$$
\begin{aligned}
\mathbf{Y}_{t+1}/\mathbf{Y}_t &= \mathbb{M}\left[\xi_{t+1}\Gamma\psi_{t+1}\mathbf{p}_t\right]/\mathbb{M}\left[\mathbf{p}_t\xi_t\right] \\
&= \Gamma
\end{aligned}
$$

because of the independence assumptions we have made about $\xi$ and $\psi$.

Aggregate assets are:

$$
\begin{aligned}
\left(\frac{\mathbf{A}_{t+1}}{\mathbf{A}_t}\right) &= \mathbb{M}\left[\frac{a_{t+1,i}\Gamma\mathbf{p}_{t+1,i}}{a_{t,i}\mathbf{p}_{t,i}}\right] \\
&= \Gamma\mathbb{M}\left[\frac{a_{t+1}\psi_{t+1}}{a_t}\right] \\
&= \Gamma\mathbb{M}\left[\frac{(a_t\mathcal{R}_{t+1}+\xi_{t+1}-\mathrm{c}(a_t\mathcal{R}_{t+1}+\xi_{t+1}))\psi_{t+1}}{a_t}\right] \\
&\Gamma\mathbb{M}\left[\frac{(a_t\mathsf{R}/\Gamma+\psi_{t+1}\xi_{t+1}-\mathrm{c}(a_t\mathcal{R}_{t+1}+\xi_{t+1})\psi_{t+1}}{a_t}\right] \\
&\Gamma\mathbb{M}\left[\frac{(a_t\mathsf{R}/\Gamma+\psi_{t+1}\xi_{t+1}-(\mathrm{c}(\mathbb{E}_t[m_{t+1}])+(\mathrm{c}'(\mathbb{E}_t[m_{t+1}])(m_{t+1}-\mathbb{E}_t[m_{t+1}])))\,\psi_{t+1}}{a_t}\right]
\end{aligned}
$$

but the first term reduces to

$$
\Gamma\mathbb{M}\left[\frac{a_t\mathsf{R}/\Gamma+\psi_{t+1}\xi_{t+1}}{a_t}\right] = \mathsf{R}+1/a_t
$$

but defining $\bar{\mathcal{R}}_{t+1}=\mathbb{E}_t[\mathcal{R}_{t+1}]$

$$
\Gamma\mathbb{M}\left[\frac{-\mathrm{c}(a_t\mathcal{R}_{t+1}+\xi_{t+1})\psi_{t+1}}{a_t}\right] \approx \Gamma\mathbb{M}\left[\frac{-\left(\mathrm{c}(a_t\bar{\mathcal{R}}_{t+1}+\xi_{t+1})+\mathrm{c}'(a_t\bar{\mathcal{R}}_{t+1}+\xi_{t+1})(\mathcal{R}_{t+1}-\bar{\mathcal{R}}_{t+1})\right)\psi_{t+1}}{a_t}\right] \tag{58}
$$

$$
= \Gamma\mathbb{M}\left[\frac{-\left(\mathrm{c}(a_t\bar{\mathcal{R}}_{t+1}+\xi_{t+1})\psi_{t+1}+\mathrm{c}'(a_t\bar{\mathcal{R}}_{t+1}+\xi_{t+1})(\mathsf{R}/\Gamma-\bar{\mathcal{R}}_{t+1}\psi_{t+1})\right)\psi}{a_t}\right. \tag{59}
$$

while the remainder of the expression is

where $\mathbf{P}_t$ designates the mean level of permanent income across all individuals, and we are assuming that $a_{t,i}$ was distributed according to the invariant distribution with a mean value of $a$. Since permanent income grows at mean rate $\Gamma$ while the distribution of $a$ is invariant, if we normalize $\mathbf{P}_t$ to one we will similarly have for any period $n \geq 1$

$$
\mathbf{A}_{t+n} = A\Gamma^n + \mathrm{cov}(a_{t+n,i},\mathbf{p}_{t+n,i}).
$$