

Table 1: Results from posterior maximization (parameters)

	Prior			Posterior	
	Dist.	Mean	Stdev	Mode	Stdev
$\alpha$	norm	0.300	0.0500	0.2123	0.0276
$\psi$	beta	0.500	0.1500	0.3971	0.1391
$\Phi$	norm	1.250	0.1250	1.4865	0.1173
$\iota_w$	beta	0.500	0.1500	0.5732	0.1399
$\xi_w$	beta	0.500	0.1000	0.7434	0.0796
$\iota_p$	beta	0.500	0.1500	0.3708	0.1679
$\xi_p$	beta	0.500	0.1000	0.5583	0.0598
$\sigma_c$	norm	1.500	0.3750	1.1106	0.3164
$\sigma_l$	norm	2.000	0.7500	1.9156	0.7097
$\lambda$	beta	0.700	0.1000	0.7143	0.0976
$\varphi$	norm	4.000	1.5000	3.9275	1.4102
$\mu_w$	beta	0.500	0.2000	0.7201	0.1276
$\mu_p$	beta	0.500	0.2000	0.6649	0.1358
$\bar{\gamma}$	norm	0.400	0.1000	0.3534	0.0520
$100(\beta^{-1} - 1)$	gamm	0.250	0.1000	0.2304	0.0923
$\bar{\pi}$	gamm	0.625	0.1000	0.8725	0.1365
$\bar{l}$	norm	0.000	2.0000	3.8575	0.8443
$r_\pi$	norm	1.500	0.2500	1.8342	0.1862
$r_{\Delta y}$	norm	0.125	0.0500	0.2114	0.0339
$r_y$	norm	0.125	0.0500	0.0933	0.0681
$\rho$	beta	0.750	0.1000	0.7813	0.0394
$\rho_a$	beta	0.500	0.2000	0.8572	0.0845
$\rho_{ga}$	norm	0.500	0.2500	0.5637	0.1077
$\rho_b$	beta	0.500	0.2000	0.4845	0.5013
$\rho_g$	beta	0.500	0.2000	0.9131	0.0447
$\rho_i$	beta	0.500	0.2000	0.8836	0.1091
$\rho_r$	beta	0.500	0.2000	0.1607	0.0960
$\rho_p$	beta	0.500	0.2000	0.8356	0.1101
$\rho_w$	beta	0.500	0.2000	0.8941	0.0668

Table 2: Results from posterior maximization (standard deviation of structural shocks)

	Prior			Posterior	
	Dist.	Mean	Stdev	Mode	Stdev
$\eta^a$	invg	0.100	2.0000	0.4640	0.0357
$\eta^b$	invg	0.100	2.0000	0.2334	0.1143
$\eta^g$	invg	0.100	2.0000	0.5314	0.0392
$\eta^i$	invg	0.100	2.0000	0.3418	0.0937
$\eta^m$	invg	0.100	2.0000	0.2884	0.0249
$\eta^p$	invg	0.100	2.0000	0.1606	0.0273
$\eta^w$	invg	0.100	2.0000	0.1730	0.0256

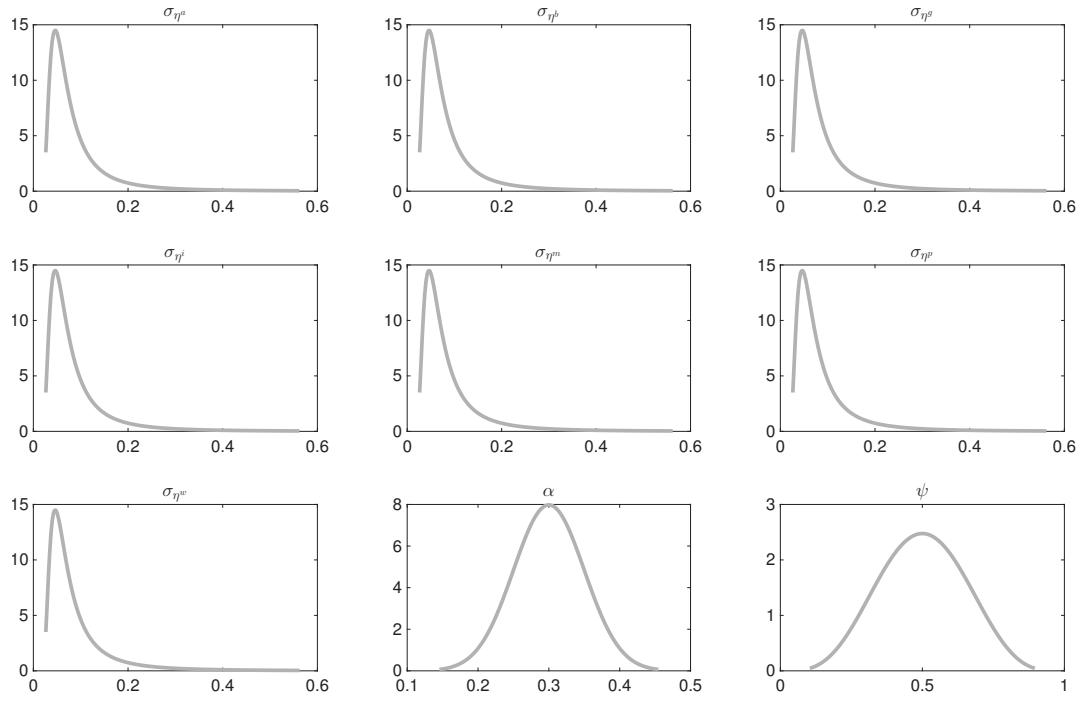


Figure 1: Priors.

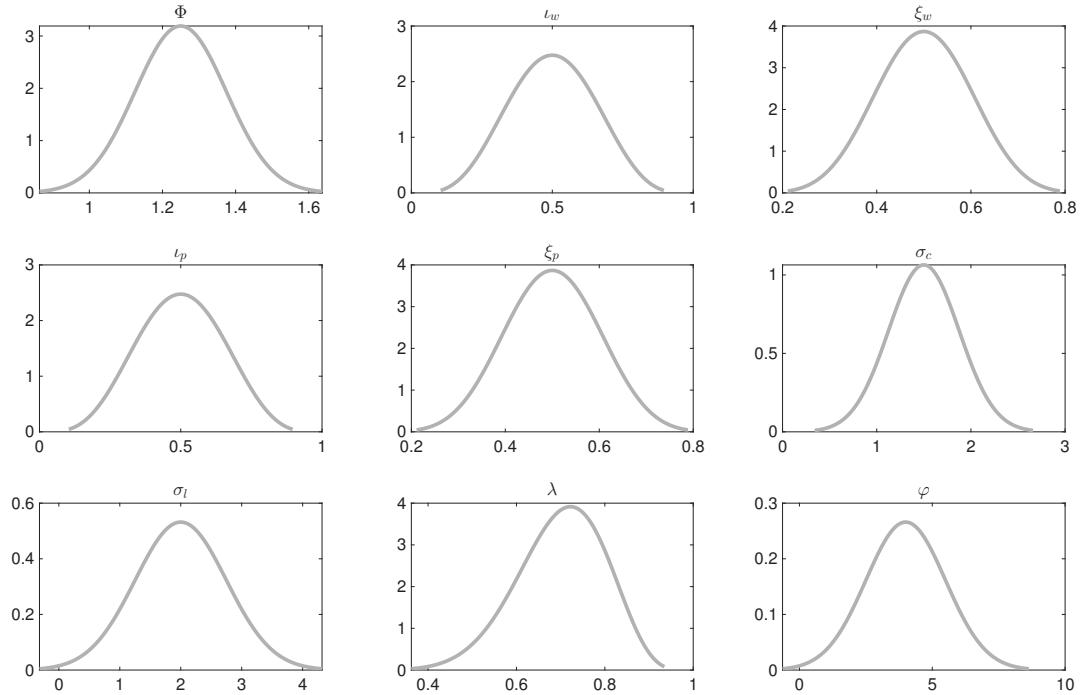


Figure 2: Priors.

