Demand Theory

Types of Demand

- Demand for consumers' goods and producers' goods
- Demand for perishable and durable goods
- Autonomous (direct) and derived (indirect) demand
- Individual demand and Aggregate/market Demand
- Firm and Industry Demand
- Demand by market segments and by total Market

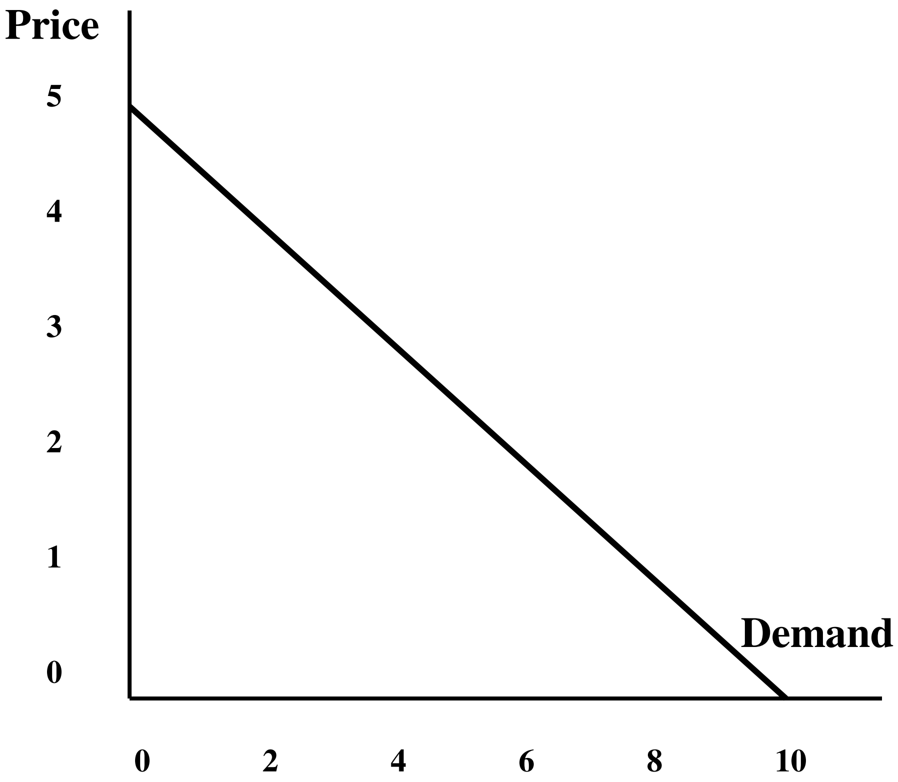
Law of Demand

- A decrease in the price of a good, all other things held constant, will cause an increase in the quantity demanded of the good.
- And Vice-versa

An Example

(the inverse relationship, i.e., The Law of Demand)

Price	Quantity
0	10
1	8
2	6
3	4
4	2
5	0



Determinants of Demand

- Income
- Prices of substitutes
- Prices of complements
- Advertising
- Population
- Consumer expectations

How Advertising?

- Advertising influences consumer choice and preferences.
- Advertising budgets of profit-seeking firms indicate that it influences consumer choices.
- Advertising can:
  - reduce the search time of consumers
  - help them make more informed choices
  - provide assurances with regard to quality (through brand names).

Factors affecting Demand

- **For all Demand**
  - Consumers' Income
  - Own Price
  - Consumers' taste preference
  - Prices of related goods
    - Substi.
    - Compl.
- **Durable and/or Expensive Goods**
  - Consumers' Expectation about
    - Future Incomes
    - Future Prices
- **For Aggregate Demand**
  - Nos of Consumers'
  - Distribution of Consumers

Demand Function

Dx = f (y, Px, Ps, Pc, T; Ep.Ey; N, D, u)

Where,

Dx = Demand for good X

Y = Consumers' Income

Px = Price of Good X

Ps = Prices of substitutes of X

Pc = Prices of complements of X

T = measures of consumers' tastes & prefernces

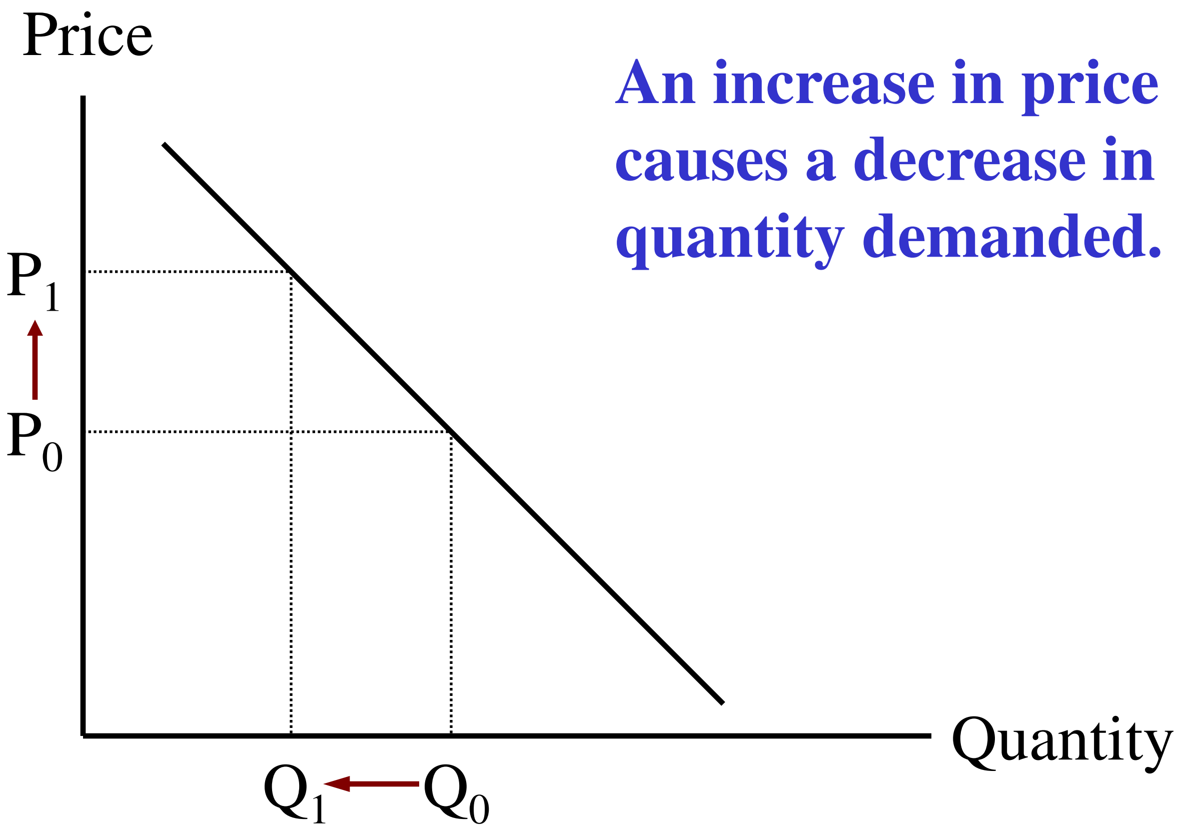
Ep & Ey = Consumers' expectation about future prices & incomes

