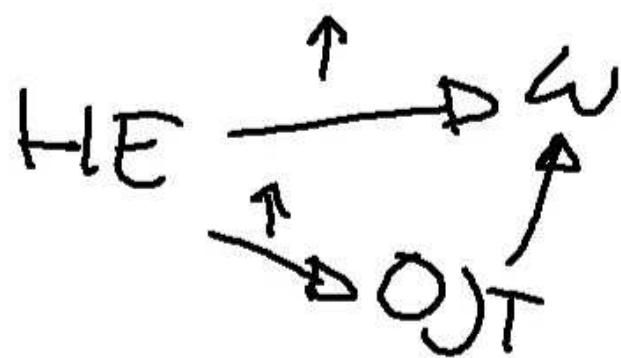
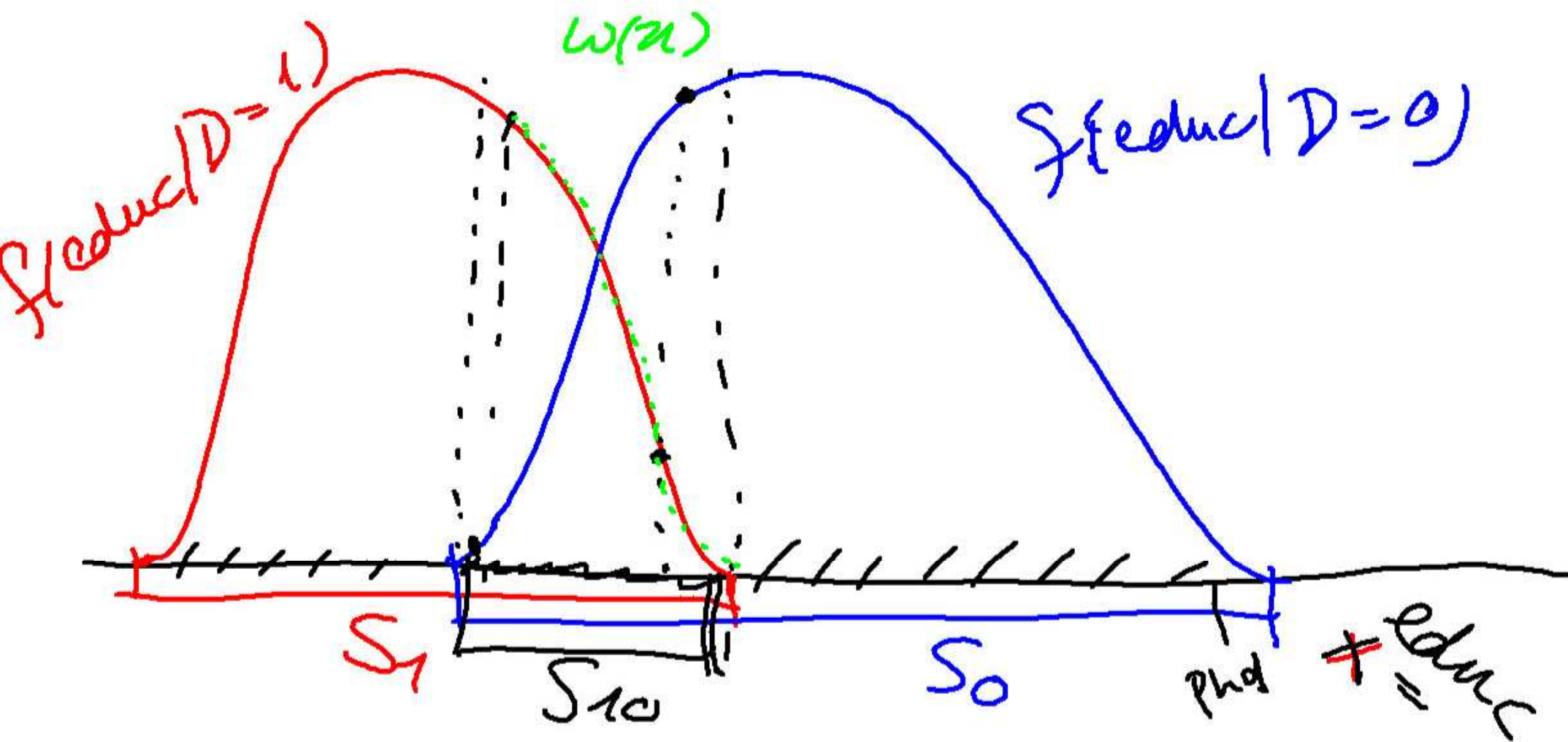


