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Model name: RSW_RP

1 HIGHREGIME

1.1 Optimisation problem

$$\max_{piH_t, yH_t, iH_t} UH_t = -0.5\left(pitH - pitCB + piH_t\right)^2 + \beta \mathrm{E}_t\left[UH_{t+1}\right] + \beta\left(-\mathrm{E}_t\left[UH_{t+1}\right] + \mathrm{E}_t\left[UL_{t+1}\right]\right)\left(1 - pHss - \tau\left(-pitCB + piH_t\right)^2\right) - 0.5\kappa\theta^{-1} {yH_t}^2 \tag{1.1}$$

s.t. :

$$piH_{t-1} = \log etapi_{t-1} + \kappa yH_{t-1} + \beta piH_t\left(pHss + \tau\left(-pitCB + piH_t\right)^2\right) + \beta\left(-piH_t + piL_t\right)\left(1 - pHss - \tau\left(-pitCB + piH_t\right)^2\right) \quad \left(\lambda_t^{\mathrm{HIGHREGIME}^1}\right) \tag{1.2}$$

$$yH_{t-1} = yH_t - \sigma\left(iH_{t-1} - piH_t\right) + \left(-yH_t + yL_t\right)\left(1 - pHss - \tau\left(-pitCB + piH_t\right)^2\right) + \sigma\left(-piH_t + piL_t\right)\left(1 - pHss - \tau\left(-pitCB + piH_t\right)^2\right) \quad \left(\lambda_t^{\mathrm{HIGHREGIME}^2}\right) \tag{1.3}$$

1.2 First order conditions

$$\beta - \lambda_t^{\mathrm{HIGHREGIME}^{\mathrm{UH}}} - \beta\left(1 - pHss - \tau\left(-pitCB + piH_{t-1}\right)^2\right) = 0 \quad (UH_t) \tag{1.4}$$

$$-pitH + pitCB - piH_t + \lambda_t^{\mathrm{HIGHREGIME}^1}\left(\beta\left(pHss + \tau\left(-pitCB + piH_t\right)^2\right) - \beta\left(1 - pHss - \tau\left(-pitCB + piH_t\right)^2\right) + 2\beta\tau piH_t\left(-pitCB + piH_t\right) - 2\beta\tau\left(-pitCB + piH_t\right)\left(-piH_t + piL_t\right)\right) + \lambda_t^{\mathrm{HIGHRE}} \tag{1.5}$$

$$\lambda_t^{\mathrm{HIGHREGIME}^2}\left(pHss + \tau\left(-pitCB + piH_t\right)^2\right) - \kappa\theta^{-1} yH_t + \mathrm{E}_t\left[\lambda_{t+1}^{\mathrm{HIGHREGIME}^{\mathrm{UH}}}\left(-\lambda_{t+1}^{\mathrm{HIGHREGIME}^2} + \kappa\lambda_{t+1}^{\mathrm{HIGHREGIME}^1}\right)\right] = 0 \quad (yH_t) \tag{1.6}$$

$$-\sigma \mathrm{E}_t\left[\lambda_{t+1}^{\mathrm{HIGHREGIME}^{\mathrm{UH}}} \lambda_{t+1}^{\mathrm{HIGHREGIME}^2}\right] = 0 \quad (iH_t) \tag{1.7}$$

2 LOWREGIME

2.1 Optimisation problem

$$\max_{piL_t, yL_t, iL_t} UL_t = -0.5\left(-pitCB + pitL + piL_t\right)^2 + \beta \mathrm{E}_t\left[UL_{t+1}\right] + \beta\left(\mathrm{E}_t\left[UH_{t+1}\right] - \mathrm{E}_t\left[UL_{t+1}\right]\right)\left(1 - pLss + \tau\left(-pitCB + piL_t\right)^2\right) - 0.5\kappa\theta^{-1} {yL_t}^2 \tag{2.1}$$

s.t. :

$$piL_{t-1} = \log etapi_{t-1} + \kappa yL_{t-1} + \beta piL_t\left(pLss - \tau\left(-pitCB + piL_t\right)^2\right) + \beta\left(piH_t - piL_t\right)\left(1 - pLss + \tau\left(-pitCB + piL_t\right)^2\right) \quad \left(\lambda_t^{\mathrm{LOWREGIME}^1}\right) \tag{2.2}$$

$$yL_{t-1} = yL_t - \sigma\left(iL_{t-1} - piL_t\right) + \left(yH_t - yL_t\right)\left(1 - pLss + \tau\left(-pitCB + piL_t\right)^2\right) + \sigma\left(piH_t - piL_t\right)\left(1 - pLss + \tau\left(-pitCB + piL_t\right)^2\right) \quad \left(\lambda_t^{\mathrm{LOWREGIME}^2}\right) \tag{2.3}$$

