(i) If $\frac{d_1}{b_1+d_1} \cdot \frac{1}{1-\beta_1} + \frac{d_2}{b_2+d_2} \cdot \frac{1}{1-\beta_2} \leq 1,$ (3.13)

$$\frac{d_1}{b_1+d_1} \cdot \frac{1}{1-\beta_1} \leq p^* \leq 1 - \frac{d_2}{b_2+d_2} \cdot \frac{1}{1-\beta_2}, \quad q_1^* = q_2^* = 0 \tag{3.14}$$

$$E_I^* = E_S^* = 0. \tag{3.15}$$

(ii) If $\frac{d_1}{b_1+d_1} \cdot \frac{1}{1-\beta_1} + \frac{d_2}{b_2+d_2} \cdot \frac{1}{1-\beta_2} > 1$ and $d_1 > d_2$; (3.16)

If $d_1 - d_2 > (b_1+d_1)(1-\beta_1)$ (3.17)

$$p^* = 1, \; q_1^* = 1, \; q_2^* = 0 \tag{3.18}$$

$$E_I^* = -c_1 + (c_1 - a_1) \cdot (1-\beta_1) \tag{3.19}$$

$$E_S^* = d_1 - (b_1+d_1) \cdot (1-\beta_1)$$

If $d_1 - d_2 < (b_1+d_1) \cdot (1-\beta_1)$ (3.20)

$$p^* = \frac{d_1 - d_2 + (b_2+d_2)(1-\beta_2)}{(b_1+d_1) \cdot (1-\beta_1) + (b_2+d_2)(1-\beta_2)} \tag{3.21}$$

$$q_1^* = \frac{(c_2-a_2) \cdot (1-\beta_2)}{(c_1-a_1) \cdot (1-\beta_1) + (c_2-a_2) \cdot (1-\beta_2)} = 1 - q_2^* \tag{3.22}$$

$$E_I^* = \frac{-\frac{c_1}{c_1-a_1} \cdot \frac{1}{1-\beta_1} - \frac{c_2}{c_2-a_2} \cdot \frac{1}{1-\beta_2} + 1}{\frac{1}{c_1-a_1} \cdot \frac{1}{1-\beta_1} + \frac{1}{c_2-a_2} \cdot \frac{1}{1-\beta_2}} \tag{3.23}$$

$$E_S^* = \frac{\frac{d_1}{b_1+d_1} \cdot \frac{1}{1-\beta_1} + \frac{d_2}{b_2+d_2} \cdot \frac{1}{1-\beta_2} - 1}{\frac{1}{b_1+d_1} \cdot \frac{1}{1-\beta_1} + \frac{1}{b_2+d_2} \cdot \frac{1}{1-\beta_2}}. \tag{3.24}$$

Proof

(i) With (3.12) and (3.14) equilibrium condition (3.6) is identically fulfilled, whereas (3.7) becomes

$$0 \geq [q_1 \cdot (-b_1 + (b_1+d_1)\beta_1(\varepsilon) + q_2 \cdot (-b_2 + (b_2+d_2)\beta_2(0)] \cdot p^*$$
$$+ [q_1 \cdot (-b_1 + (b_1+d_1)\beta_1(0) + q_2 \cdot (-b_2 + (b_2+d_2)\beta_2(\varepsilon))] \cdot (1-p^*)$$