# **The Principles of Economics**

# What Economics Is All About

- Scarcity: the limited nature of society's resources
- Economics: the study of how society manages its scarce resources, *e.g.*
  - how people decide what to buy, how much to work, save, and spend
  - how firms decide how much to produce, how many workers to hire
  - how society decides how to divide its resources between national defense, consumer goods, protecting the environment, and other needs

#### **Principle #1: People Face Tradeoffs**

All decisions involve tradeoffs. Examples:

- Going to a party the night before your midterm leaves less time for studying.
- Having more money to buy stuff requires working longer hours, which leaves less time for leisure.
- Protecting the environment requires resources that could otherwise be used to produce consumer goods.

#### **Principle #1: People Face Tradeoffs**

- Society faces an important tradeoff:
  efficiency vs. equality
- Efficiency: when society gets the most from its scarce resources
- Equality: when prosperity is distributed uniformly among society's members
- Tradeoff: To achieve greater equality, we could redistribute income from wealthy to poor. But this reduces incentive to work and produce, and shrinks the size of the economic "pie."

# Principle #2: The Cost of Something Is What You Give Up to Get It

- Making decisions requires comparing the costs and benefits of alternative choices.
- The opportunity cost of any item is whatever must be given up to obtain it.
- It is the relevant cost for decision making.

# Principle #2: The Cost of Something Is What You Give Up to Get It

#### <u>Examples:</u>

The opportunity cost of...

...going to college for a year is not just the tuition, books, and fees, but also the foregone wages.

...seeing a movie is not just the price of the ticket, but the value of the time you spend in the theater.

# Principle #3: Rational People Think at the Margin

#### **Rational people**

- systematically and purposefully do the best they can to achieve their objectives.
- make decisions by evaluating costs and benefits of marginal changes – incremental adjustments to an existing plan.

# Principle #3: Rational People Think at the Margin

Examples:

- When a student considers whether to go to college for an additional year, he compares the fees & foregone wages to the extra income he could earn with the extra year of education.
- When a manager considers whether to increase output, she compares the cost of the needed labor and materials to the extra revenue.

### **Principle #4: People Respond to Incentives**

- Incentive: something that induces a person to act, *i.e.* the prospect of a reward or punishment.
- Rational people respond to incentives.
  - Examples:
    - When gas prices rise, consumers buy more hybrid cars and fewer gas guzzling SUVs.
    - When cigarette taxes increase, teen smoking falls.

# Example

You are selling your 1996 Mustang. You have already spent \$1000 on repairs.

At the last minute, the transmission dies. You can pay \$600 to have it repaired, or sell the car "as is."

In each of the following scenarios, should you have the transmission repaired? Explain.

- A. Blue book value is \$6500 if transmission works,
  \$5700 if it doesn't
- B. Blue book value is \$6000 if transmission works,
  \$5500 if it doesn't

# Answers

Cost of fixing transmission = \$600

- A. Blue book value is \$6500 if transmission works,
  \$5700 if it doesn't
  - Benefit of fixing the transmission = \$800 (\$6500 5700).

It's worthwhile to have the transmission fixed.

 B. Blue book value is \$6000 if transmission works, \$5500 if it doesn't
 Benefit of fixing the transmission is only \$500.
 Paying \$600 to fix transmission is not worthwhile.

## Answers

**Observations:** 

- The \$1000 you previously spent on repairs is irrelevant. What matters is the cost and benefit of the *marginal* repair (the transmission).
- The change in incentives from scenario A to scenario B caused your decision to change.

# Principle #5: Trade Can Make Everyone Better Off

- Rather than being self-sufficient, people can specialize in producing one good or service and exchange it for other goods.
- Countries also benefit from trade & specialization:
  - Get a better price abroad for goods they produce
  - Buy other goods more cheaply from abroad than could be produced at home

Principle #6: Markets Are Usually A Good Way to Organize Economic Activity

- Market: a group of buyers and sellers (need not be in a single location)
- "Organize economic activity" means determining
  - what goods to produce
  - how to produce them
  - how much of each to produce
  - who gets them

Principle #6: Markets Are Usually A Good Way to Organize Economic Activity

- A market economy allocates resources through the decentralized decisions of many households and firms as they interact in markets.
- Famous insight by Adam Smith in The Wealth of Nations (1776):

Each of these households and firms acts as if "led by **an invisible hand**" to promote general economic well-being.

# Principle #6: Markets Are Usually A Good Way to Organize Economic Activity

- The invisible hand works through the price system:
  - The interaction of buyers and sellers determines prices.
  - Each price reflects the good's value to buyers and the cost of producing the good.
  - Prices guide self-interested households and firms to make decisions that, in many cases, maximize society's economic well-being.

# Principle #7: Governments Can Sometimes Improve Market Outcomes

- Important role for govt: <u>enforce property rights</u> (with police, courts)
- People are less inclined to work, produce, invest, or purchase if large risk of their property being stolen.

# Principle #7: Governments Can Sometimes Improve Market Outcomes

- Market failure: when the market fails to allocate society's resources efficiently
- Causes:
  - Externalities, when the production or consumption of a good affects bystanders (*e.g.* pollution)
  - Market power, a single buyer or seller has substantial influence on market price (*e.g.* monopoly)
- In such cases, public policy may promote efficiency.

# Principle #7: Governments Can Sometimes Improve Market Outcomes

- Govt may alter market outcome to promote equity
- If the market's distribution of economic well-being is not desirable, tax or welfare policies can change how the economic "pie" is divided.

Principle #8: A country's standard of living depends on its ability to produce goods & services.

- Huge variation in living standards across countries and over time:
  - Average income in rich countries is more than ten times average income in poor countries.
  - The U.S. standard of living today is about eight times larger than 100 years ago.

Principle #8: A country's standard of living depends on its ability to produce goods & services.

- The most important determinant of living standards: productivity, the amount of goods and services produced per unit of labor.
- Productivity depends on the equipment, skills, and technology available to workers.
- Other factors (*e.g.*, labor unions, competition from abroad) have far less impact on living standards.

**Principle #9: Prices rise when the government prints too much money.** 

- Inflation: increases in the general level of prices.
- The faster the govt creates money, the greater the inflation rate.

# Principle #10: Society faces a short-run tradeoff between inflation and unemployment

- In the short-run (1 2 years), many economic policies push inflation and unemployment in opposite directions.
- Other factors can make this tradeoff more or less favorable, but the tradeoff is always present.

# CHAPTER SUMMARY

The principles of the economy as a whole are:

- Productivity is the ultimate source of living standards.
- Money growth is the ultimate source of inflation.
- Society faces a short-run tradeoff between inflation and unemployment.