

From equations (33), (37), (34), (38), (26), (28), (30) and from the above, we get

$$\begin{aligned}
g^{M_1} &= \frac{\lambda \frac{\frac{exp^W}{p}}{\frac{p^M}{p}} y^M}{1 - \beta \theta_M \gamma^L \left(\frac{(\Pi^M)^{\chi_M}}{\Pi^M} \right)^{-\epsilon_M}}, & g^{M_2} &= \frac{\epsilon_M}{\epsilon_M - 1} g^{M_1}, \\
g^{x_1} &= \frac{\lambda \frac{\frac{q^x}{p}}{\frac{p^x}{p}} x^d}{1 - \beta \theta_X \gamma^L \left(\frac{(\Pi^W)^{\chi_X}}{\Pi^x} \right)^{-\epsilon_x}}, & g^{x_2} &= \frac{\epsilon_x}{\epsilon_x - 1} g^{x_1}, \\
f &= \frac{d\varphi \psi(\Pi^{w*})^{-\eta(1+\vartheta)} (l^d)^{1+\vartheta}}{1 - \beta \theta_w \gamma^L z^{\eta(1+\vartheta)} \Pi^{\eta(1-\chi_w)(1+\vartheta)}}, \\
g^1 &= \frac{\lambda mc y^d}{1 - \beta \theta_p \gamma_L \Pi^{(\chi-1)(-\epsilon)}}, & g^2 &= \frac{\epsilon}{\epsilon - 1} g^1.
\end{aligned}$$

Net foreign assets evolution is derived from eq. (91)

$$exb^W = \frac{\left(\frac{exp^W}{p} \right)^{\epsilon_W} \left(\frac{p^x}{p} \right)^{1-\epsilon_W} \left(\frac{y^W}{y^d} \right) - \frac{exp^W}{p} \frac{M}{y^d}}{1 - R^W \dot{ex} \frac{y^d}{\gamma_L z \Pi y^d}}.$$

From eq. (84) and from the fact that $exb^W = 0$, we get

$$prem = 1$$

and from eq. (48)

$$y^W = \frac{x}{v_x \left(\frac{\frac{p^x}{p}}{\frac{exp^W}{p}} \right)^{-\epsilon_W}}$$

To recapitulate, first we define steady states for $z, A, \mu, \gamma_L, u, d, \varphi, \frac{exp^W}{p}, \Delta ex, a\dot{X} target, \Pi, \Pi^c, a\dot{R}, \kappa^{euler}, \kappa^{forex}, \Pi^i, \Pi^{4c}, \Pi^W, \Pi^{W*}, \Pi^x, \Pi^M, \tilde{\Pi}^x, \dot{c}, \dot{i}, y^d, \Pi^w, \dot{g}, a\dot{G}, a\dot{O}, \dot{x}, \dot{M}, y^W, \gamma^c, \gamma^i, \gamma^x, \gamma^{c,der}, \gamma^{i,der}, \gamma^{x,der}, R, R^W$ and for deep parameters θ_p and χ and observables (127) – (142).

From simple subsequent computation we derive steady states for $\Pi^*, \Pi^{w*}, mc, v^p, v^w, \Pi^{M*}, v^M, \tilde{\Pi}^{x*}, v^x, \frac{p^M}{p}, \frac{p^i}{p}, \frac{q^x}{p}, \frac{p^x}{p}, q, r, w, w^*, \frac{p^c}{p}$.

Solving 9 non-linear equations delivers steady states for $k, y^d, i, x, c, g, M, \lambda, l^d$.

Then we can compute the rest of steady states as $c^d, i^d, x^d, c^M, i^M, x^M, y^M, l, g^{M_1}, g^{M_2}, g^{x_1}, g^{x_2}, f, g^1, g^2, exb^W, prem, y^W$. We thus have **120 steady state** values from **120 equations**.