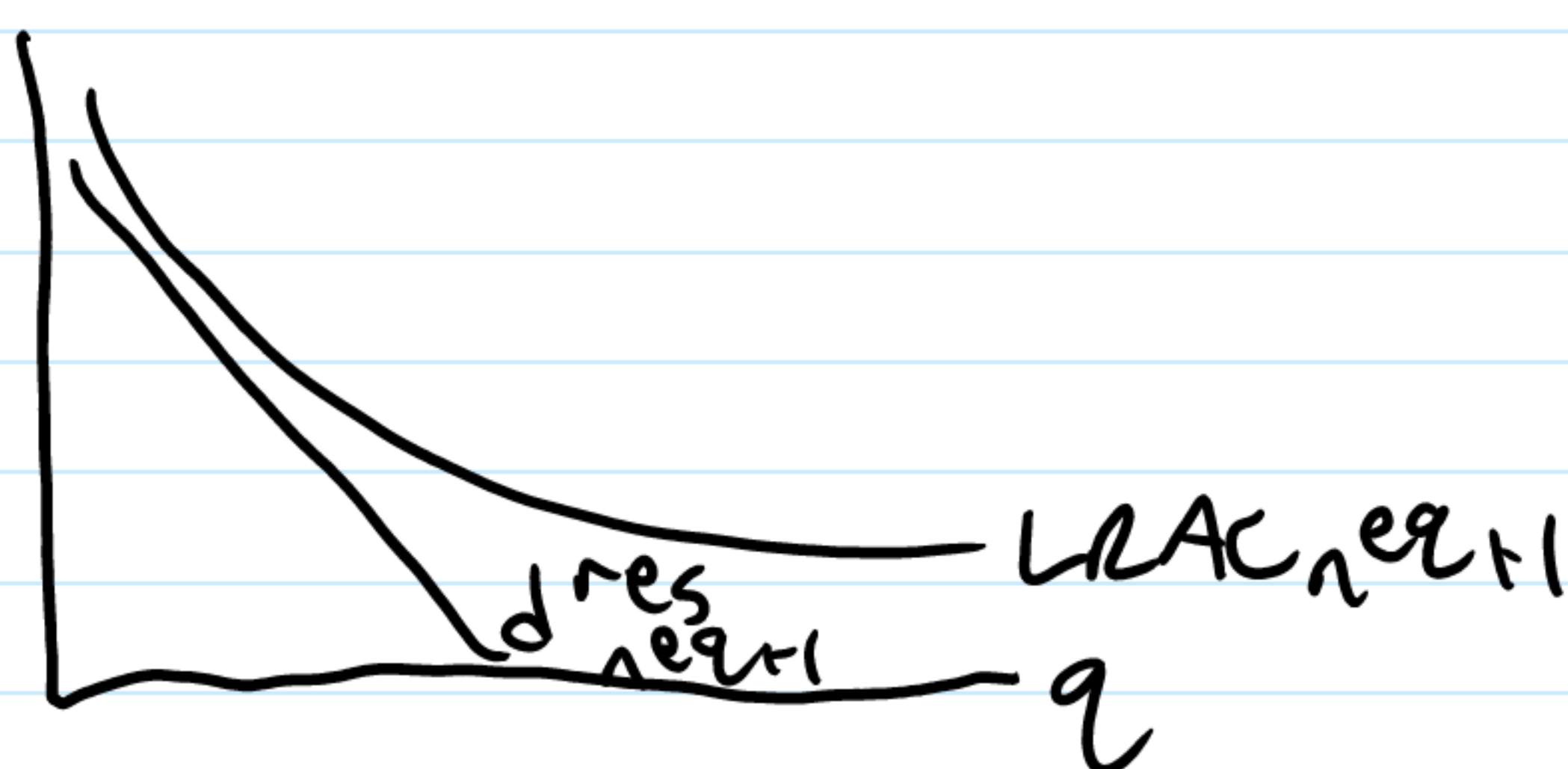


## Entry w/ differentiated products



$$\pi(n^{eq}+1) < 0$$

$$\pi(n^{eq}) \geq 0$$

$$R = P(q)q$$

$$MR = \frac{dR}{dq} = P + P'q$$

$$MR = P \left( \frac{dP}{dP} \cdot \frac{q}{P} + 1 \right)$$

$$MR_i = P_i \left( \frac{1}{\epsilon_i} + 1 \right)$$

$$\epsilon_i < 0$$

more alternatives means

- better subs
- more elastic demand

$$\text{As } \epsilon_i \rightarrow -1 \quad MR_i = P_i \left( \frac{1}{\epsilon_i} + 1 \right) \rightarrow P_i$$

Limit on  $\epsilon_i$ ? # of subs  
Limit on subs?

market size relative to Fixed Cost

$$\boxed{MR = MC}$$

$$P_{short} = LRAC$$

Free entry w/ diff products

$$MR_i = P(Q) \left( \frac{dP}{dP} \cdot \frac{q}{P} + 1 \right) = \frac{dP}{dQ} \cdot \frac{Q}{P} \epsilon_i + P = \frac{dP}{dQ} \cdot \frac{P}{Q} \cdot \frac{Q}{P} \epsilon_i + P = \frac{dP}{dQ} \cdot \frac{P}{Q} \cdot \frac{Q}{P} \epsilon_i + P$$

$$MR_i = P \left( \frac{\epsilon_i}{\epsilon_i} + 1 \right)$$

$$MR_i \rightarrow P_i$$

$$MR_i \rightarrow P$$

As rel to  $P, Q, N$