$$w_i = a + bHE_i + c'X_i + d \overset{\downarrow}{\underline{OJT}_i} + u_i$$

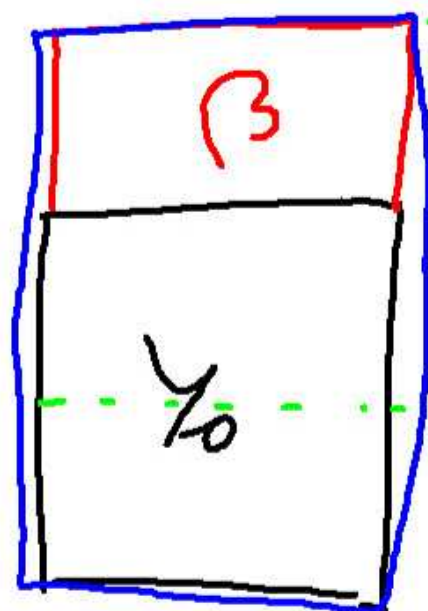


$$E(w) | HE=1, \underline{OJT}=1$$

$$E(w) | HE=0, \underline{OJT}=1$$



$$y = y_1$$

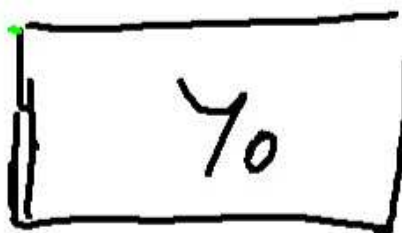


$$D=1$$

$\beta_{naïve}$

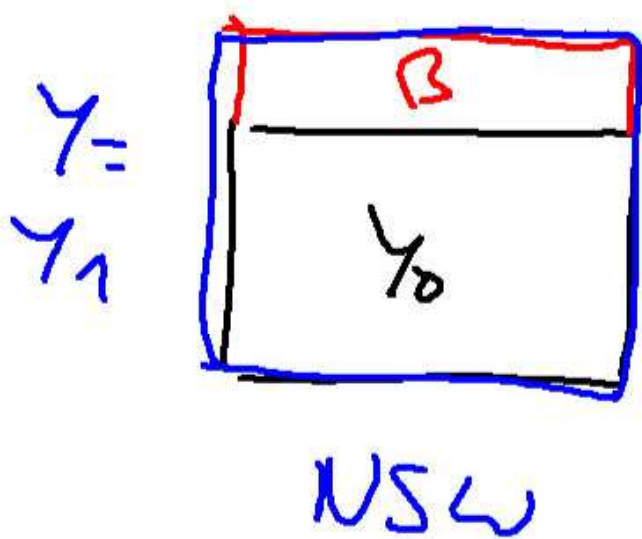
$$\neq x$$

$$\neq u_0$$

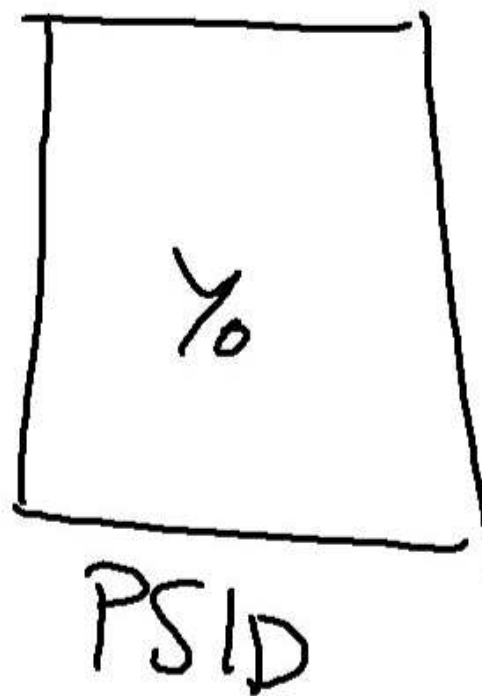


$$D=0$$

$$y = y_0$$



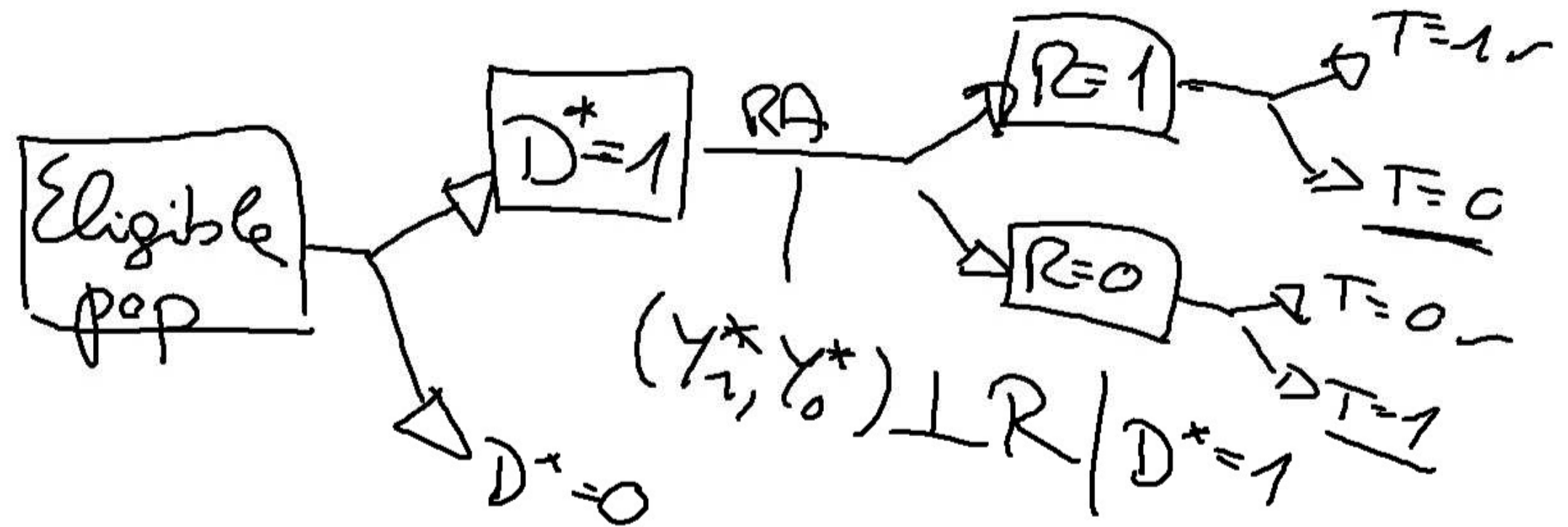
$\neq X$
 (u_0)