N = Number of consumers

D = distribution of consumers

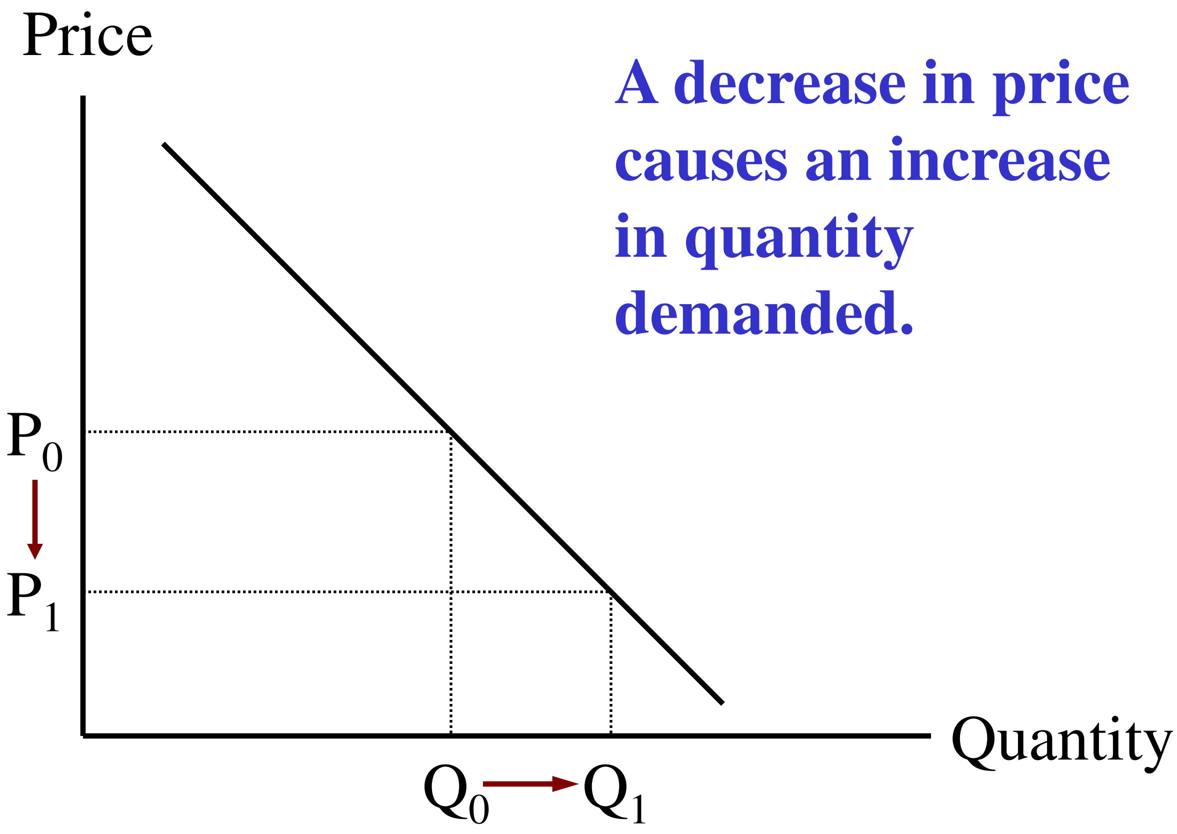
U = others

Change in Quantity Demanded



An increase in price causes a decrease in quantity demanded.

