CHAPTER 2

SPECIALIZATION AND EXCHANGE

**Chapter Overview**

Specialization and trade can make everyone better off. It is not surprising, then, that in an economy driven by individuals seeking to make a profit or improve their communities, people specialize so as to exploit their comparative advantages. That principle is as true for countries, like the United States and Bangladesh, as it is for individuals picking their careers.

No government intervention is required to coordinate production. The great economic thinker Adam Smith suggested the term invisible hand to describe this coordinating mechanism:

It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their [self-interest]. . . . he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention.

The functioning of the invisible hand depends on a lot of other assumptions, such as free competition and full information. Later in the book we will discuss these assumptions, and when they work and when they do not.

Most people take for granted the prevalence of specialization and trade in their everyday lives. Few stop to think about the benefits and where they come from. In this chapter we tried to dig down to the bottom of the assumptions people make and expose the logic behind the gains from trade. As we proceed—especially when we return to topics like international trade and government intervention in the markets—try to remember the underlying incentive that drives people to interact with one another in economic exchanges.

**Learning Objectives**

LO 2.1: Construct a production possibilities graph and describe what causes shifts in production

possibilities curves.

LO 2.2: Define absolute and comparative advantage.

LO 2.3: Explain why people specialize.

LO 2.4: Explain how the gains from trade follow from comparative advantage.

**Chapter Outline**

OPENING STORY: THE ORIGINS OF A T-SHIRT

Production Possibilities **(LO 2.1)**

Drawing the Production Possibilities Frontier

Choosing Among Production Possibilities

Shifting the Production Possibilities Frontier

Absolute and Comparative Advantage

Absolute Advantage **(LO 2.2)**

Comparative Advantage

BOX FEATURE: FROM ANOTHER ANGLE – BABE RUTH, STAR PITCHER

Why Trade?

Specialization **(LO 2.3)**

BOX FEATURE: ECONOMICS IN ACTION – SPECIALIZATION SAUCE

Gains from Trade **(LO 2.4)**

BOX FEATURE: ECONOMICS IN ACTION – WINNERS AND LOSERS

Comparative Advantage over Time

BOX FEATURE: ECONOMICS IN ACTION – COMPARATIVE ADVANTAGE: THE GOOD, THE BAD, AND THE UGLY

**Beyond the Lecture**

Class Discussion: Production Possibilities (LO 2.1)

In order to highlight the concept of the production possibilities curve, have students consider the production possibilities curve for a student deciding how to study for two exams given a fixed timeframe. This helps to highlight the concept of tradeoffs for students, as you can ask them to consider the tradeoff between grades on the two exams. Assume that the students have a fixed number of hours in one evening to study for two large exams the following day.

1. What tradeoffs does a student face when deciding how to spend his or her time?
2. What factors should the student consider when making the decision regarding how to study?
3. Why might different students make different decisions regarding how to spend the hours studying?

Class Discussion: Absolute and Comparative Advantage (LO 2.2)

You can show the following clip during class from the TV show [Suits](http://www.criticalcommons.org/Members/mrousu/clips/suits-louis-has-an-absolute-advantage). (Please note that there is a small bit of language in the clip that some may find objectionable). The page itself has some commentary on absolute and comparative advantage. In short, the boss does all the work overnight (showing his absolute advantage).

1. If the boss has the absolute advantage, why doesn’t he just do all the work?

Writing Assignment: Specialization (LO 2.3)

Have students read (or listen to the audio book for) [*I, Pencil* by Leonard E. Read](http://www.fee.org/library/detail/i-pencil-audio-pdf-and-html). Ask students to write a brief essay on why no single individual can personally produce even a seemingly simple product like a pencil.

Class Activity: Gains from Trade (LO 2.4)

A simple trading exercise can highlight the concept of gains from trade for students. Bring a few bags of chips or other snacks to class and distribute them to students (you may choose only a few students for this activity in a large lecture).

1. Ask each student to rate their satisfaction with the snack you’ve given them on a scale from 1-10, with 1 being highly dissatisfied and ten being highly satisfied. Record their answers somewhere where all students can see.
2. Ask the students if they want to trade, and give them a few minutes to interact and exchange snacks. (Remind them that it must be voluntary—they do not have to trade if they do not wish to.)
3. Ask the students about their satisfaction again, this time with their new snack. Have the students explain any changes in their answer from before.

After trading, students should be at the very least equally as well off in terms of satisfaction as the first time they answered. This exercise can be used to highlight the gains from trade. You can also discuss the fact that the original distribution matters as well. This can tie into a number of discussions, including income distribution and comparative advantage.

**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. A movement along the production possibilities frontier would imply that **[LO 2.1]**

A. firms have more labor to produce goods

B. new technology has improved production processes

**C**. society chose a new combination of output to produce

D. workers are taking more vacation days

2. Which of the following could cause an outward shift of the production possibilities curve? **[LO 2.1]**

A. a decrease in productivity

**B**. an increase in the amount of labor inputs available to firms

C. a different choice of outputs produced by society

D. an increase in the price of final goods that society can produce

**Feedback**: Price increases won’t shift the PPF. Remember that the PPF simply shows what we CAN produce, not necessarily what we would WANT to produce. If a good has a higher price, that doesn’t automatically give us more capabilities to produce it!

3. The production possibilities frontier model illustrates which economic concept(s)? **[LO 2.1]**

A. scarcity

B. tradeoffs and choices

C. opportunity cost

**D**. all of the above

4. Gains from trade depend on **[LO 2.4]**

A. absolute advantage

**B**. comparative advantage

C. finite vs. infinite production possibilities

D. the willingness of individuals to specialize

**Feedback**: Trade can occur even if one person (or country) has the absolute advantage in all goods. The gains come from comparative advantage, where we take advantage of the lowest opportunity costs.

5. The United States has a lot of land. Japan has very little land area compared to the United States. Compared to Japan, what output do you think the United States would most likely have an absolute and comparative advantage in producing? **[LO 2.4]**

**A**. agricultural commodities

B. smart phones

C. automobiles

D. clothing