

$$\text{Utility} = U_i = \overbrace{u_i y}^{\text{Resource}} - \overbrace{(\bar{u} - u_i) \tilde{w}_i}^{\text{Wage}} - \overbrace{\max\{u_i - R_i, 0\} S}^{\text{Sanctioning}},$$

$$\dot{u}_i = \frac{dU_i}{du} = y - \left(\tilde{w}_i + \begin{cases} S & \text{if } u_i \geq R_i \\ 0 & \text{otherwise} \end{cases} \right),$$

$$\gamma = \tilde{w}_i + \begin{cases} S & \text{if } u_i \geq R_i \\ 0 & \text{otherwise} \end{cases}$$