2.2 First order conditions

$$\beta - \lambda_t^{\text{LOWREGIME}^{\text{UL}}} - \beta\left(1 - pLss + \tau\left(-pitCB + piL_{t-1}\right)^2\right) = 0 \quad (UL_t) \tag{2.4}$$

$$pitCB - pitL - piL_t + \lambda_t^{\text{LOWREGIME}^1}\left(\beta\left(pLss - \tau\left(-pitCB + piL_t\right)^2\right) - \beta\left(1 - pLss + \tau\left(-pitCB + piL_t\right)^2\right) - 2\beta\tau piL_t\left(-pitCB + piL_t\right) + 2\beta\tau\left(-pitCB + piL_t\right)\left(piH_t - piL_t\right)\right) + \lambda_t^{\text{LOWREGIME}^2}\left(\sigma\right. \tag{2.5}$$

$$\lambda_t^{\text{LOWREGIME}^2}\left(pLss - \tau\left(-pitCB + piL_t\right)^2\right) - \kappa\theta^{-1} yL_t + \mathrm{E}_t\left[\lambda_{t+1}^{\text{LOWREGIME}^{\text{UL}}}\left(-\lambda_{t+1}^{\text{LOWREGIME}^2} + \kappa\lambda_{t+1}^{\text{LOWREGIME}^1}\right)\right] = 0 \quad (yL_t) \tag{2.6}$$

$$-\sigma\mathrm{E}_t\left[\lambda_{t+1}^{\text{LOWREGIME}^{\text{UL}}}\lambda_{t+1}^{\text{LOWREGIME}^2}\right] = 0 \quad (iL_t) \tag{2.7}$$

3 EXOG

3.1 Identities

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

4 Equilibrium relationships (after reduction)

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

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

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

$$-piH_{t-1} + \log etapi_{t-1} + \kappa yH_{t-1} + \beta piH_t\left(pHss + \tau\left(-pitCB + piH_t\right)^2\right) + \beta\left(-piH_t + piL_t\right)\left(1 - pHss - \tau\left(-pitCB + piH_t\right)^2\right) = 0 \tag{4.4}$$

$$-piL_{t-1} + \log etapi_{t-1} + \kappa yL_{t-1} + \beta piL_t\left(pLss - \tau\left(-pitCB + piL_t\right)^2\right) + \beta\left(piH_t - piL_t\right)\left(1 - pLss + \tau\left(-pitCB + piL_t\right)^2\right) = 0 \tag{4.5}$$

$$-yH_{t-1} + yH_t - \sigma\left(iH_{t-1} - piH_t\right) + \left(-yH_t + yL_t\right)\left(1 - pHss - \tau\left(-pitCB + piH_t\right)^2\right) + \sigma\left(-piH_t + piL_t\right)\left(1 - pHss - \tau\left(-pitCB + piH_t\right)^2\right) = 0 \tag{4.6}$$

$$-yL_{t-1} + yL_t - \sigma\left(iL_{t-1} - piL_t\right) + \left(yH_t - yL_t\right)\left(1 - pLss + \tau\left(-pitCB + piL_t\right)^2\right) + \sigma\left(piH_t - piL_t\right)\left(1 - pLss + \tau\left(-pitCB + piL_t\right)^2\right) = 0 \tag{4.7}$$