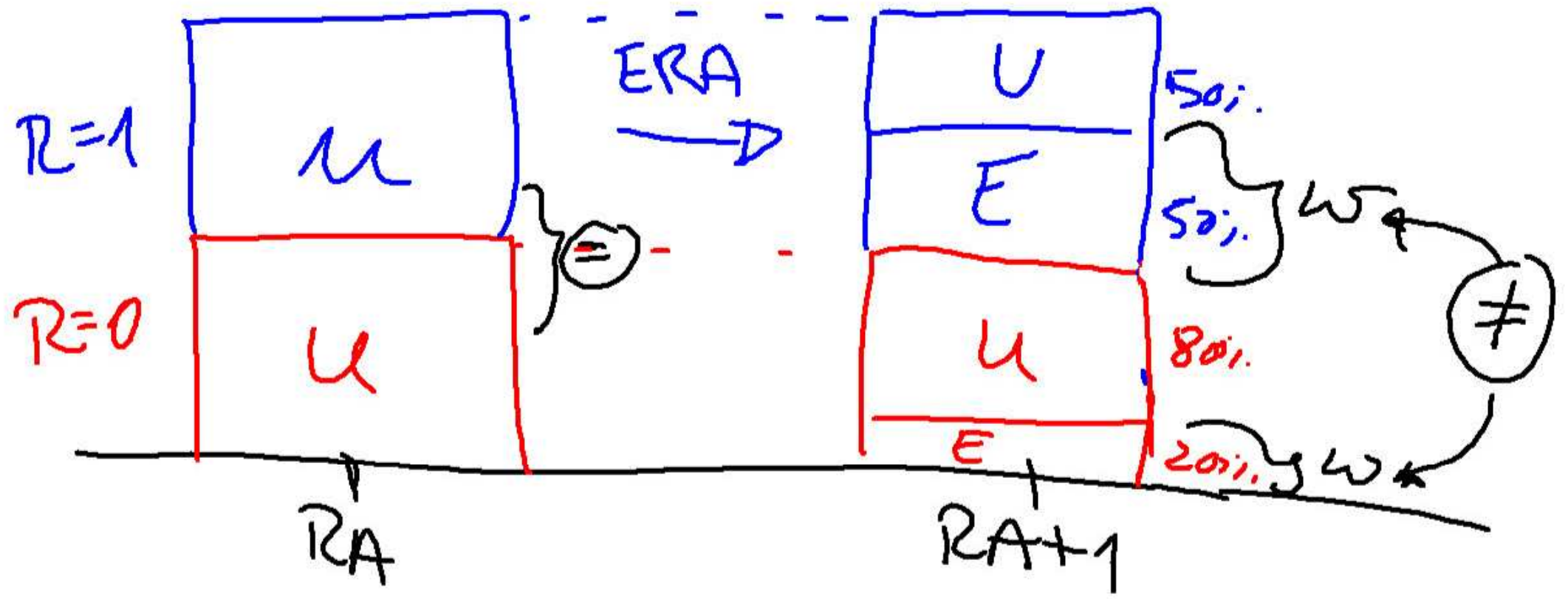


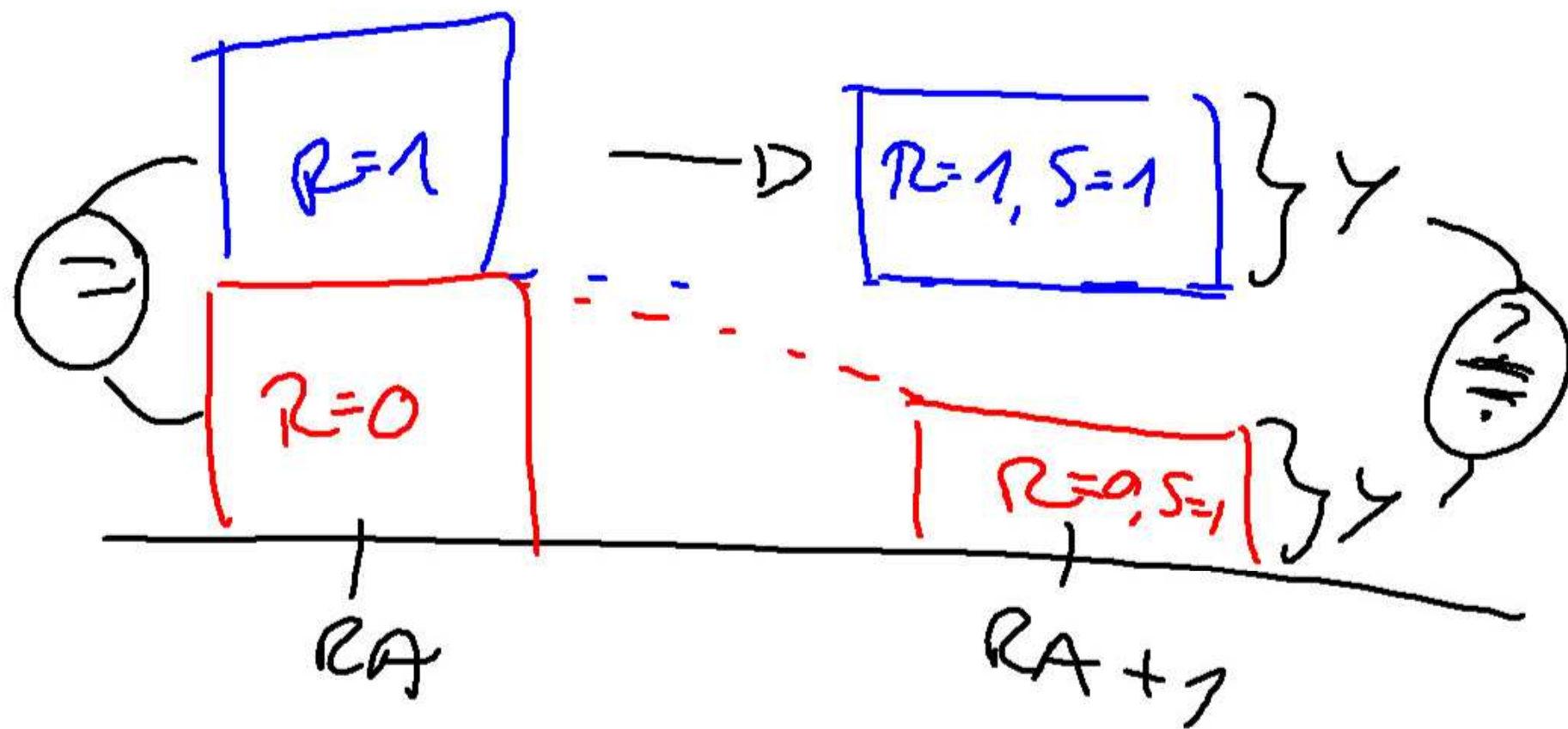
$y = y_0$

$$y = a + bD + u$$

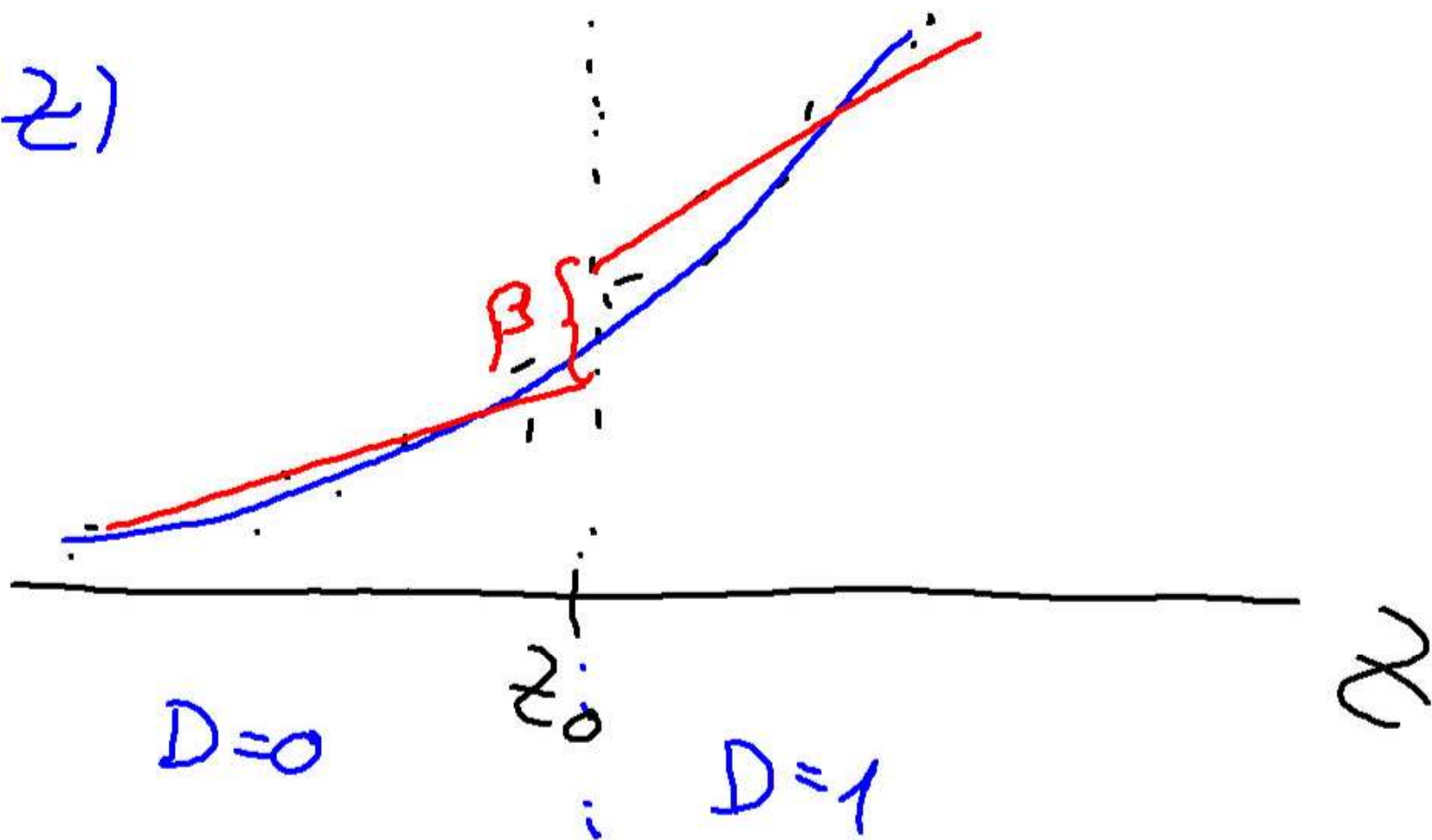
$$\hat{b}_{OLS} = \overline{y}_{D=1} - \overline{y}_{D=0}$$



