

4.2.3 - GEDM

$$(1) \% \Delta P_c = -15.2\%$$

$$\% \Delta P_B = -8.7\%$$

$$\% \Delta Q_c = 2.2\%$$

$$\% \Delta Q_B = -10.4\%$$

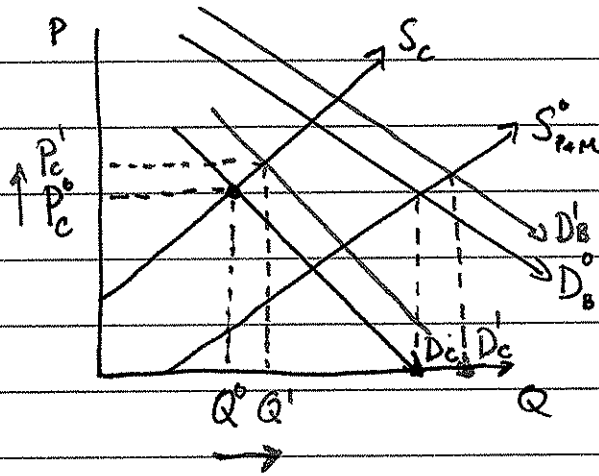
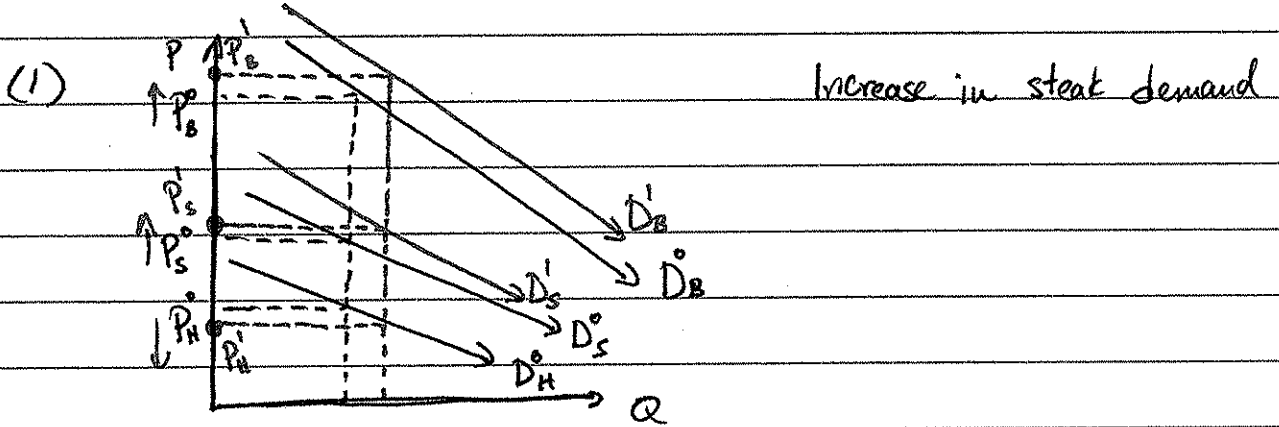
$$(2) \% \Delta P_B = 3.65\%$$

$$\% \Delta P_c = 2.19\%$$

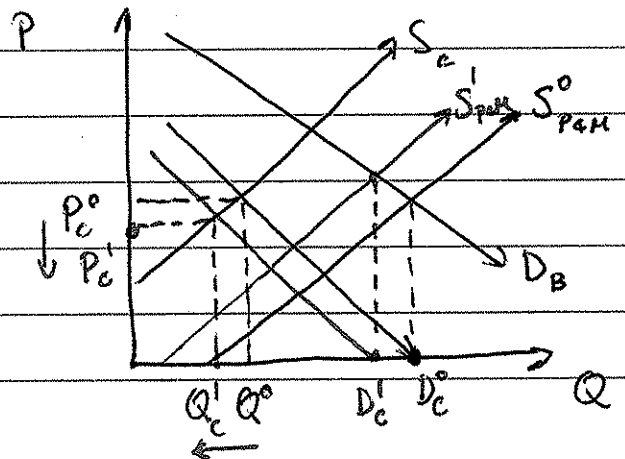
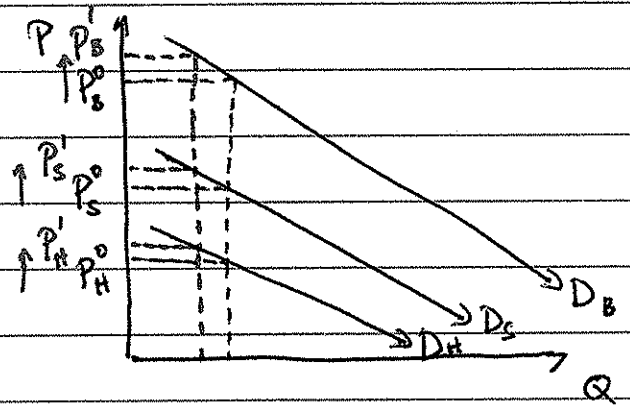
$$\% \Delta Q_B = 4.38\%$$

