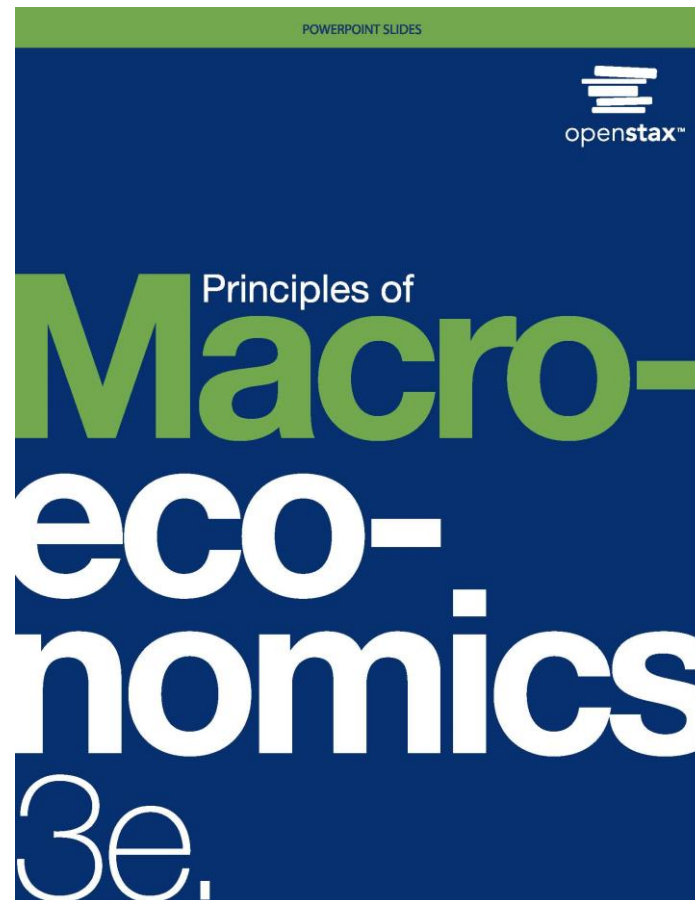


# Principles of Macroeconomics 3e

## Chapter 2 CHOICE IN A WORLD OF SCARCITY

### PowerPoint Image Slideshow



## Ch.2 OUTLINE

2.1: How Individuals Make Choices Based on Their Budget Constraint

2.2: The Production Possibilities Frontier and Social Choices

2.3: Confronting Objections to the Economic Approach

## 2.1 How Individuals Make Choices Based on Their Budget Constraint

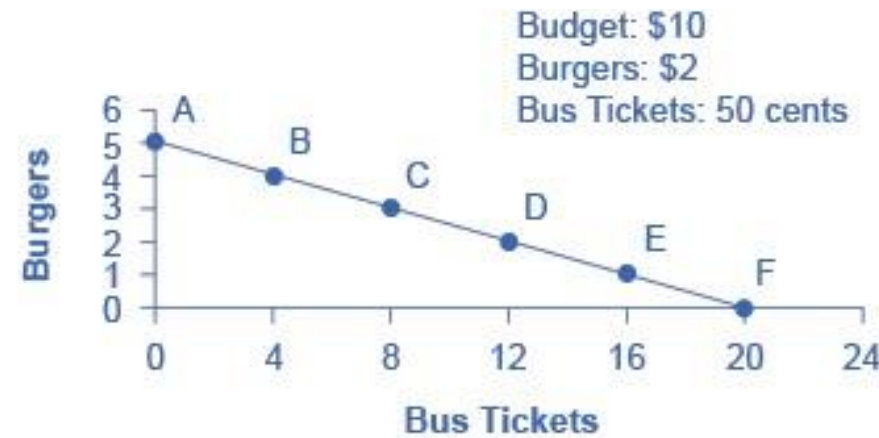
- **Budget constraint** - all possible consumption combinations of goods that someone can afford, given the prices of goods, when all income is spent; “the boundary of the opportunity set”.
- With a limited amount of income to spend on things, consumers must choose what they need and want. (What two “Fundamentals of Economics” are here?)
- Given the price of the two goods and a budget amount, a budget constraint can be illustrated *graphically*. **YAY!!!!!!**