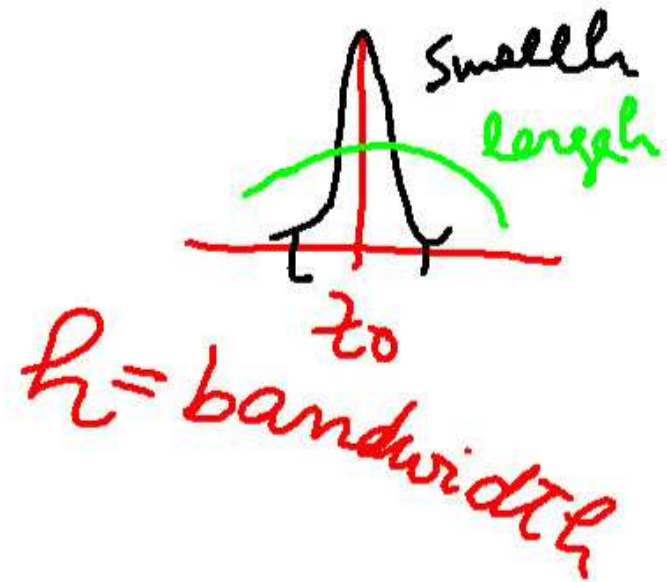
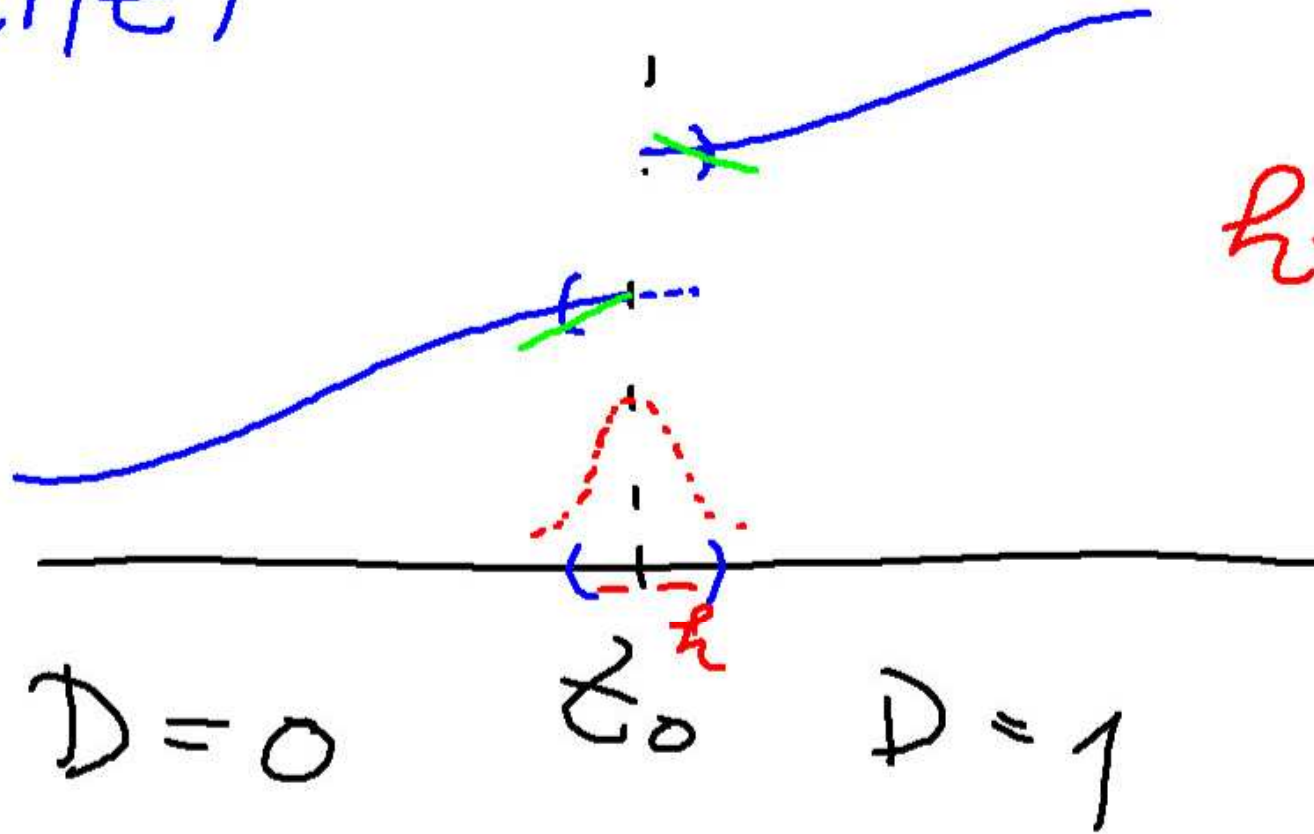