Change in Quantity Demanded

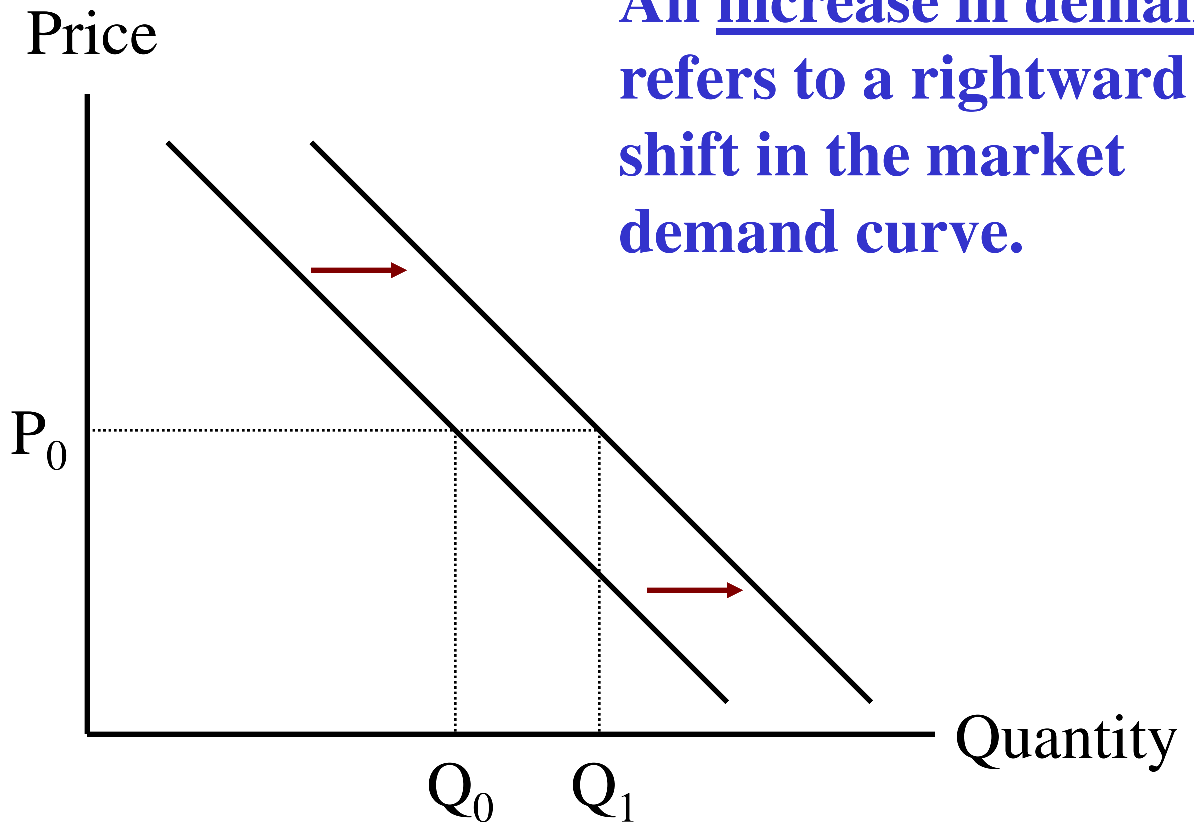


A decrease in price causes an increase in quantity demanded.

Changes in Demand

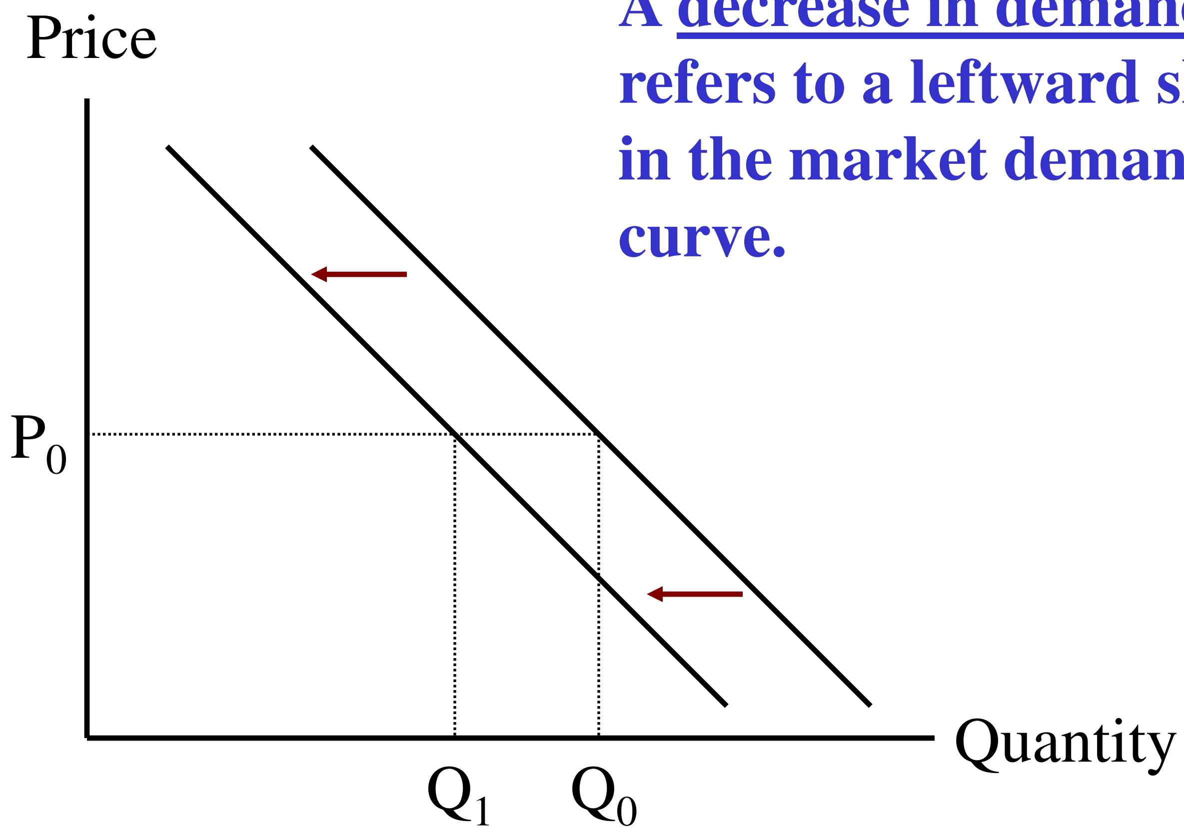
- Change in Buyers' Tastes
- Change in Buyers Incomes
  - Normal Goods
  - Inferior Goods
- Change in the Number of Buyers
- Change in the Price of Related Goods
  - Substitute Goods
  - Complementary Goods

Change in Demand



An <u>increase in demand</u> refers to a rightward shift in the market demand curve.

