

### **Class Three** **Comparative Advantage Lecture**

#### **1. Definitions**

**Absolute Advantage:** One person has an absolute advantage over another if (s)he takes less time to perform a task than the other person.

**Comparative Advantage:** One person has a comparative advantage over another if his or her opportunity cost of performing a task is lower than the other person's opportunity cost.

**The Principle of Comparative Advantage:** Everyone does best when each person (or each country) concentrates on the activities for which his or her opportunity cost is the lowest.

#### **2. Sources of Comparative Advantage**

At the individual level, comparative advantage may be the result of genetic difference but is more often the result of education, training and experience.

At the national level, comparative advantage may derive from differences in natural resources, cultures, legal systems, or institutions.

#### **3. Production Possibilities**

The production possibilities curve is a graph that describes the maximum amount of one good that can be produced by an economy for every possible level of a second good. Of course, there are more than two goods produced in every economy. The PP curve holds production of all other goods at a constant level. The point of a PP curve is to illustrate that the scarcity of resources means that additional production of one good implies less production of another good.

- a. If the PP curve is concave, then the law of increasing marginal cost holds. The law of increasing marginal cost characterizes example 3 below. In example 1, costs are constant at the margin.
- b. If an economy is inside the PP curve, resources are unemployed or underemployed.
- c. A point outside the PP curve is not attainable in the present, but may be attainable after a period of growth in resources or technology.

#### **4. Comparative Advantage and Trade**

To benefit from comparative advantage, trade must be possible at a reasonably low transactions cost. To exploit comparative advantage, requires that agents specialize in activities where they have a comparative advantage and trade away their "extra" production of their specialized good or service for other goods and services that they wish to consume.

Free trade is controversial because a movement from protection to free trade produces both winners and losers. In many cases, there are many winners who each benefit a little bit from free trade and there are a few losers each who lose a lot. Individual losers have strong incentives to oppose free trade. Individual gainers have weak incentives to campaign for free trade.



3. Certain resources are better suited to producing some outputs than others. For example, some workers are better making wood products than they are making metal products. In this exercise you will study the connection between specialized resources and production possibilities.

Four survivors are stuck on an island. To survive the survivors can either fish or gather berries. Some survivors are better at fishing, others are better at gathering. The table gives the output that each survivor can produce in a day.

	Output			
Survivor	Jean	Joe	Jerry	Jackie
Fish (Pounds)	4	3	2	1
Berries (Pounds)	1	2	3	4

Each column gives the alternative product of one survivor. For example, in a day Jean can produce either 4 pound of fish or 1 pound of berries. We suppose that by dividing the day evenly between the two activities Jean could also produce 2 pounds of fish and  $\frac{1}{2}$  pound of berries.

- a. Suppose at their evening meeting, the survivors decided that they want to make a stew using 6 pounds of fish. They would also like, in addition, as many berries as possible. How should work be assigned the next day? Who should fish and who should gather? Why?
  - b. Given the decision that the survivors have made in part a, what is their opportunity cost for fish?
  - c. Draw a graph showing the survivors production possibilities for fish and berries.
  - d. Why does the cost of fish increase as the survivors decide to produce more fish?
4. Consider the news article on the following pages.
- a. If steel pipe produced in India is allowed to be used in US construction projects who are the winners and who are the losers?
  - b. In this case, are the losses concentrated?
  - c. In this case, are the winnings diffuse?
  - d. Do you agree that the winners win more than the losers lose? Why or why not?
  - e. Do you believe that the winners can form a politically effective lobby that will offset the efforts of the losers to block Indian pipe from the US market?