

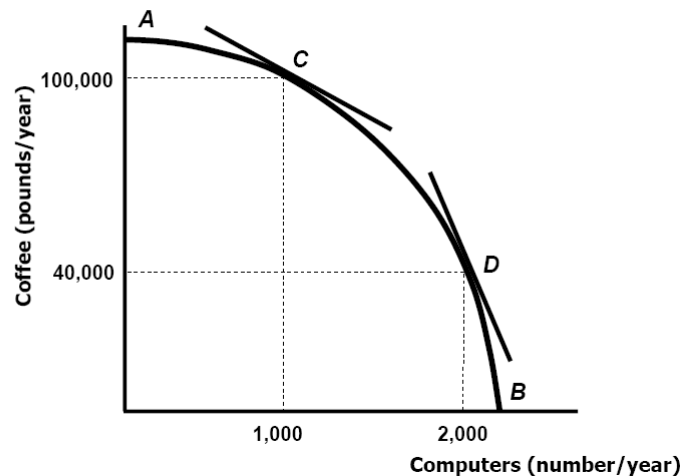
International Trade

Main Points

1. For a nation, the opportunity cost of one good in terms of another depends on the extent to which it specializes in production of that good.
 2. World prices define the slope of a trading line along which a small nation may trade. International trade allows a nation's consumption possibilities to be different from that nation's production possibilities.
 3. To maximize the benefits from trade a nation must choose the production strategy that equates the slope of its production possibilities frontier to the trading line defined by world prices.
 4. Using demand and supply analysis to explain who benefits and who loses from trade.
-

1. For a nation, the opportunity cost of one good in terms of another depends on the extent to which it specializes in production of that good. 2. World prices define the slope of a trading line along which a small nation may trade.
- a. Example. Costa Rica is a small country that can produce coffee and computers. The following graph shows production possibilities in Costa Rica.

Costa Rica's Internal Opportunity Cost Depends on its Levels of Production

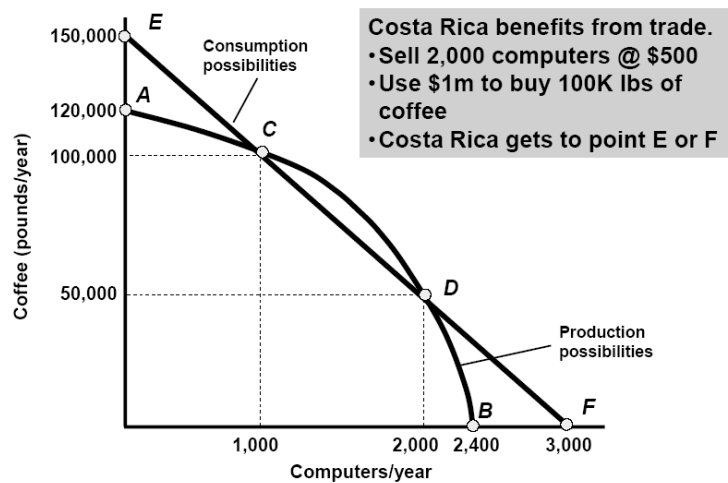


- b. The slope of a nation's production possibilities schedule gives the "internal opportunity cost" of a computer in terms of coffee.

2. World prices define the slope of a trading line along which a small nation may trade. International trade allows a nation's consumption possibilities to be different from that nation's production possibilities.

- a. Prices in world markets define the “external opportunity cost” of a computer in terms of coffee.
- b. World prices define a trading line that allows Costa Rica to consume a different combination of computers and coffee than it produces.
- c. Suppose we assume that the world price of coffee is \$10 per pound and the world price of a computer is \$500. Then the external opportunity cost of a computer is 50 pounds of coffee. The trading line in the graph below has a slope of -50 lbs of coffee/computer.

Suppose CR Chooses Point D



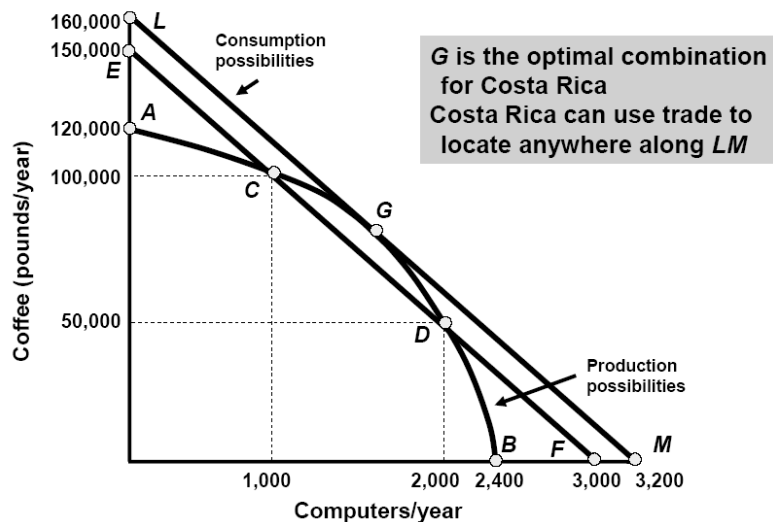
- d. As the graph shows, through trade Cost Rica obtains consumption possibilities that lie outside its production possibilities frontier.