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

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

$$-pitH + pitCB - piH_t + \lambda_t^{\text{HIGHREGIME}^1}\left(\beta\left(pHss + \tau\left(-pitCB + piH_t\right)^2\right) - \beta\left(1 - pHss - \tau\left(-pitCB + piH_t\right)^2\right) + 2\beta\tau piH_t\left(-pitCB + piH_t\right) - 2\beta\tau\left(-pitCB + piH_t\right)\left(-piH_t + piL_t\right)\right) + \lambda_t^{\text{HIGHRE}} \tag{4.10}$$

$$pitCB - pitL - piL_t + \lambda_t^{\text{LOWREGIME}^1}\left(\beta\left(pLss - \tau\left(-pitCB + piL_t\right)^2\right) - \beta\left(1 - pLss + \tau\left(-pitCB + piL_t\right)^2\right) - 2\beta\tau piL_t\left(-pitCB + piL_t\right) + 2\beta\tau\left(-pitCB + piL_t\right)\left(piH_t - piL_t\right)\right) + \lambda_t^{\text{LOWREGIME}^2}\left(\sigma\right. \tag{4.11}$$

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

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

5 Steady state relationships (after reduction)

$$-etapi_{\text{ss}} + e^{\phi \log etapi_{\text{ss}}} = 0 \tag{5.1}$$

$$\lambda_{\text{ss}}^{\text{HIGHREGIME}^2}\left(pHss + \tau\left(-pitCB + piH_{\text{ss}}\right)^2\right) + \left(\beta - \beta\left(1 - pHss - \tau\left(-pitCB + piH_{\text{ss}}\right)^2\right)\right)\left(-\lambda_{\text{ss}}^{\text{HIGHREGIME}^2} + \kappa\lambda_{\text{ss}}^{\text{HIGHREGIME}^1}\right) - \kappa\theta^{-1}yH_{\text{ss}} = 0 \tag{5.2}$$

$$\lambda_{\text{ss}}^{\text{LOWREGIME}^2}\left(pLss - \tau\left(-pitCB + piL_{\text{ss}}\right)^2\right) + \left(\beta - \beta\left(1 - pLss + \tau\left(-pitCB + piL_{\text{ss}}\right)^2\right)\right)\left(-\lambda_{\text{ss}}^{\text{LOWREGIME}^2} + \kappa\lambda_{\text{ss}}^{\text{LOWREGIME}^1}\right) - \kappa\theta^{-1}yL_{\text{ss}} = 0 \tag{5.3}$$

$$-piH_{\text{ss}} + \log etapi_{\text{ss}} + \kappa yH_{\text{ss}} + \beta piH_{\text{ss}}\left(pHss + \tau\left(-pitCB + piH_{\text{ss}}\right)^2\right) + \beta\left(-piH_{\text{ss}} + piL_{\text{ss}}\right)\left(1 - pHss - \tau\left(-pitCB + piH_{\text{ss}}\right)^2\right) = 0 \tag{5.4}$$

$$-piL_{\text{ss}} + \log etapi_{\text{ss}} + \kappa yL_{\text{ss}} + \beta piL_{\text{ss}}\left(pLss - \tau\left(-pitCB + piL_{\text{ss}}\right)^2\right) + \beta\left(piH_{\text{ss}} - piL_{\text{ss}}\right)\left(1 - pLss + \tau\left(-pitCB + piL_{\text{ss}}\right)^2\right) = 0 \tag{5.5}$$

$$\left(-yH_{\text{ss}} + yL_{\text{ss}}\right)\left(1 - pHss - \tau\left(-pitCB + piH_{\text{ss}}\right)^2\right) - \sigma\left(iH_{\text{ss}} - piH_{\text{ss}}\right) + \sigma\left(-piH_{\text{ss}} + piL_{\text{ss}}\right)\left(1 - pHss - \tau\left(-pitCB + piH_{\text{ss}}\right)^2\right) = 0 \tag{5.6}$$

$$\left(yH_{\text{ss}} - yL_{\text{ss}}\right)\left(1 - pLss + \tau\left(-pitCB + piL_{\text{ss}}\right)^2\right) - \sigma\left(iL_{\text{ss}} - piL_{\text{ss}}\right) + \sigma\left(piH_{\text{ss}} - piL_{\text{ss}}\right)\left(1 - pLss + \tau\left(-pitCB + piL_{\text{ss}}\right)^2\right) = 0 \tag{5.7}$$

$$UH_{\text{ss}} + 0.5\left(pitH - pitCB + piH_{\text{ss}}\right)^2 - \beta UH_{\text{ss}} - \beta\left(-UH_{\text{ss}} + UL_{\text{ss}}\right)\left(1 - pHss - \tau\left(-pitCB + piH_{\text{ss}}\right)^2\right) + 0.5\kappa\theta^{-1}yH_{\text{ss}}{}^2 = 0 \tag{5.8}$$

