

CHAPTER 2: EFFICIENCY, EXCHANGE, AND COMPARATIVE ADVANTAGE**RESPONSES TO THE DISCUSSION QUESTIONS**

1. Serena Dippity is a play on the word *serendipity*, which means the finding of valuable things not sought for. Serendipitous events are free goods; they are not acquired by the sacrifice of other things one values. The gold Serena Dippity happens to find is, initially, a free good. But once she *chooses to retain ownership* of the gold, it is a scarce good. How can that be? Because she *can* sell it for \$1800. By choosing *not* to sell it, she is choosing to *forego* something else she values -- \$1800 cash.

2. The gasoline is not a “free” good to any of them. It is purchased by the station owner, and therefore he makes a sacrifice. The drivers, too, incur the cost of their time waiting in line. Don’t forget, a good is “scarce” if an individual sacrifices something else she values (such as an alternative use of her time) in order to enjoy the good in question. “Scarcity” implies “sacrifice.”

3. The bully gains Jack’s glove. Jack loses a glove, and gets a lump on his head as well (not an economic good, but instead an economic *bad*!). Clearly the bully increases his wealth, and Jack loses wealth. This occurs because the exchange was not agreed upon by *both* parties; it was a coerced, or involuntary trade.

4. (a) It all depends on what the musician is trying to accomplish. If she can “get by” with a cheap guitar, she probably won’t be inclined to spend \$12,000 on the 1956 Fender. Price often does make a big difference (b) It all depends on what the musical act is trying to accomplish. Booking a concert at Madison Square Gardens could cost tens of thousands of dollars; booking a concert at the local bar will cost significantly less. So why doesn’t Eric Clapton book at your local bar? Because the benefits to him are far less than his costs. On tour, if Clapton books a night at a local bar, he sacrifices a night at an amphitheater, which could have generated tens of thousands of dollars for him. Again, the question of which is more efficient can only be sensibly answered, in the economic way of thinking, by assessing what the individuals are trying to accomplish with their talents and resources. What is efficient for someone might not be efficient for others. On the other hand, if your band books at the local bar, at best you give up the opportunity to book at another bar on the same evening. You didn’t give up something like a Madison Square Gardens possibility. Perhaps the cost to your band is only a couple hundred dollars. (c) The answer depends upon “transaction costs.” Most people (including your co-authors) purchase bananas from a local grocer rather than going through the bother of traveling to central America to buy them directly from the growers. For *us*, this is the more efficient way to obtain bananas. But we can imagine some people who might only buy bananas when traveling in central America, and never buy bananas in the U.S. For *them*, that is the more efficient course of action. Efficiency depends upon people’s values. (d) Perhaps you are now getting the idea. How can anyone possibly answer this question? Stated this way, it is a meaningless question. Efficiency, in the economic way of thinking, can only be assessed in the context of one’s projects. What is the *expected benefit* of having an eight-cylinder SUV vs. a solar-powered car? And that must be weighed against the *expected cost* of purchasing, owning and using one.

5. Those who insist that households waste money by purchasing expensive convenience foods are behaving as if they believe that money is the ultimate good for households. An economizing or efficient householder will weigh the opportunity cost of time spent preparing food against the opportunity cost of purchasing someone else’s food-preparation services as packaged in “convenience” foods.

6. (a) Economic theory *assumes* that everyone is behaving “efficiently.” (That doesn’t mean that everyone is looking for the “cheapest” deal nor that they are doing the right thing, nor that they are even making “correct” decisions without error.) We must consider the values that drivers in single-passenger vehicles place upon inputs and outputs by seeing how they behave. Of course, people do make mistakes, and then look back at what they have done and decide it was inefficient. But it was an efficient action at the time, when the actor had less adequate information. It is costly and therefore sometimes inefficient to acquire additional information before deciding. (b) Whether because of differences in situation or differences in character and temperament, the people riding the bus assign different relative values to certain inputs and outputs. (c) Such critics are assigning evaluative weights to the inputs or outputs of other peoples’ actions different from the weights assigned by the actors. They may be objecting to the costs (air pollution, traffic congestion) that drivers impose on others and ignore in their decision making (a topic for Chapter 10); they may be claiming that drivers of single-passenger vehicles are misinformed in some way; they may simply be asserting implicitly that their own values are superior to the values of such drivers. Or they may be saying that if transaction costs did not exist or if they had all knowledge and power they could arrange the social world in a way more satisfactory to everyone. But who could not?

7. (a) Since comparisons of volume, weight, or calories would obviously make no sense, we may reasonably conclude that the comparisons were of monetary values. (b) Reflect on that for a bit, and you will start to realize that the food the United States imports is mostly a lot of fancy luxury items, for which we do indeed pay high prices. But the basic stuff that feeds us comes overwhelmingly from our own land. If the United States is indeed importing more dollars worth of food than it’s exporting, that is a result of our enormous wealth and our consequent ability to afford expensive delicacies. It is in no way an indication that we have lost the ability to feed ourselves.

