

$$1/e = e$$

~~in~~ in

$$MC = p \left(1 - \frac{1}{e}\right)$$

(1)

$$\rightarrow p = MC \left[1 + \frac{1}{e-1}\right]$$

(2)

Hvorfor?

$$(1): MC = p \cdot \frac{e-1}{e} \quad | \cdot \frac{e}{e-1}$$

$$\begin{aligned} &= \frac{1 - \frac{1}{e}}{\frac{e}{e-1}} \\ &= \frac{e-1}{e} \end{aligned}$$

$$MC \left[\frac{e}{e-1}\right] = p$$

$$MC \left[\frac{e-1+1}{e-1}\right] = p$$

$$MC \left[\frac{e-1}{e-1} + \frac{1}{e-1}\right] = p$$

$$MC \left[1 + \frac{1}{e-1}\right] = p$$

Tilbuds kurver blir produktions
bedrift.

Profitfunktion:

$$\Pi(x) = px - VC - F$$

På kort sikt: Faste kostnader må
betrags.

Produktion:

$$\Pi(x) \geq -F \leftarrow \text{fordi at } \Pi(0) = -F$$

$$\Leftrightarrow px - VC - F \geq -F$$

$$px - VC \geq 0$$

$$px \geq VC \quad / :x$$

$$p \geq \frac{VC}{x} = AVC$$

~~p~~ På kort sikt vil en bedrift producere
så lenge $p \geq AVC$

På lang sikt: Fast kostnad
kan ~~ikke~~ være negativ.

Vil producere så langt

$$\Pi(x) \geq 0 \quad \leftarrow \text{fordi at } \Pi(0) = 0$$

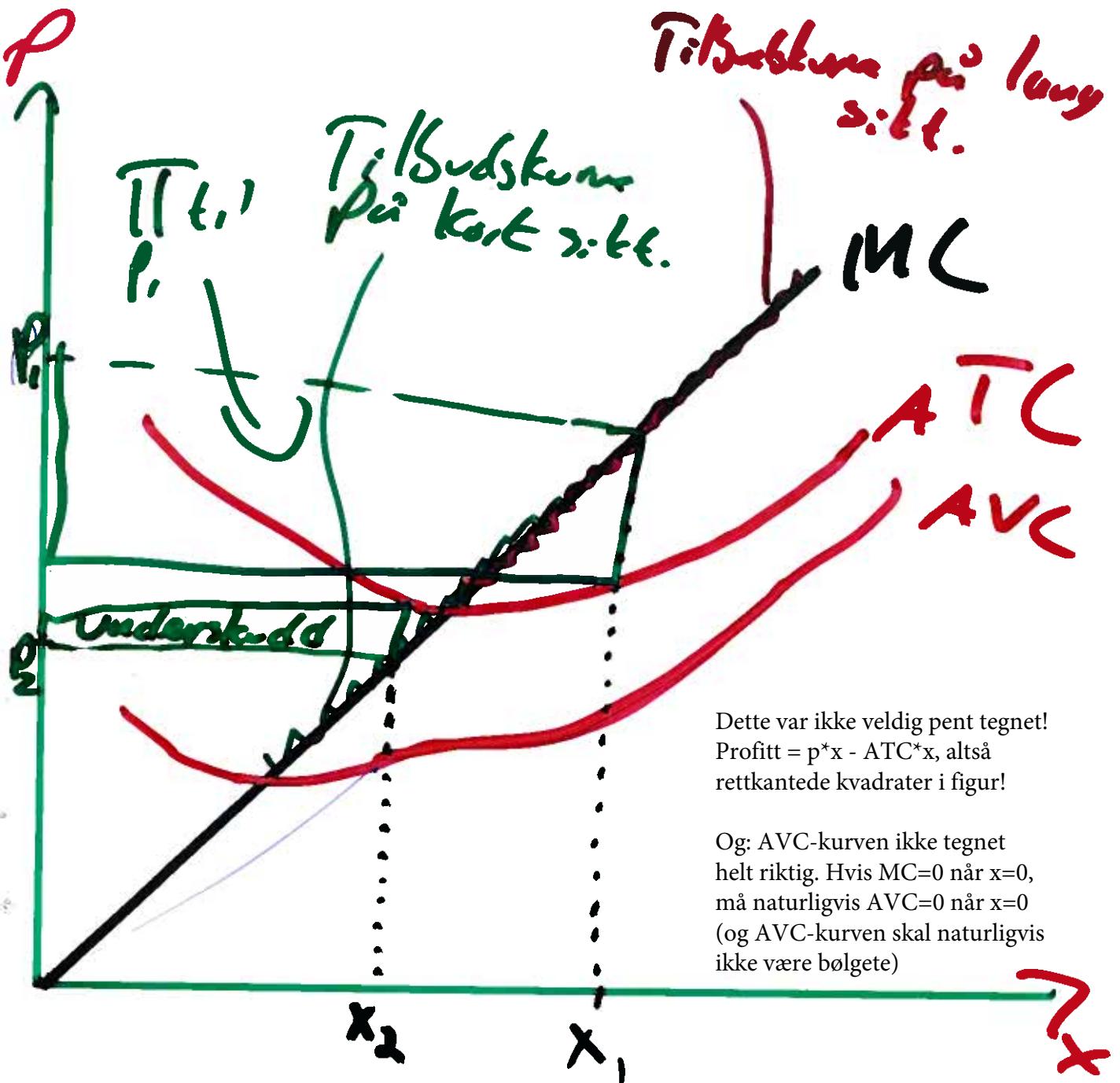
$$px - vc - f \geq 0$$

$$\Leftrightarrow px \geq vc + f \quad | :x$$

$$p \geq \frac{vc + f}{x} = ATC$$

På lang sikt vil en bedrift
producere så langt

$$p \geq ATC$$



$$P_1 > ATC \Leftrightarrow P_1 x_1 > ATC \cdot x_1 \Leftrightarrow P_1 x_1 > \frac{VC + F}{x_1} \cdot x_1$$

$$\Leftrightarrow P_1 x_1 - VC - F > 0$$

$$\Leftrightarrow \Pi_1 > 0$$

$$AVC < P_2 < ATC \Leftrightarrow AVC \cdot x_2 < P_2 x_2 \leq ATC \cdot x_2$$

$$\Leftrightarrow \frac{VC}{x_2} \cdot x_2 < P_2 x_2 \leq \frac{VC + F}{x_2} \cdot x_2$$

$$\Leftrightarrow VC \leq P_2 x_2 \leq VC + F$$

$$\Leftrightarrow -F \leq P_2 x_2 - VC - F \leq 0$$

$$\Leftrightarrow -F \leq \Pi_2 \leq 0$$

$-F < \text{profit}_2 < 0$