

Table 1: Results from posterior maximization (parameters)

	Dist.	Prior		Posterior	
		Mean	Stdev	Mode	Stdev
$\alpha$	norm	0.300	0.0500	0.3906	0.0241
$\psi$	beta	0.500	0.1500	0.6150	0.0490
$\Phi$	norm	1.250	0.1250	1.1968	0.0549
$\iota_w$	beta	0.500	0.1500	0.1752	0.0759
$\xi_w$	beta	0.500	0.1000	0.8972	0.0193
$\iota_p$	beta	0.500	0.1500	0.1815	0.0676
$\xi_p$	beta	0.500	0.1000	0.8428	0.0493
$\sigma_c$	norm	1.500	0.3750	1.4501	0.0742
$\sigma_l$	norm	2.000	0.7500	0.0404	0.3553
$\lambda$	beta	0.700	0.1000	0.3156	0.0641
$\varphi$	norm	4.000	1.5000	0.0780	0.0181
$r_\pi$	norm	1.500	0.2500	1.7781	0.2067
$r_y$	norm	0.125	0.0500	0.0606	0.0330
$r_{\Delta y}$	norm	0.125	0.0500	0.2875	0.0258
$\rho$	beta	0.750	0.1000	0.9311	0.0223
$n_*$	norm	0.000	2.0000	2.9819	0.9572
$\gamma$	norm	0.400	0.1000	0.5781	0.0848
$\zeta_{sp}$	beta	0.050	0.0050	0.0434	0.0046
$\bar{\pi}$	gamma	0.625	0.2000	0.3870	0.0694
$\rho_{ga}$	beta	0.500	0.2000	0.6122	0.1967
$\rho_a$	beta	0.500	0.2000	0.9677	0.0110
$\rho_b$	beta	0.500	0.2000	0.8577	0.0238
$\rho_g$	beta	0.500	0.2000	0.9835	0.0077
$\rho_i$	beta	0.500	0.2000	0.9956	0.0021
$\rho_r$	beta	0.500	0.2000	0.0641	0.0385
$\rho_p$	beta	0.500	0.2000	0.9673	0.0264
$\rho_w$	beta	0.500	0.2000	0.2546	0.1427
$\rho_{\sigma_w}$	beta	0.750	0.1500	0.9890	0.0109
$\rho_{\pi_*}$	beta	0.750	0.1500	0.9940	0.0049
$\mu_p$	beta	0.500	0.2000	0.8372	0.0503
$\mu_w$	beta	0.500	0.2000	0.4425	0.1204

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

		Prior		Posterior	
		Dist.	Mean	Stdev	Mode
$\eta^a$	invg	0.100	2.0000	0.5696	0.0294
$\eta^b$	invg	0.100	2.0000	0.1271	0.0137
$\eta^g$	invg	0.100	2.0000	2.5326	0.1214
$\eta^i$	invg	0.100	2.0000	1.8464	0.2507
$\eta^m$	invg	0.100	2.0000	0.3307	0.0266
$\eta^p$	invg	0.100	2.0000	0.1886	0.0128
$\eta^w$	invg	0.100	2.0000	0.4943	0.0300
$\eta^{\sigma_w}$	invg	0.100	2.0000	0.0777	0.0134
$\eta^{\pi^*}$	invg	0.100	2.0000	0.0577	0.0242

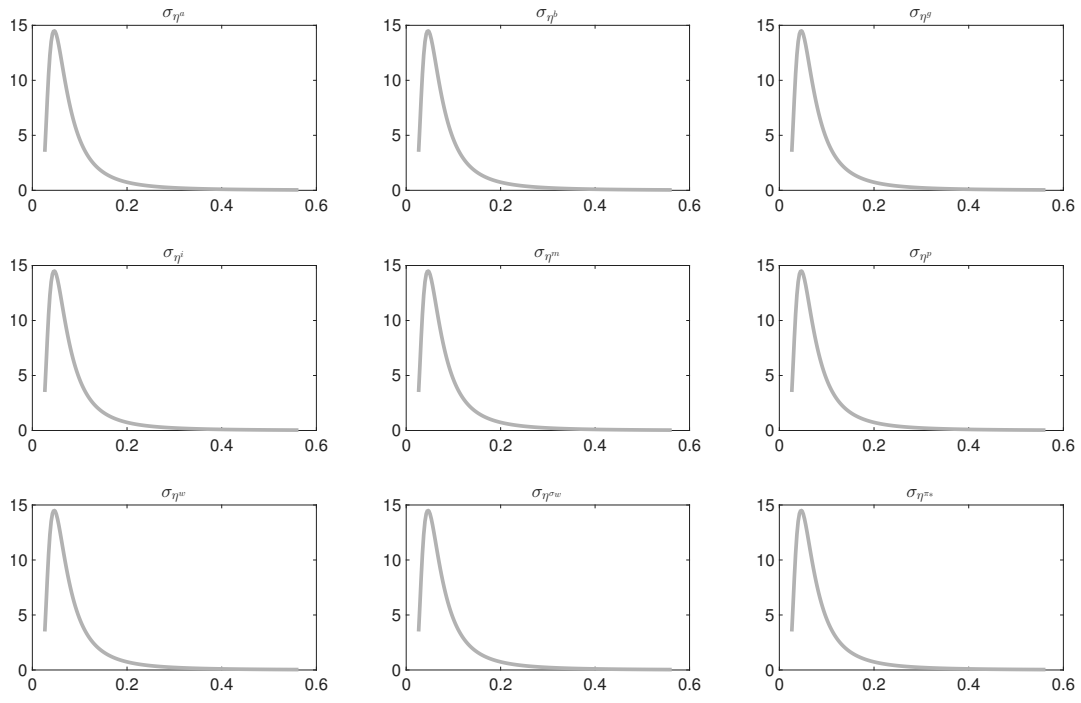


Figure 1: Priors.

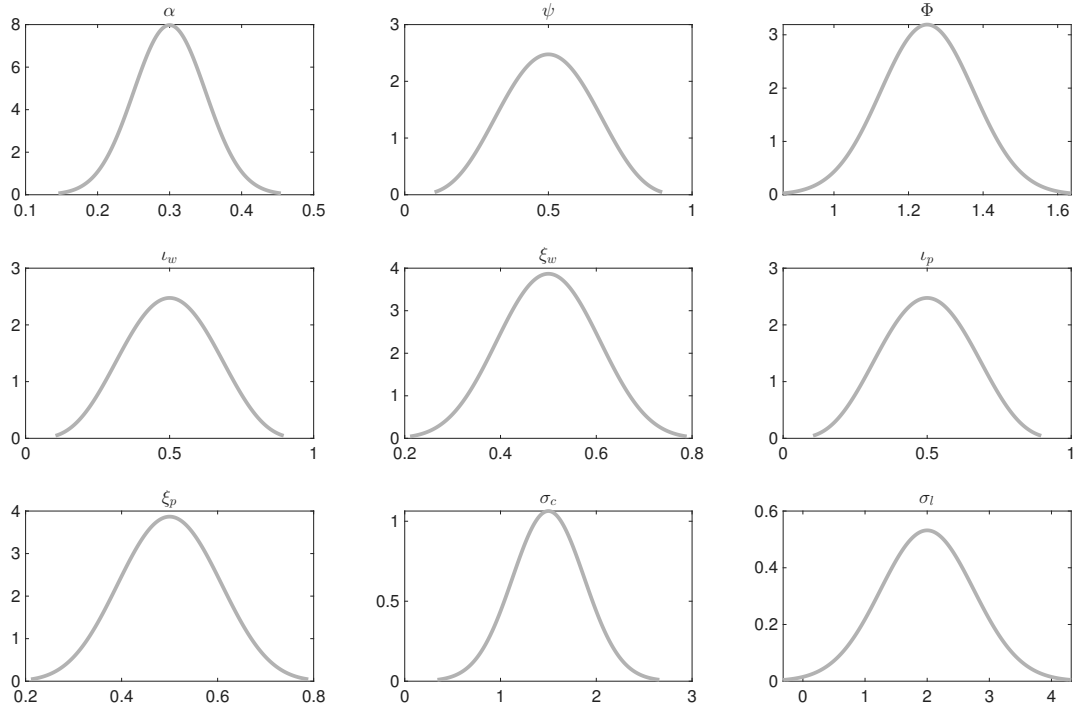


Figure 2: Priors.