8. Some people believe that using a resource for entertainment purposes is more wasteful than using it for “serious” purposes. This always strikes the authors as an extraordinarily solemn, joyless way of looking at life. Moreover, it is a hard position to maintain consistently. We probably would not *need* to consume any gasoline at all. Where does waste begin?

9. (a) This will increase the relative efficiency of no-till farming by raising the cost to farmers of tilling. (b) This will increase the relative efficiency of no-till farming by lowering the cost of controlling the weeds and pests that are more abundant with no-till farming. (c) This will increase the relative efficiency of no-till farming through its imposition of additional costs on maximum-tillage farming. (d) This will decrease the relative efficiency of no-till farming because an untilled field will provide less aesthetic satisfaction. (e) This will decrease the relative efficiency of no-till farming by raising the cost of an input that is employed more liberally in no-till farming.

10. (a) Whose values are we using to decide? If it’s the values of those with the legal right to decide how the water will be used, we have to see what they choose to do. (b) If we had no food and no electricity, we would all prefer food to electricity. But we aren’t on that margin. Many people would much rather have a little more electricity than a lot more food—perhaps to keep their refrigerator running and prevent their food from spoiling! (c) It’s allocated to the use that the owners deem of most value to themselves. (d) Adversely affected groups include consumers of the food previously grown; owners of businesses that serve farmers in the Sevier Valley; downstream water users who find their flow decreasing; people who want to maintain the small towns in the river valley; people who dislike industrialization; and so forth.

11. (a) Land downtown is too valuable in other uses to be allocated to a gasoline station. When one is found, it's always in a tiny, constricted space. (b) The land would still be taken from more productive uses, at least as the market assesses productivity, if it were taken under the power of eminent domain.

12. (a) Overbooking enables the airlines to hold down the number of empty seats and to sell more passengers the seats they ask for. (b) Passengers are able to get onto flights they want to take and from which they would have been excluded, despite empty seats, under a policy of no overbooking. (c) Under the new system, passengers in a hurry (who proved how valuable their time was by arriving at the airport shortly before the flight) always get on their flight; passengers not in a hurry get money for taking a later flight; airline agents at the gate avoid nasty arguments with passengers who are being bumped; the airlines continue the efficient practice of overbooking, and don't reap the wrath of valuable passengers who have been involuntarily denied boarding. It almost seems as if *everyone* is better off. (d) There is no feasible way to conduct the necessary negotiations. The transaction costs are too high *given* the present politicized system of assigning landing slots. (e) The crucial step was the law that gave passengers a legally-established right to space on any flight for which they had confirmed reservations. This means that the airline has to purchase someone's rights when there are more passengers than seats. A system for doing so consequently evolved. If equally clear title to landing slots were established, a mechanism would almost certainly evolve whereby those who valued them least would be induced by relative price changes to let those who valued them most take over the scarcest slots. Clearly-established, well-defined entitlements are often crucial to the evolution of cooperative arrangements.

13. Fudd is a high-cost, that is, inefficient typist, because his time is so valuable in producing legal services. The time Fudd spends typing could have been time devoted to the practice of law itself.

14. (a) Put corn on the horizontal axis and strawberries on the vertical axis in each graph. Gomer can produce 200 bushels of corn, and zero strawberries (one point on his production possibilities frontier, or curve) *or* zero corn and 200 bushels of strawberries (another point on his frontier). Connect the two points with a straight line to illustrate Gomer's entire production possibilities frontier. Notice it has a slope of -1 (as you learned in middle school, slope = rise/run). For Goober, his two points are 100 bushels of corn and zero strawberries *or* zero corn and 50 strawberries. Connecting *those* points gives us Goober's PPF. Notice it has a slope of $-1/2$. (b) one bushel of strawberries. (c) 1 bushel of corn. (d) $1/2$ bushel of strawberries. (e) 2 bushels of corn. (f) Goober. (g) Gomer. Please notice something very important here. Gomer appears "better" at both corn and strawberry production – he can produce a larger quantity of either good, relative to Goober. But the notion of *comparative advantage* does not simply focus on total output. It focuses on the *opportunity cost* of producing a particular output. Gomer and Goober have *different costs* of producing corn and strawberries. We've just seen that Goober is more efficient ("has a comparative advantage") at producing corn compared to Gomer. Remember that all questions regarding efficiency (and therefore, comparative advantage) requires us to look not only at total benefit or output, but at the *sacrifices* or *opportunity costs* that an individual must incur to produce that benefit or output. Reconsider question 4 (b). Eric Clapton can fill both Madison Square Garden *and* your local bar. That doesn't mean he's more efficient, or has a comparative advantage, at playing both the big amphitheaters and the local bars, compared to your own garage band. That's why he *typically* doesn't do so. *Your band* can

play the local bar at a much lower cost than Eric Clapton can. That's why your band typically books the small gigs (perhaps dreaming of much larger future gigs) and Clapton books the huge gigs. Each of you have followed your comparative advantage. (h) Both Gomer and Goober would gain with any terms of trade in the following range: 1 bushel of strawberries being exchange for more than 1 bushel of corn but less than 2 bushel of corn. For example, 1 bushel of strawberries being exchanged for $1\frac{1}{2}$ bushels of corn ($1\frac{1}{2}$ is in between 1 and 2).