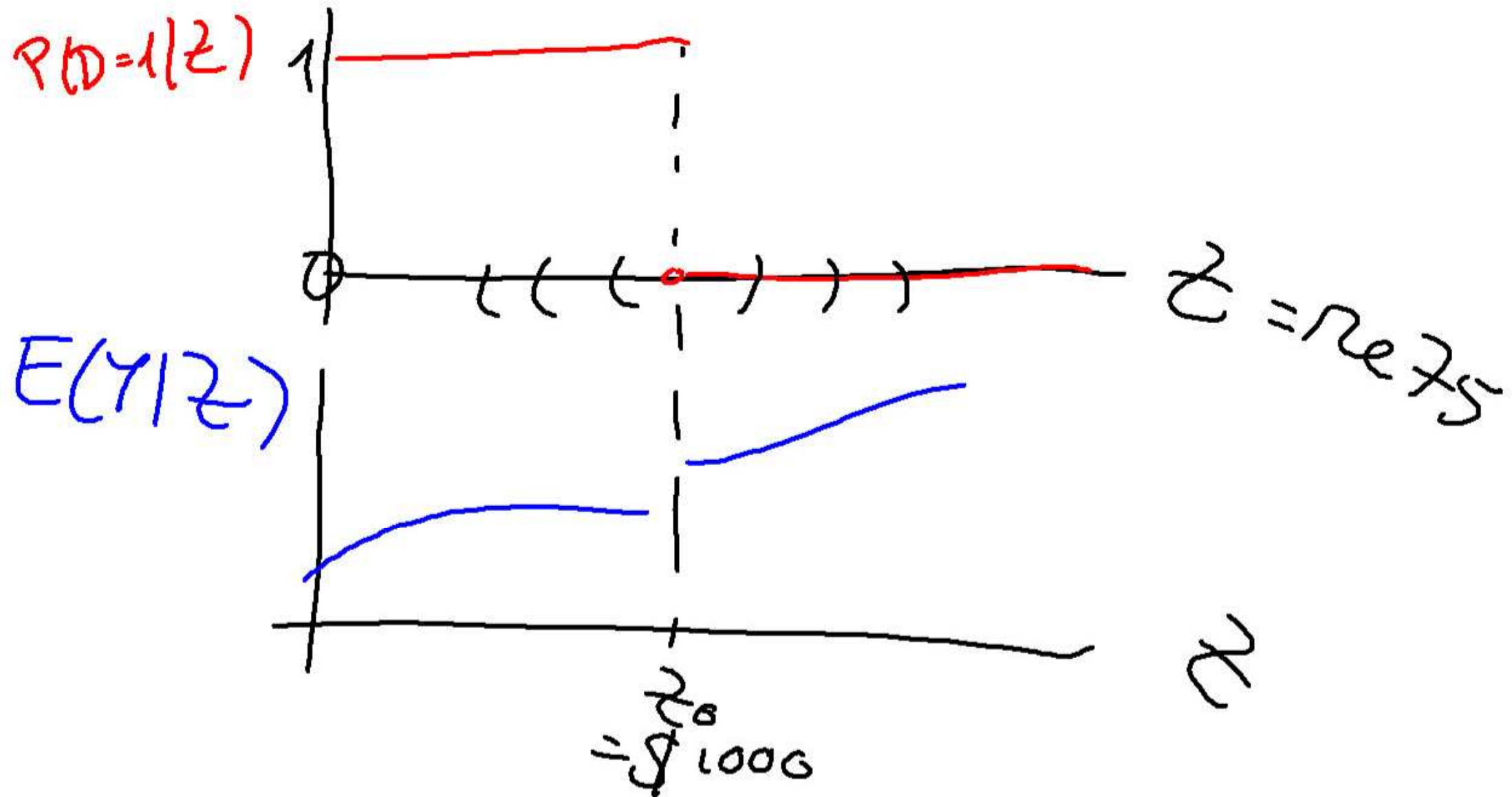


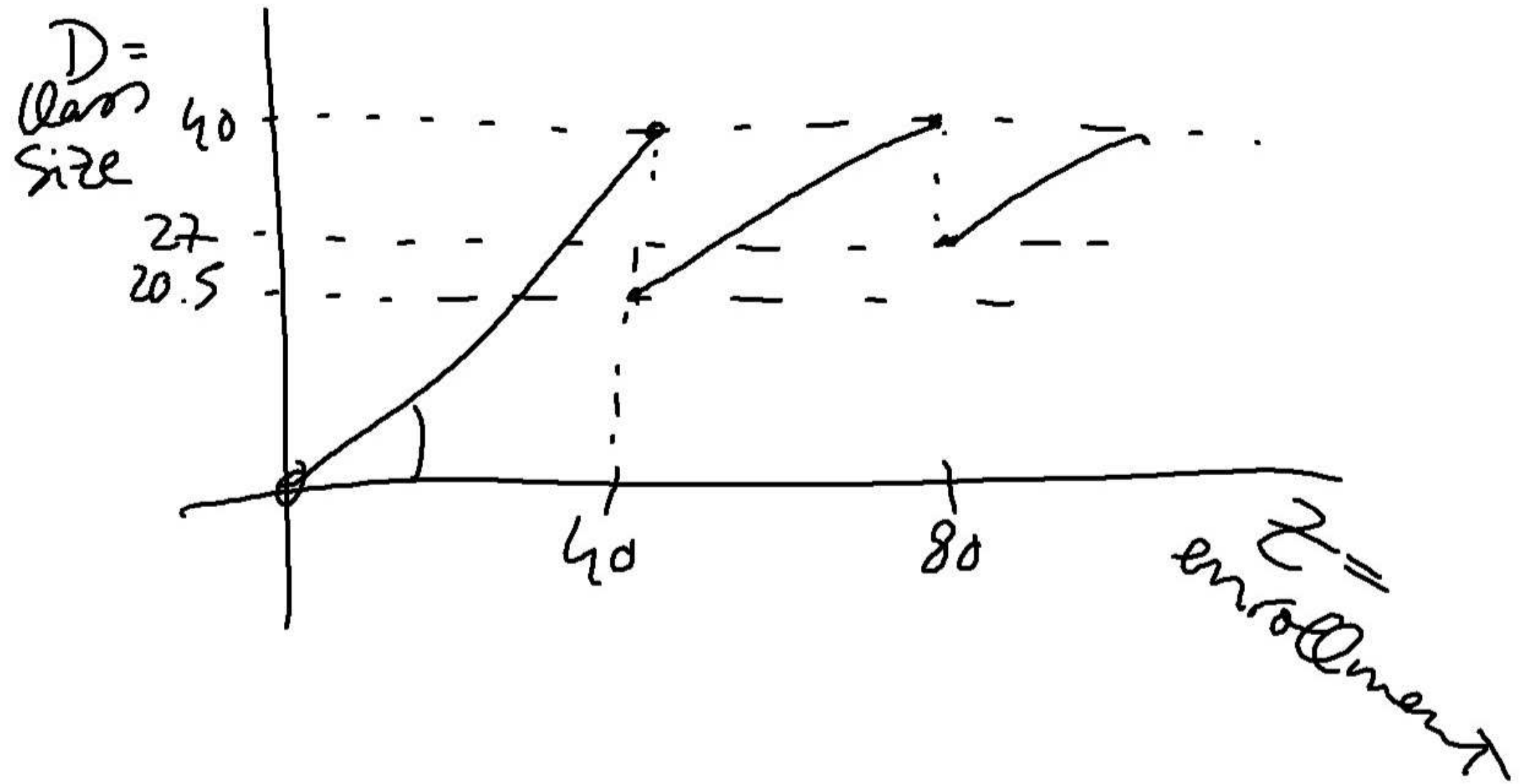
$E(Y|Z)$



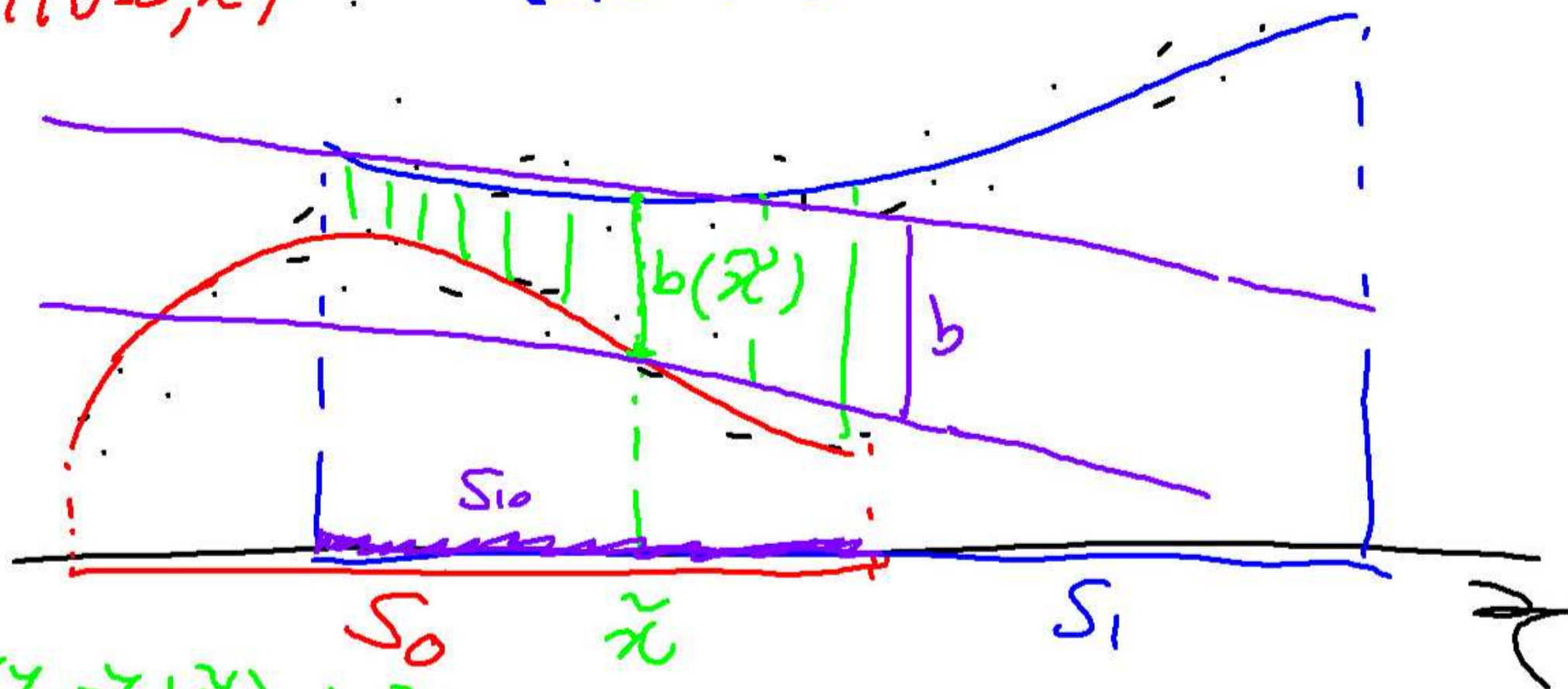
$$E(Y|Z)$$



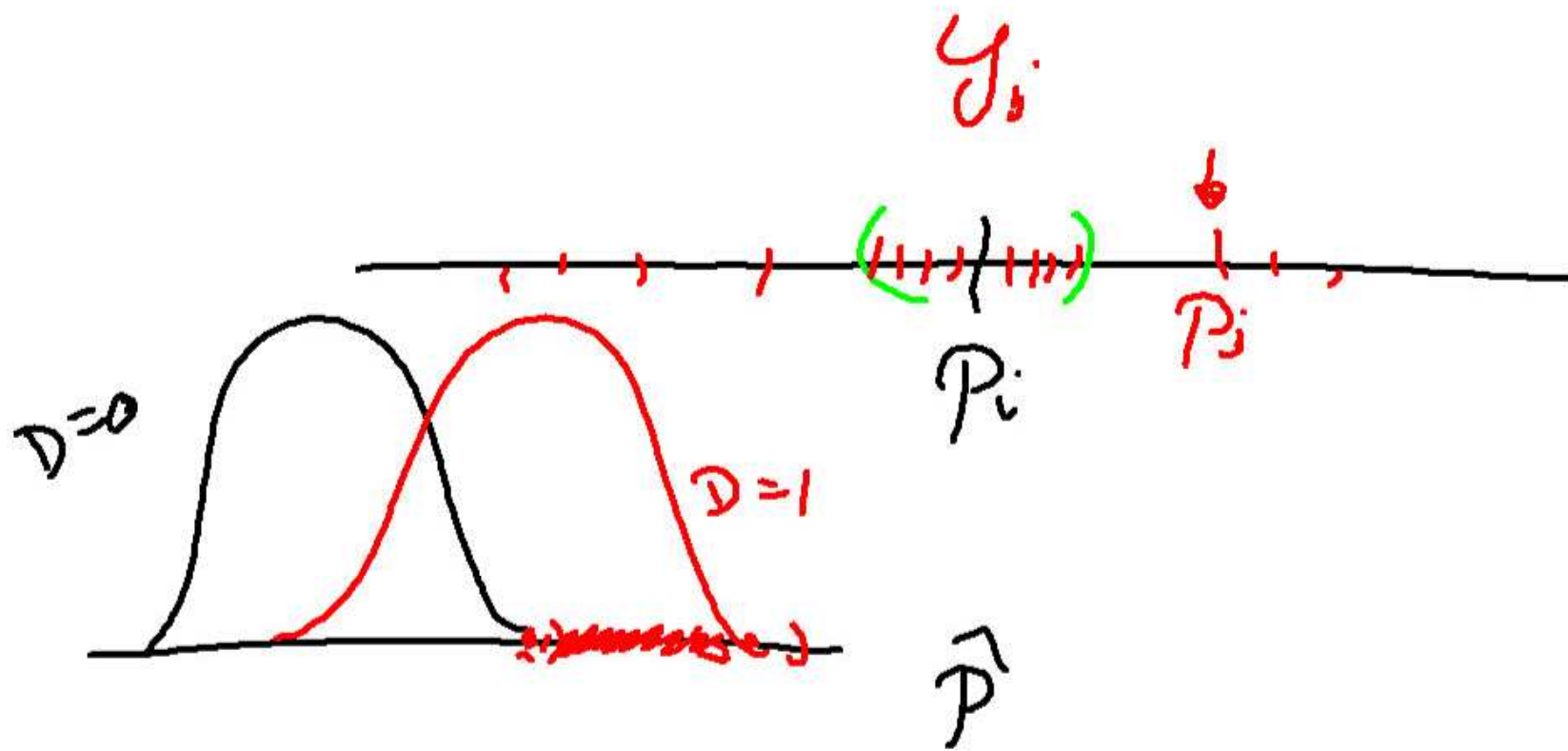