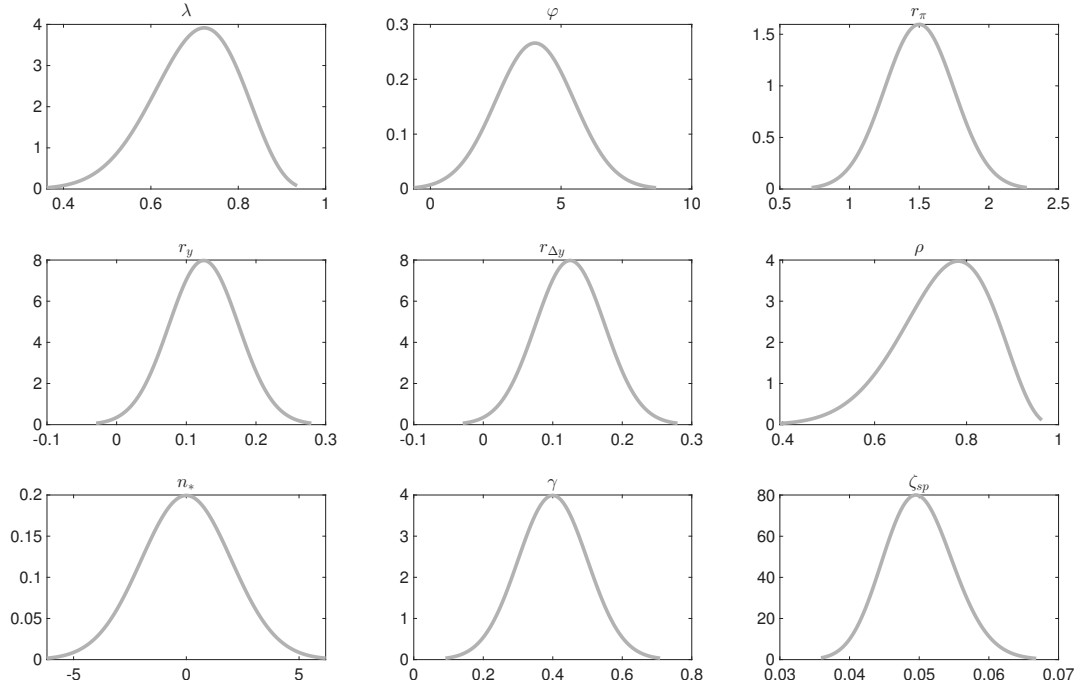


Figure 3: Priors.

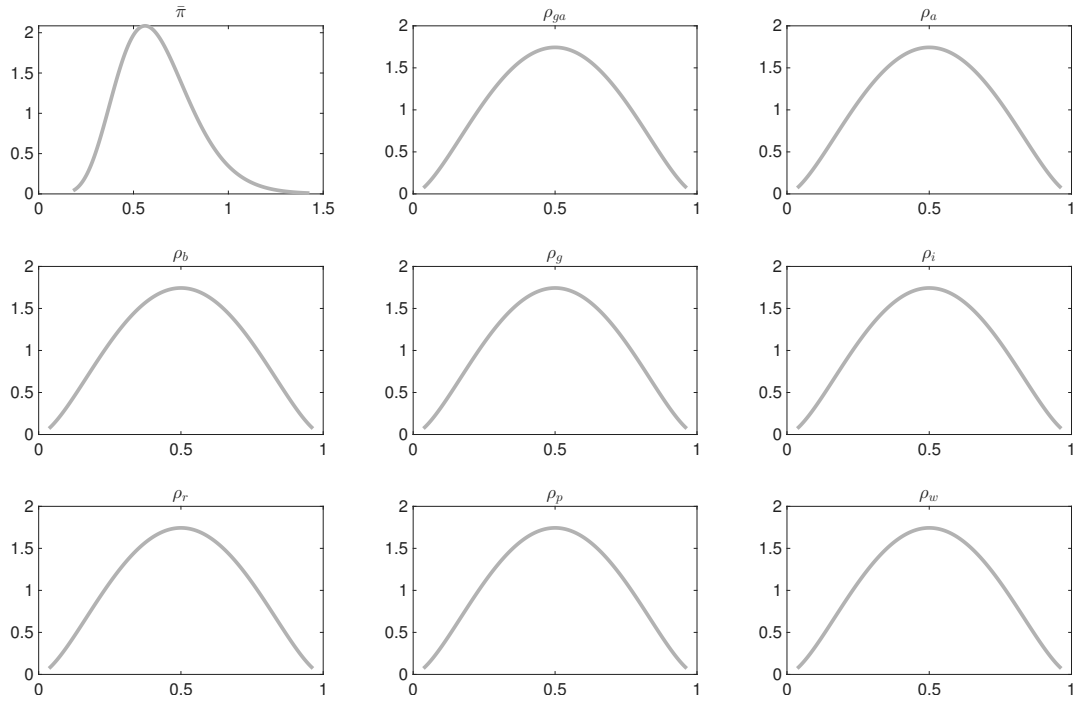


Figure 4: Priors.

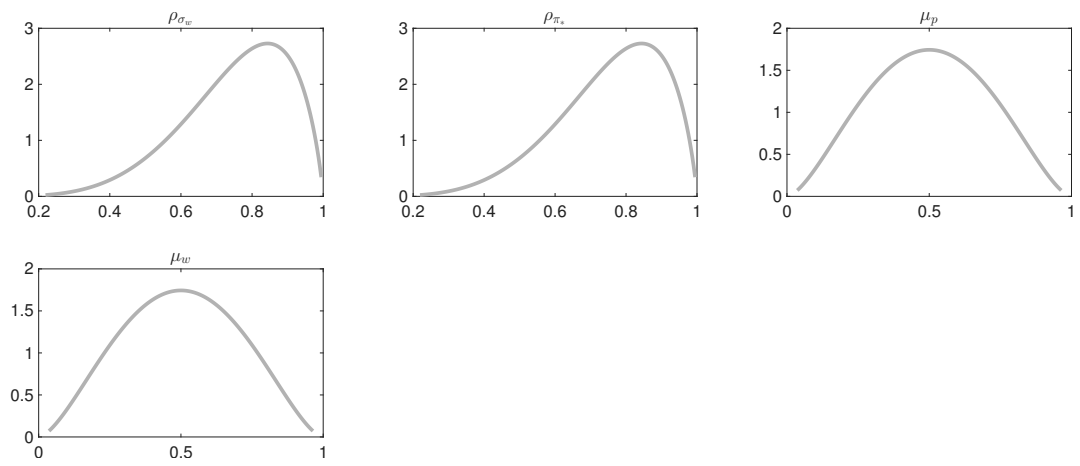


Figure 5: Priors.

Table 3: MATRIX OF COVARIANCE OF EXOGENOUS SHOCKS

<i>Variables</i>	$\eta^a$	$\eta^b$	$\eta^g$	$\eta^i$	$\eta^m$	$\eta^p$	$\eta^w$	$\eta^{\sigma_w}$	$\eta^{\pi_*}$
$\eta^a$	0.324482	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
$\eta^b$	0.000000	0.016165	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
$\eta^g$	0.000000	0.000000	6.413922	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
$\eta^i$	0.000000	0.000000	0.000000	3.409015	0.000000	0.000000	0.000000	0.000000	0.000000
$\eta^m$	0.000000	0.000000	0.000000	0.000000	0.109337	0.000000	0.000000	0.000000	0.000000
$\eta^p$	0.000000	0.000000	0.000000	0.000000	0.000000	0.035568	0.000000	0.000000	0.000000
$\eta^w$	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.244287	0.000000	0.000000
$\eta^{\sigma_w}$	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.006033	0.000000
$\eta^{\pi_*}$	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.003333
$\eta^{z_p}$	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Table 4: Endogenous

Variable	L <sup>A</sup> T <sub>E</sub> X	Description
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
rk	$r^k$	rental rate of capital
k	$k^s$	Capital services
mc	$\mu_p$	gross price markup
spinf	$\varepsilon^p$	Price markup shock process
sw	$\varepsilon^w$	Wage markup shock process
g	$\varepsilon^g$	Exogenous spending
b	$c_2 * \varepsilon_t^b$	Scaled risk premium shock
rkf	$r^{k,flex}$	rental rate of capital flex price economy
kf	$k^{s,flex}$	Capital services 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
sobs	<i>Spread</i>	BBB-AAA Rate Spread
labobs	<i>lHOURS</i>	log hours worked
robs	<i>FEDFUNDS</i>	Federal funds rate
pinfobs	<i>dlP</i>	Inflation
dy	<i>dlGDP</i>	Output growth rate
dc	<i>dlCONS</i>	Consumption growth rate
dinve	<i>dlINV</i>	Investment growth rate
dw	<i>dlWAG</i>	Wage growth rate
wh	$w^h$	Marginal rate of substitution
rktl	$r^{ktil}$	Return to capital
ztil	$z^{til}$	Stationary Technology shock
sigw	$\sigma_w$	Financial shock
pist	$\pi_*$	Inflation Target
og	<i>OG</i>	OutputGap
zp	$z_p$	Permanent Technology shock
n	$n$	Entrepreneurial Net Worth
z	$w$	Trend growth rate
u	$u$	Capital utilization rate
mu	$\varepsilon^i$	Investment-specific technology
rm	$\varepsilon^r$	Monetary policy shock process
kbar	$k$	Capital stock
qk	$q$	real value of existing capital stock
rf	$r^{flex}$	real interest rate flex price economy

Table 4 – Continued

Variable	$\LaTeX$	Description
kbarf	$k^{flex}$	Capital stock flex price economy
uf	$z^{flex}$	Capital utilization rate flex price economy
qkf	$q^{flex}$	real value of existing capital stock flex price economy
AUX_EXO_LAG_52_0	$AUX\_EXO\_LAG\_52\_0$	AUX_EXO_LAG_52_0
AUX_EXO_LAG_53_0	$AUX\_EXO\_LAG\_53\_0$	AUX_EXO_LAG_53_0

Table 5: Exogenous

Variable	$\LaTeX$	Description
ea	$\eta^a$	TFP shock
eb	$\eta^b$	Risk Premium 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
esigw	$\eta^{\sigma_w}$	Financial shock
epist	$\eta^{\pi^*}$	Inflation Target shock
ezp	$\eta^{z^p}$	Permanent technology shock