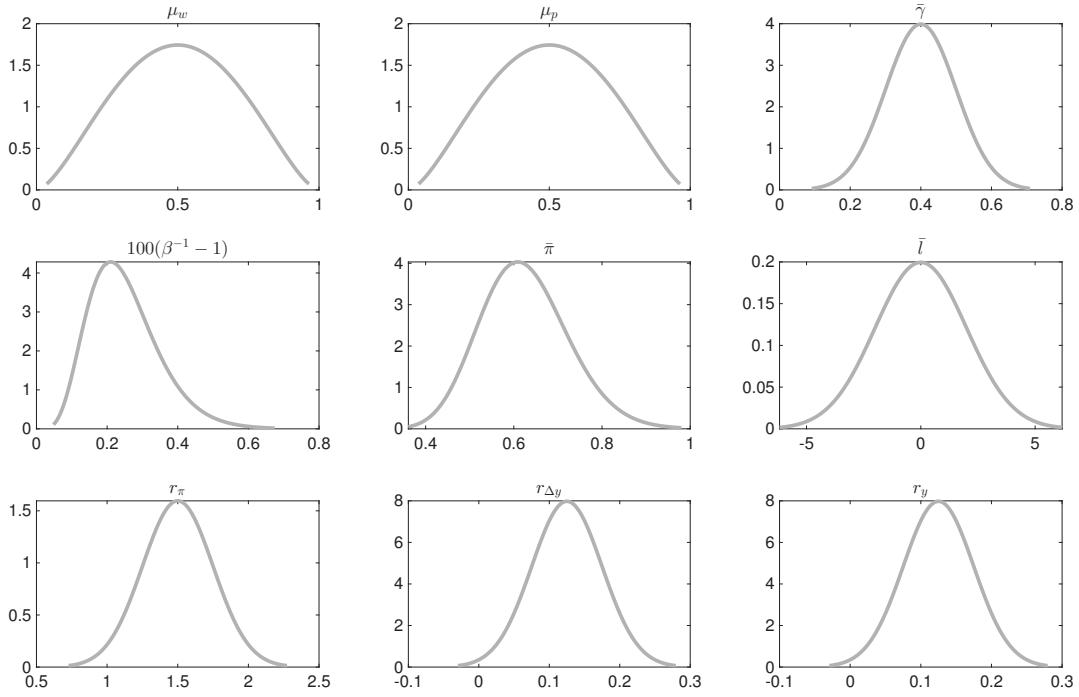


Figure 3: Priors.

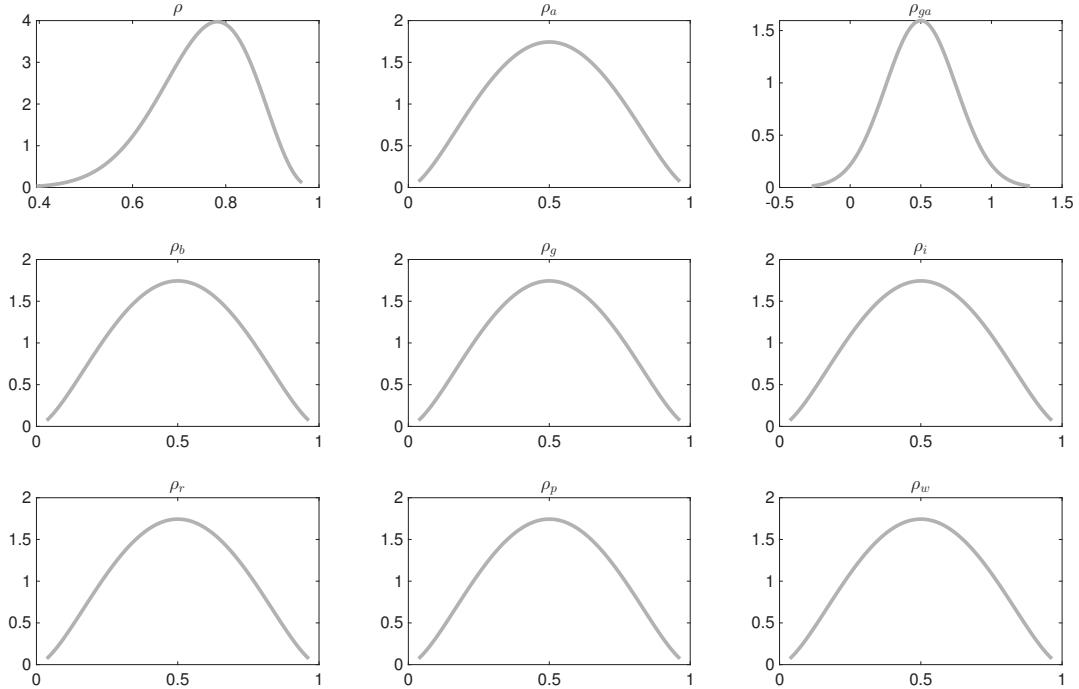


Figure 4: Priors.

Table 3: MATRIX OF COVARIANCE OF EXOGENOUS SHOCKS

	<i>Variables</i>	$\eta^a$	$\eta^b$	$\eta^g$	$\eta^i$	$\eta^m$	$\eta^p$	$\eta^w$
$\eta^a$	0.215332	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
$\eta^b$	0.000000	0.054482	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
$\eta^g$	0.000000	0.000000	0.282408	0.000000	0.000000	0.000000	0.000000	0.000000
$\eta^i$	0.000000	0.000000	0.000000	0.116804	0.000000	0.000000	0.000000	0.000000
$\eta^m$	0.000000	0.000000	0.000000	0.000000	0.083181	0.000000	0.000000	0.000000
$\eta^p$	0.000000	0.000000	0.000000	0.000000	0.000000	0.025784	0.000000	
$\eta^w$	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.029915	

Table 4: Endogenous

	Variable	LATEX	Description
labobs	$lHOURS$		log hours worked
robs	$FEDFUNDS$		Federal funds rate
pinfobs	$dlP$		Inflation
dy	$dlGDP$		Output growth rate
dc	$dlCONS$		Consumption growth rate
dinve	$dlINV$		Investment growth rate
dw	$dlWAG$		Wage growth rate
ewma	$\eta^{w,aux}$		Auxiliary wage markup moving average variable
epinfma	$\eta^{p,aux}$		Auxiliary price markup moving average variable
zcapf	$z^{flex}$		Capital utilization rate flex price economy
rkf	$r^{k,flex}$		rental rate of capital flex price economy
kf	$k^{s,flex}$		Capital services flex price economy
pkf	$q^{flex}$		real value of existing capital stock flex price economy
cf	$c^{flex}$		Consumption flex price economy
invef	$i^{flex}$		Investment flex price economy
yf	$y^{flex}$		Output flex price economy
labf	$l^{flex}$		hours worked flex price economy
wf	$w^{flex}$		real wage flex price economy
rrf	$r^{flex}$		real interest rate flex price economy
mc	$\mu_p$		gross price markup
zcap	$z$		Capital utilization rate
rk	$r^k$		rental rate of capital
k	$k^s$		Capital services
pk	$q$		real value of existing capital stock
c	$c$		Consumption
inve	$i$		Investment
y	$y$		Output
lab	$l$		hours worked
pinf	$\pi$		Inflation
w	$w$		real wage
r	$r$		nominal interest rate
a	$\varepsilon_a$		productivity process
b	$c_2 * \varepsilon_t^b$		Scaled risk premium shock
g	$\varepsilon^g$		Exogenous spending
qs	$\varepsilon^i$		Investment-specific technology
ms	$\varepsilon^r$		Monetary policy shock process
spinf	$\varepsilon^p$		Price markup shock process
sw	$\varepsilon^w$		Wage markup shock process
kpf	$k^{flex}$		Capital stock flex price economy
kp	$k$		Capital stock
muw	$\mu_w$		wage markup