$$\% \Delta Q_c = 3.3\%$$

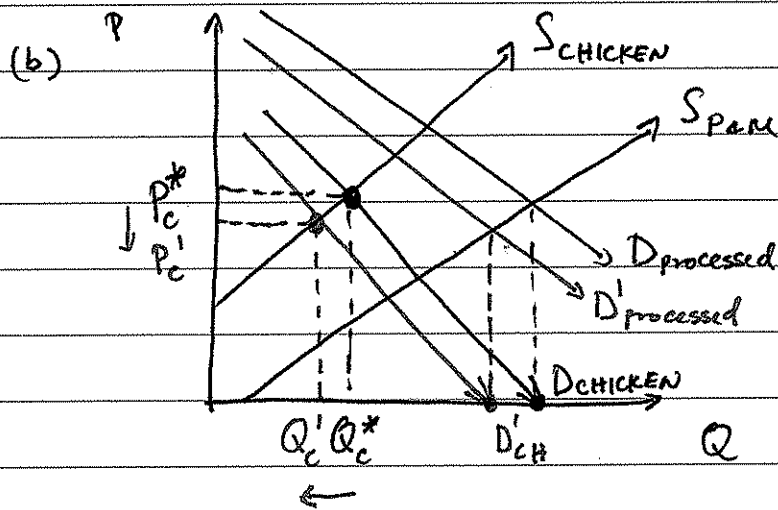
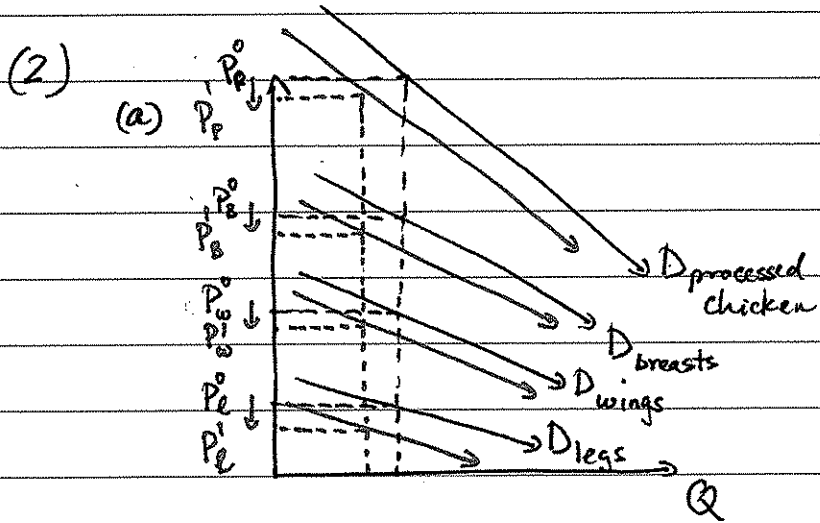
5.2.2 - DD GRAPHICAL



(2) Reduction in supply of P&M



5.3.2: DD Numerical



(c) In red above

$$(d) \quad (i) \quad D_{PC} = D_B + D_W + D_E$$

$$P_{PC} = P_B + P_W + P_E$$

$$P_{PC} = (15 - Q) + (10 - 0.75Q) + (5 + 0.25Q)$$

$$P_{PC} = 20 - 2Q$$

(ii) Equilibrium quantity of processing occurs where $P^{PM} = P^{D_{CHICKEN}}$

$$20 - 2Q = 8 + 0.25Q$$

$$12 = 2.25Q$$

$$Q = 5.3$$

(iii) Derived demand

$$DD_{CHICKEN} = D_{PC} - S_{PM}$$

$$P_{CH}^D = (20 - 2Q) - (8 + 0.25Q)$$

$$P_{CH}^D = 12 - 2.25Q$$

(iv) Equilibrium where $P_{CH}^D = P_{CH}^S$

$$12 - 2.25Q = -10 + 5Q$$

$$22 = 7.75Q$$

$$Q_{CH}^* = 2.84$$

$$P_{CH}^* = 12 - 2.25 \cdot (2.84)$$

$$P_{CH}^* = \$5.61$$

$$(v) \quad P_e = 5 - 0.25(2.84) = \$4.29$$

$$P_w = 10 - 0.75(2.84) = \$7.87$$

$$P_b = 15 - (2.84) = \$12.16$$

6.1.2 : 2D transport model