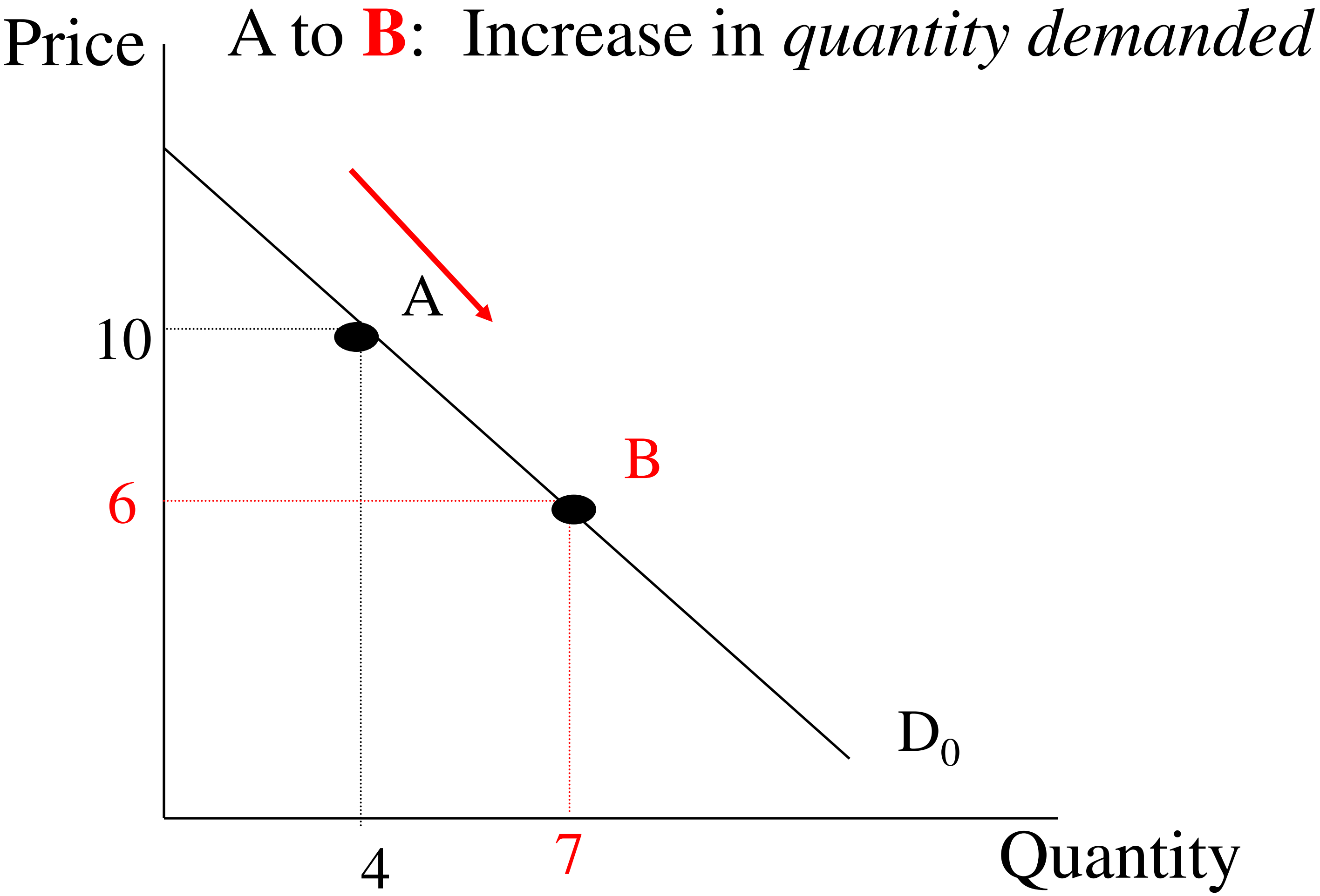
Change in Demand



A <u>decrease in demand</u> refers to a leftward shift in the market demand curve.

What is the difference between a change in the quantity demanded and a change in demand?

