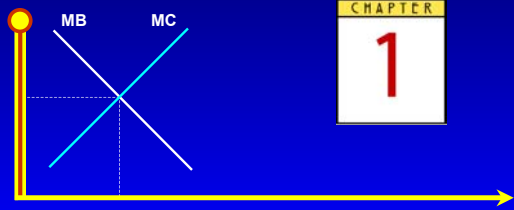


Thinking Like An Economist



CHAPTER
1

Introduction

- What is the Optimal Class Size?
 - To maximize learning without consideration of cost?
 - How would considering costs change our answer?
 - ◆ A personal tutorial course in economics might cost \$20,000
 - ◆ A class of 300 students might cost \$100/student

Introduction

- What is the Optimal Class Size?
 - What trade-offs must university administrators and students consider when choosing class size?

Economics: Studying Choice In a World of Scarcity

- The Scarcity Principle
 - Boundless wants cannot be satisfied with limited resources.
 - Therefore, having more of one thing usually means having less of another.
 - Because of scarcity we must make choices.

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Economics: Studying Choice In a World of Scarcity

Wants vs. Resources

↓

Scarcity

↓

Choices

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Economics: Studying Choice In a World of Scarcity

- Economics
 - The study of how people make choices under conditions of scarcity and of the results of those choices for society.

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Economics: Studying Choice In a World of Scarcity

- **The Cost-Benefit Principle**
 - An individual (or a firm or a society) should take an action if, and only if, the extra benefits from taking the action are at least as great as the extra costs

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Economics: Studying Choice In a World of Scarcity

- **Choosing the Optimal Class Size Revisited**
 - Assumptions:
 - ◆ Two class sizes: 100 and 20
 - ◆ Introductory economics classes have 100 students
 - Question
 - ◆ Should the class size be reduced to 20 students?

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Economics: Studying Choice In a World of Scarcity

- **Choosing the Optimal Class Size**
 - Assume
 - ◆ The cost of a class with 20 students is \$1,000 per student more than a class of 100 students
 - What do you think
 - ◆ Would it be a good idea to reduce the class size?

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Applying The Cost-Benefit Principle

- Rational Person
 - Someone with well-defined goals who tries to fulfill those goals as best he or she can

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Applying The Cost-Benefit Principle

- Should you walk downtown to save \$10 on a \$25 computer game?
 - The benefit of going downtown = \$10
 - The cost of going downtown is the dollar value of everything you give up to go downtown

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Applying The Cost-Benefit Principle

- Should you walk downtown to save \$10 on a \$25 computer game?
 - Estimating the cost
 - ◆ How much could someone have to pay to walk downtown?
 - ◆ If you would walk downtown for \$9, the trip's cost is \$9.
 - The benefit (\$10) exceeds the cost of (\$9) of buying the game downtown

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Applying The Cost-Benefit Principle

- Economic Surplus
 - The benefit of taking any action minus its cost
 - The goal of economic decision makers is to maximize their economic surplus

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Applying The Cost-Benefit Principle

- Opportunity Cost
 - The value of the next-best alternative that must be forgone to undertake an activity

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Applying The Cost-Benefit Principle

- Assume
 - The benefit of buying the game downtown is \$10
 - The cost of making the trip is \$12
- Questions
 - What is your economic surplus from buying the game downtown?
 - Where should you buy the game?

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Applying The Cost-Benefit Principle

- The Role of Economic Models
 - Economic models are abstract constructs (simplified descriptions) that allow us to analyze situations in a logical way
 - Other examples of abstract models
 - ◆ A computer model of climate change
 - ◆ A road map

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Four Important Decision Pitfalls

- Pitfall 1: Measuring cost and benefits as proportions rather than absolute dollar amounts
- Examples
 - Should you walk downtown to save \$10 on a \$2,020 laptop computer?
 - Which is more valuable, saving \$100 on a \$2,000 plane ticket to Tokyo or saving \$90 on a \$200 plane ticket to Chicago?

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Four Important Decision Pitfalls

- Pitfall 2: Ignoring Opportunity Costs
 - Example:
 - ◆ Should you use your frequent-flyer coupon to fly to Fort Lauderdale for spring break?
 - Assume:
 - ◆ Round trip airfare is \$500 and is equal to your frequent flyer coupon
 - ◆ Other costs equal \$1,000

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Four Important Decision Pitfalls

- Pitfall 2: Ignoring Opportunity Costs
 - Example
 - ◆ Should you use your frequent-flyer coupon to fly to Fort Lauderdale for spring break?
 - Assume (continued)
 - ◆ The most you are willing to pay for the Fort Lauderdale trip is \$1,350
 - ◆ Alternate use for the frequent flyer coupon is to attend a wedding in Boston and the Boston airfare is \$400

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Four Important Decision Pitfalls

- Pitfall 2: Ignoring Opportunity Costs
 - Example
 - ◆ Should you use your frequent flyer coupon to fly to Fort Lauderdale for spring break?
 - Without the coupon
 - ◆ Benefits = \$1,350
 - ◆ Cost = \$1,400 (\$400 opportunity cost + \$1,000 other costs)

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Four Important Decision Pitfalls

- Pitfall 2: Ignoring Opportunity Costs
 - The key to using the concept of opportunity cost correctly lies in recognizing precisely what taking a given action prevents us from doing.

