

# Monte Carlo Simulations (Y)

$$\mathbf{x}_{t,i} = \theta_{11}\mathbf{x}_{t-1,i} + \theta_{12}\mathbf{y}_{t-1,i} + \mu_{\mathbf{x},i} + \mathbf{e}_{1,i}$$

$$\mathbf{y}_{t,i} = \theta_{22}\mathbf{y}_{t-1,i} + \theta_{21}\mathbf{x}_{t-1,i} + \mu_{\mathbf{y},i} + \mathbf{e}_{2,i}$$

