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Model name: `RSW_RP`

1 HIGHREGIME

1.1 Optimisation problem

$$\max_{\mathit{piH}_t, \mathit{yH}_t, \mathit{iH}_t} \mathit{UH}_t = -0.5 \left(\mathit{pitH} - \mathit{pitCB} + \mathit{piH}_t\right)^2 + \beta \mathrm{E}_t \left[\mathit{UH}_{t+1}\right] + \beta \left(1 - \mathit{pH}\right) \left(-\mathrm{E}_t \left[\mathit{UH}_{t+1}\right] + \mathrm{E}_t \left[\mathit{UL}_{t+1}\right]\right) - 0.5 \kappa \theta^{-1} {\mathit{yH}_t}^2 \tag{1.1}$$

s.t. :

$$\mathit{piH}_{t-1} = \log \mathit{etapi}_{t-1} + \beta \mathit{piH}_t + \kappa \mathit{yH}_{t-1} + \beta \left(1 - \mathit{pH}\right) \left(-\mathit{piH}_t + \mathit{piL}_t\right) \quad \left(\lambda_t^{\mathrm{HIGHREGIME}^1}\right) \tag{1.2}$$

$$\mathit{yH}_{t-1} = \mathit{yH}_t - \sigma \left(\mathit{iH}_{t-1} - \mathit{piH}_t\right) + \left(1 - \mathit{pH}\right) \left(-\mathit{yH}_t + \mathit{yL}_t\right) + \sigma \left(1 - \mathit{pH}\right) \left(-\mathit{piH}_t + \mathit{piL}_t\right) \quad \left(\lambda_t^{\mathrm{HIGHREGIME}^2}\right) \tag{1.3}$$

1.2 First order conditions

$$-\mathit{pitH} + \mathit{pitCB} - \mathit{piH}_t + \lambda_t^{\mathrm{HIGHREGIME}^1} \left(\beta - \beta \left(1 - \mathit{pH}\right)\right) + \lambda_t^{\mathrm{HIGHREGIME}^2} \left(\sigma - \sigma \left(1 - \mathit{pH}\right)\right) - \left(\beta - \beta \left(1 - \mathit{pH}\right)\right) \mathrm{E}_t \left[\lambda_{t+1}^{\mathrm{HIGHREGIME}^1}\right] = 0 \quad \left(\mathit{piH}_t\right) \tag{1.4}$$

$$\mathit{pH} \lambda_t^{\mathrm{HIGHREGIME}^2} + \left(\beta - \beta \left(1 - \mathit{pH}\right)\right) \left(\kappa \mathrm{E}_t \left[\lambda_{t+1}^{\mathrm{HIGHREGIME}^1}\right] - \mathrm{E}_t \left[\lambda_{t+1}^{\mathrm{HIGHREGIME}^2}\right]\right) - \kappa \theta^{-1} \mathit{yH}_t = 0 \quad \left(\mathit{yH}_t\right) \tag{1.5}$$

$$-\sigma \left(\beta - \beta \left(1 - \mathit{pH}\right)\right) \mathrm{E}_t \left[\lambda_{t+1}^{\mathrm{HIGHREGIME}^2}\right] = 0 \quad \left(\mathit{iH}_t\right) \tag{1.6}$$

2 LOWREGIME

2.1 Optimisation problem

$$\max_{\mathit{piL}_t, \mathit{yL}_t, \mathit{iL}_t} \mathit{UL}_t = -0.5 \left(-\mathit{pitCB} + \mathit{pitL} + \mathit{piL}_t\right)^2 + \beta \mathrm{E}_t \left[\mathit{UL}_{t+1}\right] + \beta \left(1 - \mathit{pL}\right) \left(\mathrm{E}_t \left[\mathit{UH}_{t+1}\right] - \mathrm{E}_t \left[\mathit{UL}_{t+1}\right]\right) - 0.5 \kappa \theta^{-1} {\mathit{yL}_t}^2 \tag{2.1}$$

s.t. :

