

# Simulation | Model

## Technology

The production function for log output  $y_{iht}$  is TL

$$y_{iht} = \omega_{it} + \gamma\alpha v_{iht} + \gamma(1 - \alpha)k_{iht} + \gamma \frac{\alpha(1 - \alpha)(\phi - 1)}{2\phi} (v_{iht}^2 + k_{iht}^2 - 2k_{iht}v_{iht})$$

- $v_{iht}$  is the log of the variable input, and  $k_{iht}$ , the log of the fixed input.
- $\omega_{it}$  is the log of (hicks-neutral) total factor productivity,  $\gamma$  returns to scale,  $\alpha$  the weight of the variable input in the PF, and  $\phi$  is the ES between flexible and fixed input.