Table 6: Parameters

Variable	$\LaTeX$	Description
cbeta	$\beta$	discount rate
cepsp	$\varepsilon_w$	Curvature Kimball aggregator wages
cepsw	$\varepsilon_p$	Curvature Kimball aggregator prices
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
crpi	$r_\pi$	Taylor rule inflation feedback
crdy	$r_{\Delta y}$	Taylor rule output growth feedback



Table 6 – Continued

Variable	$\LaTeX$	Description
cry	$r_y$	Taylor rule output level feedback
crr	$\rho$	interest rate persistence
czeta_spb	$\zeta_{sp}$	Spread elasticity
cgamma_star	$\gamma^*$	Wealth parameter
cvstar	$v^*$	Wealth parameter
cnstar	$n_*$	SS Entrepreneurial wealth
czeta_nRk	$\zeta_{nRk}$	Net Worth parameter
czeta_nR	$\zeta_{nR}$	Net Worth parameter
czeta_nsigw	$\zeta_{n\sigma_w}$	Net Worth parameter
czeta_spsigw	$\zeta_{sp\sigma_w}$	Net Worth parameter
czeta_nqk	$\zeta_{nqk}$	Net Worth parameter
czeta_nn	$\zeta_{nn}$	Net Worth parameter
cgy	$\rho_{ga}$	Feedback technology on exogenous spending
cmaw	$\mu_w$	coefficient on MA term wage markup
cmap	$\mu_p$	coefficient on MA term price markup
crhosigw	$\rho_{\sigma_w}$	persistence Financial shock
crhopist	$\rho_{\pi^*}$	persistence Inflation Target shock
crhozp	$\rho_{zp}$	persistence permanent technology shock
csigma_spinf	$\sigma_{map}$	price markup MA scaling
csigma_sw	$\sigma_{maw}$	wage markup MA scaling
crhoa	$\rho_a$	persistence productivity shock
crhob	$\rho_b$	persistence risk premium shock
crhog	$\rho_g$	persistence spending shock
crhoqs	$\rho_i$	persistence risk premium shock
crhoms	$\rho_r$	persistence monetary policy shock
crhopinf	$\rho_p$	persistence price markup shock
crhow	$\rho_w$	persistence wage markup shock
cgamma	$\gamma$	Adjusted trend
crkstar	$r\bar{k}$	SS return on capital
ckstar	$k^*$	Capital-Output ratio
ckbarstar	$\bar{k}^*$	SS Capital-Output ratio
cinvestar	$\frac{\bar{i}}{\bar{y}}$	Private investment share in aggregate output
cystar	$\frac{\bar{y}^p}{\bar{y}}$	Private output share in aggregate output
ccstar	$\frac{\bar{c}}{\bar{y}}$	Private consumption share in aggregate output
cwl_c	$wl_c$	Consumption wage parameter
conster	$\bar{r}$	steady state interest rate
constelab	$\bar{l}$	steady state hours
constepinf	$\bar{\pi}$	steady state inflation rate
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
$\beta$	0.999	discount rate
$\varepsilon_w$	10.000	Curvature Kimball aggregator wages
$\varepsilon_p$	10.000	Curvature Kimball aggregator prices
$\alpha$	0.391	capital share
$\psi$	0.615	capacity utilization cost
$\varphi$	0.078	investment adjustment cost
$\delta$	0.025	depreciation rate
$\sigma_c$	1.450	risk aversion
$\lambda$	0.316	external habit degree
$\Phi$	1.197	fixed cost share
$\iota_w$	0.175	Indexation to past wages
$\xi_w$	0.897	Calvo parameter wages
$\iota_p$	0.182	Indexation to past prices
$\xi_p$	0.843	Calvo parameter prices
$\sigma_l$	0.040	Frisch elasticity
$r_\pi$	1.778	Taylor rule inflation feedback
$r_{\Delta y}$	0.288	Taylor rule output growth feedback
$r_y$	0.061	Taylor rule output level feedback
$\rho$	0.931	interest rate persistence
$\zeta_{sp}$	0.043	Spread elasticity
$\gamma^*$	0.990	Wealth parameter
$v^*$	2.471	Wealth parameter
$n_*$	2.982	SS Entrepreneurial wealth
$\zeta_{nRk}$	1.694	Net Worth parameter
$\zeta_{nR}$	0.693	Net Worth parameter
$\zeta_{n\sigma_w}$	0.004	Net Worth parameter
$\zeta_{sp\sigma_w}$	0.028	Net Worth parameter
$\zeta_{nqk}$	0.002	Net Worth parameter
$\zeta_{nn}$	0.999	Net Worth parameter
$\rho_{ga}$	0.612	Feedback technology on exogenous spending
$\mu_w$	0.443	coefficient on MA term wage markup
$\mu_p$	0.837	coefficient on MA term price markup
$\rho_{\sigma_w}$	0.989	persistence Financial shock
$\rho_{\pi_*}$	0.994	persistence Inflation Target shock
$\rho_{zp}$	0.950	persistence permanent technology shock
$\sigma_{map}$	1.000	price markup MA scaling
$\sigma_{maw}$	1.000	wage markup MA scaling
$\rho_a$	0.968	persistence productivity shock
$\rho_b$	0.858	persistence risk premium shock
$\rho_g$	0.983	persistence spending shock
$\rho_i$	0.996	persistence risk premium shock
$\rho_r$	0.064	persistence monetary policy shock
$\rho_p$	0.967	persistence price markup shock

Table 7 – Continued

Parameter	Value	Description
$\rho_w$	0.255	persistence wage markup shock
$\gamma$	0.578	Adjusted trend
$r\bar{k}$	0.036	SS return on capital
$k^*$	4.149	Capital-Output ratio
$\bar{k}^*$	4.165	SS Capital-Output ratio
$\frac{\bar{i}}{\bar{y}}$	0.120	Private investment share in aggregate output
$\frac{\bar{y}_p}{\bar{y}}$	0.845	Private output share in aggregate output
$\frac{\bar{c}}{\bar{y}}$	0.573	Private consumption share in aggregate output
$wl_c$	0.808	Consumption wage parameter
$\bar{r}$	0.700	steady state interest rate
$\bar{l}$	0.000	steady state hours
$\bar{\pi}$	0.387	steady state inflation rate
$\bar{\gamma}$	0.400	net growth rate in percent
$\frac{\bar{g}}{\bar{y}}$	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
$\sigma_{\eta^{\sigma_w}}$	Inv. Gamma	0.1000	0.0461	2.0000	0.0118	5595.7204	0.0326	0.2490
$\sigma_{\eta^{\pi*}}$	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
$r_\pi$	Gaussian	1.5000	1.5000	0.2500	-0.0903	3.0903	1.0888	1.9112
$r_y$	Gaussian	0.1250	0.1250	0.0500	-0.1931	0.4431	0.0428	0.2072
$r_{\Delta y}$	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
$n_*$	Gaussian	0.0000	0.0000	2.0000	-12.7227	12.7227	-3.2897	3.2897
$\gamma$	Gaussian	0.4000	0.4000	0.1000	-0.2361	1.0361	0.2355	0.5645
$\zeta_{sp}$	Beta	0.0500	0.0495	0.0050	0.0243	0.0881	0.0421	0.0585
$\bar{\pi}$	Gamma	0.6250	0.5610	0.2000	0.0280	2.8267	0.3362	0.9862
$\rho_{ga}$	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
$\rho_a$	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
$\rho_b$	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
$\rho_{\sigma_w}$	Beta	0.7500	0.8438	0.1500	0.0114	1.0000	0.4671	0.9519

\*Displayed bounds are after applying a prior truncation of options'.trunc=0.000

(Continued on next page)

Table 8: (continued)

	Distribution	Mean	Mode	Std.dev.	Bounds*		90% HPDI	
					Lower	Upper	Lower	Upper
$\rho_{\pi_*}$	Beta	0.7500	0.8438	0.1500	0.0114	1.0000	0.4671	0.9519
$\mu_p$	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
$\mu_w$	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
$y$	0.9957	0.9895	0.9828	0.9760	0.9691
$c$	0.9968	0.9927	0.9883	0.9837	0.9791
$i$	0.9918	0.9760	0.9567	0.9363	0.9159
$\pi$	0.9218	0.8906	0.8672	0.8447	0.8220
$r$	0.9606	0.9102	0.8595	0.8115	0.7669
$w$	0.9952	0.9892	0.9817	0.9729	0.9628
$k^s$	0.9980	0.9955	0.9926	0.9894	0.9858
$l$	0.9941	0.9852	0.9754	0.9653	0.9550
$q$	0.9944	0.9894	0.9848	0.9803	0.9760
$n$	0.9959	0.9916	0.9871	0.9821	0.9769
$r^{ktil}$	0.3502	0.3642	0.3641	0.3576	0.3479
$OG$	0.9955	0.9887	0.9811	0.9732	0.9653

