

MATEZ +  
MATEZBOADA

START W/  
LOCAL COUNCIL  
CLUSTER

HOLD FOR 2. IF YOU KNOW  
THE EV. ODDING.

MIRROR DESCENT  
FROM ONE CASE TO  
THE NEXT.

ENTIRE DESCENT.

POSS. inconsistent vs.  
consistent.

MATEZ + MATEZ  
SARAH MATEZ

2 = F, B

gender(X) → gender(B)  
COR(B)

$\frac{T_1^F}{\sigma_1} \text{gender}(B) \leftrightarrow \frac{T_2^F}{\sigma_2} \text{gender}(B)$   
 $\downarrow \sigma_1$  COR(B) = T  $\downarrow \sigma_2$  COR(B) = F

$$p(x_1, x_2) = P(x_1, x_2 | \mathcal{L}^*)$$

$$\frac{p(F, F)}{p(T, T)} = \frac{p(F, F)}{p(F, T)} \cdot \frac{p(F, T)}{p(T, T)} = \frac{p(F, F)}{p(T, F)} \cdot \frac{p(T, F)}{p(T, T)}$$

$$= \frac{p(T_2^F = F | T_1^F = F)}{p(T_2^F = T | T_1^F = F)} \cdot \frac{p(T_1^F = F | T_2^F = F)}{p(T_1^F = T | T_2^F = F)}$$

$$\Leftrightarrow X_1 \perp\!\!\!\perp X_2 | \gamma_a$$

$$\frac{\theta_{X_2=F | X_1=F, \gamma_a}}{\theta_{X_2=T | X_1=F, \gamma_a}} = \frac{\theta_{X_2=F | X_1=T, \gamma_a}}{\theta_{X_2=T | X_1=T, \gamma_a}}$$

$$\Leftrightarrow \frac{\psi_{F|F}^{1/\pi_1}}{\psi_{T|F}^{1/\pi_2}} \cdot \frac{\psi_{T|F}^{1/\pi_1}}{\psi_{T|T}^{1/\pi_2}} = \frac{\psi_{F|F}^{1/\pi_1}}{\psi_{F|T}^{1/\pi_2}} \cdot \frac{\psi_{F|T}^{1/\pi_1}}{\psi_{T|T}^{1/\pi_2}}$$

$$\Leftrightarrow \frac{\psi_{F|F}^{(1/\pi_1 - 1/\pi_2)}}{\psi_{T|F}^{(1/\pi_1 - 1/\pi_2)}} = \frac{\psi_{F|T}^{(1/\pi_1 - 1/\pi_2)}}{\psi_{T|T}^{(1/\pi_1 - 1/\pi_2)}}$$

$\Leftrightarrow \pi_1 = \pi_2$  OR

$$\frac{\psi_{F|F}}{\psi_{T|F}} = \frac{\psi_{F|T}}{\psi_{T|T}}$$

$$\left\{ \begin{array}{l} P(T_1^F = x_1 | T_2^F = x_2, \mathcal{L}^*) \\ = \sigma_1 \cdot \psi_{x_1|x_2} \end{array} \right\} \quad \frac{1/\pi_1}{\text{INF(JACK)}} \leftrightarrow \frac{1/\pi_2}{\text{DIFF(100)}} \quad \psi_{x_1, x_2} = \theta_{x_1|x_2, \text{past}}$$