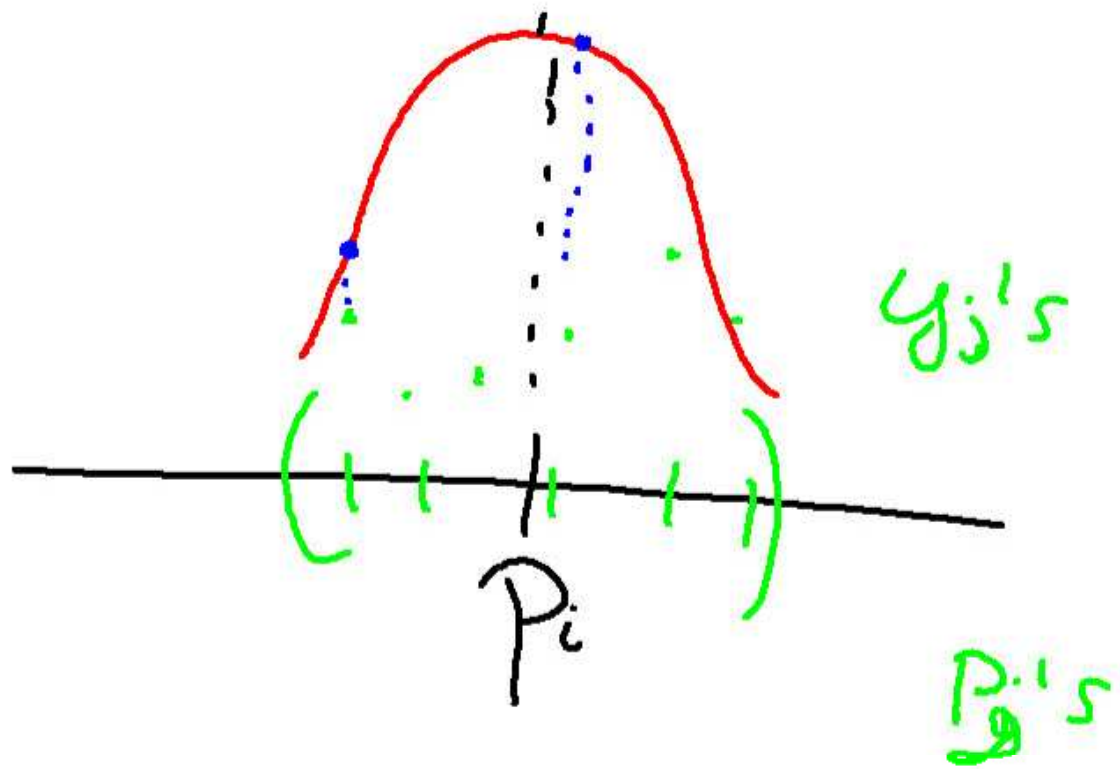


$$E(Y|D=0, \pi) \quad E(Y|D=1, \pi)$$



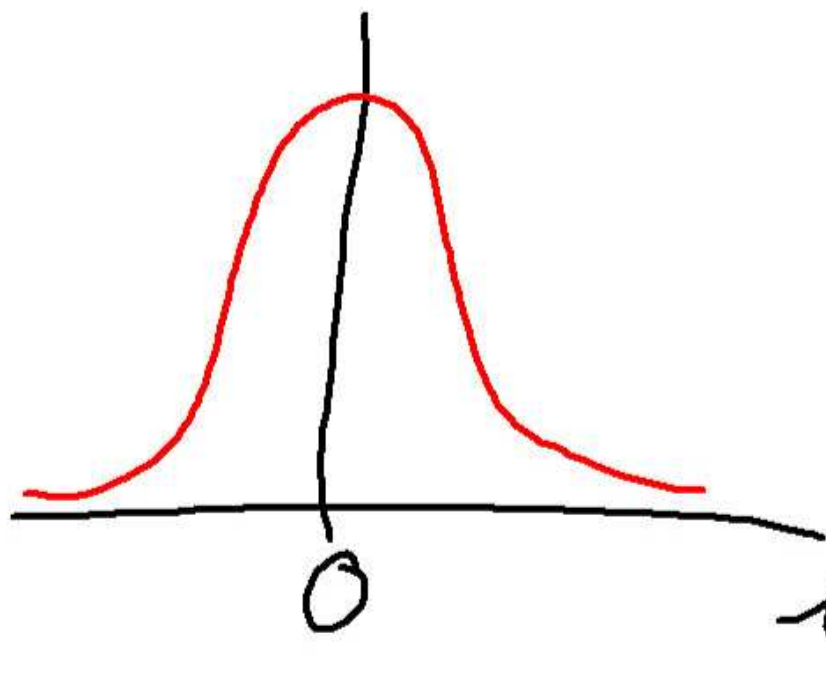
$$E(Y_1 - Y_0 | \tilde{x}) \equiv b(\tilde{x}) \triangleq E(Y | D=1, \tilde{x}) - E(Y | D=0, \tilde{x})$$





