Aiyagari_Main.m

Set parameter value

↓

StationaryDis_MarkovProcess.m

Get the stationary distribution of *s*

TransitionDynamics.m

Solve for a sequence of $\{K_t\}_{t=1}^{T-1}$

- Guess a path for aggregate capital $(\{K_t\}_{t=1}^{T-1})^0$
- Prices_Firm_FOC.m

  Given guess for $\{K_t\}_{t=1}^{T-1}$, get sequence of $\{r_t\}_{t=1}^{T-1}$ and $\{w_t\}_{t=1}^{T-1}$
- BackwardIndc_VF.m

  Given $V_T = V_{ss_{new}}$, solve the value function backwards from $t = T-1, \dots, 1$

↓

CapitalMktClearing_Transition.m

Solve for a sequence of $\{K_t^*\}_{t=1}^{T-1}$

- Prices_Firm_FOC

  r and *w* are functions of *K*
- ForwardCalc_Pol.m

  Given *r* and *w*, solve household problem and get policy function using Bellman equation

  CRRA_Utility.m

  Get utility when doing value function iteration
- LawMotion_mu.m

  Given policy function, and the initial distribution μ_0, compute distribution in each period μ_t using law of motion for μ
- Given optimal decision for k_t (policy function) and distribution μ_t, compute the aggregate capital supply K_t^S
- $\Phi = K_t^S - K_t$
- Use 'fsolve' to find K_t^* such that Φ is close to zero.

↓

- Get difference between $\{K_t^*\}_{t=1}^{T-1}$ and $(\{K_t\}_{t=1}^{T-1})^0$. Update guess

$$(\{K_t\}_{t=1}^{T-1})^1 = \vartheta(\{K_t\}_{t=1}^{T-1})^0 + (1-\vartheta)\{K_t^*\}_{t=1}^{T-1}$$