$$UL_{\text{ss}} + 0.5\left(-pitCB + pitL + piL_{\text{ss}}\right)^2 - \beta UL_{\text{ss}} - \beta\left(UH_{\text{ss}} - UL_{\text{ss}}\right)\left(1 - pLss + \tau\left(-pitCB + piL_{\text{ss}}\right)^2\right) + 0.5\kappa\theta^{-1}yL_{\text{ss}}{}^2 = 0 \tag{5.9}$$

$$-pitH + pitCB - piH_{\text{ss}} - \lambda_{\text{ss}}^{\text{HIGHREGIME}^1}\left(\beta - \beta\left(1 - pHss - \tau\left(-pitCB + piH_{\text{ss}}\right)^2\right)\right) + \lambda_{\text{ss}}^{\text{HIGHREGIME}^1}\left(\beta\left(pHss + \tau\left(-pitCB + piH_{\text{ss}}\right)^2\right) - \beta\left(1 - pHss - \tau\left(-pitCB + piH_{\text{ss}}\right)^2\right) + 2\beta\tau piH_{\text{ss}}\left(-\right.\right. \tag{5.10}$$

$$pitCB - pitL - piL_{\text{ss}} - \lambda_{\text{ss}}^{\text{LOWREGIME}^1}\left(\beta - \beta\left(1 - pLss + \tau\left(-pitCB + piL_{\text{ss}}\right)^2\right)\right) + \lambda_{\text{ss}}^{\text{LOWREGIME}^1}\left(\beta\left(pLss - \tau\left(-pitCB + piL_{\text{ss}}\right)^2\right) - \beta\left(1 - pLss + \tau\left(-pitCB + piL_{\text{ss}}\right)^2\right) - 2\beta\tau piL_{\text{ss}}\left(-pitCB + \right.\right. \tag{5.11}$$

$$-\sigma\lambda_{\text{ss}}^{\text{HIGHREGIME}^2}\left(\beta - \beta\left(1 - pHss - \tau\left(-pitCB + piH_{\text{ss}}\right)^2\right)\right) = 0 \tag{5.12}$$

$$-\sigma\lambda_{\text{ss}}^{\text{LOWREGIME}^2}\left(\beta - \beta\left(1 - pLss + \tau\left(-pitCB + piL_{\text{ss}}\right)^2\right)\right) = 0 \tag{5.13}$$

6 Parameter settings

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

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

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

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

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

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

$$pHss = 0.99 \tag{6.7}$$

$$pLss = 0.99 \tag{6.8}$$

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

$$\tau = 0.001 \tag{6.10}$$

$$\theta = 6 \tag{6.11}$$

7 Steady-state values

	Steady-state value
etapi	1
iH	-0.024
iL	-1.9653
$\lambda^{\text{HIGHREGIME}^1}$	0.0136
$\lambda^{\text{HIGHREGIME}^2}$	0
$\lambda^{\text{LOWREGIME}^1}$	-0.0522
$\lambda^{\text{LOWREGIME}^2}$	0
piH	-0.0001
piL	-1.9987
yH	0.0803
yL	-0.3057
UH	-0.0657
UL	-0.1187

8 The solution of the 1st order perturbation

Matrix P

	$etapi_{t-1}$	iH_{t-1}	iL_{t-1}	piH_{t-1}	piL_{t-1}	yH_{t-1}	yL_{t-1}
$etapi_t$	0.95	0	0	0	0	0	0
iH_t	−552.0559	−1.9792	1.8507	0.034	−6.3402	−11.5989	0.527
iL_t	−6.9292	0.0004	−2.0164	0	6.4225	0.0025	−0.5559
piH_t	−7548.9355	0	0	1.0309	−159.4846	−150.917	6.0139
piL_t	−0.5212	0	0	0	1.0567	0.0001	−0.0398
yH_t	12.7119	0.3019	−0.2509	−0.0017	0.266	1.2644	−0.0491
yL_t	3.3739	−0.0011	6.52	0	−6.8409	−0.0047	1.2723