## Will the Workin' Man



Budget - \$10 Burgers - \$2 Bus Tickets - \$0.50

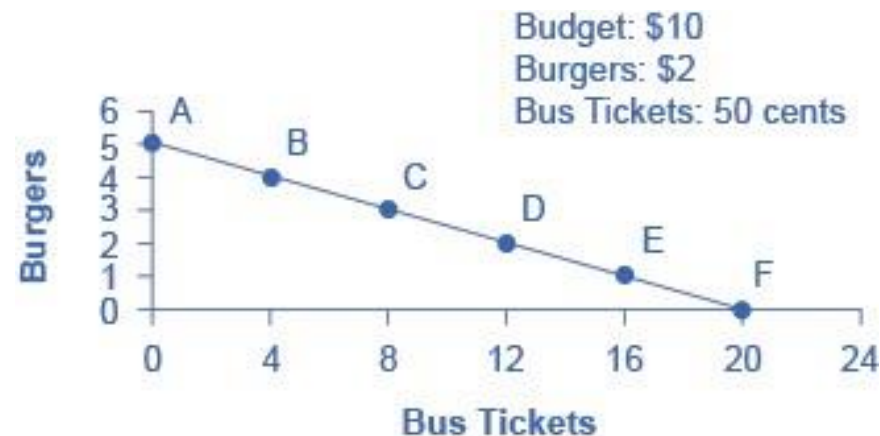
# The Budget Constraint: Will's Consumption Choice



- Each point on the budget constraint represents a combination of burgers and bus tickets whose total cost adds up to Will's budget of \$10.
- The opportunity set - every point on (or inside) the constraint which shows a combination of burgers and bus tickets that Will can afford.
- What about a point outside the constraint?

# The Concept of Opportunity Cost

- **Opportunity cost** indicates what one must give up to obtain what he or she desires.
  - The cost of one item is the lost opportunity to do or consume something else.
  - The opportunity cost is the value of the next best alternative. (College vs. Work)
  - A fundamental principle of economics is that every choice has an opportunity cost.
- For Will, what is the the opportunity cost of a burger?



- **Discussion Question: What are the opportunity costs of...**
  - Buying vs. leasing a car
  - Investing in different ways (i.e., savings accounts, certificates of deposit, mutual funds, stocks, etc.)
  - Going out to eat vs. preparing food at home
  - Walking or taking public transportation

## Consumer's goal is to maximize utility!



**Utility** – satisfaction, usefulness or value one obtains from consuming goods and services.



# Marginal Utility



**Marginal analysis** - examining the benefits and costs of choosing a little more or a little less of a good.

# Diminishing Marginal Utility

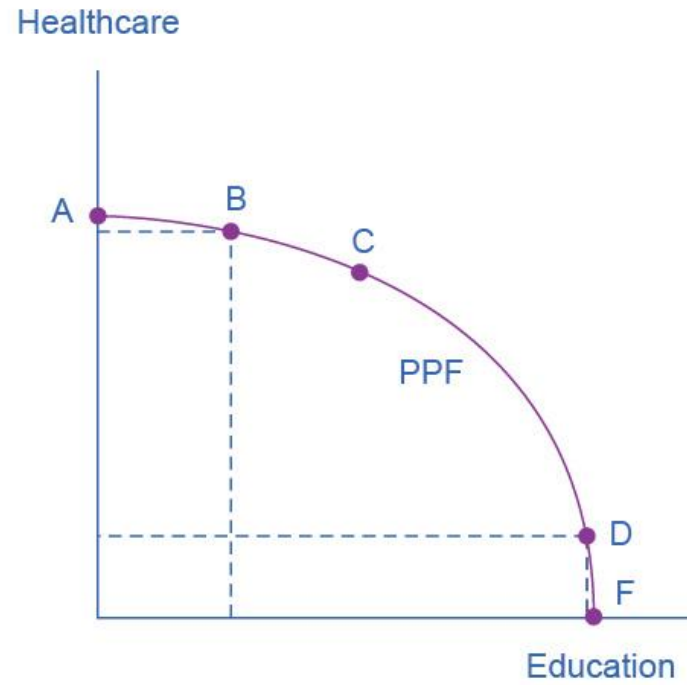


**Law of diminishing marginal utility** - as a person receives more of a good, the additional (or marginal) utility from each additional unit of the good declines.

