**CHAPTER 1**

**ECONOMICS AND LIFE**

**Chapter Overview**

Economists approach problems differently from many other people. A basic principle of human behavior underlies economics—the idea that people typically make choices to achieve their goals in the most effective way possible, subject to the constraints they face.

In this chapter we have introduced the basic concepts economists use, as well as four questions they ask to break down problems. Throughout this book, you will see these concepts and questions over and over again:

1. Scarcity: What are the wants and constraints of those involved?
2. Opportunity cost: What are the trade-offs?
3. Incentives: How will others respond?
4. Efficiency: Why isn’t someone already doing it?

In later chapters, as we progress to more complicated problems, try using these four questions to break down problems into manageable pieces. Then you can tackle those smaller pieces using the four fundamental concepts presented in this chapter.

**Learning Objectives**

LO 1.1: Explain the economic concept of scarcity.

LO 1.2: Explain the economic concepts of opportunity cost and marginal decision making.

LO 1.3: Explain the economic concept of incentives.

LO 1.4: Explain the economic concept of efficiency.

LO 1.5: Distinguish between correlation and causation.

LO 1.6: List the characteristics of a good economic model.

LO 1.7: Distinguish between positive and normative analysis.

**Chapter Outline**

OPENING STORY: MAKING AN IMPACT WITH SMALL LOANS

The Basic Insights of Economics

Scarcity **(LO 1.1)**

Opportunity Cost and Marginal Decision Making **(LO 1.2)**

BOX FEATURE: WHAT DO YOU THINK? – THE OPPORTUNITY COST OF A LIFE

Incentives **(LO 1.3)**

Efficiency **(LO 1.4)**

An Economist’s Problem-Solving Toolbox

Correlation and Causation **(LO 1.5)**

BOX FEATURE: FROM ANOTHER ANGLE – DOES ICE CREAM CAUSE POLIO?

Models **(LO 1.6)**

BOX FEATURE: ECONOMICS IN ACTION – WHEN EDUCATION PAYS OFF

Positive and Normative Analysis **(LO 1.7)**

BOX FEATURE: WHAT DO YOU THINK? – THE COST OF COLLEGE CASH

**Beyond the Lecture**

Class Discussion: Scarcity (LO 1.1)

Have students review [this recent TED talk by Peter Diamandis](http://www.ted.com/talks/peter_diamandis_abundance_is_our_future.html). Peter highlights the impact of human ingenuity on scarcity and argues that we should be optimistic about the use of technology to address problems in the future. This is a great springboard for discussion.

1. Do students think that technology will continue to improve living standards and mitigate the problems associated with scarcity?
2. Despite the fact that technology advancements have greatly improved quality of life and consumption for most people, will we ever eliminate scarcity?

Writing Assignment: Opportunity Cost and Marginal Decision Making (LO 1.2)

Have students review [this article by Russell Roberts](http://www.econlib.org/library/Columns/y2007/Robertsopportunitycost.html) on opportunity cost. It highlights some basic examples that are familiar to students. Require students to write a brief essay on the opportunity costs associated with decisions in their lives, decisions that firm’s make, or government decisions. This can be used as a catalyst for class discussion as well.

Class Discussion: Opportunity Cost and Marginal Decision Making (LO 1.2)

Your class that you teach is most likely 50 or 75 minutes in length. Poll the students (perhaps informally, or using software such as Poll Anywhere or clickers) and ask them what they would be doing during this hour if they were not in class. Some possible answers may include sleeping (especially for an early AM class), working out, studying for another course, watching TV, eating, or many others. This is a great introduction to opportunity cost – the cost of attending class is giving up the next best alternative of your time. Questions to ask include:

1. Is your opportunity cost the same as other students’ opportunity cost?
2. Does the fact that you chose to attend class today mean that sitting in this economics lecture is the best use of your time during this hour?

Class Discussion: Incentives (LO 1.3)

In order to highlight the importance of incentives, consider discussing [Chapter 3 of *Freakonomics*](http://freakonomics.com/books/) by Steven Levitt and Stephen Dubner with your students. The chapter provides insight into the career of an individual who is involved in the illegal drug market. You could also ask students to review [this Los Angeles Times commentary](http://articles.latimes.com/2005/apr/24/opinion/oe-dubner24) on the chapter, also written by Levitt and Dubner.

1. Ask students to consider why an individual would be willing to endure the risks associated with the illegal drug market given the relatively low pay and poor working conditions that many workers endure. Students really enjoy this interesting discussion.
2. How does this market compare to other markets? There are surprising similarities and differences between legal markets and the black market.

**Clicker Questions**

There are three main purposes to clicker questions. First, they are a great way to do a quick and instant “on demand” test of student understanding of the material. You can cover material, and instantly get feedback on student comprehension. You can see whether you need to explain certain topics again, or move on to the next subject. Second, they are a great method to break up the class and take a moment away from lecture. It gets the students actively involved. Finally, certain clicker questions can be framed in a “discussion” manner, in which you can invite students to talk about the possible right answer with their peers. You can instruct students to convince their classmate of a right or wrong answer.

1. What is the result of scarcity of goods and services? **[LO 1.1]**

A. People can have all the goods they desire at any price

B. Only government can provide enough goods for the people

C. People may experience poverty

**D.**  Any economic system must have a method to allocate goods and services

**Feedback**: With scarcity, we don’t have enough goods to freely be given to everyone to satisfy all wants. Thus, a method to allocate goods must be used. This could include prices, or other methods. Note that poverty isn’t a direct result of scarcity – scarcity affects all people, both rich and poor.

2. “Children eat more ice cream in the summer. Children are more likely to drown in the summer. We can conclude that ice cream consumption causes drowning.” The previous statement is an example of\_\_\_\_\_\_\_\_\_\_\_\_. **[LO 1.5]**

A. Normative economic statements

B. Negative incentives resulting in undesirable outcomes

C. Confusing correlation with causation

**D.** Opportunity cost creating tradeoffs

3. Which of the following do you think is most likely necessary to create a good economic model? **[LO 1.6]**

A. Identical to the real world and no simplifications

B. Changing assumptions until all problems are eliminated in the model

C. Finding a lot of experts who agree with my opinions before building the model

**D.** A set of well-defined variables with data that we wish to study

**Feedback**: Remember that models by definition are a simplification of reality. We can’t have a model that is identical to the real world economy. It would require billions of variables, trillions of data points, and multiple supercomputers to analyze the data!

4. Which of the following is an incentive your instructor could provide to get more students to attend class?  **[LO 1.3]**

A. Giving extra credit to students who attend more than 90% of classes

B. Handing out candy to students who attend

C. Failing students who miss a class without a University-approved excuse

**D.** All of the above

**Feedback**: Remember that incentives can be positive or negative. We don’t want to ask which incentives we would personally agree with. We just want to ask if the incentive would change behavior.

5. A rational person should only do an activity as long as **[LO 1.2]**

A. The marginal benefits are greater than the marginal costs

B. There are no costs to the activity

C. It can earn them money

**D.** The opportunity costs of doing the activity are low

**Feedback**: People do activities even if opportunity costs are high. One example is going to college and not working for four years during your time as a student!