Table 5: Exogenous

Variable	<b>LATEX</b>	Description
ea	$\eta^a$	productivity shock
eb	$\eta^b$	Investment-specific technology shock
eg	$\eta^g$	Spending shock
eqs	$\eta^i$	Investment-specific technology shock
em	$\eta^m$	Monetary policy shock
epinf	$\eta^p$	Price markup shock
ew	$\eta^w$	Wage markup shock

Table 6: Parameters

Variable	<b>LATEX</b>	Description
curvw	$\varepsilon_w$	Curvature Kimball aggregator wages
cgy	$\rho_{ga}$	Feedback technology on exogenous spending
curvp	$\varepsilon_p$	Curvature Kimball aggregator prices
constelab	$\bar{l}$	steady state hours
constepinf	$\bar{\pi}$	steady state inflation rate
constebeta	$100(\beta^{-1} - 1)$	time preference rate in percent
cmaaw	$\mu_w$	coefficient on MA term wage markup
cmap	$\mu_p$	coefficient on MA term price markup
calfa	$\alpha$	capital share
czcap	$\psi$	capacity utilization cost
csadjcost	$\varphi$	investment adjustment cost
ctou	$\delta$	depreciation rate
csigma	$\sigma_c$	risk aversion
chabb	$\lambda$	external habit degree
cfc	$\Phi$	fixed cost share
cindw	$\iota_w$	Indexation to past wages
cprobw	$\xi_w$	Calvo parameter wages
cindp	$\iota_p$	Indexation to past prices
cprobp	$\xi_p$	Calvo parameter prices
csigl	$\sigma_l$	Frisch elasticity
clandaw	$\phi_w$	Gross markup wages
crpi	$r_\pi$	Taylor rule inflation feedback
crdy	$r_{\Delta y}$	Taylor rule output growth feedback
cry	$r_y$	Taylor rule output level feedback
crr	$\rho$	interest rate persistence
crhoa	$\rho_a$	persistence productivity shock
crhoas	$d_2$	Unused parameter
crhob	$\rho_b$	persistence risk premium shock
crhog	$\rho_g$	persistence spending shock
crhols	$d_1$	Unused parameter

Table 6 – Continued

Variable	\texttt{ATEX}	Description
crhoqs	$\rho_i$	persistence risk premium shock
crhom <sub>s</sub>	$\rho_r$	persistence monetary policy shock
crhopinf	$\rho_p$	persistence price markup shock
crhow	$\rho_w$	persistence wage markup shock
ctrend	$\bar{\gamma}$	net growth rate in percent
cg	$\frac{\bar{g}}{\bar{y}}$	steady state exogenous spending share

Table 7: Parameter Values

Parameter	Value	Description
$\varepsilon_w$	10.000	Curvature Kimball aggregator wages
$\rho_{ga}$	0.564	Feedback technology on exogenous spending
$\varepsilon_p$	10.000	Curvature Kimball aggregator prices
$\bar{l}$	3.857	steady state hours
$\bar{\pi}$	0.873	steady state inflation rate
$100(\beta^{-1} - 1)$	0.230	time preference rate in percent
$\mu_w$	0.720	coefficient on MA term wage markup
$\mu_p$	0.665	coefficient on MA term price markup
$\alpha$	0.212	capital share
$\psi$	0.397	capacity utilization cost
$\varphi$	3.928	investment adjustment cost
$\delta$	0.025	depreciation rate
$\sigma_c$	1.111	risk aversion
$\lambda$	0.714	external habit degree
$\Phi$	1.486	fixed cost share
$\iota_w$	0.573	Indexation to past wages
$\xi_w$	0.743	Calvo parameter wages
$\iota_p$	0.371	Indexation to past prices
$\xi_p$	0.558	Calvo parameter prices
$\sigma_l$	1.916	Frisch elasticity
$\phi_w$	1.500	Gross markup wages
$r_\pi$	1.834	Taylor rule inflation feedback
$r_{\Delta y}$	0.211	Taylor rule output growth feedback
$r_y$	0.093	Taylor rule output level feedback
$\rho$	0.781	interest rate persistence
$\rho_a$	0.857	persistence productivity shock
$d_2$	1.000	Unused parameter
$\rho_b$	0.484	persistence risk premium shock
$\rho_g$	0.913	persistence spending shock
$d_1$	0.993	Unused parameter
$\rho_i$	0.884	persistence risk premium shock
$\rho_r$	0.161	persistence monetary policy shock
$\rho_p$	0.836	persistence price markup shock
$\rho_w$	0.894	persistence wage markup shock
$\bar{\gamma}$	0.353	net growth rate in percent
$\frac{g}{y}$	0.180	steady state exogenous spending share

Table 8: Prior information (parameters)

	Distribution	Mean	Mode	Std.dev.	Bounds*		90% HPDI	
					Lower	Upper	Lower	Upper
$\sigma_{\eta^a}$	Inv. Gamma	0.1000	0.0461	2.0000	0.0118	5595.7204	0.0326	0.2490
$\sigma_{\eta^b}$	Inv. Gamma	0.1000	0.0461	2.0000	0.0118	5595.7204	0.0326	0.2490
$\sigma_{\eta^g}$	Inv. Gamma	0.1000	0.0461	2.0000	0.0118	5595.7204	0.0326	0.2490
$\sigma_{\eta^i}$	Inv. Gamma	0.1000	0.0461	2.0000	0.0118	5595.7204	0.0326	0.2490
$\sigma_{\eta^m}$	Inv. Gamma	0.1000	0.0461	2.0000	0.0118	5595.7204	0.0326	0.2490
$\sigma_{\eta^p}$	Inv. Gamma	0.1000	0.0461	2.0000	0.0118	5595.7204	0.0326	0.2490
$\sigma_{\eta^w}$	Inv. Gamma	0.1000	0.0461	2.0000	0.0118	5595.7204	0.0326	0.2490
$\alpha$	Gaussian	0.3000	0.3000	0.0500	-0.0181	0.6181	0.2178	0.3822
$\psi$	Beta	0.5000	0.5000	0.1500	0.0040	0.9960	0.2526	0.7474
$\Phi$	Gaussian	1.2500	1.2500	0.1250	0.4548	2.0452	1.0444	1.4556
$\iota_w$	Beta	0.5000	0.5000	0.1500	0.0040	0.9960	0.2526	0.7474
$\xi_w$	Beta	0.5000	0.5000	0.1000	0.0471	0.9529	0.3351	0.6649
$\iota_p$	Beta	0.5000	0.5000	0.1500	0.0040	0.9960	0.2526	0.7474
$\xi_p$	Beta	0.5000	0.5000	0.1000	0.0471	0.9529	0.3351	0.6649
$\sigma_c$	Gaussian	1.5000	1.5000	0.3750	-0.8855	3.8855	0.8832	2.1168
$\sigma_l$	Gaussian	2.0000	2.0000	0.7500	-2.7710	6.7710	0.7664	3.2336
$\lambda$	Beta	0.7000	0.7222	0.1000	0.1025	0.9960	0.5242	0.8525
$\varphi$	Gaussian	4.0000	4.0000	1.5000	-5.5420	13.5420	1.5327	6.4673
$\mu_w$	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
$\mu_p$	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
$\bar{\gamma}$	Gaussian	0.4000	0.4000	0.1000	-0.2361	1.0361	0.2355	0.5645
$100(\beta^{-1} - 1)$	Gamma	0.2500	0.2100	0.1000	0.0031	1.4759	0.1111	0.4339
$\bar{\pi}$	Gamma	0.6250	0.6090	0.1000	0.1814	1.4844	0.4701	0.7981
$\bar{l}$	Gaussian	0.0000	0.0000	2.0000	-12.7227	12.7227	-3.2897	3.2897
$r_\pi$	Gaussian	1.5000	1.5000	0.2500	-0.0903	3.0903	1.0888	1.9112
$r_{\Delta y}$	Gaussian	0.1250	0.1250	0.0500	-0.1931	0.4431	0.0428	0.2072
$r_y$	Gaussian	0.1250	0.1250	0.0500	-0.1931	0.4431	0.0428	0.2072
$\rho$	Beta	0.7500	0.7817	0.1000	0.1073	0.9991	0.5701	0.8971
$\rho_a$	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
$\rho_{ga}$	Gaussian	0.5000	0.5000	0.2500	-1.0903	2.0903	0.0888	0.9112
$\rho_b$	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
$\rho_g$	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
$\rho_i$	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
$\rho_r$	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
$\rho_p$	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
$\rho_w$	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282

