

# Economics 001 Principles of Microeconomics

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• Lecture 1

- An Example
- Introductions
- What is Economics?
- Scarcity and Opportunity Costs
- PPFs
- Syllabus



## A Definition of Economics

- The social science that studies how societies allocate scarce resources



### Example



#### The Big 10 Ticket Book

Coupon Makeup: A-10¢ (1), B-25¢ (1), C-35¢ (2), D-45¢ (3), E-60¢ (3)

- Tickets were eliminated in June 1982, when all-inclusive passports became the only form of Disneyland admission.
- Why?
- Fastpass?

## A Definition of Economics

- The social science that studies how societies allocate scarce resources



"one of the world's most centrally directed economies"

Population = 23 million  
GDP/capita = \$1156  
Life expectancy = 64 yrs  
Famine deaths, 600K in 1990s.



"lack of effective national governance"

Population = 10 million  
GDP/capita = \$264  
Life expectancy = 50 yrs  
Famine deaths, 200K in 1990s.

USA GDP/cap = \$47K, life expectancy=78 yrs.

Source: CIA World Factbook

– **Microeconomics** is the study of individual people and businesses and the interaction of those decisions in the market.

- Prices and Quantities
- Effects of government regulation and taxes

– **Macroeconomics** is the study of the national economy and the global economy as a whole.

- Average prices and total employment, income, and production
- Effects of taxes, government spending, a budget deficits on total jobs and incomes
- Effects of money and interest rates

- **Microeconomics**
  - tradeoffs
  - margins and incentives
  - voluntary exchange is efficient
  - market failures
- **Macroeconomics**
  - for the whole economy
  - productivity
  - inflation
  - interest rates
  - unemployment

### Theory

- model of how the world works
- abstract
- equations represent real world ideas
- e.g. employer-provided health insurance reduces job mobility

### Empiricism

- use statistics, data, computers to measure and test theory
- e.g. gather data on quits by workers with and without employer-provided health insurance

- **Positive statements** are about *what is*.
  - can be proven right or wrong
  - can be tested by comparing it to facts
- **Normative statements** are about *what ought to be*.
  - depend upon personal values and cannot be tested

## DN: Opportunity Cost

**Opportunity Cost** = value of the best foregone alternative

Note: relate this to "scarcity" and the definition of "economics."

## Examples of opportunity cost

1. One semester of college.
2. Rose bowl tickets.
3. Georgetown faculty tuition assistance.
4. Lost theater tickets.

## Examples of opportunity cost

Farmer choosing wheat or corn.

- 0 corn	&	65,000 wheat
- 10,000 corn	&	60,000 wheat
- 20,000 corn	&	52,000 wheat
- 30,000 corn	&	38,000 wheat
- 40,000 corn	&	20,000 wheat
- 50,000 corn	&	0 wheat

## DN: Production Efficiency

Cannot produce more of one good without:

- (1) producing less of another
- (2) using more inputs

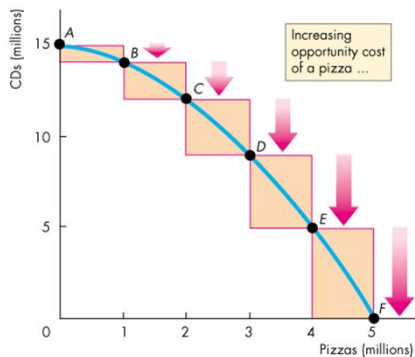
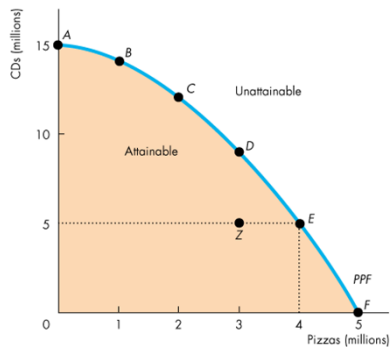
## Production Possibility Frontier (PPF)

The set of production efficient output combinations.

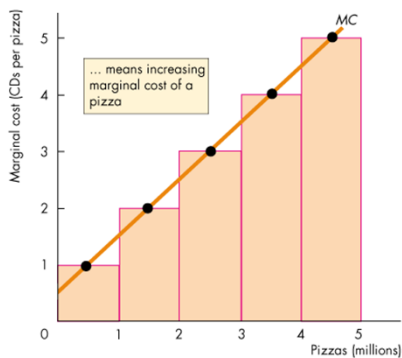
## 3 important points about the PPF

- 1) The slope
  - $|\text{slope}|$  = opportunity cost of good on bottom axis, in terms of good on left axis.
- 2) The slope is negative.
  - can PPF slope up?
- 3) The PPF is bowed outwards.

Figure 2.1: A Production Possibility Boundary



(a) PPF and opportunity cost



(b) Marginal cost

## Resources

- **Aplia:** [www.aplia.com](http://www.aplia.com). The code is **XVHB-DMFJ-NPDU**. Be sure you register for the lecture time you will attend, A or B (12:30 or 2 PM). Sign up here: <http://www.cengagebrain.com/micro/georgetown/ECON001>
- **iClicker:** You must purchase an iClicker device and bring it to class every day or use the app. You must register at [www.iclicker.com](http://www.iclicker.com).
- **Piazza.com:** <https://piazza.com/georgetown/fall2014/econ001/home>
- **Text:** Parkin, *Microeconomics*, Pearson Addison-Wesley. 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> editions are nearly identical and you can save a lot of money by purchasing a used copy. Not every topic covered in lecture will appear in the reading material, and not every page of the text will be covered in class.
- (Note: I do not use Blackboard.)

## Requirements

- Homework assignments, experiments
- Two in-class exams
  - multiple choice and short-answer questions
- One final exam (cumulative).
- iClicker
  - register your clicker at [www.iclicker.com](http://www.iclicker.com)