

C&T, Chapters 1–5

[10] 1. a. If everyone thinks that the price of tomatoes will go up next week, what is likely to happen to demand for tomatoes today?

Today's demand for tomatoes will probably rise, since people see "tomatoes today" and "tomatoes next week" as substitutes.

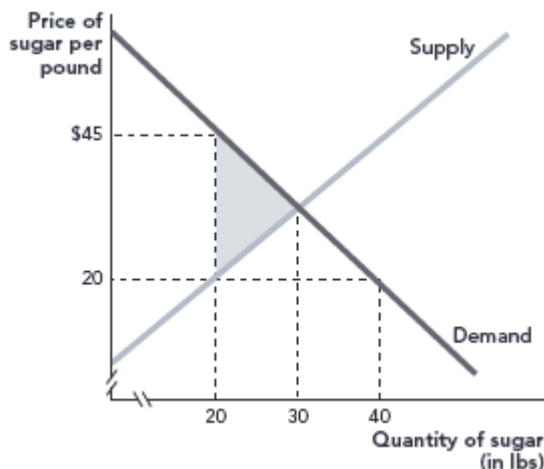
b. If everyone thinks that the price of gasoline will go up next week, what is likely to happen to the demand for gasoline today? (Note: Is this change in demand caused by consumers or by gas station owners?)

It's the same question as above: So gas demand probably rises. This rise in demand is caused by consumers, since consumers create demand, not the gas station owners.

[10] 2. What should happen to the "demand for speed" (measured by the average speed on highways) once airbags are included on cars?

Airbags decrease the costs associated with driving fast by decreasing injuries caused by high-speed crashes, thus the demand for speed increases, raising the average speed. As a result, safety devices such as airbags and mandatory seatbelts tend to increase the safety of car drivers and passengers (although not as much as if there were no increase in speed) but decrease the safety of pedestrians.

[15] 3. In the figure below how many pounds of sugar are sellers willing to sell at a price of \$20? How much is demanded at this price? What is the buyer's willingness to pay when the quantity is 20 lbs? Is this combination of \$20 per pound and a quantity of 20 pounds an equilibrium? If not, identify the unexploited gains from trade.



At a price of \$20 sellers are willing to supply 20 pounds and buyers are demanding 40 lbs. The buyer's willingness to pay at a quantity of 20 is \$45 so the buyers are willing to pay more than the \$20 sellers require to sell an additional pound of sugar. Thus, this is not an equilibrium. Unexploited gains from trade are shaded.

[10] 4. For many years it was illegal to color margarine yellow (margarine is naturally white). In some states, margarine manufacturers were even required to color margarine pink! Who do you think supported these laws? Why?

The dairy industry wanted to prevent margarine from being a good substitute for butter in order to keep butter prices high. Yellow-colored margarine is a better substitute for butter than white or pink margarine! Thus, the dairy industry lobbied for laws to prevent margarine manufacturers from making their product look more like butter. It is still illegal to sell colored margarine in Quebec.

[15] 5. On average, old cars pollute more than newer cars. Therefore, every few years, a politician proposes a "cash for clunkers" program: The government offers to buy up and destroy old, high-polluting cars. If a "cash for clunkers" program buys 1,000 old, high-polluting cars, is this the same as saying that there are 1,000 fewer old, high-polluting cars on the road? Why or why not?

This is not the same: It's just another version of the slave redemption story or the gun buyback story. People will bring cars from out of state, from their backyard, or from the junkyard to sell to the government. Some of these cars were probably being driven very little, if at all. Such rarely used cars are just the ones you'd expect people to sell to the government.

[15] 6. Henry Ford famously mass produced cars at the beginning of the 20th century, starting Ford Motor Company. He made millions because mass production made cars cheap to make, and he passed some of the savings to the consumer in the form of a low price. Cars became a common sight in the United States thereafter. Keeping total revenue and its relationship with price in mind, do you expect the demand for cars to be elastic or inelastic given the story of Henry Ford?

Total revenue clearly went up for the Ford Motor Company as the price of cars decreased. Thus, the demand for cars was elastic.

[25] 7. The supply and demand for copper changes constantly. New sources are discovered, mines collapse, workers go on strike, products that use it wane in and out of popularity, weather affects shipping conditions, and so on.

a. Suppose you learned that growing political instability in Chile (the largest producer of copper) will greatly reduce the productivity of its mines in two years. Ignoring all other factors, which curve (demand or supply) will shift, which way in the market for copper two years from now?

Supply would decrease, that is, a shift to the left (up).

b. Will the price rise or fall as a result of this curve shift?

The price will rise.

c. Given your answer in part b, would a reasonable person buy copper to store for later? Why or why not? Ignore storage costs.

A reasonable person would buy and store copper now if the price was going to rise in the future.

d. As a result of many people imitating your choice in part c, what happens to the current price of copper?

The current price would be higher.

e. Does the action in parts c and d encourage people to use more copper today or less copper today?

The high price encourages people to begin to conserve copper today, even though the increase in costs does not occur until the future.