$$\begin{split} Q_{oo} &= 18p - 1000; \quad Q_{do} = 9000 - 22p \\ Q_{ot} &= 14p - 800; \quad Q_{dt} = 4000 - 16p \\ &\rightarrow \epsilon_{do} = -\frac{\partial D_d}{\partial p} * \frac{p}{Q} = 22 \frac{p_o^*}{Q_o^*} \\ &\rightarrow \epsilon_{dt} = -\frac{\partial D_d}{\partial p} * \frac{p}{Q} = 16 \frac{p_t^*}{Q_t^*} \\ Q_{oo} &= Q_{do} \leftrightarrow p_o^* = 250; \quad Q_o^* = 3500 \\ Q_{ot} &= Q_{dt} \leftrightarrow p_t^* = 160; \quad Q_t^* = 1440 \end{split}$$