Matrix Q

	ϵ^{π}
etapi	1
iH	−319.7266
iL	−3.971
piH	0
piL	0
yH	0
yL	0

Matrix R

	$etapi_{t-1}$	iH_{t-1}	iL_{t-1}	piH_{t-1}	piL_{t-1}	yH_{t-1}	yL_{t-1}
$\lambda_t^{\text{HIGHREGIME}^1}$	−453.3439	−0.9352	1.5966	0.036	−9.9361	−8.3939	0.6231
$\lambda_t^{\text{HIGHREGIME}^2}$	1.0293	0.0033	−0.0049	−0.0001	0.0227	0.0215	−0.0016
$\lambda_t^{\text{LOWREGIME}^1}$	−127.0936	0.0076	−21.5623	−0.0003	151.0271	0.0633	−9.0495
$\lambda_t^{\text{LOWREGIME}^2}$	1.0876	−0.0001	0.2809	0	−1.1447	−0.0006	0.0869
UH_t	1.6316	0	−0.0071	0	0.0422	0.0041	−0.0027
UL_t	−5.8738	0.0001	−0.0001	0	0.88	0.0006	−0.0332

Matrix S

$$\begin{array}{c} \\ \lambda^{\text{HIGHREGIME}^1} \\ \lambda^{\text{HIGHREGIME}^2} \\ \lambda^{\text{LOWREGIME}^1} \\ \lambda^{\text{LOWREGIME}^2} \\ UH \\ UL \end{array} \begin{array}{c} \epsilon^{\pi} \\ \begin{pmatrix} -202.3331 \\ 0.5351 \\ -56.2586 \\ 0.5592 \\ 1.5203 \\ -5.7413 \end{pmatrix} \end{array}$$

9 Model statistics

9.1 Basic statistics

	Steady-state value	Std. dev.	Variance	Loglin
etapi	1	0.1303	0.017	Y
iH	-0.024	32.5638	1060.4038	Y
iL	-1.9653	0.4057	0.1646	Y
$\lambda^{\text{HIGHREGIME}^1}$	0.0136	22.2918	496.9225	Y
$\lambda^{\text{HIGHREGIME}^2}$	0	0.0516	0.0027	N
$\lambda^{\text{LOWREGIME}^1}$	-0.0522	6.1676	38.0394	Y
$\lambda^{\text{LOWREGIME}^2}$	0	0.0539	0.0029	N
piH	-0.0001	736.7328	542775.1587	Y
piL	-1.9987	0.0509	0.0026	Y
yH	0.0803	8.6925	75.5595	Y
yL	-0.3057	2.3131	5.3505	Y
UH	-0.0657	0.2097	0.044	Y
UL	-0.1187	0.7703	0.5934	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	-0.298	-0.293	-0.821	0.436	-0.812	0.436	-0.486	-0.4
iH		1	1	0.57	-0.977	0.581	-0.977	-0.324	-0.3
iL			1	0.563	-0.975	0.574	-0.975	-0.332	-0.3
$\lambda^{\text{HIGHREGIME}^1}$				1	-0.73	1	-0.73	0.563	0.56
$\lambda^{\text{HIGHREGIME}^2}$					1	-0.739	1	0.113	0.10
$\lambda^{\text{LOWREGIME}^1}$						1	-0.739	0.556	0.55
$\lambda^{\text{LOWREGIME}^2}$							1	0.113	0.10
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}
$etqpi_t$	0.004	0.097	0.13	0.176	0.258	0.446	-0.298	-0.252	-0.208	-0.168	-0.131
iH_t	1	-0.027	-0.035	-0.05	-0.093	-0.221	1	-0.221	-0.093	-0.05	-0.035
iL_t	0.012	-0.027	-0.034	-0.05	-0.092	-0.219	1	-0.228	-0.094	-0.05	-0.034
$\lambda_t^{\text{HIGHREGIME}^1}$	0.685	-0.077	-0.099	-0.133	-0.203	-0.387	0.57	0.468	0.149	0.041	0.002
$\lambda_t^{\text{HIGHREGIME}^2}$	0.002	0.04	0.051	0.071	0.122	0.273	-0.977	0.043	0.042	0.041	0.038
$\lambda_t^{\text{LOWREGIME}^1}$	0.189	-0.076	-0.097	-0.131	-0.201	-0.384	0.581	0.466	0.144	0.037	-0.001
$\lambda_t^{\text{LOWREGIME}^2}$	0.002	0.04	0.051	0.071	0.122	0.273	-0.977	0.043	0.042	0.041	0.038
piH_t	22.624	-0.045	-0.055	-0.07	-0.095	-0.155	-0.324	0.853	0.233	0.037	-0.024
piL_t	0.002	-0.044	-0.054	-0.068	-0.093	-0.152	-0.32	0.858	0.229	0.033	-0.027
yH_t	0.267	-0.068	-0.091	-0.12	-0.162	-0.244	-0.445	0.552	0.271	0.162	0.109
yL_t	0.071	-0.068	-0.09	-0.119	-0.162	-0.243	-0.445	0.561	0.271	0.16	0.107
UH_t	0.006	0.097	0.129	0.174	0.254	0.438	-0.248	-0.32	-0.22	-0.164	-0.123
UL_t	0.024	-0.097	-0.129	-0.175	-0.256	-0.442	0.272	0.292	0.215	0.165	0.126