Note: Displayed bounds are after applying a prior truncation of options.prior\_trunc=1.00e-10

Table 9: COEFFICIENTS OF AUTOCORRELATION

	<i>Order</i>	1	2	3	4	5
$y$	0.9630	0.9040	0.8362	0.7663	0.6978	
$c$	0.9709	0.9201	0.8635	0.8076	0.7548	
$i$	0.9865	0.9541	0.9090	0.8555	0.7971	
$\pi$	0.8282	0.6680	0.5282	0.4106	0.3141	
$r$	0.8916	0.7529	0.6241	0.5136	0.4216	
$w$	0.9662	0.9195	0.8643	0.8045	0.7434	
$k^s$	0.9916	0.9773	0.9595	0.9398	0.9188	
$l$	0.9488	0.8743	0.7924	0.7106	0.6322	

Table 10: MATRIX OF CORRELATIONS

	<i>Variables</i>	<i>y</i>	<i>c</i>	<i>i</i>	$\pi$	<i>r</i>	<i>w</i>	$k^s$	<i>l</i>
<i>y</i>	1.0000	0.5493	0.7998	-0.0239	0.0764	0.3051	0.6782	0.8685	
<i>c</i>	0.5493	1.0000	0.1912	-0.2407	-0.3022	0.2816	0.6138	0.3721	
<i>i</i>	0.7998	0.1912	1.0000	0.1112	0.2915	0.2920	0.6727	0.6910	
$\pi$	-0.0239	-0.2407	0.1112	1.0000	0.6251	0.3018	0.0729	0.0164	
<i>r</i>	0.0764	-0.3022	0.2915	0.6251	1.0000	0.2133	0.1539	0.1395	
<i>w</i>	0.3051	0.2816	0.2920	0.3018	0.2133	1.0000	0.6642	-0.0359	
$k^s$	0.6782	0.6138	0.6727	0.0729	0.1539	0.6642	1.0000	0.3847	
<i>l</i>	0.8685	0.3721	0.6910	0.0164	0.1395	-0.0359	0.3847	1.0000	

Table 11: THEORETICAL MOMENTS

<i>VARIABLE</i>	<i>MEAN</i>	<i>STD.DEV.</i>	<i>VARIANCE</i>
$y$	0.0000	4.0789	16.6373
$c$	0.0000	3.4979	12.2350
$i$	0.0000	16.5616	274.2878
$\pi$	0.0000	0.5970	0.3564
$r$	0.0000	0.7109	0.5054
$w$	0.0000	1.7593	3.0953
$k^s$	0.0000	4.8061	23.0983
$l$	0.0000	2.5720	6.6154

Table 12: VARIANCE DECOMPOSITION (in percent)

	$\eta^a$	$\eta^b$	$\eta^g$	$\eta^i$	$\eta^m$	$\eta^p$	$\eta^w$
$y$	12.69	10.53	4.33	25.47	5.24	4.97	36.77
$c$	2.92	15.32	3.17	30.70	5.60	3.05	39.22
$i$	2.09	1.14	1.74	76.56	1.13	1.57	15.76
$\pi$	5.14	4.34	0.68	10.56	6.61	25.16	47.51
$r$	7.36	24.22	2.20	28.16	15.22	4.61	18.22
$w$	10.28	1.91	0.50	28.32	1.93	27.70	29.36
$k^s$	2.42	2.59	1.47	69.30	1.82	4.66	17.72
$l$	2.20	13.16	6.28	22.52	6.22	4.14	45.48

$$cpie=1+\frac{\bar{\pi}}{100}$$

$$c gamma = 1 + \frac{\bar{\gamma}}{100}$$

$$cbeta=\frac{1}{1+\frac{100(\beta^{-1}-1)}{100}}$$

$$clandap=\Phi$$

$$cbetabar=cbeta\,cgamma^{(-\sigma_c)}$$

$$cr=\frac{cpie}{cbeta\,cgamma^{(-\sigma_c)}}$$

$$crk=cbeta^{(-1)}\,cgamma^{\sigma_c}-(1-\delta)$$

$$cw=\left(\frac{\alpha^\alpha\;(1-\alpha)^{1-\alpha}}{clandap\;crk^\alpha}\right)^{\frac{1}{1-\alpha}}$$

$$cikbar=1-\frac{1-\delta}{cgamma}$$

$$cik=c gamma\,\left(1-\frac{1-\delta}{cgamma}\right)$$

$$clk=\frac{1-\alpha}{\alpha}\,\frac{crk}{cw}$$

$$cky=\Phi\,clk^{\alpha-1}$$

$$ciy=cik\,cky$$

$$ccy=1-\frac{\bar{g}}{\bar{y}}-cik\,cky$$

$$crkky=crk\,cky$$

$$cwhlc=\frac{cky\,crk\,\frac{(1-\alpha)\,\frac{1}{\phi_w}}{\alpha}}{ccy}$$

$$15\,$$

$$c w l y = 1 - c r k \, c k y$$

$$conster=100~(cr-1)$$

$$c1=\frac{\frac{\lambda}{cgamma}}{1+\frac{\lambda}{cgamma}}$$

$$c2=\frac{(\sigma_c-1)\;cwhlc}{\sigma_c\left(1+\frac{\lambda}{cgamma}\right)}$$

$$c3=\frac{1-\frac{\lambda}{cgamma}}{\sigma_c\left(1+\frac{\lambda}{cgamma}\right)}$$

$$i1=\frac{1}{1+cgamma\,cbetabar}$$

$$i2=\frac{1}{1+cgamma\,cbetabar}\,\frac{1}{cgamma^2\,\varphi}$$

$$q1=\frac{1-\delta}{1-\delta+crk}$$

$$q2=\frac{1}{\frac{1-\frac{\lambda}{cgamma}}{\sigma_c\left(1+\frac{\lambda}{cgamma}\right)}}$$