Table 10: MATRIX OF CORRELATIONS

<i>Variables</i>	$y$	$c$	$i$	$\pi$	$r$	$w$	$k^s$	$l$	$q$	$n$
$y$	1.0000	0.9712	0.8865	0.1858	0.2021	0.2148	0.7377	0.7943	-0.3040	0.4420
$c$	0.9712	1.0000	0.8422	0.1708	0.1612	0.2187	0.7473	0.7469	-0.3358	0.4544
$i$	0.8865	0.8422	1.0000	0.2678	0.2908	0.4037	0.8073	0.5599	-0.4294	0.5132
$\pi$	0.1858	0.1708	0.2678	1.0000	0.7961	0.6805	0.4593	-0.1385	-0.0093	0.4916
$r$	0.2021	0.1612	0.2908	0.7961	1.0000	0.5619	0.3652	-0.0251	-0.0284	0.3196
$w$	0.2148	0.2187	0.4037	0.6805	0.5619	1.0000	0.7521	-0.3598	-0.3462	0.7019
$k^s$	0.7377	0.7473	0.8073	0.4593	0.3652	0.7521	1.0000	0.1789	-0.5810	0.7724
$l$	0.7943	0.7469	0.5599	-0.1385	-0.0251	-0.3598	0.1789	1.0000	0.0805	-0.0451
$q$	-0.3040	-0.3358	-0.4294	-0.0093	-0.0284	-0.3462	-0.5810	0.0805	1.0000	-0.2654
$n$	0.4420	0.4544	0.5132	0.4916	0.3196	0.7019	0.7724	-0.0451	-0.2654	1.0000
$r^{ktil}$	0.1873	0.1671	0.2168	0.6478	0.5143	0.4024	0.2891	0.0161	-0.0092	0.2939
$OG$	0.9299	0.9200	0.7925	0.2775	0.2929	0.1792	0.6004	0.8218	-0.0095	0.3767

Table 11: THEORETICAL MOMENTS

<i>VARIABLE</i>	<i>MEAN</i>	<i>STD.DEV.</i>	<i>VARIANCE</i>
$y$	0.0000	14.2027	201.7175
$c$	0.0000	16.9755	288.1670
$i$	0.0000	20.6558	426.6604
$\pi$	0.0000	0.8082	0.6532
$r$	0.0000	0.8875	0.7877
$w$	0.0000	13.7878	190.1021
$k^s$	0.0000	18.7751	352.5045
$l$	0.0000	13.2707	176.1105
$q$	0.0000	8.6545	74.9001
$n$	0.0000	19.4626	378.7932
$r^{ktil}$	0.0000	1.2146	1.4752
$OG$	0.0000	13.1281	172.3470



Table 12: VARIANCE DECOMPOSITION (in percent)

	$\eta^a$	$\eta^b$	$\eta^g$	$\eta^i$	$\eta^m$	$\eta^p$	$\eta^w$	$\eta^{\sigma_w}$	$\eta^{\pi^*}$	$\eta^{z_p}$
$y$	0.65	1.86	3.10	9.90	17.22	1.73	0.07	0.44	52.09	12.94
$c$	0.37	2.14	0.11	12.08	15.33	0.92	0.07	0.39	55.46	13.13
$i$	1.84	1.80	0.45	20.28	22.01	5.12	0.31	9.88	32.06	6.25
$\pi$	1.24	0.49	0.06	0.02	1.94	18.87	0.78	0.19	11.58	64.83
$r$	1.86	24.72	0.37	0.87	1.63	3.38	0.53	1.85	12.31	52.47
$w$	2.97	0.03	0.09	14.91	2.37	10.99	0.79	0.55	8.01	59.29
$k^s$	1.72	0.31	0.61	39.36	10.22	3.82	0.08	1.74	33.10	9.04
$l$	1.06	2.39	3.66	3.31	13.51	0.37	0.17	0.22	32.04	43.26
$q$	0.01	0.05	0.00	99.75	0.10	0.01	0.00	0.06	0.00	0.01
$n$	1.87	3.04	0.70	26.35	7.52	2.78	0.08	10.62	30.18	16.87
$r^{ktil}$	0.78	3.91	0.19	42.33	6.15	10.08	0.76	3.04	6.74	26.01
$OG$	0.55	2.18	0.11	0.28	20.15	2.03	0.08	0.52	60.97	13.14

$$cbetabar = \beta \exp ((1 - \sigma_c) \gamma)$$

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

$$crss = \frac{cpie}{cbetabar}$$

$$clandap = \Phi$$

$$c1 = \frac{\lambda \exp ((-\gamma))}{1 + \lambda \exp ((-\gamma))}$$

$$c2 = \frac{1 - \lambda \exp ((-\gamma))}{\sigma_c (1 + \lambda \exp ((-\gamma)))}$$

$$c3 = \frac{1}{1 + \lambda \exp ((-\gamma))}$$

$$c4 = \frac{1}{1 - \alpha} (\rho_a - 1)$$

$$c5 = \frac{(\sigma_c - 1) wl_c}{\sigma_c (1 + \lambda \exp ((-\gamma)))}$$

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

$$i2 = \frac{cbetabar}{1 + cbetabar}$$

$$i3 = (1 + cbetabar) \varphi \exp (2 \gamma)$$

$$k1 = 1 - \frac{\frac{\bar{z}}{\bar{y}}}{\bar{k}^*}$$

$$k2 = \frac{\frac{\bar{z}}{\bar{y}}}{\bar{k}^*}$$

$$k3 = \frac{(1 + cbetabar) \exp (2 \gamma) \varphi \frac{\bar{z}}{\bar{y}}}{\bar{k}^*}$$

$$u1 = \frac{1 - \psi}{\psi}$$

$$pi1 = \frac{(1 - cbetabar \xi_p) (1 - \xi_p)}{\xi_p (1 + (\Phi - 1) \varepsilon_w)}$$

$$pi2 = \frac{1}{1 + cbetabar \iota_p}$$

$$pi3 = \frac{\iota_p}{1 + cbetabar \iota_p}$$

$$pi4 = \frac{cbetabar}{1 + cbetabar \iota_p}$$

$$w1 = \frac{(1 - cbetabar \xi_w) (1 - \xi_w)}{\xi_w (1 + 0.5 \varepsilon_p)}$$

$$w2 = \frac{1}{1 + cbetabar}$$

$$w3 = \frac{1 + cbetabar \iota_w}{1 + cbetabar}$$

$$w4 = \frac{cbetabar}{1 + cbetabar}$$

$$y1 = \frac{\frac{\bar{c}}{\bar{y}}}{\frac{\bar{y} \bar{p}}{\bar{y}}}$$

$$y2 = \frac{\frac{\bar{i}}{\bar{y}}}{\frac{\bar{y} \bar{p}}{\bar{y}}}$$

$$y3 = r \bar{k} \frac{k^*}{\frac{\bar{y} \bar{p}}{\bar{y}}}$$

$$ff1 = \frac{r \bar{k}}{1 + r \bar{k} - \delta}$$

$$ff2 = \frac{1 - \delta}{1 + r \bar{k} - \delta}$$

$$ff3 = \frac{\sigma_c (1 + \lambda \exp((- \gamma)))}{1 - \lambda \exp((- \gamma))}$$

$$ff4 = \frac{\gamma^* v^*}{n_*}$$

$$mrs1 = \frac{1}{1 - \lambda \exp((- \gamma))}$$

$$c_t = (-c2) (r_t - \pi_{t+1}) + c_2 * \varepsilon_{tt}^b + c1 (c_{t-1} - w_t) + c3 (c_{t+1} + c4 z^{til}_t) + c5 (l_t - l_{t+1}) \quad (1)$$

$$q_t = i3 (i_t - i1 (i_{t-1} - w_t) - i2 i_{t+1} - z^{til}_t c4 i2 - \varepsilon^i_t) \quad (2)$$

$$k_t = k1 (k_{t-1} - w_t) + i_t k2 + \varepsilon^i_t k3 \quad (3)$$

$$k^s_t = k_{t-1} + u_t - w_t \quad (4)$$

$$u_t = u1 r^k_t \quad (5)$$

$$\mu_{p_t} = w_t + \alpha l_t - \alpha k^s_t \quad (6)$$

$$k^s_t = l_t + w_t - r^k_t \quad (7)$$

$$y_t = k^s_t \Phi \alpha + l_t \Phi (1 - \alpha) + z^{til}_t \frac{\Phi - 1}{1 - \alpha} \quad (8)$$

$$y_t = \frac{\bar{g}}{\bar{y}} \varepsilon^g_t + c_t y1 + i_t y2 + u_t y3 - z^{til}_t c4 \frac{\bar{g}}{\bar{y}} \quad (9)$$

$$\pi_t = \mu_{p_t} pi1 pi2 + pi3 \pi_{t-1} + \pi_{t+1} pi4 + \varepsilon^p_t \quad (10)$$

$$w_t = w1 w2 (w^h_t - w_t) - \pi_t w3 + w2 (w_{t-1} - w_t + \iota_w \pi_{t-1}) + w4 (\pi_{t+1} + c4 z^{til}_t + w_{t+1}) + \varepsilon^w_t \quad (11)$$

$$w^h_t = mrs1 (c_t - \lambda \exp((- \gamma)) c_{t-1} + \lambda \exp((- \gamma)) w_t) + l_t \sigma_l \quad (12)$$

$$r_t = \rho r_{t-1} + (1 - \rho) r_\pi (\pi_t - \pi_{*t}) + (1 - \rho) r_y (y_t - y^{flex}_t) \\ + r_{\Delta y} (y_t - y^{flex}_t - (y_{t-1} - y^{flex}_{t-1})) + \varepsilon^r_t \quad (13)$$

$$r^{ktil}_t = \pi_t + r^k_t ff1 + q_t ff2 - q_{t-1} \quad (14)$$

$$r^{ktil}_{t+1} = r_t - c_2 * \varepsilon_{tt}^b f f 3 + \zeta_{sp} (q_t + k_t - n_t) + \sigma_{wt} \quad (15)$$

