

CHAPTER 22

Frontiers of Microeconomics

PRINCIPLES OF
Economics
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Premium PowerPoint Slides
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**In this chapter,
look for the answers to these questions:**

- § How does asymmetric information affect market outcomes? How can market participants reduce the resulting problems?
- § Why might democratic voting systems fail to represent the preferences of society?
- § Why do people not always behave as rational maximizers?

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Introduction

- § Microeconomics continues to evolve.
- § This chapter introduces three active areas of research:
 - § Asymmetric information
 - § Political economy
 - § Behavioral economics

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Asymmetric Information

§ Information asymmetry:

§ Two types:

§ Hidden actions

§ Hidden characteristics

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Hidden Actions and Moral Hazard

§ Moral hazard:

§ Workers sometimes shirk their responsibilities because their employer cannot continually monitor their effort and performance.

§ Someone whose property is insured may not try as hard to protect it from theft/damage.

§ While the parents are out, the babysitter may spend more time watching videos than watching the children.

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The Principal-Agent Problem

§ Agent:

§ Principal:

§ When the principal cannot perfectly monitor the agent's behavior, there is a risk ("hazard") that the agent may do something undesirable ("immoral").

§ E.g., worker may play video games or surf the web while on the clock.

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How Principals May Respond

§ Parents plant hidden cameras in the home

§ Employers pay workers **efficiency wages**

§ Firms delay payment

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Corporate Management

§ The separation of ownership and control of corporations creates a principal-agent problem:

§ Principals:

§ Agents:

§ Shareholders hire a board of directors to oversee management, create incentives for management to pursue the firm's goals instead of their own.

§ Corporate managers sometimes sent to jail for taking advantage of shareholders.

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Hidden Characteristics and Adverse Selection

Adverse selection

Example 1: The market for used cars

§ The seller knows more than the buyer about the quality of the car being sold.

§ Owners of "lemons" more likely to put their vehicles up for sale.

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Hidden Characteristics and Adverse Selection

Example 2: Insurance

- § Buyers of health insurance know more about their health than health insurance companies.
- § People with hidden health problems have more incentive to buy insurance policies.

In both examples, the information asymmetry prevents some mutually beneficial trades.

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Market Responses to Asymmetric Information

Signaling:

- § Individual selling a good used car provides all receipts for work done on car.
- § Dealership provides warranties on used cars.
- § Firms spend huge sums on advertising to signal product quality to buyers.
- § Highly competent workers get college degree to signal their quality to employers.

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Market Responses to Asymmetric Information

Screening:

- § Health insurance company requires physical exam before selling policy.
- § Buyer of a used car requires inspection by a mechanic.
- § Auto insurance company charges lower premiums to drivers willing to accept a larger deductible – they are most likely the safer drivers.

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Asymmetric Information and Public Policy

§ Asymmetric information

§ Yet, public policy may not be able to improve on the market outcome:

- § Private markets can sometimes deal with the problem using signaling or screening.
- § The govt rarely has more information than private parties.
- § The govt itself is an imperfect institution.

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ACTIVE LEARNING 1

Asymmetric information

For each situation below,

- § identify whether the problem is moral hazard or adverse selection
- § explain how the problem has been reduced

- A. Aperion Audio sells home theater sound systems over the Internet and offers to refund the purchase price and shipping both ways if the buyer is not satisfied.
- B. Landlords require tenants to pay security deposits.

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ACTIVE LEARNING 1

Answers

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Political Economy

§ Political economy

§ First, we consider voting.

§ **Condorcet paradox:**

§ **Transitivity** is a property of preference rankings:

Example of the Condorcet Paradox

A, B, and C are three candidates running for an open seat on the city council.

There are 3 types of voters, each with its own rankings of the candidates:

	Voter Type		
	Type 1	Type 2	Type 3
% of all voters	35%	45%	20%
1st choice	A	B	C
2nd choice	B	C	A
3rd choice	C	A	B

Example of the Condorcet Paradox

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Lessons from the Condorcet Paradox

§ Democratic preferences

§

§ Majority voting

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Arrow's Four Desirable Properties of a Voting System

1. **Unanimity:**
2. **Transitivity:**
3. **Independence of irrelevant alternatives:**
4. **No dictators:**

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Arrow's Impossibility Theorem

§ Arrow proved that no voting system can satisfy all four properties.

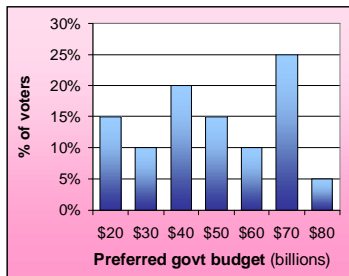
§ **Arrow's impossibility theorem:** a mathematical result showing that, under certain assumed conditions,

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The Median Voter Theorem

- § Suppose society is deciding the level of the government budget.
- § Each voter has her own preferences about the size of the budget.
- § If you line up all voters in order of their budget preferences, the median voter is the one right in the middle.
- § **Median voter theorem:** a mathematical result showing that

Example of the Median Voter Theorem



Implications of the Median Voter Theorem

- § In a two-party or two-candidate race,

- § Minority views

Politicians are People Too

- § Politicians motivated by self-interest, just like firms and consumers.
- § Some politicians motivated by re-election, willing to sacrifice the national interest toward that goal.
- § Others motivated by greed.
- § The lesson:
Economic policy is not made by benevolent leaders, and sometimes fails to resemble the ideals derived in economics textbooks.

ACTIVE LEARNING 2

Application of Median Voter Theorem

- § Would you expect the Democratic presidential nominee to be more liberal during the primaries or the general election, or to be consistent throughout both?
- § Would you expect the Republican nominee to be more conservative during the primaries or the general election, or to be consistent throughout both?

ACTIVE LEARNING 2

Answers

Behavioral Economics

§ Behavioral economics:

§ People aren't always as rational as traditional economic models assume.

§ Herbert Simon viewed humans as **satisficers**,

§ Other economists have suggested that people are only "near rational" or exhibit "bounded rationality."

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People Aren't Always Rational

Studies find that people make systematic mistakes:

Even though people are not always rational, the assumption that they are is usually a good approximation for economic modeling.

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People Care About Fairness

People's choices are sometimes influenced

Example: **The ultimatum game**

The rules

§ Two players who do not know each other have a chance to share a prize of \$100.

§ Player **A** decides what portion of the prize to give to player **B**.

§ **B** must accept the split or both get nothing.

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People Care About Fairness

Predicted outcome if both players rational

Actual outcomes from experiments with real people

- § **B** usually rejects lopsided splits like 99-1 as wildly unfair.
- § Expecting this, **A** usually proposes giving \$30 or \$40 to **B**.
- § **B** views this as unfair, but not so much as to abandon his self-interest, so **B** accepts.

People Care About Fairness

§ The results of the ultimatum game apply in other situations.

§ Example:

People Are Inconsistent Over Time

§ People tend to

§ Result: People fail to follow through on plans to do things that are dreary, take effort, or cause discomfort.

§ *E.g.*,

§ To help follow through, people look for ways to commit themselves to their plans.

§ *E.g.*, worker has money taken out of paycheck before he ever sees it

CONCLUSION

Recall two of the Ten Principles from Chapter 1:

Markets are usually a good way to organize economic activity.

Governments can sometimes improve market outcomes.

Research at the frontiers of microeconomics illustrates some caveats that go with these principles:

- § Consumers aren't always rational.
- § Market outcomes may not be best when information is asymmetric.
- § Government solutions are not always ideal.

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