Gradualism

March 20, 2018

Lobby

$$\max_{e^t,m^t,l^t} \sum_{t=1}^{\infty} \beta^{t-1} \left\{ A(m_t) F^{\alpha} \cdot l_t^{1-\alpha} \left[P^W + \tau(\gamma(e_{t-1})) \right] - l_t - \mu_t - e_t \right\} \quad \text{s.t.} \quad m_t = m_{t-1} + \mu_t$$

Bellman Equation

$$V_l(e_t, m_t) = \max_{e_t, m_t, l_t} \left\{ A(m_t) F^{\alpha} \cdot (l_t)^{1-\alpha} \left[P^W + \tau(\gamma(e_{t-1})) \right] - l_t - \mu_t - e_t + \beta V_l(e_{t+1}, m_{m+t} \right\}$$

Value Function

$$V_l(e_t^*, m_t^*) = \left\{ A(m_t^*) F^{\alpha} \cdot (l_t^*)^{1-\alpha} \left[P^W + \tau(\gamma(e_{t-1}^*)) \right] - l_t^* - \mu_t^* - e_t^* + \beta V_l(e_{t+1}^*, m_{t+1}^*) \right\}$$

$t =$ this period

$t + 1 =$ next period

$\beta =$ discount factor

$l =$ lobby