$$n_t = \zeta_{nRk} (r^{ktil}_t - \pi_t) - \zeta_{nR} (r_{t-1} - \pi_t) + \zeta_{nqk} (k_{t-1} + q_{t-1}) + \zeta_{nn} n_{t-1} - \frac{\zeta_{n\sigma_w}}{\zeta_{sp\sigma_w}} \sigma_{wt-1} - w_t f f 4 \quad (16)$$

$$c^{flex}_t = c_2 * \varepsilon_{tt}^b + (-c_2) r^{flex}_t + c_1 (c^{flex}_{t-1} - w_t) + c_3 (c_4 z^{til}_t + c^{flex}_{t+1}) + c_5 (l^{flex}_t - l^{flex}_{t+1}) \quad (17)$$

$$q^{flex}_t = i_3 (i^{flex}_t - i_1 (i^{flex}_{t-1} - w_t) - i_2 i^{flex}_{t+1} - z^{til}_t c_4 i_2 - \varepsilon^i_t) \quad (18)$$

$$k^{flex}_t = \varepsilon^i_t k_3 + k_1 (k^{flex}_{t-1} - w_t) + k_2 i^{flex}_t \quad (19)$$

$$k^{s,flex}_t = k^{flex}_{t-1} + z^{flex}_t - w_t \quad (20)$$

$$z^{flex}_t = u_1 r^{k,flex}_t \quad (21)$$

$$w^{flex}_t = l^{flex}_t (-\alpha) + \alpha k^{s,flex}_t \quad (22)$$

$$k^{s,flex}_t = l^{flex}_t + w^{flex}_t - r^{k,flex}_t \quad (23)$$

$$y^{flex}_t = z^{til}_t \frac{\Phi - 1}{1 - \alpha} + \Phi \alpha k^{s,flex}_t + \Phi (1 - \alpha) l^{flex}_t \quad (24)$$

$$y^{flex}_t = \frac{\bar{g}}{\bar{y}} \varepsilon^g_t + y_1 c^{flex}_t + y_2 i^{flex}_t + y_3 z^{flex}_t - z^{til}_t c_4 \frac{\bar{g}}{\bar{y}} \quad (25)$$

$$w^{flex}_t = mrs_1 (\lambda \exp((- \gamma)) w_t + c^{flex}_t - \lambda \exp((- \gamma)) c^{flex}_{t-1}) + \sigma_l l^{flex}_t \quad (26)$$

$$q^{flex}_t = c_2 * \varepsilon_{tt}^b f f 3 + f f 1 r^{k,flex}_{t+1} + f f 2 q^{flex}_{t+1} - r^{flex}_t \quad (27)$$

$$OG_t = y_t - y^{flex}_t \quad (28)$$

$$w_t = c_4 z^{til}_{t-1} + \frac{1}{1 - \alpha} \eta^a_t + z_{pt} \quad (29)$$

$$z^{til}_t = \eta^a_t + \rho_a z^{til}_{t-1} \quad (30)$$

$$\varepsilon^g_t = \rho_g \varepsilon^g_{t-1} + \eta^g_t + \eta^a_t \rho_{ga} \quad (31)$$

$$c_2 * \varepsilon_{tt}^b = \rho_b c_2 * \varepsilon_{t-1}^b + \eta^b_t \quad (32)$$

$$\varepsilon_t^i = \rho_i \varepsilon_{t-1}^i + \eta_t^i \quad (33)$$

$$\varepsilon_t^p = \rho_p \varepsilon_{t-1}^p + \eta_t^p - \mu_p \sigma_{map} \eta_{t-1}^p \quad (34)$$

$$\varepsilon_t^w = \rho_w \varepsilon_{t-1}^w + \eta_t^w - \mu_w \sigma_{maw} \eta_{t-1}^w \quad (35)$$

$$\varepsilon_t^r = \rho_r \varepsilon_{t-1}^r + \eta_t^m \quad (36)$$

$$\sigma_{wt} = \sigma_{wt-1} \rho_{\sigma_w} + \eta_t^{\sigma_w} \quad (37)$$

$$\pi_{*t} = \rho_{\pi_*} \pi_{*t-1} + \eta_t^{\pi_*} \quad (38)$$

$$z_{pt} = \rho_{zp} z_{pt-1} + \eta_t^{z_p} \quad (39)$$

$$dlGDP_t = w_t + y_t - y_{t-1} + \bar{\gamma} \quad (40)$$

$$dlCONS_t = w_t + \bar{\gamma} + c_t - c_{t-1} \quad (41)$$

$$dlINV_t = w_t + \bar{\gamma} + i_t - i_{t-1} \quad (42)$$

$$dlWAG_t = w_t + \bar{\gamma} + w_t - w_{t-1} \quad (43)$$

$$lHOURS_t = l_t + \bar{l} \quad (44)$$

$$FEDFUNDS_t = r_t + \bar{r} \quad (45)$$

$$dlP_t = \bar{\pi} + \pi_t \quad (46)$$

$$Spread_t = 100 (r^{ktil}_t - r_t) + 0.02 \quad (47)$$

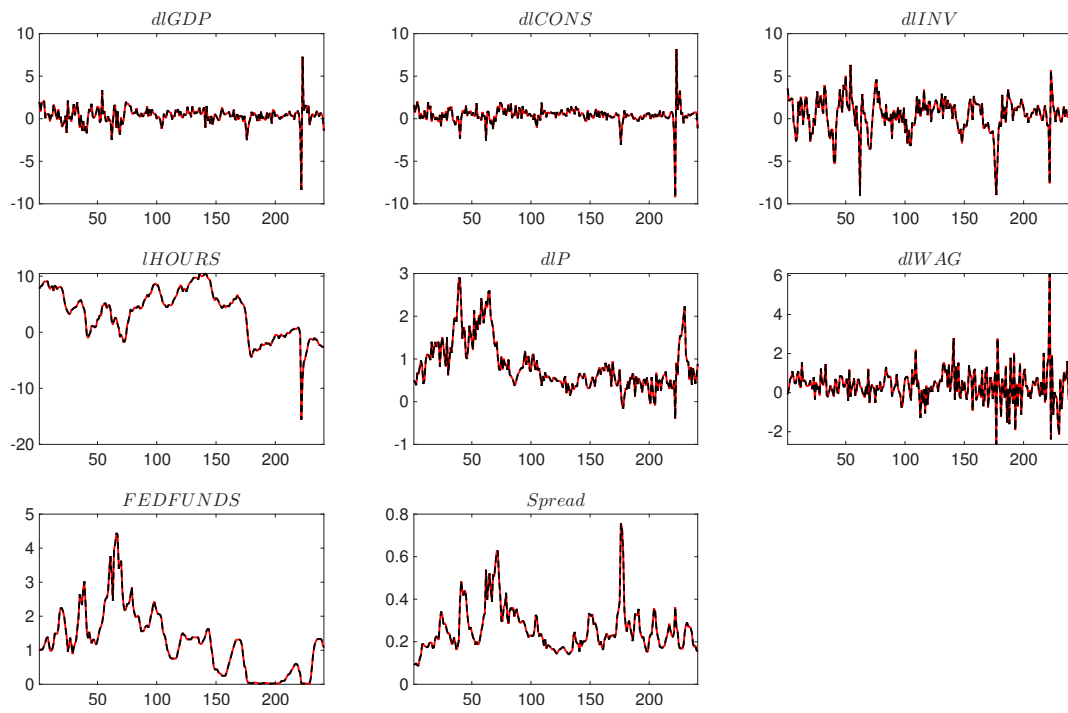


Figure 6: Historical and smoothed variables.

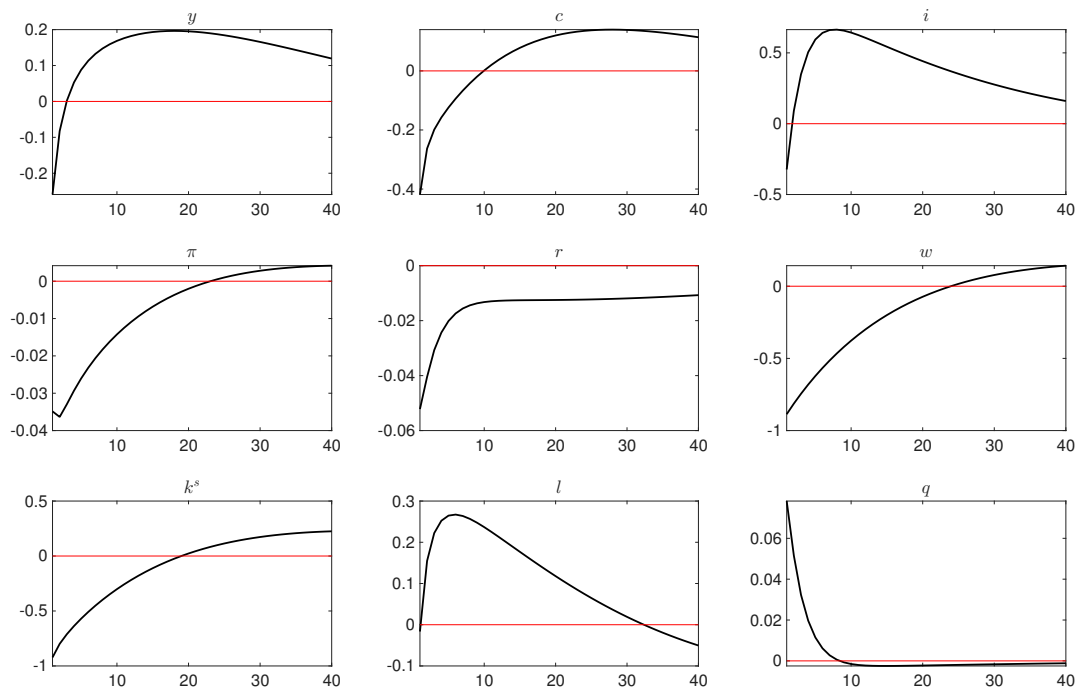


Figure 7: Impulse response functions (orthogonalized shock to  $\eta^a$ ).