15. As we emphasized in the text, trade is always trade between individuals, as opposed to streets, cities, counties, states, or even nations. Neither a national political border nor a time-zone boundary within a given country negates the mutually beneficial effects of voluntary trade. Both trading parties enjoy a larger mix of scarce goods (greater wealth, economic growth) as a result; that's *why* they choose to trade with one another across political borders. Millions of Americans purchase foreign goods, but that fact does not necessarily mean that *every* citizen in each country is better off. Cheap foreign imports are attractive to many individuals in America. Those individuals increase their wealth through such purchases. To the extent that the cheaper imports lead consumers to buy fewer American-produced substitutes, some of those workers (and business owners) may lose their jobs (and their businesses), as they now fail to provide consumers with a desirable product. But that is true whether the source of competition is from a foreign country or internal. To understand this point, let's suppose you now have access to an American internet bookstore, one that offers superior prices and service compared to the local old-fashioned bookstores in your region. (Compared *by whom?* The customers.) They win customers from the other local establishments, even forcing one or more to shut down. Clearly the local bookstore owners and employees haven't gained by the increased competition. Clearly their wealth has not increased as customers seek to trade with *others* who now offer a better substitute. But that's a large part of the nature of market competition -- the attempt to provide consumers with a better product or service, and/or a more appealing price. Consumers are constantly on the watch for a better, more attractive deal. That's why, to take another recent example, traditional American-made typewriters have been replaced by and large with American-made personal computers. A free market process -- nationally and internationally -- allows potential producers the opportunity to create more desirable options for consumers. It doesn't guarantee that *all* or even *most* existing producers will always enjoy profits and continued job expansion. If production is simply a goal in itself, the alternative seems to be to keep consumers from obtaining the products they desire. We could imagine, for example, a domestic policy that forces consumers to continue using typewriters as opposed to word-processors. That might retain jobs in the typewriter industry, but it would *reduce* job prospects in the software and personal computer industry. Similarly, import restrictions (in the form of quotas and taxes on foreign goods) might preserve some jobs in the U.S., but it would ultimately reduce job prospects for U.S. citizens (such as wheat farmers) whose goods are exported to other countries.

16. (a) They do so because they have no better option, which means that no one has created a superior alternative, which in turn suggests that there is in reality not a lot of money to be made from this business. (b) If the bookstore is not using any unfair practices to keep out competitors and students are voluntarily using its services, doesn't this answer the question? It might be interesting to find out what criteria students use to distinguish a "ripoff" from a fair transaction. We think that most people, if forced to reflect critically, will agree that the size of the mark-up is only circumstantial evidence, rebuttable by showing that no *unfair actions* were taken in the process of buying or selling. The bookstore trades with willing buyers and sellers, making them all better off. Of course, if the \$10 seller could locate the \$30 buyer, they could trade at \$20 and both would be still better off. But could they find each other at a low enough cost? The transaction costs tend to be high. The bookstore economizes on the cost of acquiring

information, and that is why students use its services, even when grumbling all the while. (c) It would be costly to go through all the books and evaluate each one separately, especially since the criteria for measuring quality will vary among students. Some students prefer books in which another student has underlined the key points; others prefer clean books. The bookstore charges the same price for all copies and allows purchasers to sort them by quality. The monetary value of used cars, on the other hand, varies so much that it is worthwhile for the seller to do the sorting.

17. People often go shopping to acquire information about what's available. They don't set out to buy what they want so much as to find out what they want to buy. A website is less useful for this purpose than a tour of the local clothing stores.

18. Goods of similar quality acquire similar prices as buyers and sellers acquire information about quality and price differences. The buyers and sellers who make up the garage sale market don't have much opportunity to acquire such information. Suppose you see some used table tennis paddles at a garage sale and you know you would like to have a couple more. Is the price the seller is asking a lot higher than the price currently being asked for table tennis paddles at other garage sales in the city? Or is it a lot lower? Who knows? Who will *ever* know? Even those whose bumper sticker proclaims, "This car stops at every garage sale" probably don't do a whole lot of comparison-shopping.

19. You have much more reason to trust a seller who intends to be doing business in the future at the same site. You don't require as much information about the seller's product because you have indirect information about the seller's honesty.

20. (a) Since lemons appear more quickly on the used-car market, the set of year-old cars will contain a higher percentage of lemons than the set of new cars. (b) Sellers of used cars will know which ones are lemons, but buyers won't. Neither seller nor buyer can identify the lemons among new cars. (c) Buyers will lower the price they are willing to pay for any year-old car (their demand curve will move southwest) unless sellers can find a way to identify the non-lemons to the satisfaction of buyers. (d) When the seller knows the car is not a lemon, he has an incentive to offer a warranty. When the car is very old, who can know its condition? The seller may want to say, "As is" and allow the car to be purchased by people who have a comparative advantage in appraising and maintaining old cars.