Scarcity

- **Scarcity**
  - Is the most basic concept in all of economics
  - Occurs when the ingredients for producing things that people desire are insufficient to satisfy all wants
  - Means we never have enough of everything, including time, to satisfy our every desire
- **What scarcity is NOT**
  - It is *not* a shortage
  - It is *not* the same thing as poverty
- **Production**
  - Any activity that results in the conversion of **resources** into products that can be used in consumption
- **Resources**
  - Inputs that are used to produce things that people want
- **Resources or Factors of Production**
  - **Land**
    - a) Natural resources or the gifts of nature
  - **Labor\***
    - a) The human resource
  - **Physical Capital**
    - a) All manufactured resources
  - **Human Capital**
    - a) Accumulated training and education of workers
  - **Entrepreneurship**
    - a) Person who organizes, manages, and assembles the other resources
    - b) Risk taker
    - c) Maker of basic business policy decisions
- **Goods versus Economic Goods**
  - **Goods** are all things from which individuals derive satisfaction or happiness
  - **Economic goods** are scarce goods, for which the quantity demanded exceeds the quantity supplied at zero prices
- **Services**
  - Tasks that are performed for someone else
  - Can be referred to as *intangible goods*
- **Recall**
  - **Scarcity** occurs when the ingredients (resources) for producing things that people desire are insufficient to satisfy all wants

## Wants and Needs

- **Needs**
  - To economists, the term *need* is not definable
- **Wants**
  - Goods and services on which we place a positive value
  - People have unlimited *wants*

## Scarcity, Choice and Opportunity Cost

- **Opportunity Cost**
  - The highest-valued, next-best alternative that must be sacrificed to obtain something or to satisfy a want
  - The *next-highest-ranked* alternative, not all alternative
- **Questions**

- What is the opportunity cost of attending this economics class?
- What is the opportunity cost of attending a concert by your favorite band?
- What is the opportunity cost of working out at the gym?
- **In economics, cost is always a forgone opportunity**

### The World of Trade-Offs

- Whenever you engage in any activity, using any resource, you are trading off the use of that resource for one or more alternative uses
- The value of the trade-off is represented by the *opportunity cost* (that which you give up to obtain something else)
- **Graphical analysis of opportunity cost**
  - The **production possibilities curve** (PPC) represents all possible combinations of maximum outputs that could be produced assuming a fixed amount of productive resources of a given quality
- **The Production Possibilities Curve (PPC)**
  - Trade-offs: What would happen if you were more interested in getting a higher grade in economics?
  - Holding a constant total study time: What would happen to the PPC if you spent more time studying?
  - Straight-line PPC: Is it possible that the terms of the trade-off might not be constant?

### The Choices Society Faces

- **PPC is used to demonstrate related concepts of scarcity, choice, and trade-offs**
  - At the individual level
  - At the societal level
- **Production Possibilities Assumptions**
  - Resources are fully employed
  - Production takes place over a specific time period
  - Resources are fixed for the time period
  - Technology does not change over the time period
- **Technology**
  - Society's pool of applied knowledge concerning how goods and services can be produced
- **Efficiency**
  - Productive efficiency: producing the maximum output with given technology and resources
  - Alternative, the situation in which a given output is produced at minimum cost
- **Inefficient Point**
  - Any point below the production possibilities curve at which the use of resources is not generating the maximum possible output
- **Law of Increasing Additional Cost**
  - As society attempts to produce more of a good, the opportunity cost of additional units of that good generally increases
  - Accounts for bowed shape of the PPC
- Resource are not *perfectly* adaptable for alternative uses
- In general, *the more specialized the resources, the more bowed the production possibilities curve*