$$k1=1-cikbar$$

$$k2=\varphi\,cgamma^2\,cikbar$$

$$pi1=\iota_p\,\frac{1}{1+cgamma\,cbetabar\,\iota_p}$$

$$pi2=c gamma\,cbetabar\,\frac{1}{1+cgamma\,cbetabar\,\iota_p}$$

$$pi3=\frac{\frac{1}{1+cgamma\,cbetabar\,\iota_p}\,\frac{(1-\xi_p)\,(1-cgamma\,cbetabar\,\xi_p)}{\xi_p}}{1+\left(\Phi-1\right)\,\varepsilon_p}$$

$$\phantom{0}16$$

$$w1 = \frac{1}{1 + cgamma cbar}$$

$$w2 = \frac{1 + cgamma cbar \iota_w}{1 + cgamma cbar}$$

$$w3 = \frac{\iota_w}{1 + cgamma cbar}$$

$$w4 = \frac{(1 - \xi_w) (1 - cgamma cbar \xi_w)}{(1 + cgamma cbar) \xi_w} \frac{1}{1 + (\phi_w - 1) \varepsilon_w}$$

$$w5 = \frac{1}{1 - \frac{\lambda}{cgamma}}$$

$$w6 = \frac{\frac{\lambda}{cgamma}}{1 - \frac{\lambda}{cgamma}}$$

$$\varepsilon_{at} = \alpha r^{k,flex}_t + (1 - \alpha) w^{flex}_t \quad (1)$$

$$z^{flex}_t = r^{k,flex}_t \frac{1}{\frac{\psi}{1-\psi}} \quad (2)$$

$$r^{k,flex}_t = w^{flex}_t + l^{flex}_t - k^{s,flex}_t \quad (3)$$

$$k^{s,flex}_t = z^{flex}_t + k^{flex}_{t-1} \quad (4)$$

$$i^{flex}_t = i1 i^{flex}_{t-1} + (1 - i1) i^{flex}_{t+1} + i2 q^{flex}_t + \varepsilon^i_t \quad (5)$$

$$q^{flex}_t = q1 q^{flex}_{t+1} + (1 - q1) r^{k,flex}_{t+1} + q2 c2 * \varepsilon^b_{tt} - r^{flex}_t \quad (6)$$

$$c^{flex}_t = c2 * \varepsilon^b_{tt} + c1 c^{flex}_{t-1} + (1 - c1) c^{flex}_{t+1} + c2 (l^{flex}_t - l^{flex}_{t+1}) - r^{flex}_t c3 \quad (7)$$

$$y^{flex}_t = ccy c^{flex}_t + i^{flex}_t ciy + \varepsilon^g_t + z^{flex}_t crkky \quad (8)$$

$$y^{flex}_t = \Phi (\varepsilon_{at} + \alpha k^{s,flex}_t + (1 - \alpha) l^{flex}_t) \quad (9)$$

$$w^{flex}_t = l^{flex}_t \sigma_l + c^{flex}_t w5 - c^{flex}_{t-1} w6 \quad (10)$$

$$k^{flex}_t = k^{flex}_{t-1} k1 + i^{flex}_t (1 - k1) + \varepsilon^i_t k2 \quad (11)$$

$$\mu_{pt} = \alpha r^k_t + (1 - \alpha) w_t - \varepsilon_{at} \quad (12)$$

$$z_t = \frac{1}{\frac{\psi}{1-\psi}} r^k_t \quad (13)$$

$$r^k_t = w_t + l_t - k^s_t \quad (14)$$

$$k^s_t = z_t + k_{t-1} \quad (15)$$

$$k_t = \varepsilon^i_t k2 + k1 k_{t-1} + (1 - k1) i_t \quad (16)$$

$$i_t = \varepsilon^i_t + i1 i_{t-1} + (1 - i1) i_{t+1} + i2 q_t \quad (17)$$

$$q_t = q2 c_2 * \varepsilon^b_{tt} + q1 q_{t+1} + (1 - q1) r^k_{t+1} - (r_t - \pi_{t+1}) \quad (18)$$

$$c_t = c_2 * \varepsilon^b_{tt} + c1 c_{t-1} + (1 - c1) c_{t+1} + c2 (l_t - l_{t+1}) - c3 (r_t - \pi_{t+1}) \quad (19)$$

$$y_t = \varepsilon^g_t + ccy c_t + ciy i_t + crkky z_t \quad (20)$$

$$y_t = \Phi (\varepsilon_{at} + \alpha k^s_t + (1 - \alpha) l_t) \quad (21)$$

$$\pi_t = pi1 \pi_{t-1} + \pi_{t+1} pi2 + \mu_{pt} pi3 + \varepsilon^p_t \quad (22)$$

$$w_t = w1 w_{t-1} + (1 - w1) (\pi_{t+1} + w_{t+1}) - \pi_t w2 + \pi_{t-1} w3 - w4 \mu_{wt} + \varepsilon^w_t \quad (23)$$

$$\mu_{wt} = w_t - \left( \sigma_l l_t + \frac{1}{1 - \frac{\lambda}{cgamma}} \left( c_t - \frac{\lambda}{cgamma} c_{t-1} \right) \right) \quad (24)$$

$$r_t = \pi_t r_\pi (1 - \rho) + (1 - \rho) r_y (y_t - y^{flex}_t) + r_{\Delta y} (y_t - y^{flex}_t - y_{t-1} + y^{flex}_{t-1}) + \rho r_{t-1} + \varepsilon^r_t \quad (25)$$

$$\varepsilon_{at} = \rho_a \varepsilon_{at-1} + \eta^a_t \quad (26)$$

$$c_2 * \varepsilon^b_{tt} = \rho_b c_2 * \varepsilon^b_{tt-1} + \eta^b_t \quad (27)$$

$$\varepsilon^g_t = \rho_g \varepsilon^g_{t-1} + \eta^g_t + \eta^a_t \rho_{ga} \quad (28)$$

$$\varepsilon^i_t = \rho_i \varepsilon^i_{t-1} + \eta^i_t \quad (29)$$

$$\varepsilon^r_t = \rho_r \varepsilon^r_{t-1} + \eta^m_t \quad (30)$$

$$\varepsilon^p_t = \rho_p \varepsilon^p_{t-1} + \eta^{p,aux}_t - \mu_p \eta^{p,aux}_{t-1} \quad (31)$$

$$\eta^{p,aux}_t = \eta^p_t \quad (32)$$

$$\varepsilon^w_t = \rho_w \varepsilon^w_{t-1} + \eta^{w,aux}_t - \mu_w \eta^{w,aux}_{t-1} \quad (33)$$