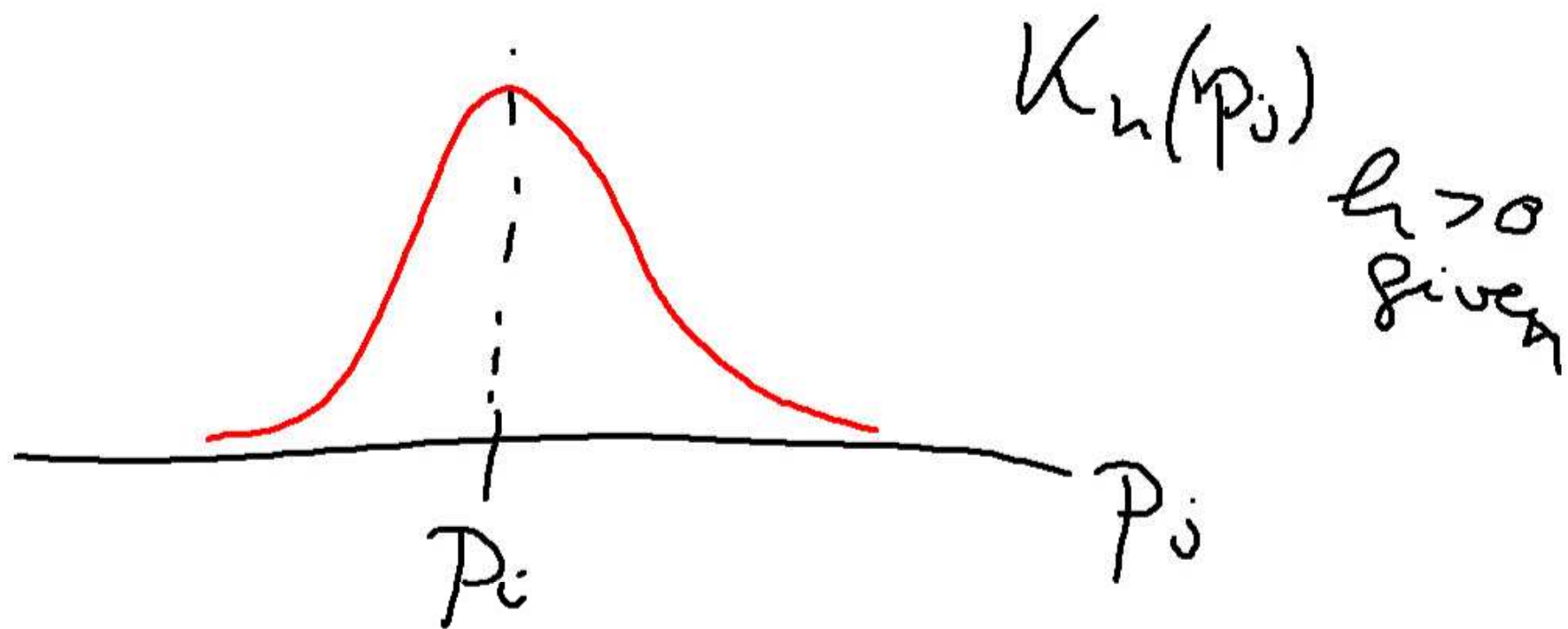
$$K(\mu)$$

- non-neg
- Symm
- at 0

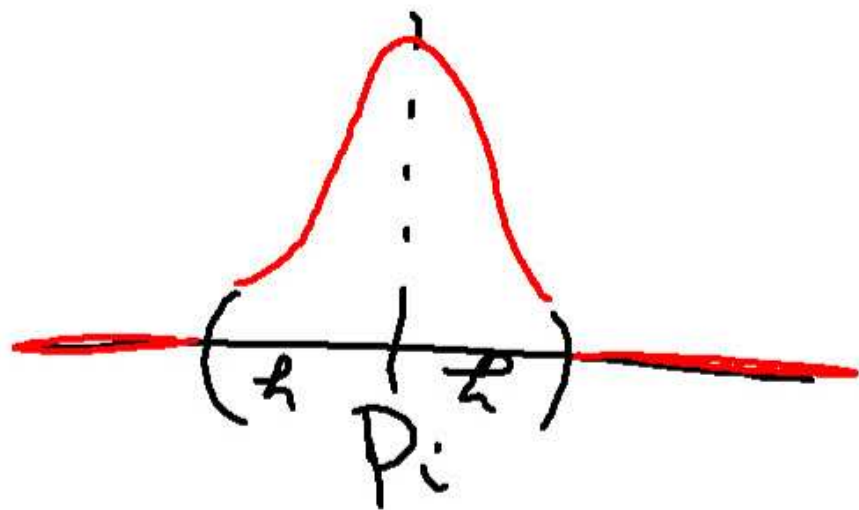


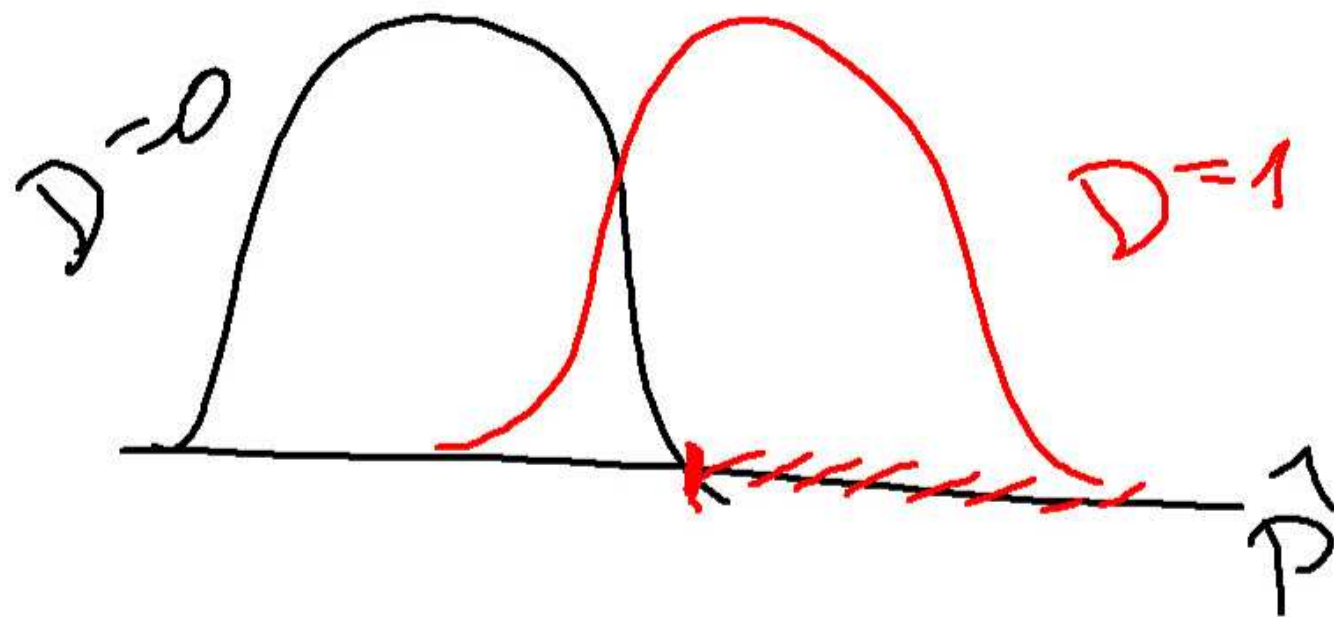
$$K\left(\frac{P_i - P_j}{h}\right)$$

