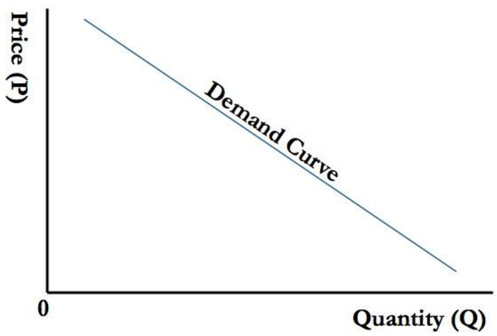
Recitation 1 Notes
14.01SC Principles of Microeconomics

I. Supply and Demand Model
    a. Supply and demand determine prices
    b. Need a competitive market
II. Competitive market
    a. Producers and consumers are price takers (not price setters)
        i. Do not individually influence prices
    b. Non-differentiated good
        i. All goods are the same, non-distinguishable
    c. Symmetric information
        i. All producers/consumers have the same knowledge about goods
    d. No transaction costs
        i. Buying/selling does not include any extra costs
III. Demand

$Q_D = D(P)$
$dQ_D/dP < 0$

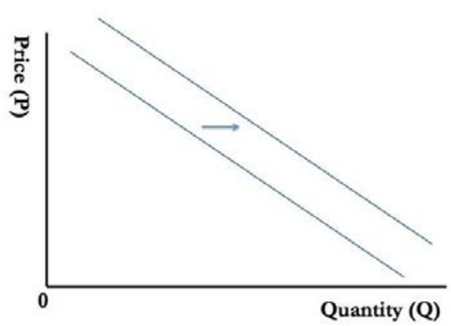
P (price) = Q_D/D



Also influenced by:
- Income (I)
- Tastes
- Substitutes
- Complements

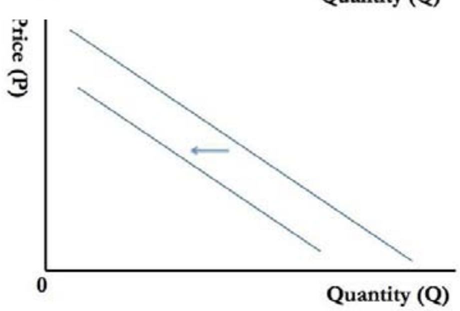
Change in Q_D – movement along demand curve
Change in demand – shift of demand curve, change in variables other than price

Example: Market for Pork
$Q_D (P, I, P_{beef}) = 7 – 2P + 3I + P_{beef}$
If I = 4, $P_{beef} = 1$, then
$Q_D (P) = 20 – 2P$
$P = 10 – 1/2\ Q_D$

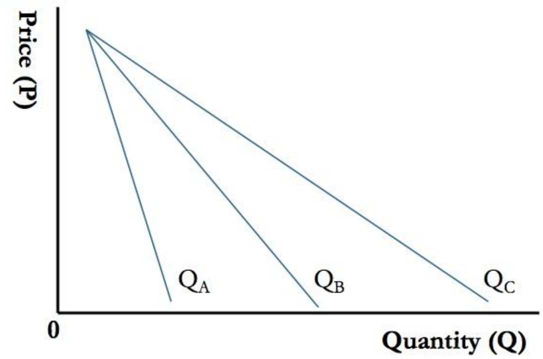


If I=4, $P_{beef} = 3$, then
$Q_D(P) = 22-2P$
$P=11-1/2\ Q_D$

If I=2, $P_{beef} = 1$
$Q_D(P) = 14-2P$
$P = 7 – 1/2Q_D$



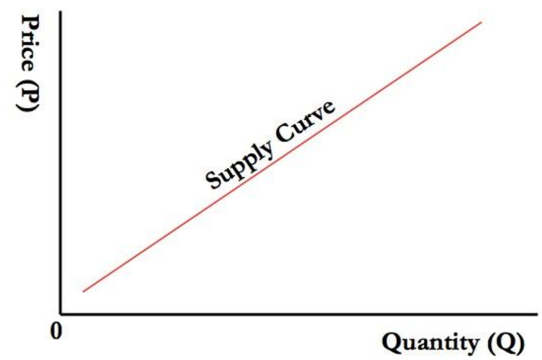
Market demand is sum of consumer demand:
$Q_M = \sum Q_i$



IV. Supply
$Q_S = S(P)$
$P = Q_S/S$
$dQ_S/dP > 0$ (law of supply)

Also influenced by:
- Input price
- Technology

Change in Q_S – move along supply curve
Change in S – shift of supply curve



V. Market Equilibrium
Equilibrium = satisfaction, no desire to change
$P = P^*$ (price is optimal)
$Q = Q^*$ (quantity supplied and demanded is optimal)
$Q_D (P^*) = Q_S (P^*)$

Example:
$20\text{-}2P^* = 8+4P^*$
$P^* = 12$
$Q^* = 16$