$$\mathit{piL}_{t-1} = \log \mathit{etapi}_{t-1} + \kappa \mathit{yL}_{t-1} + \beta \mathit{pL} \mathit{piL}_t + \beta \left(1 - \mathit{pL}\right) \left(\mathit{piH}_t - \mathit{piL}_t\right) \quad \left(\lambda_t^{\mathrm{LOWREGIME}^1}\right) \tag{2.2}$$

$$\mathit{yL}_{t-1} = \mathit{yL}_t - \sigma \left(\mathit{iL}_{t-1} - \mathit{piL}_t\right) + \left(1 - \mathit{pL}\right) \left(\mathit{yH}_t - \mathit{yL}_t\right) + \sigma \left(1 - \mathit{pL}\right) \left(\mathit{piH}_t - \mathit{piL}_t\right) \quad \left(\lambda_t^{\mathrm{LOWREGIME}^2}\right) \tag{2.3}$$

2.2 First order conditions

$$\mathit{pitCB} - \mathit{pitL} - \mathit{piL}_t + \lambda_t^{\mathrm{LOWREGIME}^1} \left(\beta \mathit{pL} - \beta \left(1 - \mathit{pL}\right)\right) + \lambda_t^{\mathrm{LOWREGIME}^2} \left(\sigma - \sigma \left(1 - \mathit{pL}\right)\right) - \left(\beta - \beta \left(1 - \mathit{pL}\right)\right) \mathrm{E}_t \left[\lambda_{t+1}^{\mathrm{LOWREGIME}^1}\right] = 0 \quad \left(\mathit{piL}_t\right) \tag{2.4}$$

$$pL\lambda_t^{\mathrm{LOWREGIME}^2} + \left(\beta - \beta\left(1 - pL\right)\right)\left(\kappa \mathrm{E}_t\left[\lambda_{t+1}^{\mathrm{LOWREGIME}^1}\right] - \mathrm{E}_t\left[\lambda_{t+1}^{\mathrm{LOWREGIME}^2}\right]\right) - \kappa\theta^{-1}yL_t = 0 \quad (yL_t) \tag{2.5}$$

$$-\sigma\left(\beta - \beta\left(1 - pL\right)\right)\mathrm{E}_t\left[\lambda_{t+1}^{\mathrm{LOWREGIME}^2}\right] = 0 \quad (iL_t) \tag{2.6}$$

3 EXOG

3.1 Identities

$$etapi_t = e^{\epsilon_t^{\pi} + \phi \log etapi_{t-1}} \tag{3.1}$$

4 Equilibrium relationships (after reduction)

$$-etapi_t + e^{\epsilon_t^{\pi} + \phi \log etapi_{t-1}} = 0 \tag{4.1}$$

$$pH\lambda_t^{\mathrm{HIGHREGIME}^2} + \left(\beta - \beta\left(1 - pH\right)\right)\left(\kappa \mathrm{E}_t\left[\lambda_{t+1}^{\mathrm{HIGHREGIME}^1}\right] - \mathrm{E}_t\left[\lambda_{t+1}^{\mathrm{HIGHREGIME}^2}\right]\right) - \kappa\theta^{-1}yH_t = 0 \tag{4.2}$$

$$pL\lambda_t^{\mathrm{LOWREGIME}^2} + \left(\beta - \beta\left(1 - pL\right)\right)\left(\kappa \mathrm{E}_t\left[\lambda_{t+1}^{\mathrm{LOWREGIME}^1}\right] - \mathrm{E}_t\left[\lambda_{t+1}^{\mathrm{LOWREGIME}^2}\right]\right) - \kappa\theta^{-1}yL_t = 0 \tag{4.3}$$

$$-piH_{t-1} + \log etapi_{t-1} + \beta piH_t + \kappa yH_{t-1} + \beta\left(1 - pH\right)\left(-piH_t + piL_t\right) = 0 \tag{4.4}$$

$$-piL_{t-1} + \log etapi_{t-1} + \kappa yL_{t-1} + \beta pL piL_t + \beta\left(1 - pL\right)\left(piH_t - piL_t\right) = 0 \tag{4.5}$$

$$-yH_{t-1} + yH_t - \sigma\left(iH_{t-1} - piH_t\right) + \left(1 - pH\right)\left(-yH_t + yL_t\right) + \sigma\left(1 - pH\right)\left(-piH_t + piL_t\right) = 0 \tag{4.6}$$

