

Shifting demand and supply

Changes in P & Q are the result of changes in S , D , or both

Demand shifters

- ▶ Incomes
- ▶ Changes in prices of substitutes or complements
- ▶ Changes in values and tastes
- ▶ Expectations about future prices
- ▶ Market size

Supply shifters

- ▶ Most important: Costs of production/supplying
 - ▶ Technological innovations
 - ▶ Changes in prices of inputs
 - ▶ Taxes and subsidies
 - ▶ Changes in value of alternative products that could be supplied, instead
 - ▶ Expectations about future prices
- ▶ Entry or exit of producers (really just a mechanism by which costs affect supply)

Demand represents the _____ of a good for _____,
while supply represents the _____.

At the equilibrium, quantity supplied and quantity demanded are
_____.

Show how demand for and supply of car tires changes in response to each of the following scenarios and what happens to equilibrium price:

1. Gas gets cheaper
2. Hoverboards actually start hovering
3. We start taxing gasoline more
4. The toll on a major highway doubles
5. Recovery from the recession means people have higher incomes
6. Ecoterrorists threaten to burn down all the tire shops in one month if we do not do something (focus on the threat rather than on effects of burning down tire shops)
7. Hipster culture spreads, and the pennyfarthing bicycle gains popularity
8. Rubber gets more expensive
9. Improvements in electronic record-keeping make tire distribution networks more efficient (lower delivery time, fewer losses from theft and mismanagement, etc.)
10. The price of tires decreases (be careful)

Evaluate each claim separately. Explain why it is good or bad.

- a. If rubber gets more expensive, then “the supply [of car tires] would shift to the left because your input costs go up, causing the price to rise but the quantity to stay the same.”
- b. If rubber gets more expensive, then the demand for car tires “would decrease because people will look for alternate modes of transportation instead of paying for a new tire.”
- c. “The supply of car tires would increase after people receive higher incomes in the wake of a recession because the company is able to and has an interest to produce more tires.”
- d. If hoverboards start hovering, “the supply of tires would not change because it would not stop production.”
- e. Which of these is better (on effects of rubber getting more expensive on car tire markets)? Why?
 - e.1 “Demand: unchanged, it won’t affect how the buyers need them.”
 - e.2 “The demand won’t be changed because it won’t affect the way people buy tires.”

If price and quantity traded both increased, which of the following statements is true? Evaluate each separately.

- a. Demand definitely increased
- b. Demand definitely decreased
- c. Supply definitely increased
- d. Supply definitely decreased
- e. Demand definitely did not increase
- f. Demand definitely did not decrease
- g. Supply definitely did not increase
- h. Supply definitely did not decrease

Suppose that there is a new medical study showing that working with roof tiles causes cancer. This should decrease the supply of roofs, roof repairs, or other roofing services. But what will happen to demand? Draw a graph with supply and demand showing the shift in supply. Describe the effect on equilibrium price, quantity supplied, and quantity demanded. Describe the change in consumer behavior in moving between the two equilibria (in other words, what does this experience look like for consumers?).

A hurricane is coming. Identify effects on at least 4 different markets. Explain shifts in supply and demand. Describe the effect on equilibrium price and quantity.

Suppose that you observe that there is bad weather for growing coffee in Colombia and Brazil in one year. Which of the following claims are consistent with sound economic reasoning? Evaluate each claim separately, and explain why it is a good or bad claim.

- a. There will be less coffee available, so buyers will want more and demand will rise, driving up the price.
- b. Firms will not be able to produce as much, so they will increase their prices to keep the same revenue.
- c. There will be a shortage of coffee that will persist until better weather returns or the government steps in to lower prices
- d. Coffee producers will be producing less, so increasing marginal cost tells us that their costs will be lower, so they will charge lower prices.
- e. People will buy less coffee.

Extra question: What will happen to demand for and supply of Vietnamese *Coffea robusta* (as opposed to *Coffea arabica*)?