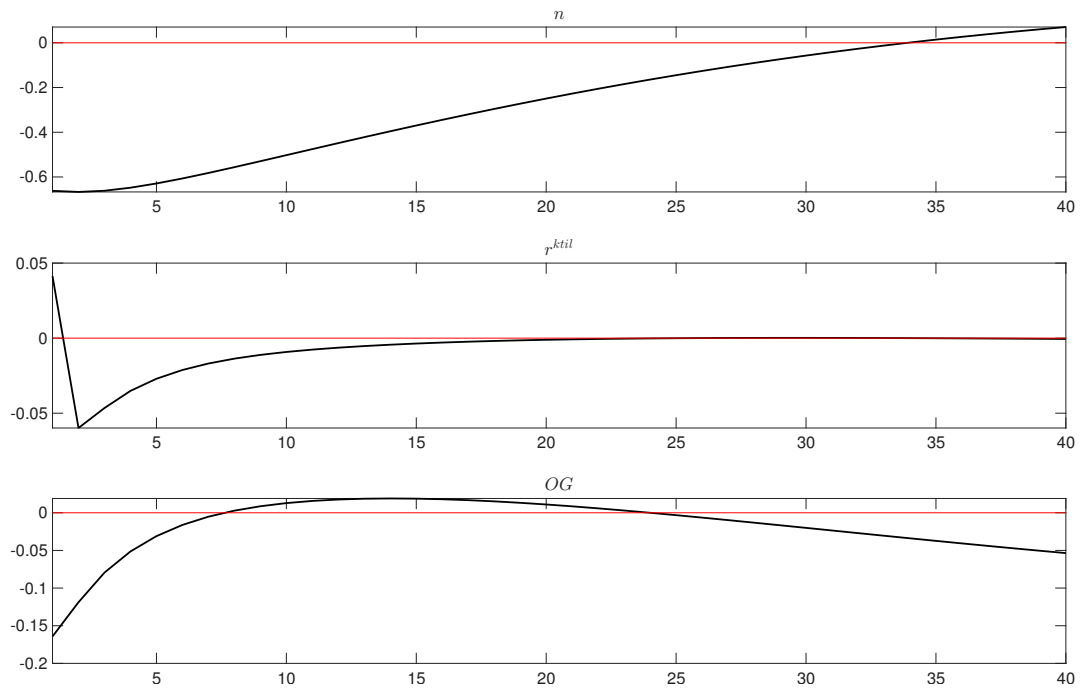


Figure 8: Impulse response functions (orthogonalized shock to  $\eta^a$ ).



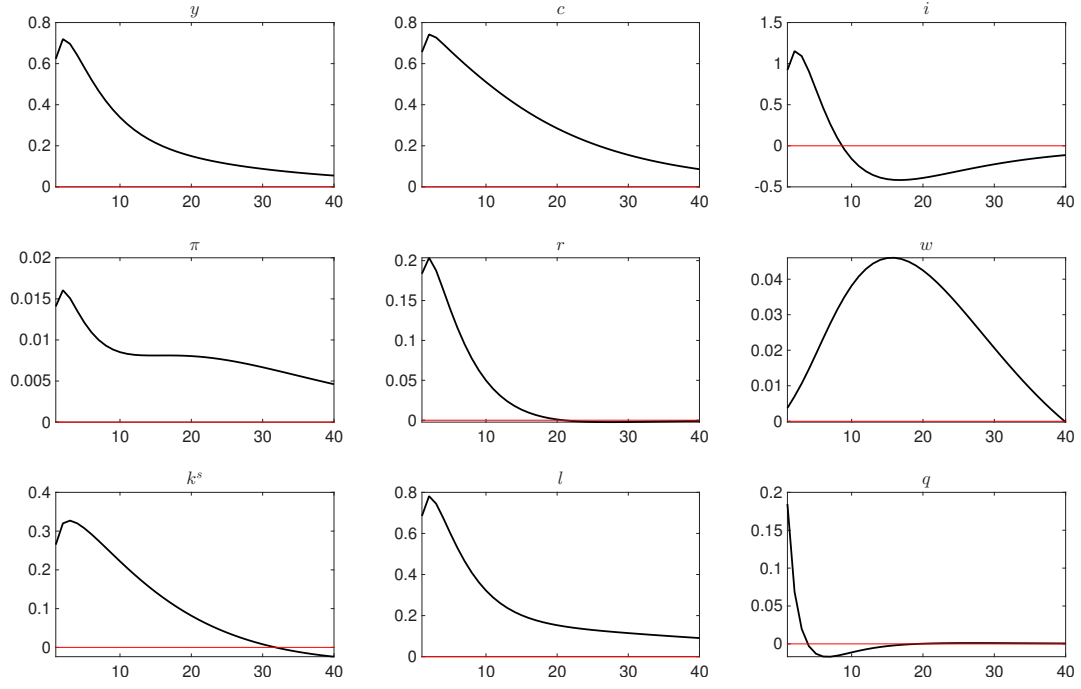


Figure 9: Impulse response functions (orthogonalized shock to  $\eta^b$ ).

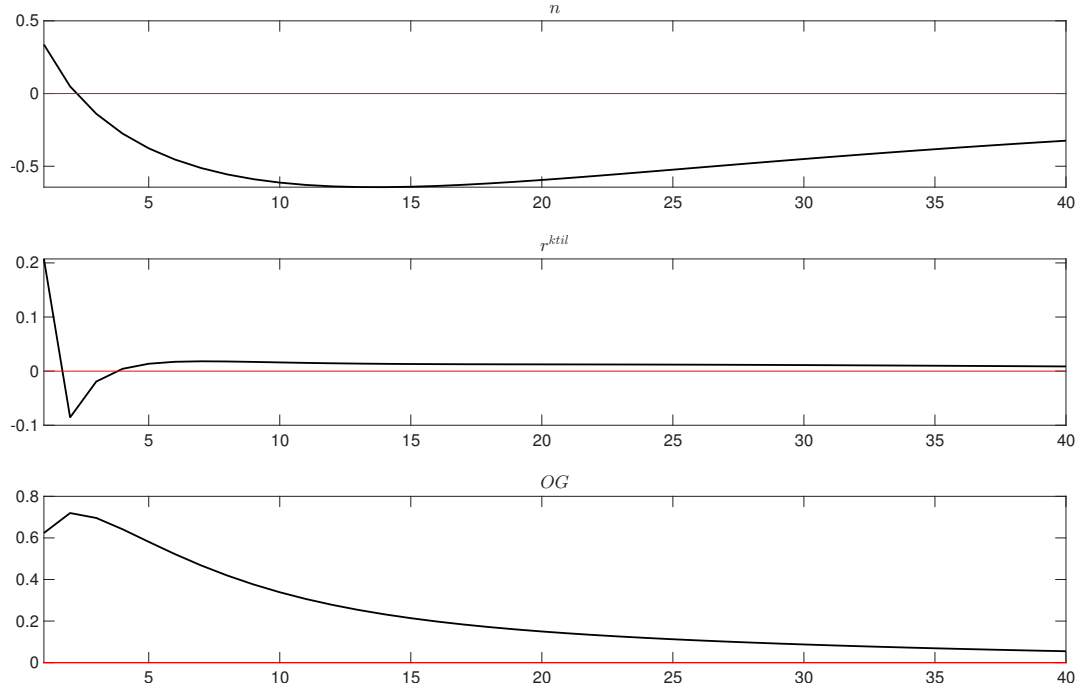


Figure 10: Impulse response functions (orthogonalized shock to  $\eta^b$ ).

