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PRINCIPLES OF ECONOMICS

Eighth Edition



CHAPTER

1

Ten Principles of Economics

Look for the answers to these questions:

- What kinds of questions does economics address?
- What are the principles of how people make decisions?
- What are the principles of how people interact?
- What are the principles of how the economy as a whole works?



Ten Principles of Economics

- Resources are scarce
- **Scarcity**: the limited nature of society's resources
 - Society has limited resources
 - Cannot produce all the goods and services people wish to have
- **Economics**
 - The study of how society manages its scarce resources



Ten Principles of Economics

- Economists study:
 - 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



How People Make Decisions

Principle 1: People face trade-offs

Principle 2: The cost of something is what you give up to get it

Principle 3: Rational people think at the margin

Principle 4: People respond to incentives



Principle 1: People Face Trade-offs

- To get something that we like, we have to give up something else that we also like
 - Going to a party the night before an exam
 - Less time for studying
 - Having more money to buy stuff
 - Working longer hours, less time for leisure
 - Protecting the environment
 - Resources could be used to produce consumer goods



Principle 1: People Face Trade-offs

- Society faces trade-offs:
 - The more it spends on national defense (guns) to protect its shores
 - The less it can spend on consumer goods (butter) to raise the standard of living at home
 - Pollution regulations: cleaner environment and improved health
 - But at the cost of reducing the incomes of the firms' owners, workers, and customers



Principle 1: People Face Trade-offs

- **Efficiency:** society gets the most from its scarce resources
- **Equality:** prosperity is distributed uniformly among society's members
- **Tradeoff:**
 - To achieve greater equality, could redistribute income from wealthy to poor
 - But this reduces incentive to work and produce, shrinks the size of economic “pie”



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

- Making decisions:
 - Compare costs and benefits of alternatives
 - Need to include opportunity costs
- Opportunity cost
 - Whatever must be given up to obtain some item



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

- The opportunity cost of:
 - Going to college for a year
 - Tuition, books, and fees
 - PLUS foregone wages
 - Going to the movies
 - The price of the movie ticket
 - PLUS 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
 - Given the available opportunities
 - Make decisions by evaluating costs and benefits of marginal changes
 - Small incremental adjustments to a plan of action



Principle 3: Rational People Think at the Margin

- Examples:
 - Cell phone users with unlimited minutes (the minutes are free at the margin)
 - Are often prone to making long/frivolous calls
 - Marginal benefit of the call > 0
 - A manager considers whether to increase output
 - 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
- Examples:
 - When gas prices rise, consumers buy more hybrid cars and fewer gas guzzling SUVs
 - When cigarette taxes increase, teen smoking falls

You are selling your 2007 Mustang. You have already spent \$1,000 on repairs. At the last minute, the transmission dies. You can pay \$900 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 (what you could get for the car) is \$7,500 if transmission works, \$6,200 if it doesn't.
- B. Blue book value is \$6,300 if transmission works, \$5,500 if it doesn't.

Cost of fixing the transmission = \$900

A. Blue book value is \$7,500 if transmission works, \$6,200 if it doesn't

– Benefit of fixing transmission = \$1,300
(= 7500 – 6200)

– Get the transmission fixed

B. Blue book value is \$6,300 if transmission works, \$5,500 if it doesn't

– Benefit of fixing the transmission = \$800
(= 6300 – 5500)

– Do not pay \$900 to fix it



How People Interact

Principle 5: Trade can make everyone better off

Principle 6: Markets are usually a good way to organize economic activity

Principle 7: Governments can sometimes improve market outcomes



Principle 5: Trade Can Make Everyone Better Off

- People benefit from trade:
 - People can buy a greater variety of goods and services at lower cost
- Countries benefit from trade and 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 and services to produce
 - How much of each to produce
 - Who produced and consumed these



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

- A market economy allocates resources
 - Decentralized decisions of many firms and households – 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

- **Prices:**
 - Determined: interaction of buyers and sellers
 - Reflect the good's value to buyers
 - Reflect the cost of producing the good
- **Invisible hand:**
 - Prices guide self-interested households and firms to make decisions that maximize society's economic well-being



Principle 7: Governments Can Sometimes Improve Market Outcomes

- Government - enforce property rights
 - Enforce rules and maintain institutions that are key to a market economy
 - 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

- Government - promote efficiency
 - Avoid market failures: market left on its own fails to allocate resources efficiently
 - Externality – source of market failure
 - Production or consumption of a good affects bystanders (e.g. pollution)
 - Market power – source of market failure
 - A single buyer or seller has substantial influence on market price (e.g. monopoly)



Principle 7: Governments Can Sometimes Improve Market Outcomes

- Government - promote equality
 - Avoid disparities in economic wellbeing
 - Use tax or welfare policies to change how the economic “pie” is divided



How the economy as a whole works

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

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

Principle 10: Society faces a short-run trade-off between inflation and unemployment



Principle 8: Country's Standard of Living Depends on Its Ability to Produce Goods and 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: Country's Standard of Living Depends on Its Ability to Produce Goods and Services

- Productivity: most important determinant of living standards
 - Quantity of goods and services produced from each unit of labor input
 - 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

- An increase in the overall level of prices in the economy

- In the long run

- Inflation is almost always caused by excessive growth in the quantity of money, which causes the value of money to fall
 - The faster the government creates money, the greater the inflation rate



Principle 10: Society Faces a Short-run Trade-off between Inflation and Unemployment

- Short-run trade-off between unemployment and inflation
 - Over a period of a year or two, 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

Summary

- Fundamental lessons about individual decision making:
 - People face trade-offs among alternative goals
 - The cost of any action is measured in terms of forgone opportunities
 - Rational people make decisions by comparing marginal costs and marginal benefits
 - People change their behavior in response to the incentives they face

Summary

- Fundamental lessons about interactions among people:
 - Trade and interdependence can be mutually beneficial
 - Markets are usually a good way of coordinating economic activity among people
 - The government can potentially improve market outcomes by remedying a market failure or by promoting greater economic equality

Summary

- Fundamental lessons about the economy as a whole:
 - Productivity is the ultimate source of living standards
 - Growth in the quantity of money is the ultimate source of inflation
 - Society faces a short-run trade-off between inflation and unemployment