$$-yL_{t-1} + yL_t - \sigma\left(iL_{t-1} - piL_t\right) + \left(1 - pL\right)\left(yH_t - yL_t\right) + \sigma\left(1 - pL\right)\left(piH_t - piL_t\right) = 0 \tag{4.7}$$

$$UH_t + 0.5\left(pitH - pitCB + piH_t\right)^2 - \beta\mathrm{E}_t\left[UH_{t+1}\right] - \beta\left(1 - pH\right)\left(-\mathrm{E}_t\left[UH_{t+1}\right] + \mathrm{E}_t\left[UL_{t+1}\right]\right) + 0.5\kappa\theta^{-1}{yH_t}^2 = 0 \tag{4.8}$$

$$UL_t + 0.5\left(-pitCB + pitL + piL_t\right)^2 - \beta\mathrm{E}_t\left[UL_{t+1}\right] - \beta\left(1 - pL\right)\left(\mathrm{E}_t\left[UH_{t+1}\right] - \mathrm{E}_t\left[UL_{t+1}\right]\right) + 0.5\kappa\theta^{-1}{yL_t}^2 = 0 \tag{4.9}$$

$$-pitH + pitCB - piH_t + \lambda_t^{\mathrm{HIGHREGIME}^1}\left(\beta - \beta\left(1 - pH\right)\right) + \lambda_t^{\mathrm{HIGHREGIME}^2}\left(\sigma - \sigma\left(1 - pH\right)\right) - \left(\beta - \beta\left(1 - pH\right)\right)\mathrm{E}_t\left[\lambda_{t+1}^{\mathrm{HIGHREGIME}^1}\right] = 0 \tag{4.10}$$

$$pitCB - pitL - piL_t + \lambda_t^{\mathrm{LOWREGIME}^1}\left(\beta pL - \beta\left(1 - pL\right)\right) + \lambda_t^{\mathrm{LOWREGIME}^2}\left(\sigma - \sigma\left(1 - pL\right)\right) - \left(\beta - \beta\left(1 - pL\right)\right)\mathrm{E}_t\left[\lambda_{t+1}^{\mathrm{LOWREGIME}^1}\right] = 0 \tag{4.11}$$

$$-\sigma\left(\beta - \beta\left(1 - pH\right)\right)\mathrm{E}_t\left[\lambda_{t+1}^{\mathrm{HIGHREGIME}^2}\right] = 0 \tag{4.12}$$

$$-\sigma\left(\beta - \beta\left(1 - pL\right)\right)\mathrm{E}_t\left[\lambda_{t+1}^{\mathrm{LOWREGIME}^2}\right] = 0 \tag{4.13}$$

5 Steady state relationships (after reduction)

$$-\mathit{etapi}_{\mathrm{ss}} + e^{\phi \log \mathit{etapi}_{\mathrm{ss}}} = 0 \tag{5.1}$$

$$\mathit{pH}\,\lambda^{\mathrm{HIGHREGIME}^2}_{\mathrm{ss}} + (\beta - \beta\,(1 - \mathit{pH}))\left(-\lambda^{\mathrm{HIGHREGIME}^2}_{\mathrm{ss}} + \kappa\lambda^{\mathrm{HIGHREGIME}^1}_{\mathrm{ss}}\right) - \kappa\theta^{-1}\mathit{yH}_{\mathrm{ss}} = 0 \tag{5.2}$$

$$\mathit{pL}\lambda^{\mathrm{LOWREGIME}^2}_{\mathrm{ss}} + (\beta - \beta\,(1 - \mathit{pL}))\left(-\lambda^{\mathrm{LOWREGIME}^2}_{\mathrm{ss}} + \kappa\lambda^{\mathrm{LOWREGIME}^1}_{\mathrm{ss}}\right) - \kappa\theta^{-1}\mathit{yL}_{\mathrm{ss}} = 0 \tag{5.3}$$

$$-\mathit{piH}_{\mathrm{ss}} + \log \mathit{etapi}_{\mathrm{ss}} + \beta\mathit{piH}_{\mathrm{ss}} + \kappa\mathit{yH}_{\mathrm{ss}} + \beta\,(1 - \mathit{pH})\,(-\mathit{piH}_{\mathrm{ss}} + \mathit{piL}_{\mathrm{ss}}) = 0 \tag{5.4}$$

