Cash-in-Advance Model

The basic equilibrium conditions of the CIA model:

$$y_t = e^{z_t} k_{t-1}^{\alpha} n_t^{1-\alpha}$$

$$y_t = c_t + x_t$$

$$x_t = k_t - (1-\delta)k_{t-1}$$

$$\Psi\left(1-n_t\right)^{-\eta} = \left(1-\alpha\right)\frac{y_t}{n_t}\lambda_t$$

$$R_t = \alpha E_t\left(\frac{y_{t+1}}{k_t}\right)+1-\delta$$

$$\lambda_t = \beta E_t R_t \lambda_{t+1}$$

$$c_t^{-\Phi} = \lambda_t\left(1+i_t\right)$$

$$\lambda_t = \beta E_t\left(\frac{c_{t+1}^{-\Phi}}{1+\pi_t}\right)$$

$$c_t = m_t$$

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

$$z_t = \rho_z z_{t-1} + e_t$$

$$u_t = \rho_u u_{t-1} + \varphi_t$$

The steady state:

$$\frac{y^{ss}}{k^{ss}} = \frac{1}{\alpha}\left(\frac{1}{\beta}-1+\delta\right)$$

$$\frac{c^{ss}}{k^{ss}} = \frac{y^{ss}}{k^{ss}} - \delta$$

$$R^{ss} = \alpha\frac{y^{ss}}{k^{ss}}+1-\delta$$

Dynamics:

$$z_t = \rho_z z_{t-1} + e_t$$

$$u_t = \rho_u u_{t-1} + \varphi_t$$

$$\hat{y}_t = \alpha\hat{k}_{t-1} + \left(1-\alpha\right)\hat{n}_t + z_t$$

$$\left(\frac{y^{ss}}{k^{ss}}\right)\hat{y}_t = \left(\frac{c^{ss}}{k^{ss}}\right)\hat{c}_t + \hat{k}_t - \left(1-\delta\right)\hat{k}_{t-1}$$

$$\hat{y}_t = \left(1+\eta\frac{n^{ss}}{1-n^{ss}}\right)\hat{n}_t - \hat{\lambda}_t$$

$$\hat{\lambda}_t = -\Phi\hat{c}_t - \hat{i}_t$$

$$\hat{m}_t = \hat{c}_t$$

$$\hat{m}_t = \hat{m}_{t-1} + u_t - \pi_t$$

$$\hat{\lambda}_t = \hat{r}_t + E_t\hat{\lambda}_{t+1}$$

$$\hat{r}_t = \alpha\frac{y^{ss}}{k^{ss}}\left(E_t\hat{y}_{t+1} - \hat{k}_t\right)$$

$$\hat{i}_t = \hat{r}_t + E_t\hat{\pi}_{t+1}$$

According the above, I coded inflation5.mod in Dynare. But the codes (CIA.mod) provided by Carl E. Walsh is quite different from me.

My questions are:

1. I have no idea of the row of 22-25 in CIA.mod.
2. The 35th row in CIA.mod is quite different from the 23rd row in my inflation5.mod. There is an additional (ISS/(1+ISS). Why?