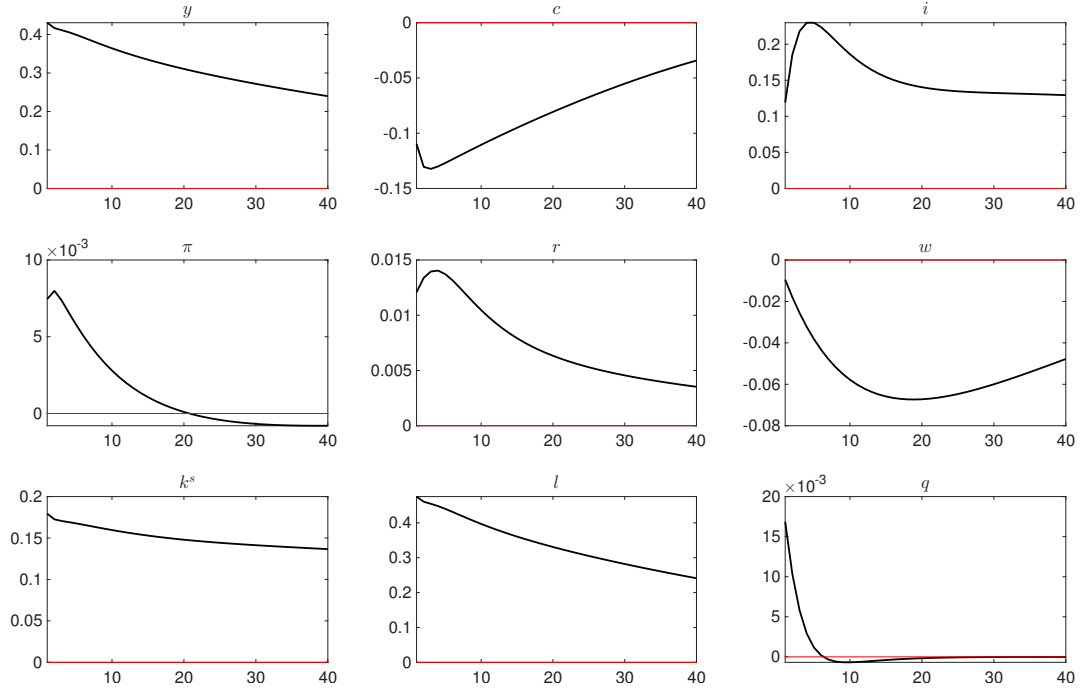


Figure 11: Impulse response functions (orthogonalized shock to  $\eta^g$ ).

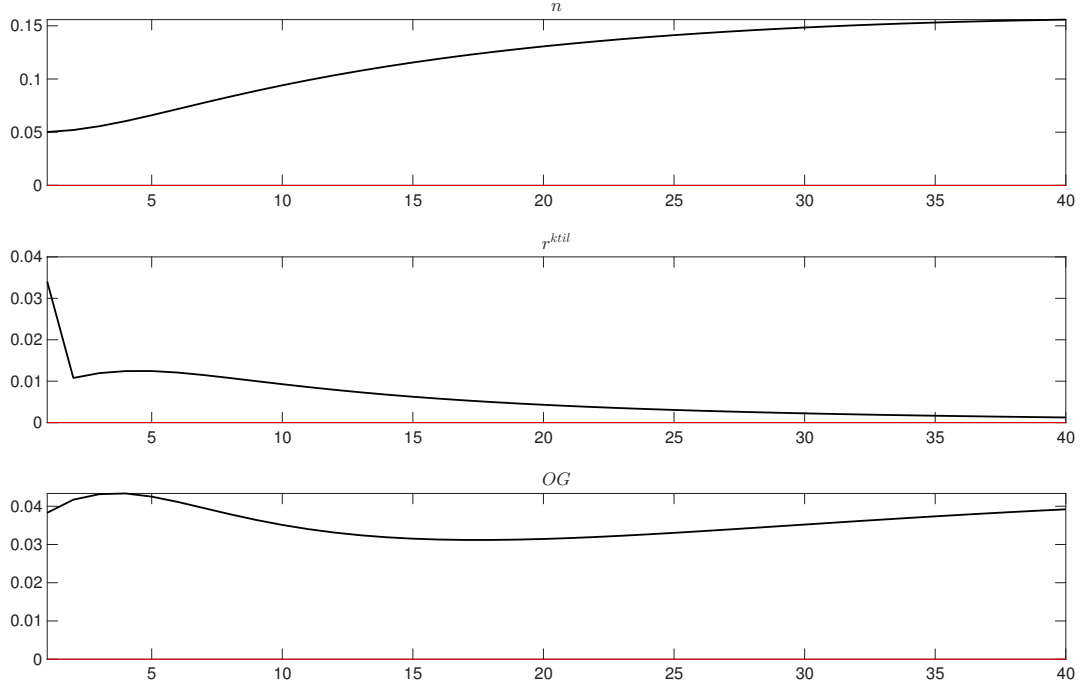


Figure 12: Impulse response functions (orthogonalized shock to  $\eta^g$ ).

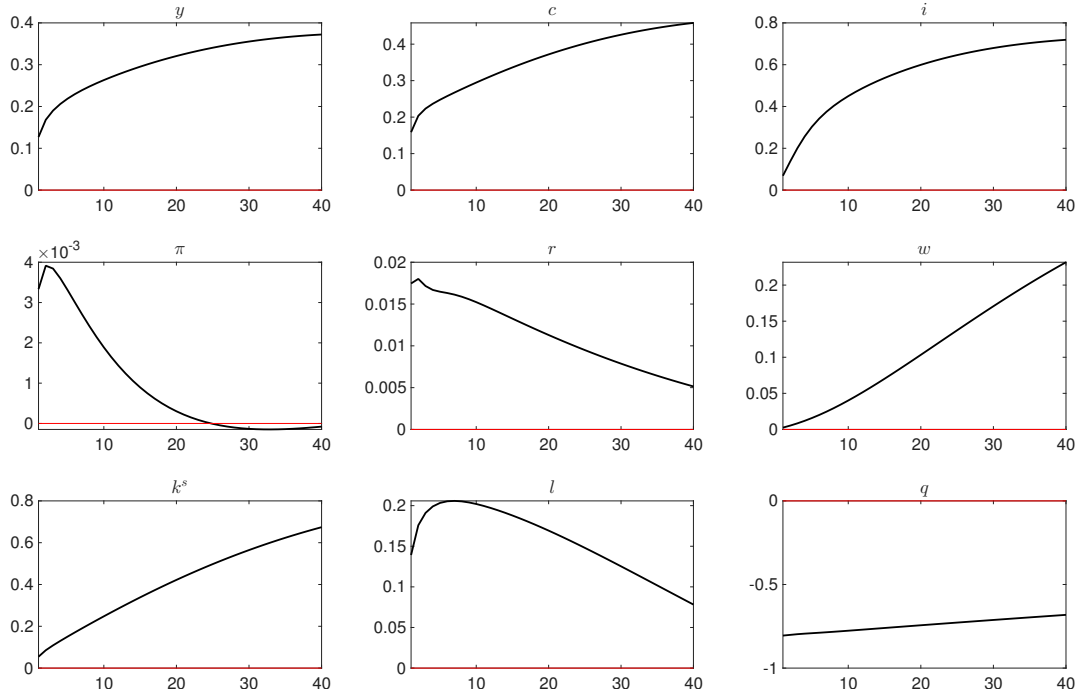


Figure 13: Impulse response functions (orthogonalized shock to  $\eta^i$ ).

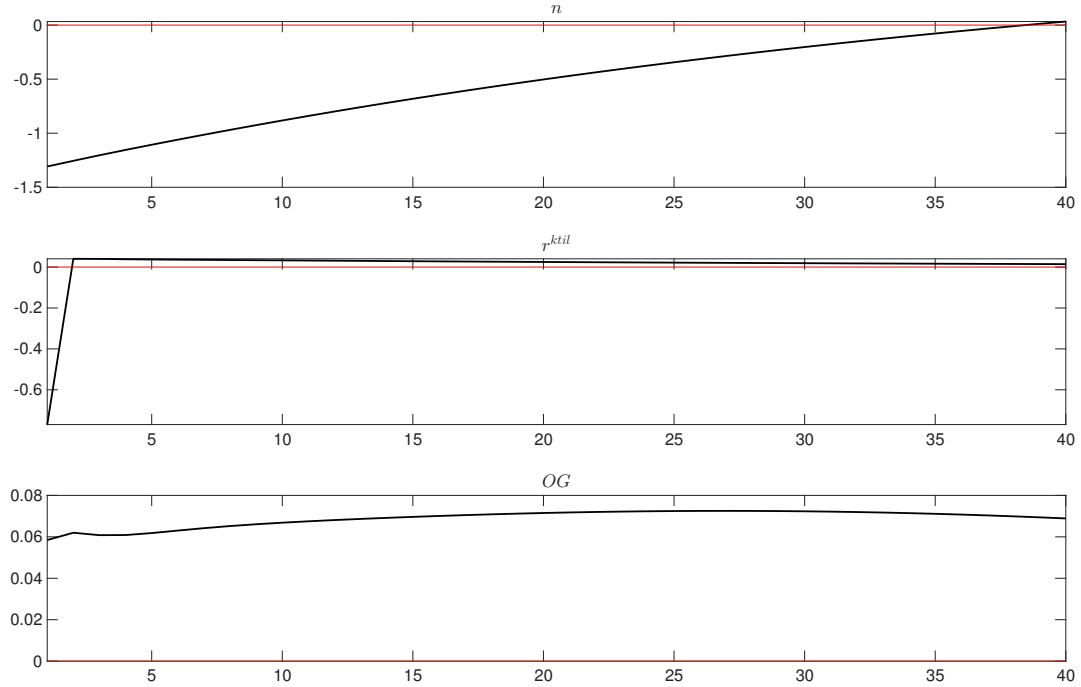


Figure 14: Impulse response functions (orthogonalized shock to  $\eta^i$ ).