$$\eta^{w,aux}_t = \eta^w_t \quad (34)$$

$$dlGDP_t = \bar{\gamma} + y_t - y_{t-1} \quad (35)$$

$$dlCONS_t = \bar{\gamma} + c_t - c_{t-1} \quad (36)$$

$$dlINV_t = \bar{\gamma} + i_t - i_{t-1} \quad (37)$$

$$dlWAG_t = \bar{\gamma} + w_t - w_{t-1} \quad (38)$$

$$dlP_t = \bar{\pi} + \pi_t \quad (39)$$

$$FEDFUNDS_t = r_t + conster \quad (40)$$

$$lHOURS_t = l_t + \bar{l} \quad (41)$$

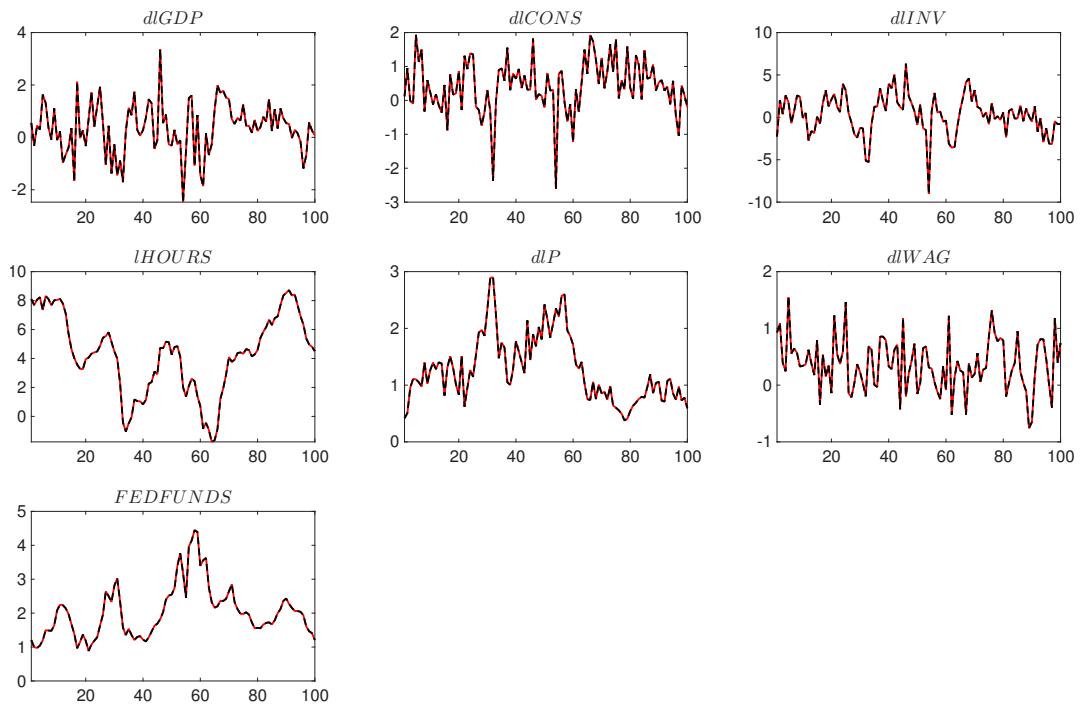


Figure 5: Historical and smoothed variables.

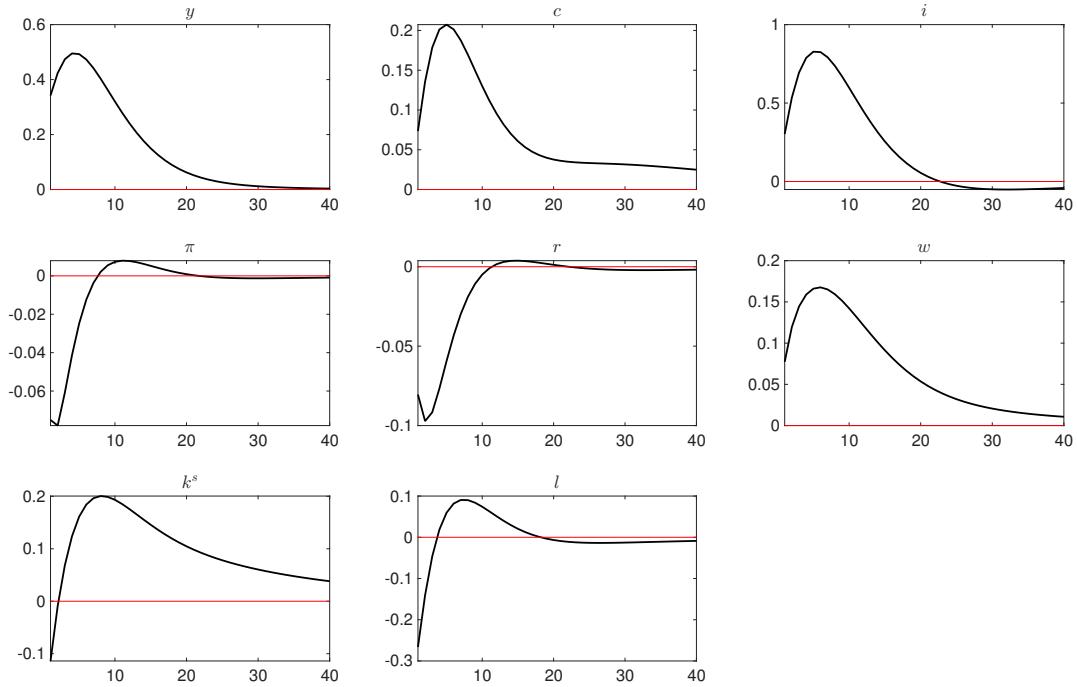


Figure 6: Impulse response functions (orthogonalized shock to  $\eta^a$ ).

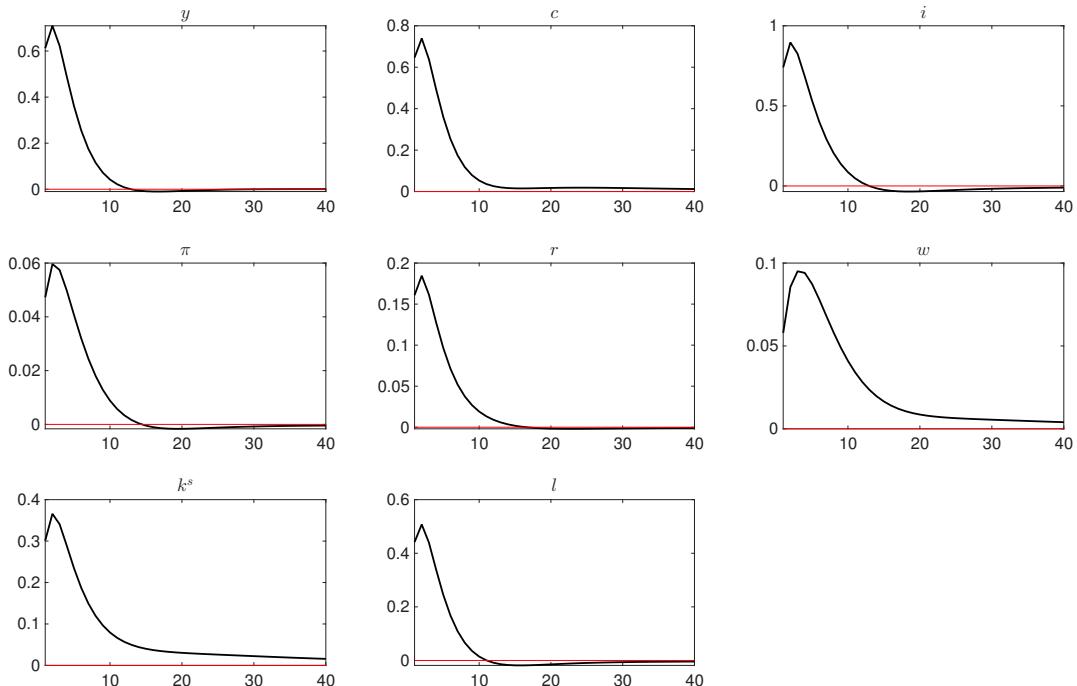


Figure 7: Impulse response functions (orthogonalized shock to  $\eta^b$ ).