$$-\mathit{piL}_{\mathrm{ss}} + \log \mathit{etapi}_{\mathrm{ss}} + \kappa\mathit{yL}_{\mathrm{ss}} + \beta\mathit{pL}\mathit{piL}_{\mathrm{ss}} + \beta\,(1 - \mathit{pL})\,(\mathit{piH}_{\mathrm{ss}} - \mathit{piL}_{\mathrm{ss}}) = 0 \tag{5.5}$$

$$(1 - \mathit{pH})\,(-\mathit{yH}_{\mathrm{ss}} + \mathit{yL}_{\mathrm{ss}}) - \sigma\,(\mathit{iH}_{\mathrm{ss}} - \mathit{piH}_{\mathrm{ss}}) + \sigma\,(1 - \mathit{pH})\,(-\mathit{piH}_{\mathrm{ss}} + \mathit{piL}_{\mathrm{ss}}) = 0 \tag{5.6}$$

$$(1 - \mathit{pL})\,(\mathit{yH}_{\mathrm{ss}} - \mathit{yL}_{\mathrm{ss}}) - \sigma\,(\mathit{iL}_{\mathrm{ss}} - \mathit{piL}_{\mathrm{ss}}) + \sigma\,(1 - \mathit{pL})\,(\mathit{piH}_{\mathrm{ss}} - \mathit{piL}_{\mathrm{ss}}) = 0 \tag{5.7}$$

$$\mathit{UH}_{\mathrm{ss}} + 0.5\,(\mathit{pitH} - \mathit{pitCB} + \mathit{piH}_{\mathrm{ss}})^2 - \beta\mathit{UH}_{\mathrm{ss}} - \beta\,(1 - \mathit{pH})\,(-\mathit{UH}_{\mathrm{ss}} + \mathit{UL}_{\mathrm{ss}}) + 0.5\kappa\theta^{-1}{\mathit{yH}_{\mathrm{ss}}}^2 = 0 \tag{5.8}$$

$$\mathit{UL}_{\mathrm{ss}} + 0.5\,(-\mathit{pitCB} + \mathit{pitL} + \mathit{piL}_{\mathrm{ss}})^2 - \beta\mathit{UL}_{\mathrm{ss}} - \beta\,(1 - \mathit{pL})\,(\mathit{UH}_{\mathrm{ss}} - \mathit{UL}_{\mathrm{ss}}) + 0.5\kappa\theta^{-1}{\mathit{yL}_{\mathrm{ss}}}^2 = 0 \tag{5.9}$$

$$-\mathit{pitH} + \mathit{pitCB} - \mathit{piH}_{\mathrm{ss}} + \lambda^{\mathrm{HIGHREGIME}^2}_{\mathrm{ss}}\,(\sigma - \sigma\,(1 - \mathit{pH})) = 0 \tag{5.10}$$

$$\mathit{pitCB} - \mathit{pitL} - \mathit{piL}_{\mathrm{ss}} - \lambda^{\mathrm{LOWREGIME}^1}_{\mathrm{ss}}\,(\beta - \beta\,(1 - \mathit{pL})) + \lambda^{\mathrm{LOWREGIME}^1}_{\mathrm{ss}}\,(\beta\mathit{pL} - \beta\,(1 - \mathit{pL})) + \lambda^{\mathrm{LOWREGIME}^2}_{\mathrm{ss}}\,(\sigma - \sigma\,(1 - \mathit{pL})) = 0 \tag{5.11}$$

$$-\sigma\lambda^{\mathrm{HIGHREGIME}^2}_{\mathrm{ss}}\,(\beta - \beta\,(1 - \mathit{pH})) = 0 \tag{5.12}$$

$$-\sigma\lambda^{\mathrm{LOWREGIME}^2}_{\mathrm{ss}}\,(\beta - \beta\,(1 - \mathit{pL})) = 0 \tag{5.13}$$