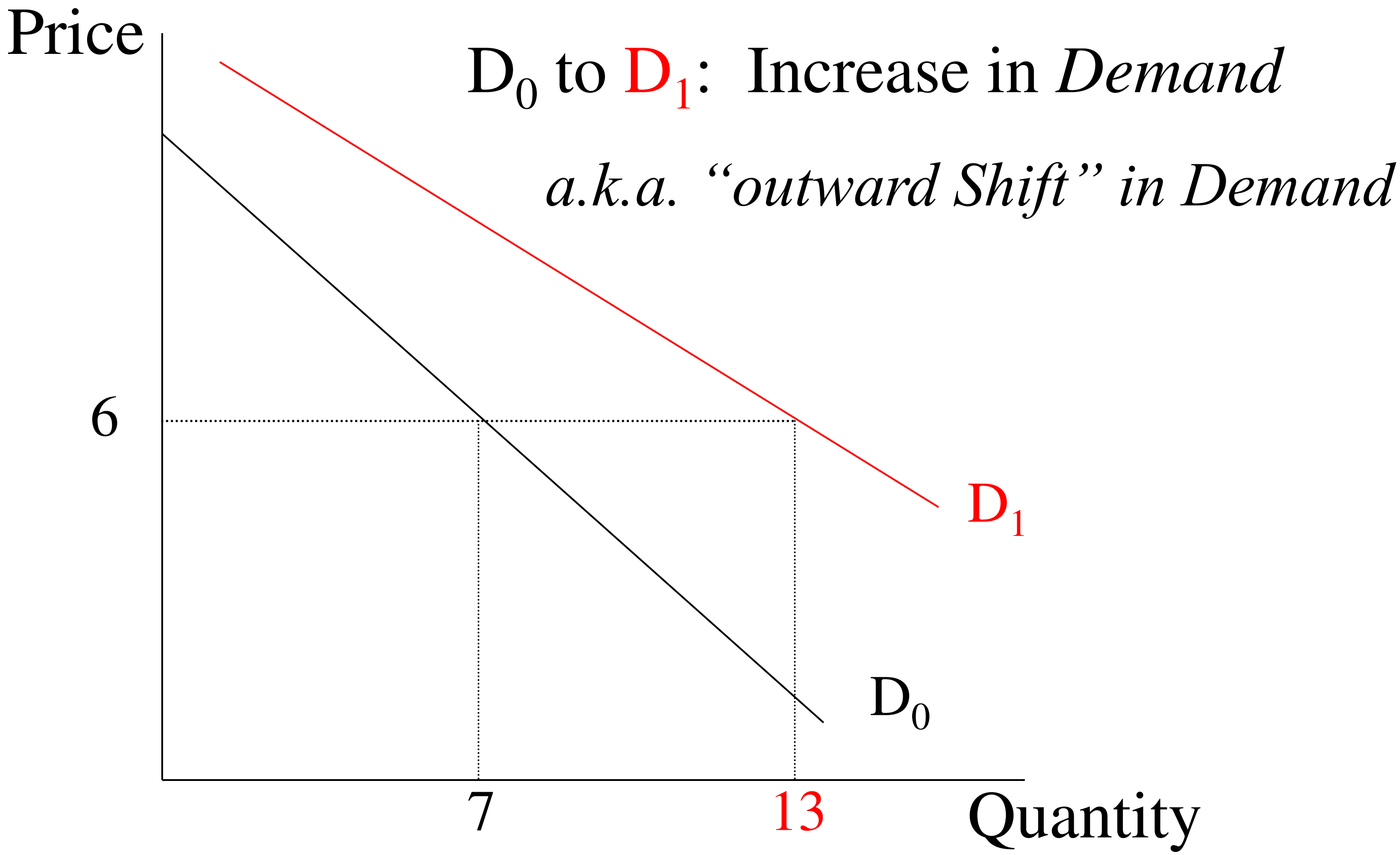
Change in Quantity Demanded



What Causes a Change in the Quantity Demanded?

Only one thing - a change in the price of the product!

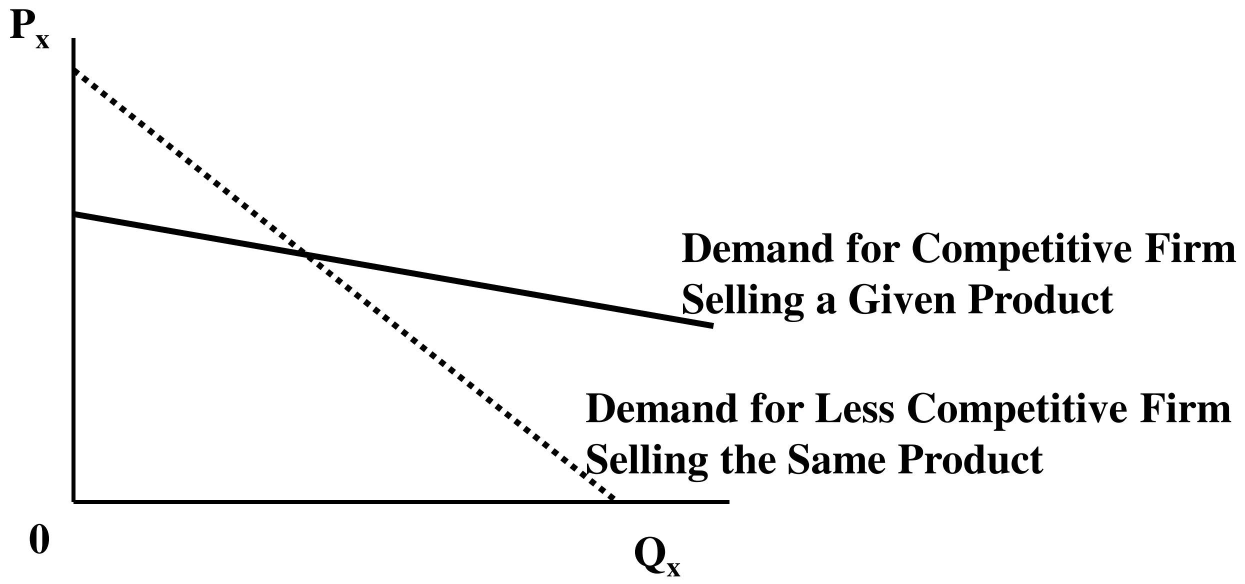
Change in Demand



What Causes a Change in Demand?

- A change in one of the ceteris paribus conditions. What are they?
  - A change in the income of the consumer.
  - A change in the consumer's taste (the whole point of advertising).
  - A change in the price of a related product.
    - Substitutes
    - complements
- For the market, a change in the number of potential consumers.

