Household Problem

$$\max_{\{c_t,d_t,m_t,n_t\}_{t=0}^{\infty}} \left[\mathbb{E}_t \sum_{t=0}^{\infty} \beta^t \Big\{ \mathcal{U}\left(c_t, c_{t-1}\right) - \mathcal{V}\left(n_t\right) \Big\} \right]$$

subject to,

$$c_t \leqslant \frac{m_{t-1}}{\pi_t} + n_t w_t - d_t$$

and

$$m_t \leqslant \frac{m_{t-1}}{\pi_t} + n_t w_t - d_t - c_t + R_t^D d_t + \Pi_t - \tau_t$$

Constraints are binding;

$$c_t = \frac{m_{t-1}}{\pi_t} + n_t w_t - d_t$$
$$c_t = \frac{m_{t-1}}{\pi_t} + n_t w_t - d_t - m_t + R_t^D d_t + \Pi_t - \tau_t$$

Government budget constraint

$$g_t = \tau_t + \left(m_t - \frac{m_{t-1}}{\pi_t} \right)$$

Profits

$$\Pi_t = y_t - w_t n_t$$

In equilibrium $d_t = 0$ and we can combine the household budget constraint, the definition of profits and the government budget constraint to get,

$$y_t = c_t + g_t$$