1 Monetary model

1.1 Xpa

Use the model from the slides with constant money supply. Use the following parameter values.

$$\begin{aligned}
\beta &= 0.99 \\
\mu &= 0.01 \\
\rho_a &= 0.7 \\
\sigma_a &= 0.01 \\
\rho_e &= 0.5 \\
\sigma_e &= 0.05
\end{aligned}$$

1. Solve the rep. agent version using first-order perturbation to get initial conditions for the problem with heterogeneous agents.

2. Solve the model with heterogeneous agents using as the aggregate law of motion the solution from the rep. agent version. If you use first-order XPA you will find that the aggregate policy rule does not change. For example, the IRFs are identical.

3. Now solve the same model with 2nd-order XPA.