## 2.2 The Production Possibilities Frontier and Social Choices

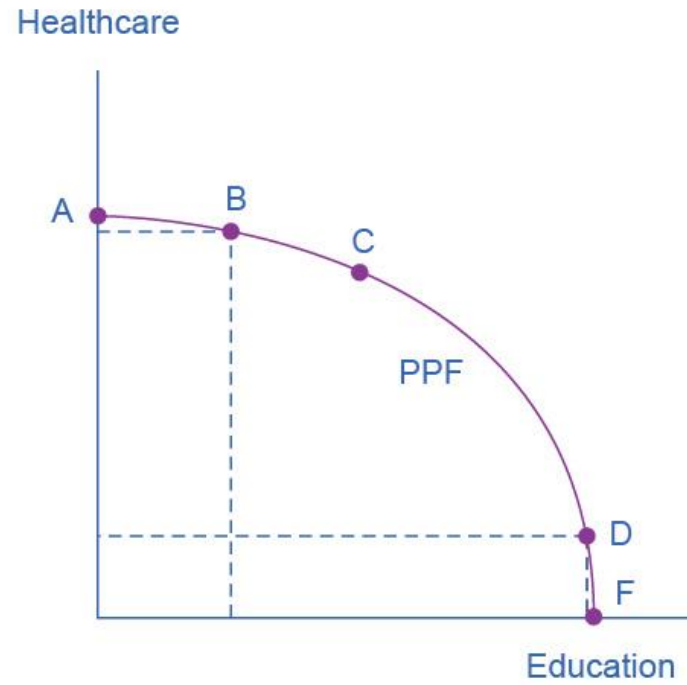
- **Production possibilities frontier (PPF)** - a diagram that shows the productively efficient combinations of two products that an economy can produce given the resources it has available.

# Healthcare vs. Education Production Possibilities Frontier



- This production possibilities frontier shows a tradeoff between devoting social resources to healthcare and devoting them to education.
- At A all resources go to healthcare and at B, most go to healthcare.
- At D most resources go to education, and at F, all go to education.

# Healthcare vs. Education Production Possibilities Frontier



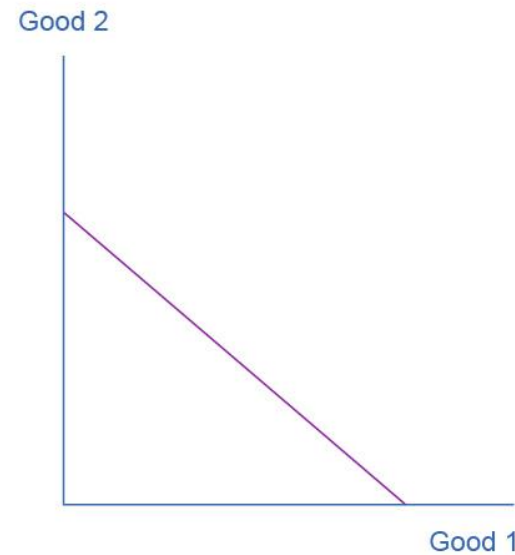
- A society could choose to produce any combination of healthcare and education on the production possibilities frontier.
- It does not have enough resources to produce outside the PPF.
- Because the PPF is downward sloping from left to right, the only way society can obtain more education is by giving up some healthcare.

## The Shape of the PPF and the Law of Diminishing Returns

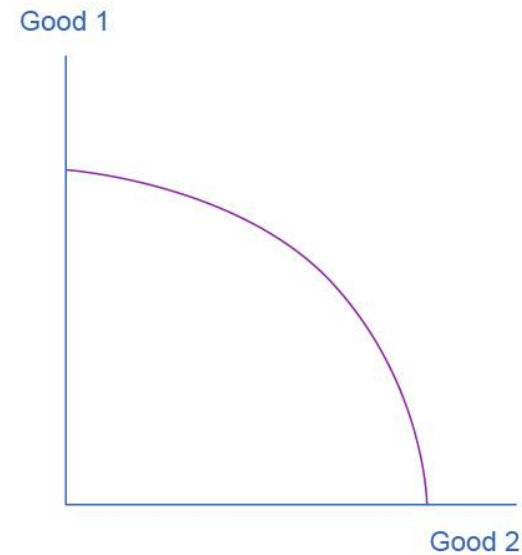


- **Law of diminishing returns** - as additional increments of resources to producing a good or service are added, the marginal benefit from those additional increments will decline.
- The law of diminishing marginal utility is a more specific case of the law of diminishing returns.