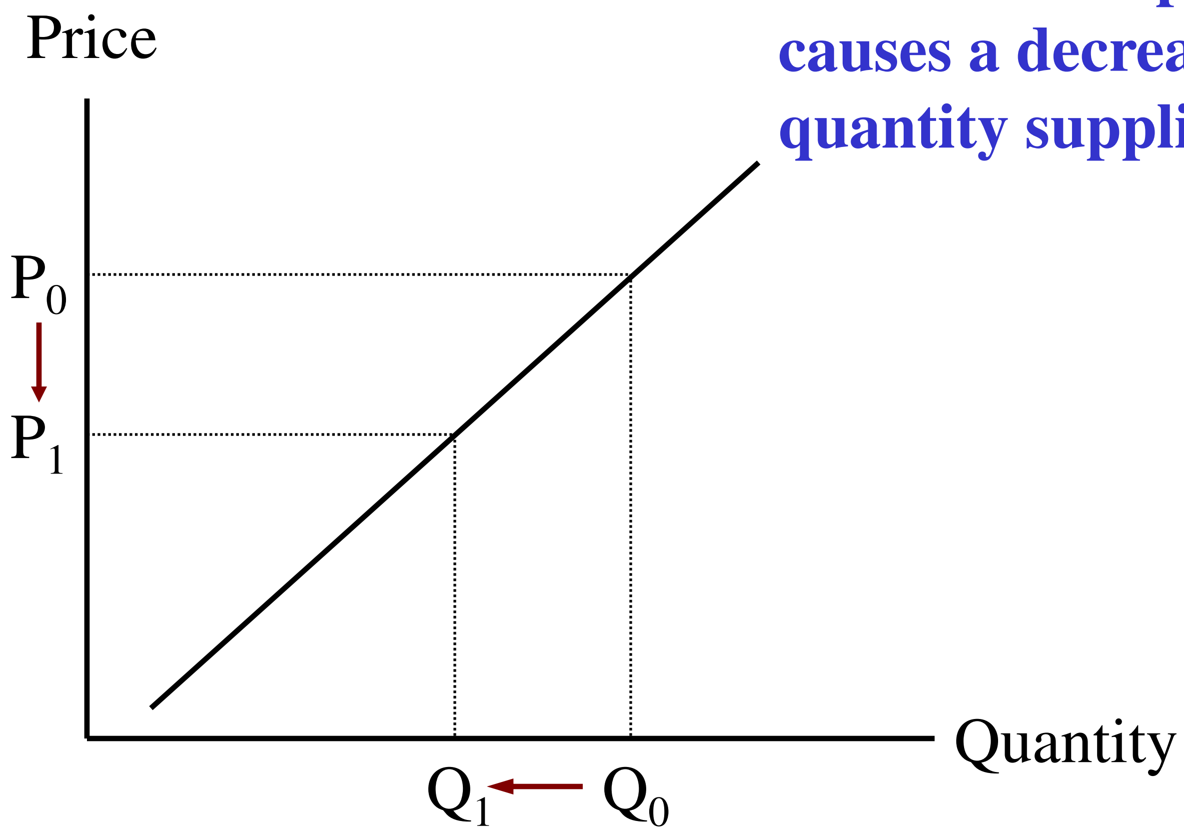
The more competition, the less the slope of the demand curve.



Law of Supply

- A decrease in the price of a good, all other things held constant, will cause a decrease in the quantity supplied of the good.
- An increase in the price of a good, all other things held constant, will cause an increase in the quantity supplied of the good.

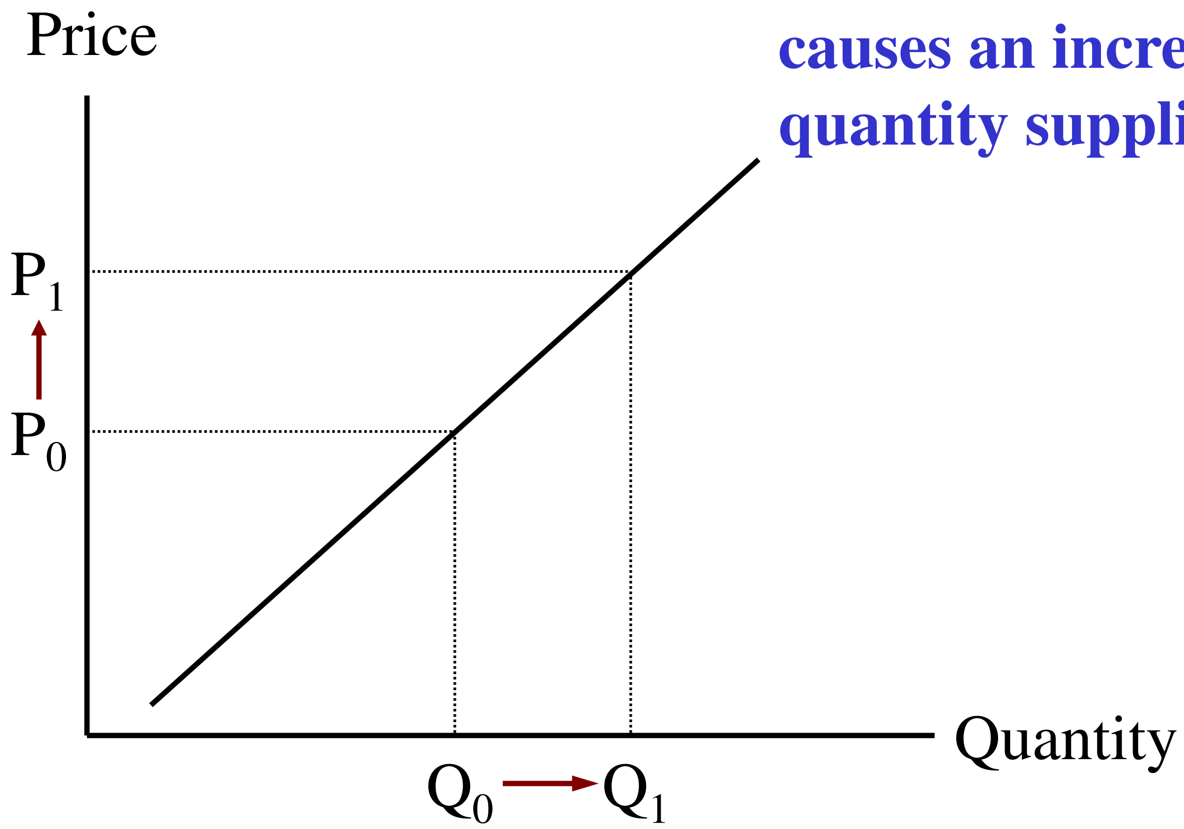
Change in Quantity Supplied



A decrease in price causes a decrease in quantity supplied.