6 Parameter settings

$$\beta = 0.99 \tag{6.1}$$

$$\kappa = 0.2465 \tag{6.2}$$

$$\phi = 0.95 \tag{6.3}$$

$$\mathit{pitH} = 0 \tag{6.4}$$

$$\mathit{pitCB} = 0 \tag{6.5}$$

$$\mathit{pitL} = 2 \tag{6.6}$$

$$\mathit{pH} = 0.99 \tag{6.7}$$

$$\mathit{pL} = 0.99 \tag{6.8}$$

$$\sigma = 1 \tag{6.9}$$

$$\theta = 6 \tag{6.10}$$

7 Steady-state values

	Steady-state value
$etapi$	1
iH	-0.0232
iL	-1.9764
$\lambda^{\mathrm{HIGHREGIME}^1}$	0.0137
$\lambda^{\mathrm{HIGHREGIME}^2}$	0
$\lambda^{\mathrm{LOWREGIME}^1}$	-0.0411
$\lambda^{\mathrm{LOWREGIME}^2}$	0
piH	0
piL	-1.9996
yH	0.0803
yL	-0.2417
UH	-0.0487
UL	-0.0846

8 The solution of the 1st order perturbation

Matrix P

$$
\begin{array}{c c}
 & \begin{array}{ccccccc} etapi_{t-1} & iH_{t-1} & iL_{t-1} & piH_{t-1} & piL_{t-1} & yH_{t-1} & yL_{t-1} \end{array} \\
\begin{array}{c} etapi_t \\ iH_t \\ iL_t \\ piH_t \\ piL_t \\ yH_t \\ yL_t \end{array} &
\begin{pmatrix}
0.95 & 0 & 0 & 0 & 0 & 0 & 0 \\
-561.3689 & -1.9645 & 1.8946 & 253.8981 & -6.2527 & -11.8214 & 0.4181 \\
-6.6986 & 0.0003 & -1.9791 & -0.0376 & 6.1014 & 0.0017 & -0.4239 \\
-1.01 & 0 & 0 & 1.0204 & -0.0208 & -0.0202 & 0.0006 \\
-0.5103 & 0 & 0 & -0.0052 & 1.0308 & 0.0001 & -0.0307 \\
12.5765 & 0.292 & -0.2511 & -12.7062 & 0.2593 & 1.2617 & -0.0384 \\
4.2212 & -0.001 & 8.2592 & 0.0431 & -8.5268 & -0.0042 & 1.2643
\end{pmatrix}
\end{array}
$$

Matrix Q

$$
\begin{array}{c c}
 & \epsilon^{\pi} \\
\begin{array}{c} etapi \\ iH \\ iL \\ piH \\ piL \\ yH \\ yL \end{array} &
\begin{pmatrix}
1 \\ -326.9451 \\ -3.8787 \\ 0 \\ 0 \\ 0 \\ 0
\end{pmatrix}
\end{array}
$$

Matrix R

$$
\begin{array}{c c}
 & \begin{array}{ccccccc} etapi_{t-1} & iH_{t-1} & iL_{t-1} & piH_{t-1} & piL_{t-1} & yH_{t-1} & yL_{t-1} \end{array} \\
\begin{array}{c} \lambda_t^{\mathrm{HIGHREGIME}^1} \\ \lambda_t^{\mathrm{HIGHREGIME}^2} \\ \lambda_t^{\mathrm{LOWREGIME}^1} \\ \lambda_t^{\mathrm{LOWREGIME}^2} \\ UH_t \\ UL_t \end{array} &
\begin{pmatrix}
-438.2766 & -0.8773 & 1.53 & 256.5425 & -9.284 & -8.1131 & 0.4638 \\
1.0037 & 0.0031 & -0.0048 & -0.516 & 0.0214 & 0.021 & -0.0012 \\
-150.6019 & 0.0061 & -25.5874 & -1.5735 & 176.6507 & 0.0524 & -8.3939 \\
1.0299 & -0.0001 & 0.2703 & 0.0108 & -1.0642 & -0.0004 & 0.0648 \\
2.5126 & 0 & -0.008 & -0.2808 & 0.0473 & 0.0056 & -0.0024 \\
-6.8483 & 0.0001 & -0.0001 & -0.0168 & 0.9727 & 0.0005 & -0.029
\end{pmatrix}
\end{array}
$$

