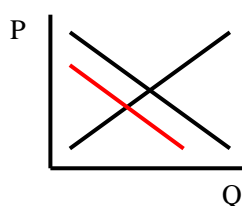


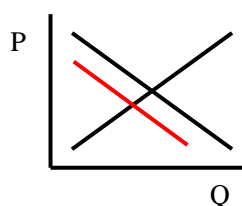
Economics Workshop

Topic 2: Supply and Demand

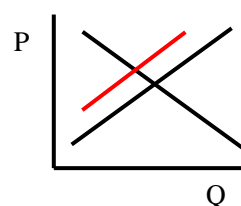
1. Using supply and demand curves, illustrate on 4 separate diagrams the effects of the following shocks on the equilibrium price and quantity sold of cars.
 - a. a decrease in consumer incomes
 - b. a rise in car insurance premiums
 - c. a rise in the real wages of car workers
 - d. a government subsidy for car production



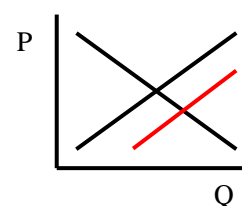
D shifts left
Decrease in
both P_e and Q_e .



D shifts left
Decrease in
both P_e and Q_e .



S shifts left
Increase in P_e and
decrease in Q_e .



S shifts right
Decrease in P_e
and increase in Q_e .

2. The market supply and demand functions for Good X are as follows:

$$Q_D = 1400 - P$$

$$Q_S = 200 + P$$

- a. Find the equilibrium market price and quantity of Good X.
- b. Suppose the government introduces a subsidy of 100 on Good X. Calculate the revised equilibrium market price and quantity. Hint: A subsidy of 100 reduces the costs for suppliers by 100, which in turn increases the quantity supplied by 100.

- a. Let

$$Q_D = Q_S$$

$$1400 - P = 200 + P$$

$$P_e = 600, \quad Q_e = 800$$

- b. The new supply function is

$$Q_S = 300 + P$$

$$Q_D = Q_S$$

$$1400 - P = 300 + P$$

$$P_e = 550, \quad Q_e = 850$$

3. Consider the market for plums in 2014, in which demand and supply are given by the following functions.

$$Q_D = 90 - 0.8P$$

$$Q_S = P$$

- Determine the equilibrium market price and quantity in 2014.
- Suppose that a poor summer in 2015 means that the supply of plums is reduced by 30% at all price levels. Calculate the equilibrium market price and quantity in 2015 assuming that demand is unchanged. Hint: The new supply curve is $Q_S = (100 - \% \text{ reduction})P$

a. Let

$$Q_D = Q_S$$

$$90 - 0.8P = P$$

$$P_e = 50, \quad Q_e = 50$$

b. The new supply function is

$$Q_S = 0.7P$$

$$Q_D = Q_S$$

$$90 - 0.8P = 0.7P$$

$$P_e = 60, \quad Q_e = 42$$

4. Consider the demand curve for computer games. What effect will a decrease in distribution costs of computer games have?
- Rightward shift
 - Movement down along (As distribution costs decrease, the supply curve shifts to the right, resulting in a lower equilibrium price and higher quantity of computer games sold. This change causes a movement down along the demand curve.)
 - Need more information to say
 - Leftward shift
 - Movement up along
5. Consider the case of the supply curve of runner beans. What would be the effect of an increase in the price of broad beans? Hint: runner beans and broad beans are alternative goods.
- Rightward shift
 - Leftward shift (An increase in price of broad beans would cause producers to allocate resources to producing broad beans instead of runner beans. This results in decrease in supply for runner beans.)
 - Movement up along
 - Movement down along

6. Suppose that good X is an inferior good. If the incomes of buyers of good X increase, and, at the same time, the cost of producing good X falls, then we can deduce that:
- The price of good X will fall, but we do not have enough information to predict quantity
 - The price of good X will rise, but we do not have enough information to predict quantity
 - We do not have enough information to predict what will happen to price or quantity.
 - The quantity of X sold will rise, but we do not have enough information to predict price.
 - The quantity of X sold will fall, but we do not have enough information to predict price
7. If one of the determinants of supply changes, the effect is shown by
- A movement along or a change in supply
 - A shift in the supply curve or a change in supply
 - A movement along or a change in quantity supplied
 - A shift in the supply curve or a change in quantity supplied
8. A shift in the demand curve to the right (assuming no shift in the supply curve) results in:
- higher price and lower quantity
 - lower price and higher quantity
 - lower price and lower quantity
 - higher price and higher quantity
9. A movement upwards/leftwards along the demand curve will be caused by:
- A rise in income
 - A fall in the price of inputs
 - A decrease in supply
 - An increase in supply
10. One of the most important determinants of demand is the level of consumer income. When considering the effect of a change in income on demand, we distinguish between normal goods and inferior goods. A normal good is:
- a good for which demand increases as price falls
 - a good for which demand increases as income increases
 - a good for which demand decreases as income increases
 - a good that represents consumer preferences
11. Consider the case of the supply curve of coffee beans. What would be the effect of a government subsidy granted to coffee growers?
- Rightward shift (A subsidy reduces a production cost, which in turn increase the supply)
 - Leftward shift
 - Movement up along
 - Movement down along
12. Suppose that it is observed that the price of umbrellas falls and that the quantity sold also falls. From this we can deduce that:

- a. The demand curve has shifted to the right, but we cannot deduce whether or not the supply curve has shifted.
 - b. The demand curve has shifted to the left, but we cannot deduce whether or not the supply curve has shifted.
 - c. The supply curve has shifted to the right, but we cannot deduce whether or not the demand curve has shifted.
 - d. The supply curve has shifted to the left, but we cannot deduce whether or not the demand curve has shifted.
 - e. Nothing. Either curve could have shifted either way depending on which way the other shifted.
13. Which of the following will not shift the supply curve of beef to the right?
- a. An increase in the price of pork
 - b. A decrease in the cost of producing beef
 - c. An increase in the efficiency of producing beef
 - d. An increase in the subsidy to producers of beef
 - e. The removal of restrictions on imports of beef into the country
14. There are several determinants of consumer demand for a product. The relationship between demand and one of these determinants is expressed in the law of demand. The law of demand states that:
- a. demand rises as income rises.
 - b. the amount purchased depends on the amount demanded.
 - c. producers respond to an increase in demand by producing more.
 - d. quantity demanded increases as price decreases.
 - e. an increase in demand causes an increase in price
15. When one good is produced along with another good at the same time (goods in joint supply), an increase in the supply of one good will:
- a. cause an increase in the price of the other.
 - b. increase the supply of the other.
 - c. decrease the supply of the other.
 - d. not change the supply of the other
 - e. damage the supply of the other