Change in Quantity Supplied

An increase in price causes an increase in quantity supplied.

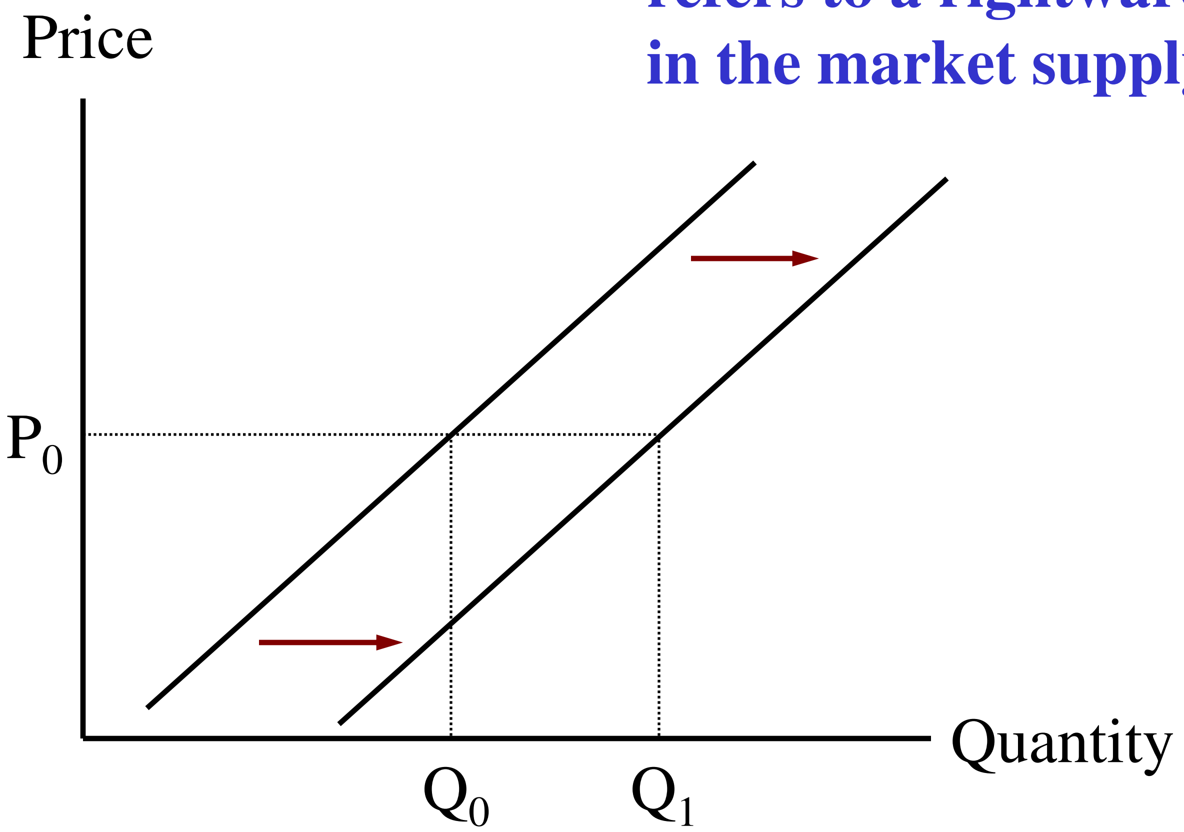


Changes in Supply

- Change in Production Technology
- Change in Input Prices
- Change in the Number of Sellers