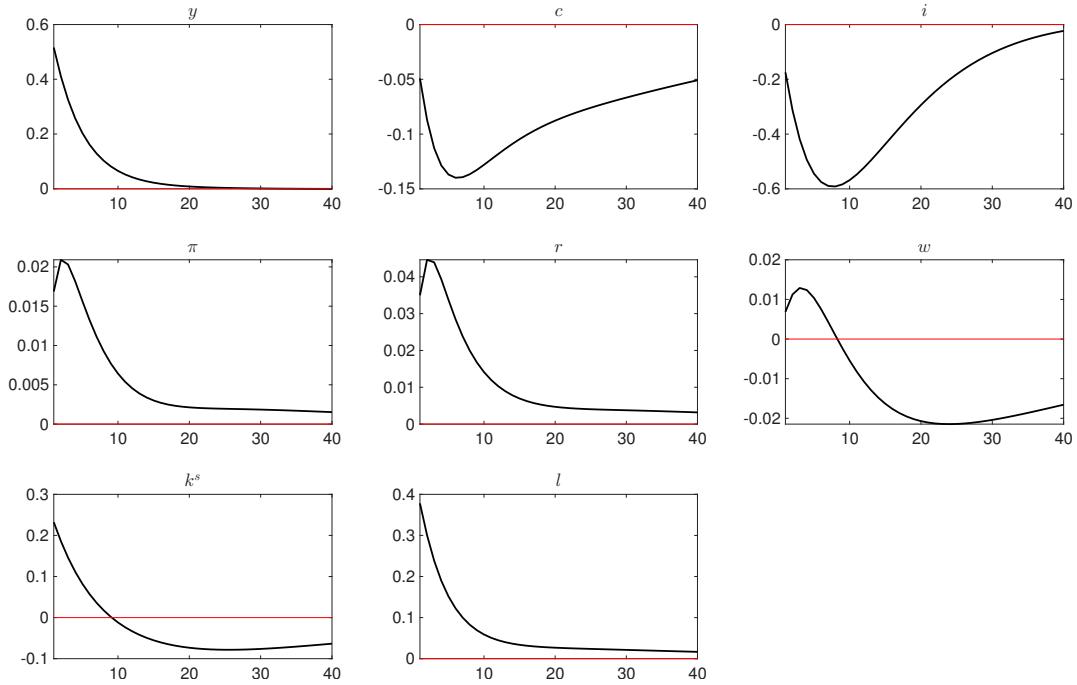


Figure 8: Impulse response functions (orthogonalized shock to  $\eta^g$ ).

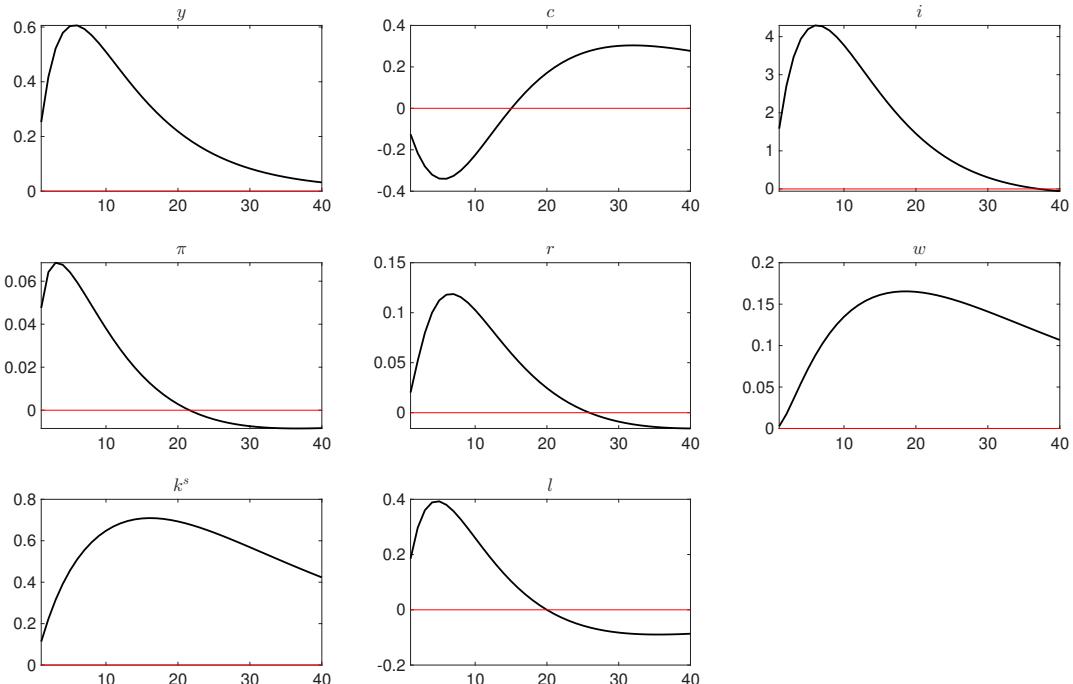


Figure 9: Impulse response functions (orthogonalized shock to  $\eta^i$ ).

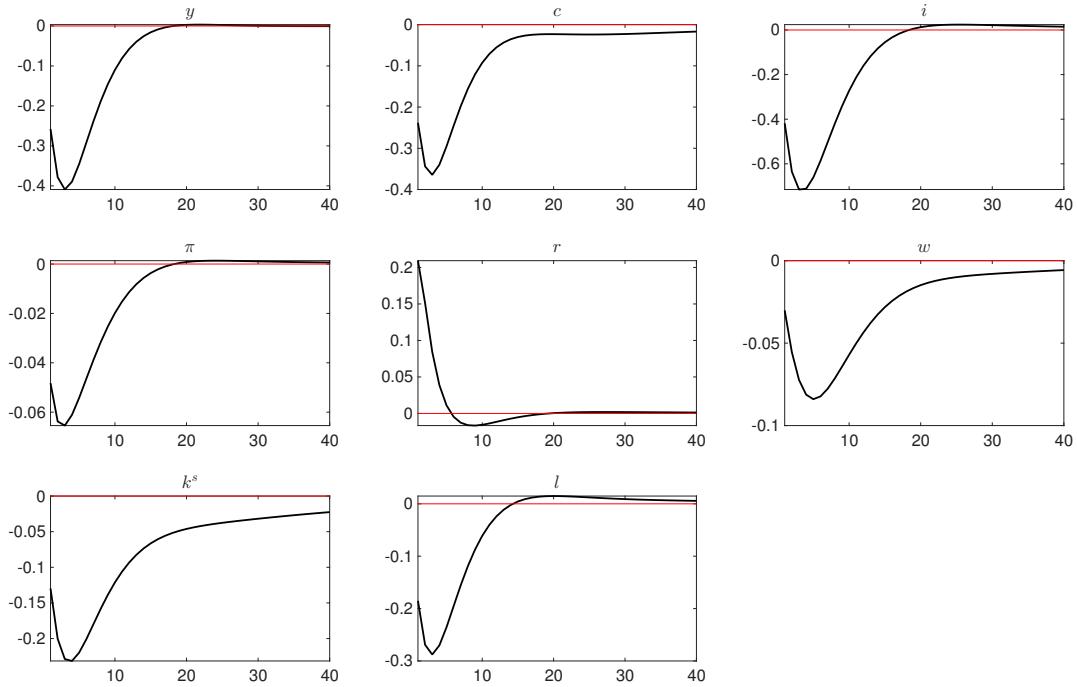


Figure 10: Impulse response functions (orthogonalized shock to  $\eta^m$ ).

