

CONDITION 2 (Average monotonicity): $\omega_i = \sum_{j=1}^J \lambda_j (p_j - p) [D_i(j) - \bar{D}_i] \geq 0$
almost surely.

CONDITION 3 (Average exclusion): $E \left[\sum_{j=1}^J \lambda_j (p_j - p) \gamma_{ij} \right] = 0.$