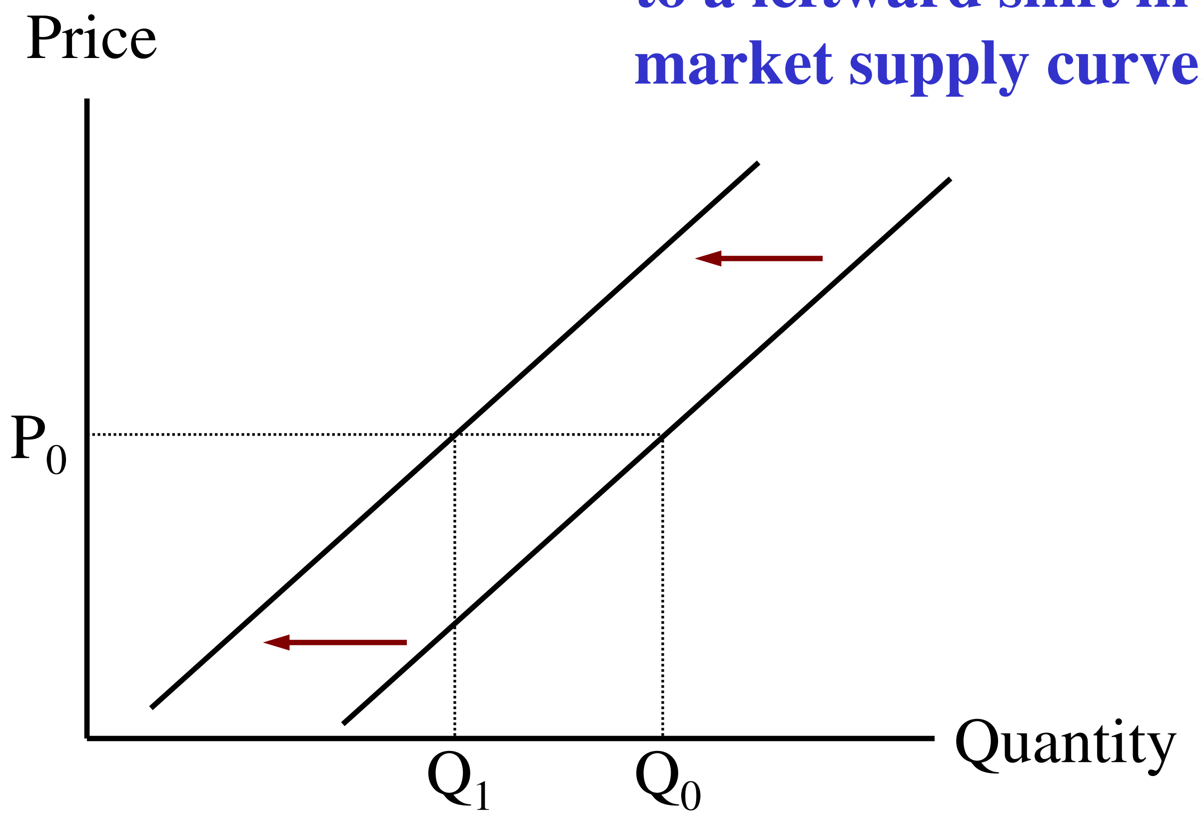
Change in Supply

An <u>increase in supply</u> refers to a rightward shift in the market supply curve.



Change in Supply

A __decrease in supply__ refers to a leftward shift in the market supply curve.



Supply Shifters

- Input prices
- Technology or government regulations
- Number of firms
- Substitutes in production
- Taxes
- Producer expectations

The Supply Function

- **An equation representing the supply curve:**

$$Q_x^S = f(P_x , P_R ,W, H,)$$

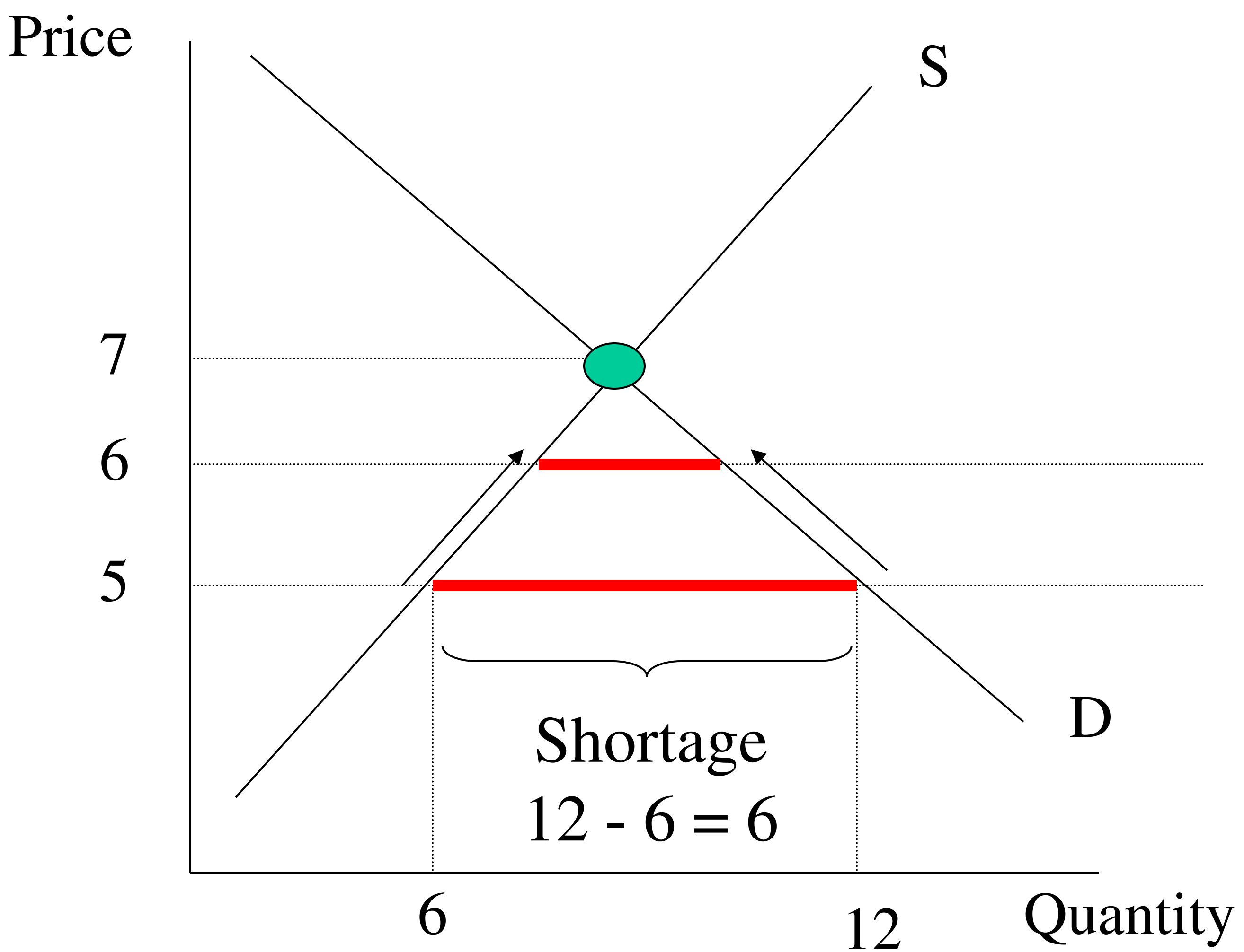
  - Q_x^S = quantity supplied of good X.
  - P_x = price of good X.
  - P_R = price of a related good
  - W = price of inputs (e.g., wages)
  - H = other variable affecting supply

Market Equilibrium

- Balancing supply and demand

  $Q_x^S = Q_x^d$

If price is too low…



If price is too high…