Matrix S

$$
\begin{array}{l}
 \\
\lambda^{\text{HIGHREGIME}^1} \\
\lambda^{\text{HIGHREGIME}^2} \\
\lambda^{\text{LOWREGIME}^1} \\
\lambda^{\text{LOWREGIME}^2} \\
UH \\
UL
\end{array}
\begin{array}{c}
\epsilon^{\pi} \\
\begin{pmatrix}
-196.1864 \\
0.5245 \\
-67.1917 \\
0.5353 \\
2.3741 \\
-6.7143
\end{pmatrix}
\end{array}
$$

9 Model statistics

9.1 Basic statistics

	Steady-state value	Std. dev.	Variance	Loglin
etapi	1	0.1303	0.017	Y
iH	-0.0232	33.249	1105.4967	Y
iL	-1.9764	0.3951	0.1561	Y
$\lambda^{\text{HIGHREGIME}^1}$	0.0137	21.6808	470.0577	Y
$\lambda^{\text{HIGHREGIME}^2}$	0	0.0506	0.0026	N
$\lambda^{\text{LOWREGIME}^1}$	-0.0411	7.4029	54.8026	Y
$\lambda^{\text{LOWREGIME}^2}$	0	0.0516	0.0027	N
piH	0	0.0985	0.0097	N
piL	-1.9996	0.0498	0.0025	Y
yH	0.0803	8.625	74.3904	Y
yL	-0.2417	2.8859	8.3285	Y
UH	-0.0487	0.3247	0.1055	Y
UL	-0.0846	0.8996	0.8093	Y

9.2 Correlation matrix

	etapi	*iH*	*iL*	$\lambda^{\text{HIGHREGIME}^1}$	$\lambda^{\text{HIGHREGIME}^2}$	$\lambda^{\text{LOWREGIME}^1}$	$\lambda^{\text{LOWREGIME}^2}$	*piH*	*piL*
etapi	1	-0.301	-0.298	-0.825	0.436	-0.821	0.436	-0.491	-0.4
iH		1	1	0.567	-0.977	0.573	-0.977	-0.323	-0.3
iL			1	0.564	-0.976	0.57	-0.976	-0.327	-0.3
$\lambda^{\text{HIGHREGIME}^1}$				1	-0.725	1	-0.725	0.567	0.56
$\lambda^{\text{HIGHREGIME}^2}$					1	-0.73	1	0.116	0.11
$\lambda^{\text{LOWREGIME}^1}$						1	-0.73	0.563	0.56
$\lambda^{\text{LOWREGIME}^2}$							1	0.116	0.11
piH								1	1
piL									1
yH									
yL									
UH									
UL									

9.3 Cross correlations with the reference variable (iH)

	$\sigma[\cdot]$ rel. to $\sigma[iH]$	iH_{t-5}	iH_{t-4}	iH_{t-3}	iH_{t-2}	iH_{t-1}	iH_t	iH_{t+1}	iH_{t+2}	iH_{t+3}	iH_{t+4}
$etapi_t$	0.004	0.098	0.131	0.177	0.258	0.444	-0.301	-0.254	-0.21	-0.169	-0.132
iH_t	1	-0.028	-0.035	-0.051	-0.093	-0.219	1	-0.219	-0.093	-0.051	-0.035
iL_t	0.012	-0.027	-0.035	-0.05	-0.092	-0.218	1	-0.222	-0.094	-0.051	-0.035
$\lambda_t^{\text{HIGHREGIME}^1}$	0.652	-0.078	-0.1	-0.134	-0.204	-0.385	0.567	0.47	0.151	0.043	0.003
$\lambda_t^{\text{HIGHREGIME}^2}$	0.002	0.04	0.051	0.071	0.122	0.269	-0.977	0.043	0.043	0.041	0.038
$\lambda_t^{\text{LOWREGIME}^1}$	0.223	-0.078	-0.099	-0.133	-0.203	-0.384	0.573	0.469	0.149	0.041	0.001
$\lambda_t^{\text{LOWREGIME}^2}$	0.002	0.04	0.051	0.071	0.122	0.269	-0.977	0.043	0.043	0.041	0.038
piH_t	0.003	-0.046	-0.056	-0.071	-0.096	-0.156	-0.323	0.852	0.236	0.04	-0.022
piL_t	0.001	-0.045	-0.056	-0.07	-0.095	-0.154	-0.32	0.855	0.233	0.037	-0.024
yH_t	0.259	-0.069	-0.092	-0.121	-0.164	-0.245	-0.443	0.551	0.273	0.164	0.111
yL_t	0.087	-0.069	-0.092	-0.121	-0.163	-0.244	-0.442	0.555	0.273	0.163	0.11
UH_t	0.01	0.098	0.13	0.175	0.255	0.438	-0.258	-0.313	-0.22	-0.165	-0.125
UL_t	0.027	-0.098	-0.13	-0.176	-0.256	-0.44	0.276	0.292	0.216	0.166	0.127

