Erläuterung zu Stoft, S. 343 f.

Lerner-Index (Monopol): $L_x = \frac{p - GK}{p} = -\frac{1}{e}$

Beweis:

$$\pi = p(x)x - C(x)$$

$$\frac{\partial \pi}{\partial x} = \frac{\partial p}{\partial x} x + p - C'(x) \overset{!}{=} 0 \quad \left| + C'(x) \right| : p$$

$$\frac{\partial p}{\partial x}\frac{x}{p} + 1 = \frac{C'(x)}{p} \qquad \left| -1; C'(x) = GK \right.$$

$$\frac{\partial p}{\partial x}\frac{x}{p} = \frac{GK}{p} - 1 = \frac{GK - p}{p} \qquad \left| \frac{\partial p}{\partial x}\frac{x}{p} = \frac{1}{e} \right| \cdot (-1)$$

$$-\frac{1}{e} = \frac{p - GK}{p} = L_x$$

Lerner-Index (Cournot-Oligopolist):

$$L_x = -\frac{s_i}{e} \qquad s_i = \frac{x}{X}$$

Beweis:

$$\pi = p(x)x - C(x)$$

$$\frac{\partial \pi}{\partial x} = \frac{\partial p}{\partial x} x + p - C'(x) \overset{!}{=} 0 \quad \left| + C'(x) \right| : p$$

$$\frac{\partial p}{\partial x}\frac{x}{p} + 1 = \frac{C'(x)}{p} \qquad \left| -1 \right| \cdot \frac{X}{X}; C'(x) = GK$$

$$\frac{x}{X}\frac{\partial p}{\partial x}\frac{X}{p} = \frac{GK - p}{p} \qquad \left| \frac{\partial p}{\partial x}\frac{x}{p} = \frac{1}{e} \right| \cdot (-1); \frac{x}{X} = s_i$$

$$-\frac{s_i}{e} = \frac{p - GK}{p} = L_x$$