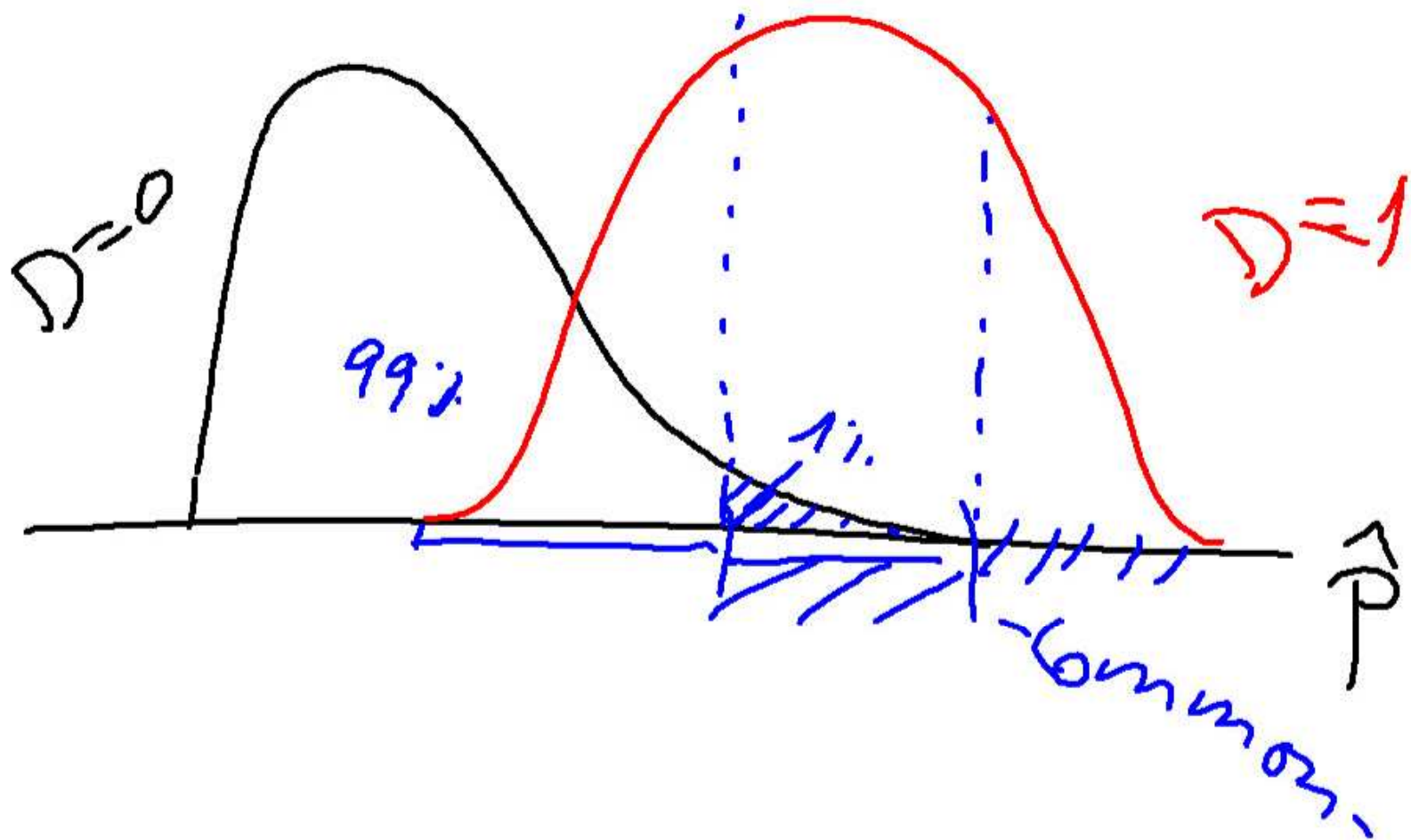
$h > 0$
bandwidth

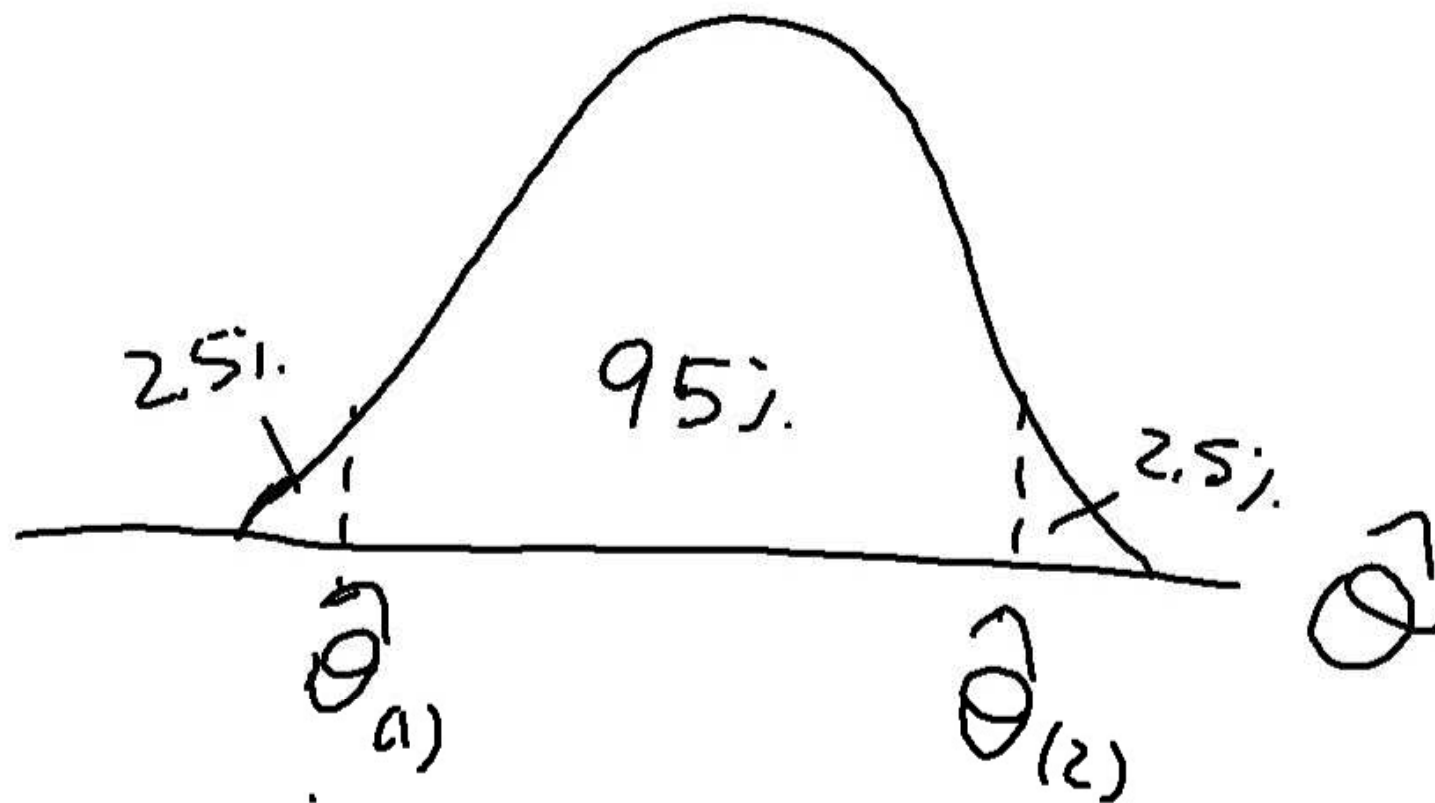


$$|p_i - p_j| < h$$









$$\log w = a + b O_{ev} + c A_{ev} + d HE \\ + \gamma' X + \epsilon$$