9.4 Autocorrelations

	Lag 1	Lag 2	Lag 3	Lag 4	Lag 5
$etapi$	0.713	0.471	0.271	0.11	-0.016
iH	-0.219	-0.093	-0.051	-0.035	-0.028
iL	-0.221	-0.093	-0.05	-0.035	-0.027
$\lambda^{\text{HIGHREGIME}^1}$	0.51	0.081	-0.065	-0.117	-0.134
$\lambda^{\text{HIGHREGIME}^2}$	-0.074	-0.071	-0.066	-0.06	-0.054
$\lambda^{\text{LOWREGIME}^1}$	0.506	0.077	-0.068	-0.118	-0.134
$\lambda^{\text{LOWREGIME}^2}$	-0.074	-0.071	-0.066	-0.06	-0.054
piH	0.22	-0.024	-0.095	-0.11	-0.107
piL	0.217	-0.025	-0.096	-0.11	-0.107
yH	0.504	0.261	0.116	0.017	-0.055
yL	0.5	0.257	0.113	0.015	-0.055
UH	0.735	0.449	0.243	0.087	-0.031
UL	0.727	0.456	0.253	0.095	-0.026

10 Impulse response functions

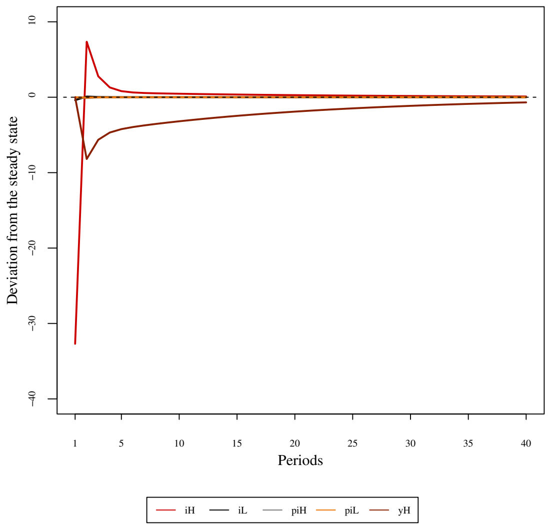

Figure 1: Impulse responses (iH, iL, piH, piL, yH) to ϵ^{π} shock

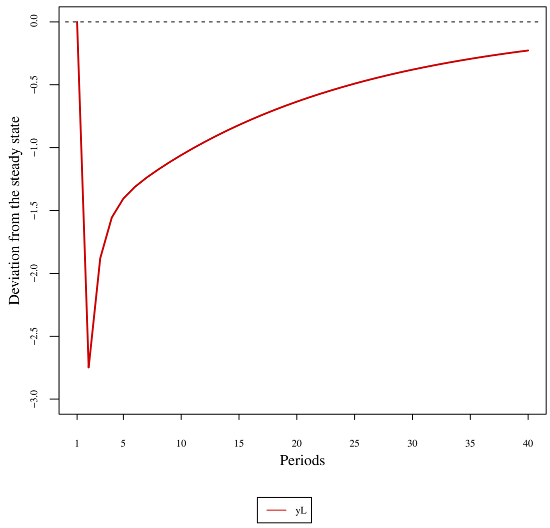

Figure 2: Impulse response (yL) to ϵ^{π} shock