9.4 Autocorrelations

	Lag 1	Lag 2	Lag 3	Lag 4	Lag 5
$etqpi$	0.713	0.471	0.271	0.11	-0.016
iH	-0.221	-0.093	-0.05	-0.035	-0.027
iL	-0.226	-0.093	-0.05	-0.034	-0.026
$\lambda^{\text{HIGHREGIME}^1}$	0.506	0.077	-0.068	-0.118	-0.134
$\lambda^{\text{HIGHREGIME}^2}$	-0.074	-0.071	-0.066	-0.06	-0.054
$\lambda^{\text{LOWREGIME}^1}$	0.498	0.069	-0.073	-0.12	-0.134
$\lambda^{\text{LOWREGIME}^2}$	-0.074	-0.071	-0.066	-0.06	-0.054
piH	0.217	-0.025	-0.096	-0.11	-0.107
piL	0.212	-0.029	-0.097	-0.111	-0.106
yH	0.5	0.257	0.113	0.015	-0.055
yL	0.491	0.25	0.108	0.012	-0.056
UH	0.738	0.445	0.239	0.084	-0.034
UL	0.728	0.455	0.252	0.094	-0.027

10 Impulse response functions

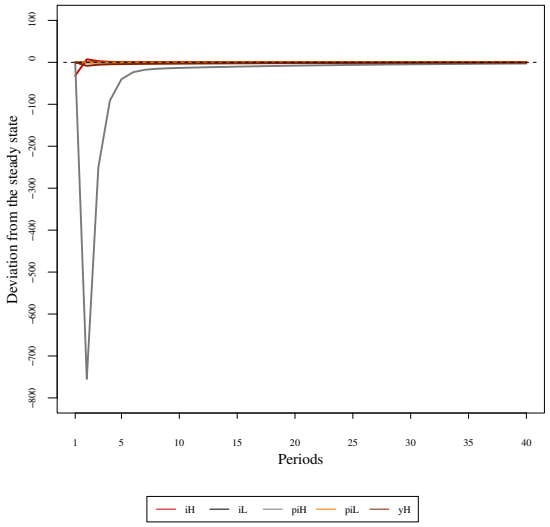

Figure 1: Impulse responses (iH, iL, piH, piL, yH) to ϵ^{π} shock

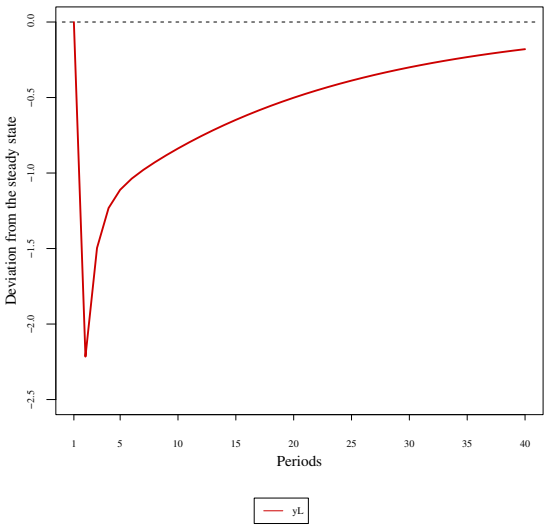

Figure 2: Impulse response (yL) to ϵ^{π} shock