

NKM - Version 0

$$\begin{aligned}
 x_t : & \quad 1 E_t x_{t+1} + \frac{1}{\sigma} E_t \bar{x}_{t+1} + 0 v_{t+1} = 1 x_t + \frac{\delta}{\sigma} \bar{x}_t + \frac{1}{\sigma} v_t + 0 \epsilon_{x,t+1} \\
 \bar{x}_t : & \quad 0 E_t x_{t+1} + \beta E_t \bar{x}_{t+1} + 0 \bar{v}_{t+1} = -k x_t + 1 \bar{x}_t + 0 v_t + 0 \epsilon_{\bar{x},t+1} \\
 v_t : & \quad 0 E_t x_{t+1} + 0 E_t \bar{x}_{t+1} + 1 v_{t+1} = 0 x_t + 1 \bar{x}_t + 0 \bar{v}_t + 0 \epsilon_{v,t+1}
 \end{aligned}$$

$$\begin{aligned}
 A & \quad \left[\begin{array}{ccc} 1 & 0 & 0 \\ 0 & \frac{1}{\sigma} & \beta \\ 0 & 0 & 0 \end{array} \right] = \left[\begin{array}{c} E_t x_{t+1} \\ E_t \bar{x}_{t+1} \\ v_{t+1} \end{array} \right] \\
 B & \quad \left[\begin{array}{ccc} 0 & 1 & -k \\ 0 & 0 & \frac{\delta}{\sigma} \\ 0 & 1 & \frac{1}{\sigma} \end{array} \right] = \left[\begin{array}{c} x_t \\ \bar{x}_t \\ v_t \end{array} \right] + \left[\begin{array}{c} 0 \\ 0 \\ 0 \end{array} \right] \epsilon_{t+1} \\
 C & \quad \left[\begin{array}{c} 1 \end{array} \right]
 \end{aligned}$$