## Similarities - Budget Constraint and PPF



(a) An individual opportunity set



(b) A social production possibilities frontier

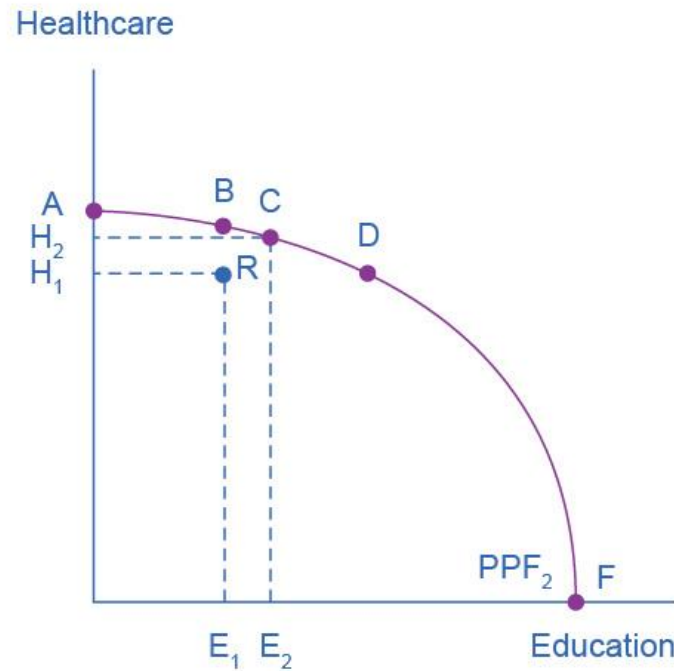
- Both the budget constraint and the social production possibilities frontier (PPF) show the constraints under which individual consumers and society as a whole operate.
- Both diagrams show the tradeoff in choosing more of one good at the cost of less of the other.

## Productive Efficiency and Allocative Efficiency

- **Productive efficiency** - when it is impossible to produce more of one good (or service) without decreasing the quantity produced of another good (or service)
- Any choice inside the PPF is productively inefficient because it is possible to produce more of one good, the other good, or some combination of both goods.
- **Allocative efficiency** - when the mix of goods produced represents the mix that society most desires



## Healthcare vs. Education Production Possibilities Frontier, Continued



- Productive efficiency -
  - All choices along a given PPF like B, C, and D display productive efficiency.
  - R does not, because it is inside the PPF curve, and thus not all resources are being used.

## The PPF and Comparative Advantage

- How much of a good a country decides to produce depends on how expensive it is to produce it versus buying it from a different country.
- Countries tend to have different opportunity costs of producing a specific good, either because of different climates, geography, technology, or skills.
- **Comparative advantage** - when a country can produce a good at a lower opportunity cost than another country.

## 2.3 Confronting Objections to the Economic Approach

*Objections in understanding the economic approach to decision-making:*

1) People, firms, and society **do not** act in a way that fits the economic way of thinking.

- Economics begins with the premise that "individuals are pursuing their separate interest". (Attempting to maximize utility)
- We may not use the vocabulary, but we use marginal analysis and budget constraints.

## Confronting Objections to the Economic Approach



*Objections in understanding the economic approach to decision-making:*

2) People, firms, and society should not act this way.

- Portrays people as self-interested, *but economics is not a form of moral instruction*.
- Seeks to describe economic behavior as it actually exists.
- Uses, **positive statements**, which describe the world as it is. These are factual.
- Tries to avoid **normative statements**, which describe how the world should be. These statements are subjective questions of opinion.

3) It is **not possible** that broader social good can emerge from selfish individual actions.

- **Invisible hand** - concept that individuals' self-interested behavior can lead to positive social outcomes
  - Identified in Adam Smith's *The Wealth of Nations*.
- Consumers will encourage businesses to offer goods and services that meet their needs.