3. To maximize the benefits from trade a nation must choose the production strategy that equates the slope of its production possibilities frontier to the trading line defined by world prices.

- a. A small nation should use world prices to determine its comparative advantage.
- b. It is not necessarily the case that a nation will specialize completely in the production of a single good. It may be true that there are resources in Costa Rica that have a comparative advantage in computer production. The issue is: how much coffee and how many computers should Costa Rica produce?

- c. Costa Rica should choose a production point that maximizes the value of its national product given world prices.

Can Costa Rica Do Better? YES

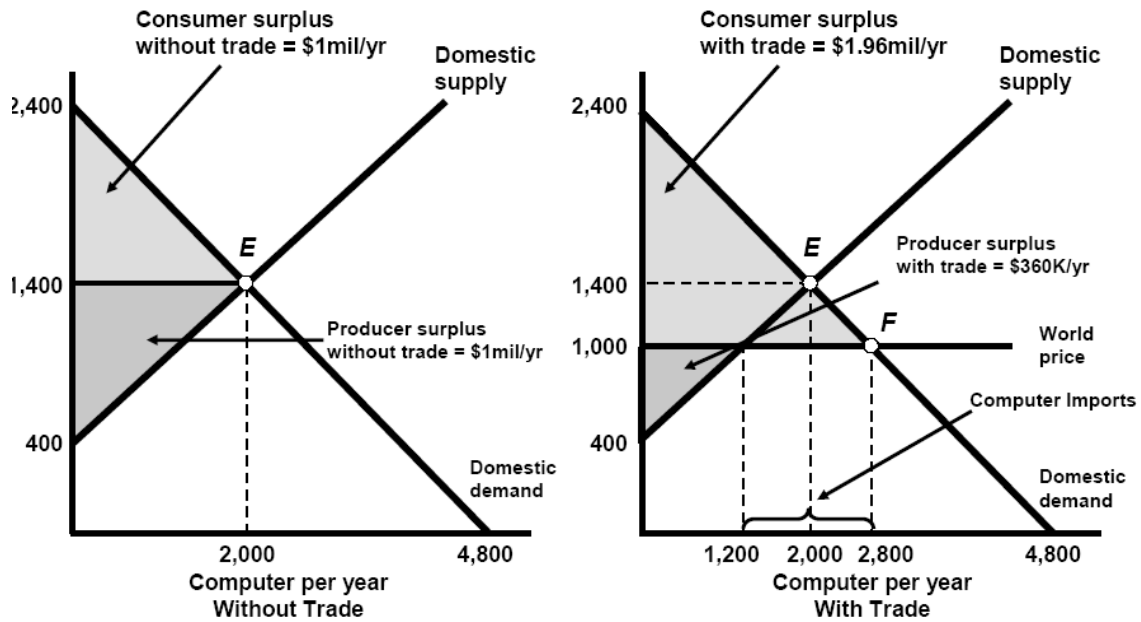


- d. At point G, Costa Rica equates the internal opportunity cost of computers to the external opportunity cost of computers and reaches the highest available consumption possibilities line.
- e. Caveat. The graph is not drawn to reflect the “real world” production possibilities in Costa Rica. The graph is drawn to make the tangency at point G easy to see and understand. It may be, in fact, optimal for Costa Rica to make very few computers.

4. Using demand and supply to explain who benefits and who loses from trade.

- a. Let's now assume that the world price of coffee is \$10 per pound and the world price of a computer is \$1000. Now the world opportunity cost of a computer is 100 pounds of coffee.
- b. The following graphs shows demand and supply for computers and for coffee in Costa Rica before and after trade.
- c. In the computer market
- (1) Production falls from 2000 to 1200.
 - (2) Computer imports rise from 0 to 1600.
 - (3) Price falls from \$1400 to \$1000.
 - (4) Consumer surplus rises from \$1 million to \$1.96 million.
 - (5) Producer surplus falls from \$1 million to \$360 thousand.
- d. In the coffee market
- (1) Production increases from 100,000 to 200,000 pounds.
 - (2) Exports rise from 0 to 160,000 pounds.
 - (3) Price rises from \$7 to \$10 per pound.
 - (4) Consumer surplus falls from \$250,000 to \$40,000.
 - (5) Producer surplus rises from \$150,000 to \$600,000.
- e. The impact of trade is to raise total surplus by \$560,000.

The Market for Computers in Costa Rica



The Market for Coffee in Costa Rica