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Four Important Decision Pitfalls

- Pitfall 3: Failure To Ignore Sunk Costs
 - The only costs that should influence a decision about whether to take an action are those that we can avoid by not taking the action

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Four Important Decision Pitfalls

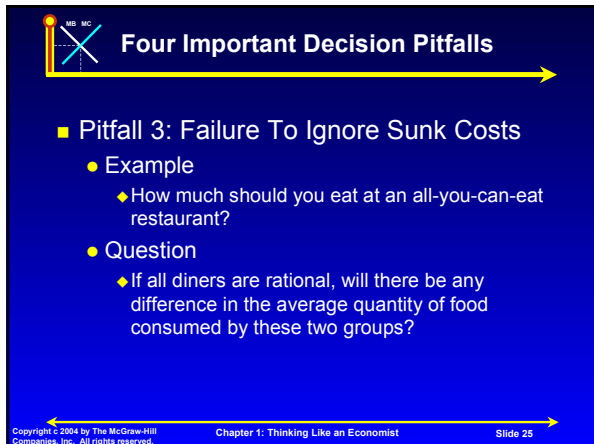
- Pitfall 3: Failure To Ignore Sunk Costs
 - Sunk cost
 - ◆ A cost that is beyond recovery at the moment a decision must be made

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Four Important Decision Pitfalls

- Pitfall 3: Failure To Ignore Sunk Costs
 - Example
 - ◆ How much should you eat at an all-you-can-eat restaurant?
 - Assume
 - ◆ Price = \$5
 - ◆ 20 randomly selected guests will get lunch on the house

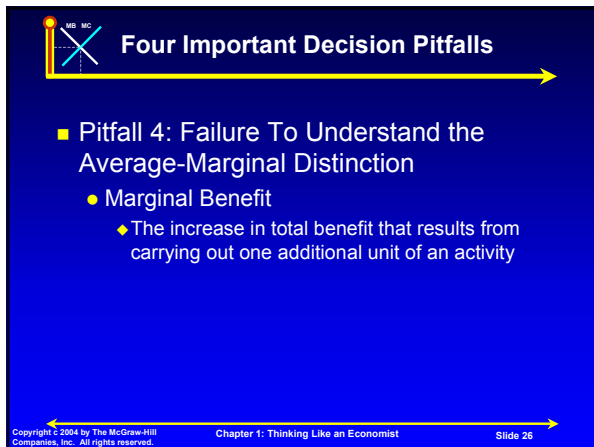
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Four Important Decision Pitfalls

- Pitfall 3: Failure To Ignore Sunk Costs
 - Example
 - ◆ How much should you eat at an all-you-can-eat restaurant?
 - Question
 - ◆ If all diners are rational, will there be any difference in the average quantity of food consumed by these two groups?

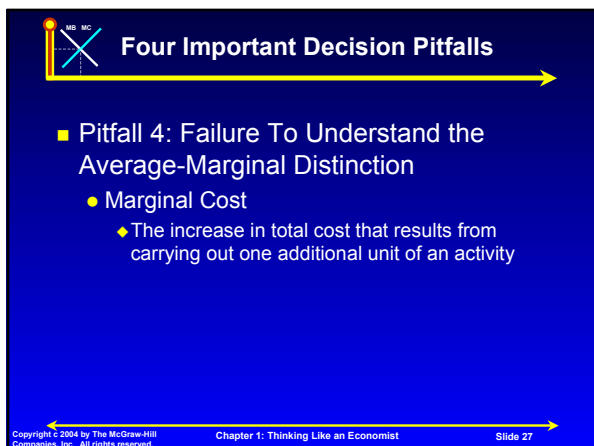
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Four Important Decision Pitfalls

- Pitfall 4: Failure To Understand the Average-Marginal Distinction
 - Marginal Benefit
 - ◆ The increase in total benefit that results from carrying out one additional unit of an activity


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Four Important Decision Pitfalls

- Pitfall 4: Failure To Understand the Average-Marginal Distinction
 - Marginal Cost
 - ◆ The increase in total cost that results from carrying out one additional unit of an activity


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Four Important Decision Pitfalls

- Pitfall 4: Failure To Understand the Average-Marginal Distinction
 - Example
 - ◆ Should NASA expand the space shuttle program from four launches per year to five?
 - ◆ Benefits
 - \$24 billion (average of \$6 billion/launch)
 - ◆ Costs
 - \$20 billion (average of \$5 billion/launch)


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Four Important Decision Pitfalls

- Pitfall 4: Failure To Understand the Average-Marginal Distinction
 - Average Cost
 - ◆ The total cost of undertaking n units of an activity divided by n


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Four Important Decision Pitfalls


- Pitfall 4: Failure To Understand the Average-Marginal Distinction
 - Average Benefit
 - ◆ The total benefit of undertaking n units of an activity divided by n

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 **The Approach of This Text**


- Focus on core economic concepts
- Learning economics through applications

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 **Economic Naturalism**

- Using insights from economics to help make sense of observations from everyday life

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 **Economic Naturalism**

- Question
 - Why do so many computer hardware manufacturers include more than \$1,000 worth of “free” software with a computer selling for only slightly more than that?

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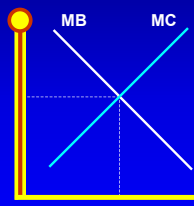


Economic Naturalism

■ Questions

- Why don't automobile manufacturers make cars without heaters?
- Why do the keypad buttons on drive-up automatic teller machines have Braille dots?

**End of
Chapter**



CHAPTER
1
