

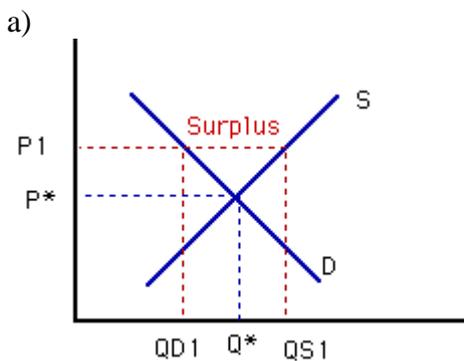
Answer on Question #44497 – Economics - Economics of Enterprise

suppose the market for frozen orange juice is in equilibrium at a price of RM 1.00 per can and quantity of 4200 cans per month. now suppose that at a price of rm 1.50 per can, quantity demanded falls to 3000 cans per month and quantity supplied increases to 4500 cans per month

- draw the appropriate diagram for this market.
- calculate the price elasticity of demand for frozen orange juice between the price of RM1.00 and RM1.50 .is the demand elasticity elastic or inelastic.
- calculate the elasticity of supply for frozen orange juice between price of RM 1.00 and RM1.50. is supply elasticity or inelastic.
- explain in general what factors would affect the elasticity of demand for and supply of juice.

Solution

$P^* = \text{RM } 1.00$ per can, $Q_d^* = Q_s^* = 4200$ cans. $P_1 = \text{RM } 1.50$ per can, $Q_{d1} = 3000$ cans, $Q_{s1} = 4500$ cans.



b)

$$E_d = \frac{\frac{P_1 + P_2}{2}}{\frac{Q_{d1} + Q_{d2}}{2}} \times \frac{\Delta Q_d}{\Delta P} = \frac{P_1 + P_2}{Q_{d1} + Q_{d2}} \times \frac{\Delta Q_d}{\Delta P}$$

$E_d = (1 + 1.5)/(4200 + 3000) * (3000 - 4200)/(1.5 - 1) = -2.5/7200 * 1200/0.5 = -0.83$, so the demand is inelastic ($|E_d| < 1$).

c) $E_s = (1 + 1.5)/(4200 + 4500) * (4500 - 4200)/(1.5 - 1) = 2.5/8700 * 300/0.5 = -0.17$, so the supply is inelastic too ($|E_s| < 1$).

d) There are three main factors that influence a demand's price elasticity:

- The availability of substitutes
- Amount of income available to spend on the good
- Time

Factors affecting price elasticity of supply:

- Time
- Availability of resources
- Number of producers
- Ease of storing stocks

- Increase in cost of production as compared to output
- Improvement in Technology
- Stock of finished goods.