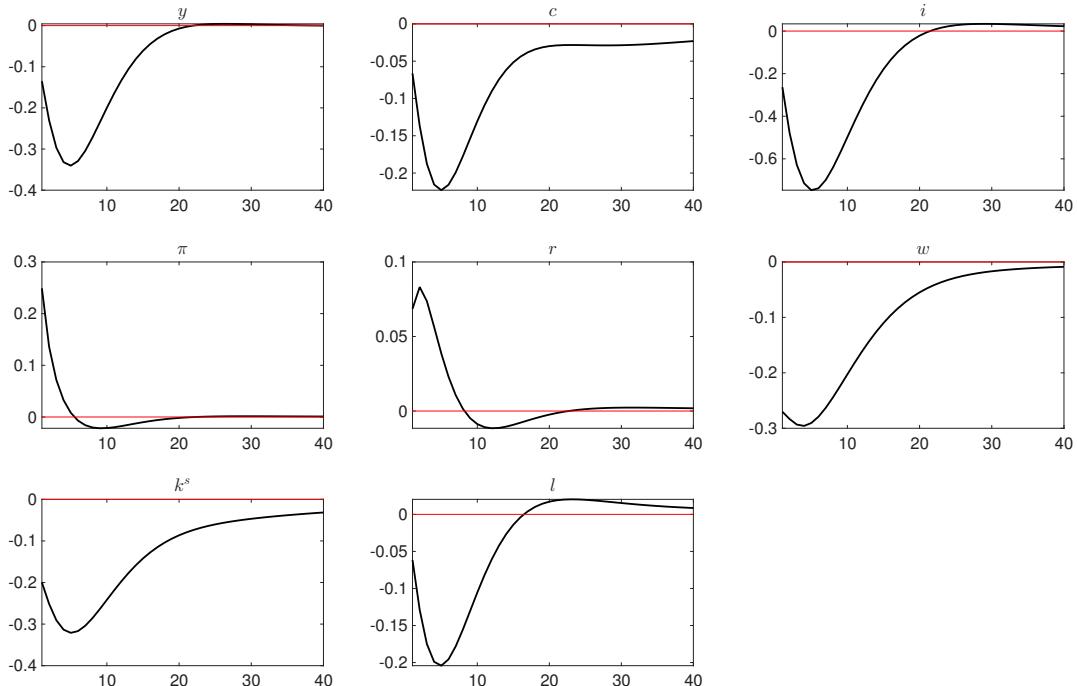


Figure 11: Impulse response functions (orthogonalized shock to  $\eta^p$ ).

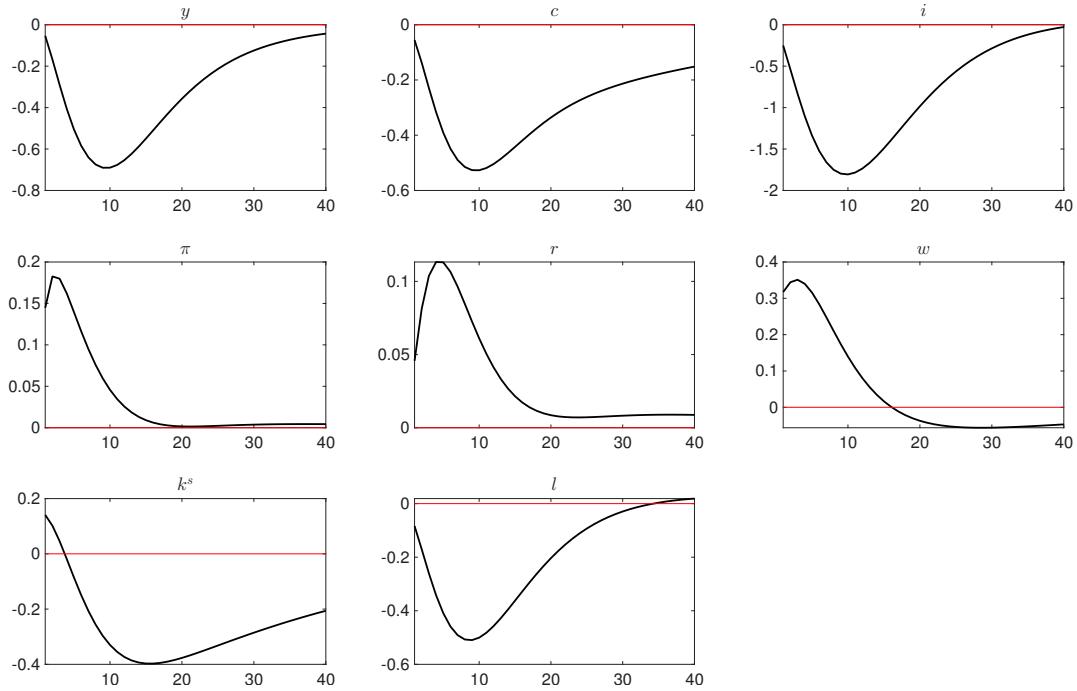


Figure 12: Impulse response functions (orthogonalized shock to  $\eta^w$ ).

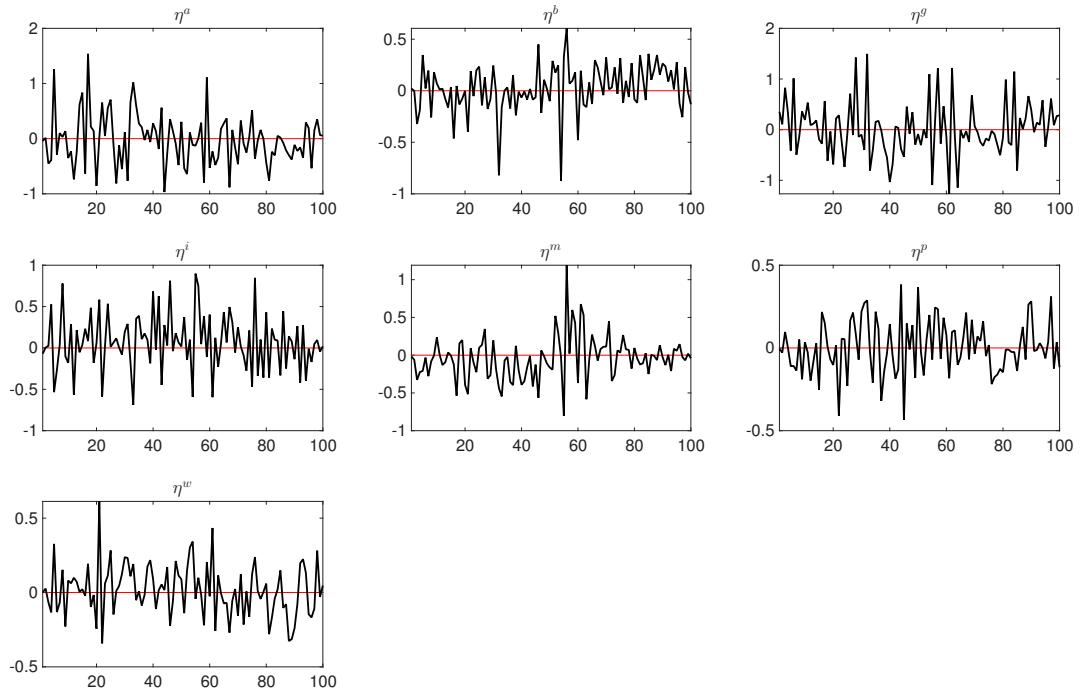


Figure 13: Smoothed shocks.