

Trade with Oligopoly

- Assume we have two firms, each facing a higher marginal cost when serving an export market.
- The firms have identical (symmetric) cost structures.
- They are located in two countries, with markets segmented by transport costs.
- We have full symmetry.

Underlying maths

$$C_1 = a + bq_1$$

$$C_2 = a + \tau bq_2 \quad \tau > 1$$

$$Q = q_1 + q_2$$

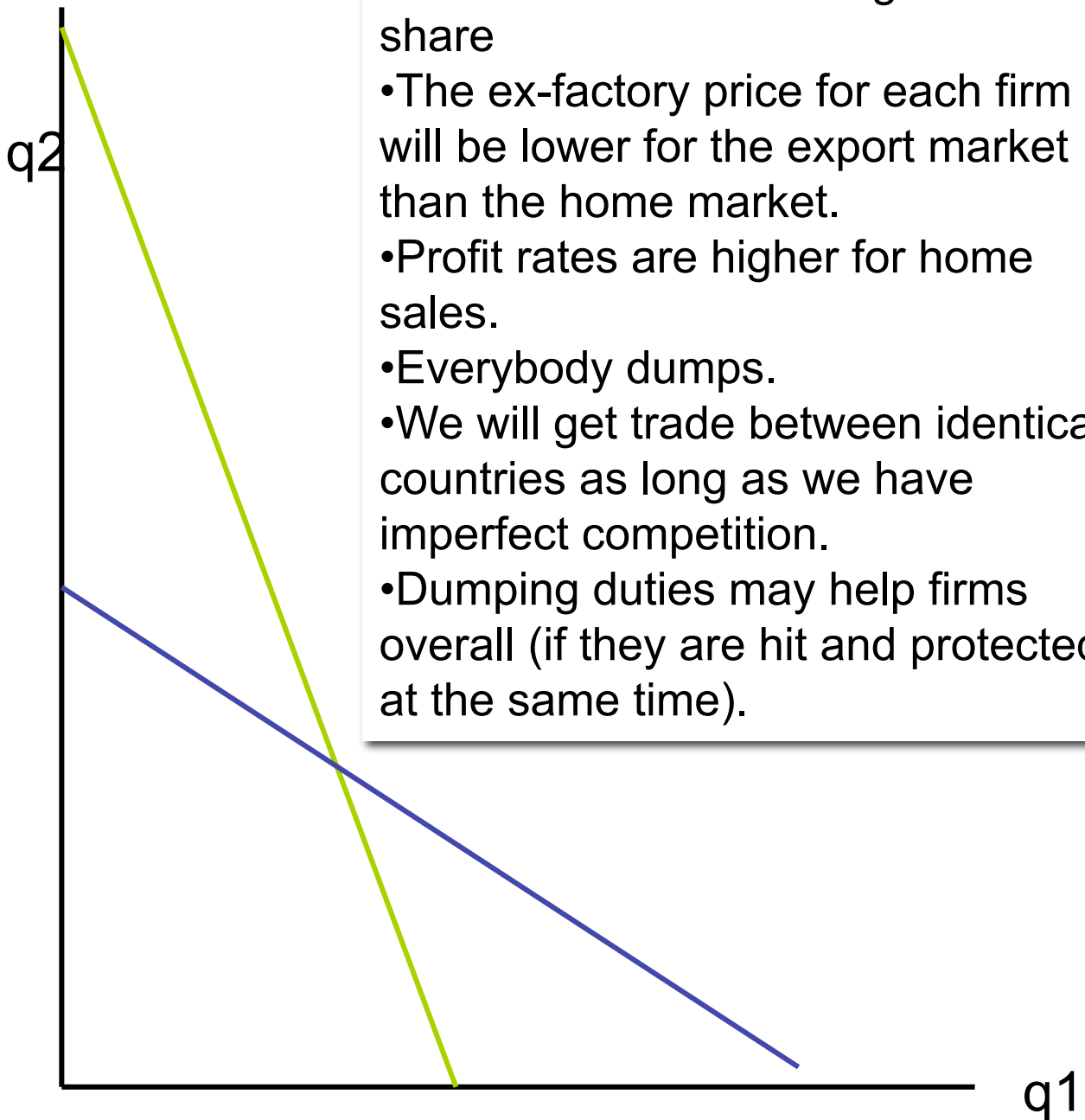
$$P = h - gQ$$

$$\Rightarrow q_1 = -\frac{-gh + 2\tau ba + ga - 2\tau bh}{3g^2 + 4\tau b + 4\tau bg + 4gb},$$

$$q_2 = -\frac{-gh + 2ba + ga - 2bh}{3g^2 + 4\tau b + 4\tau bg + 4gb}$$

$$\Rightarrow q_1 = -\frac{a - h + gq_2}{2(b + g)}, \quad q_2 = -\frac{a - h + gq_1}{2(\tau b + g)}$$

Equilibrium



- The home firm will a larger market share
- The ex-factory price for each firm will be lower for the export market than the home market.
- Profit rates are higher for home sales.
- Everybody dumps.
- We will get trade between identical countries as long as we have imperfect competition.
- Dumping duties may help firms overall (if they are hit and protected at the same time).

Home market effect:
This follows from trade
costs

$$\Rightarrow \frac{q_1}{q_2} = \frac{2\tau b(a-h) + g(a-h)}{2b(a-h) + g(a-h)}$$