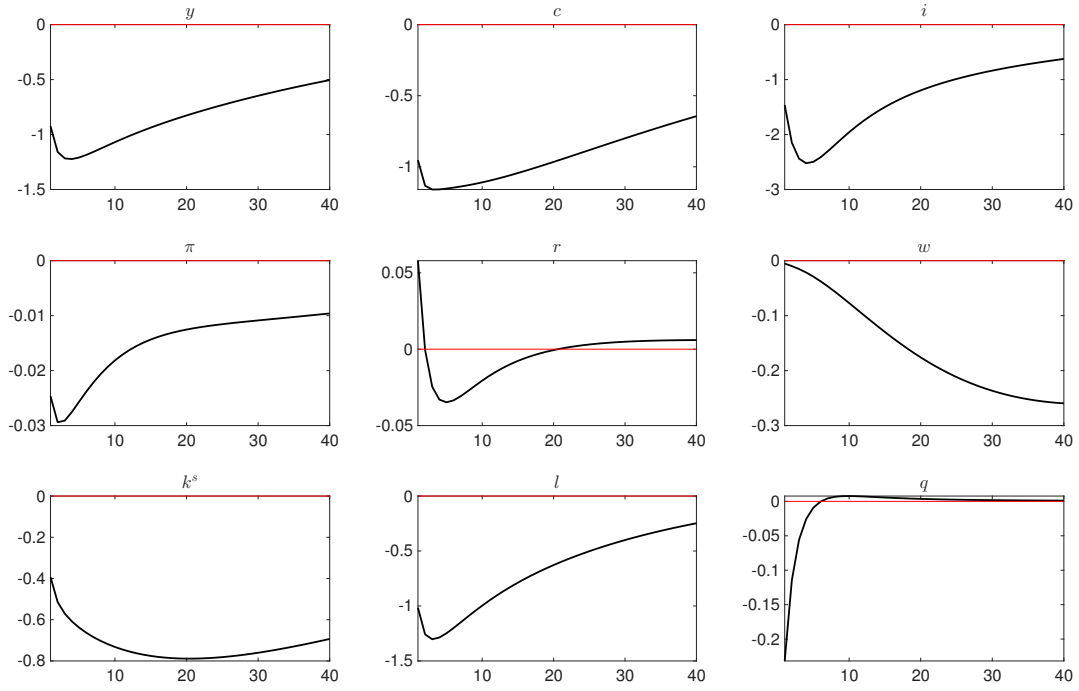


Figure 15: Impulse response functions (orthogonalized shock to  $\eta^m$ ).

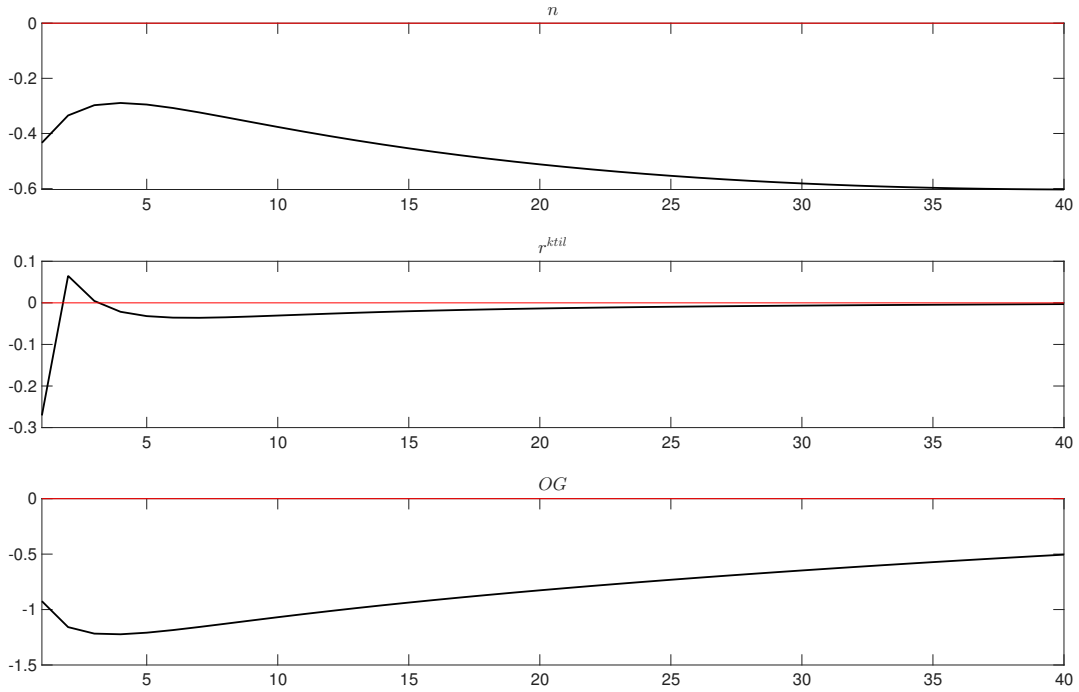


Figure 16: Impulse response functions (orthogonalized shock to  $\eta^m$ ).

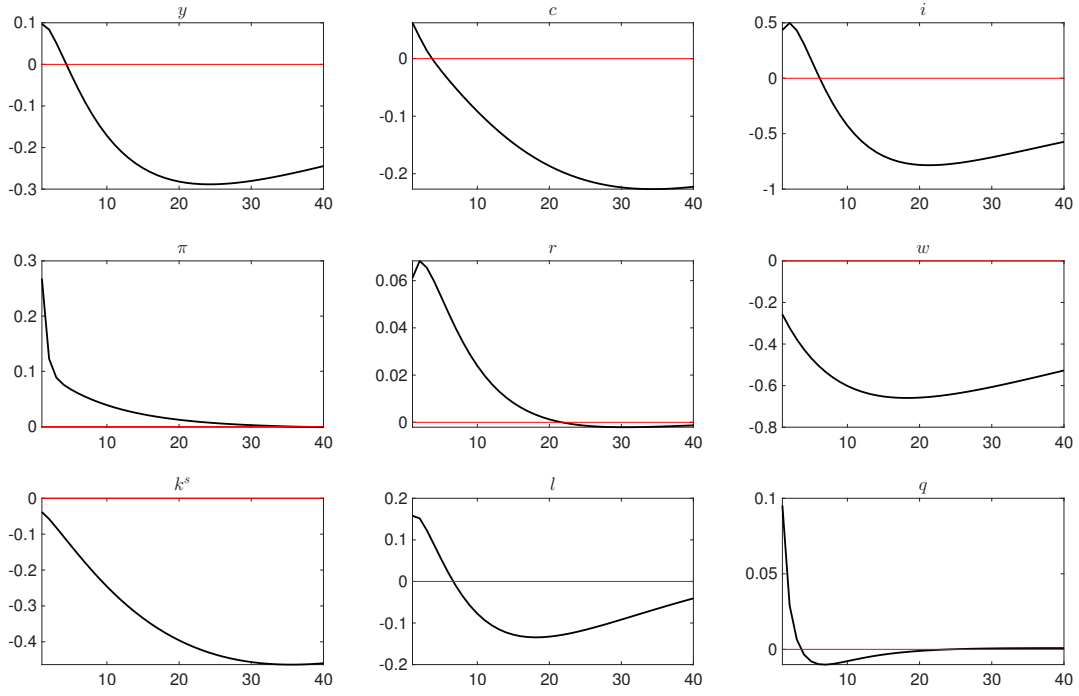


Figure 17: Impulse response functions (orthogonalized shock to  $\eta^p$ ).

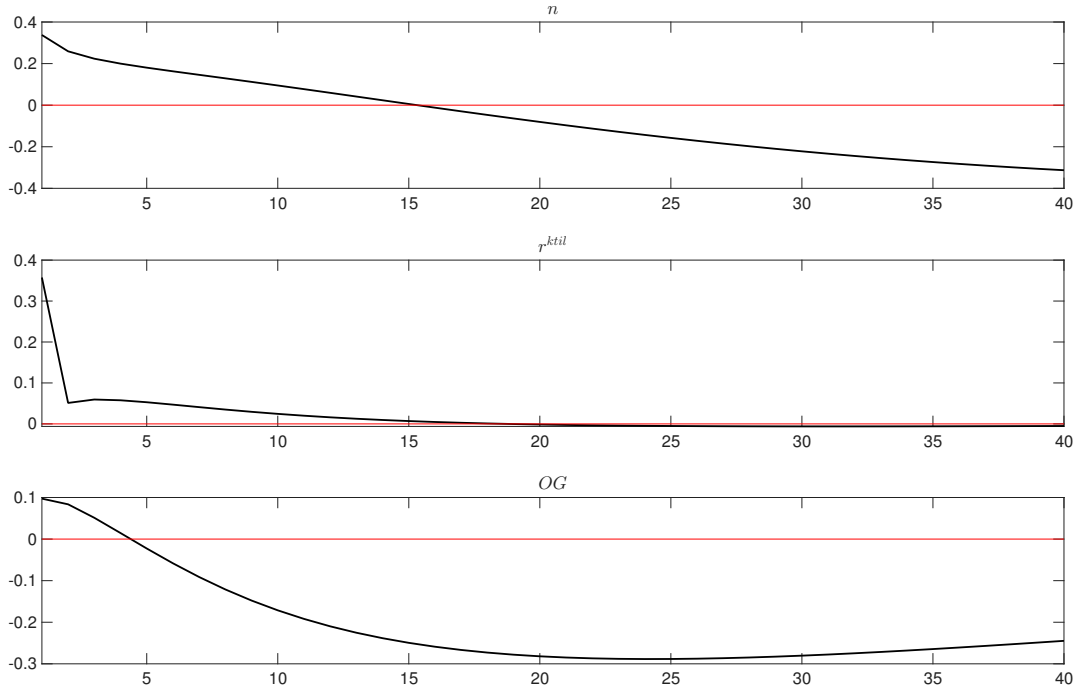


Figure 18: Impulse response functions (orthogonalized shock to  $\eta^p$ ).

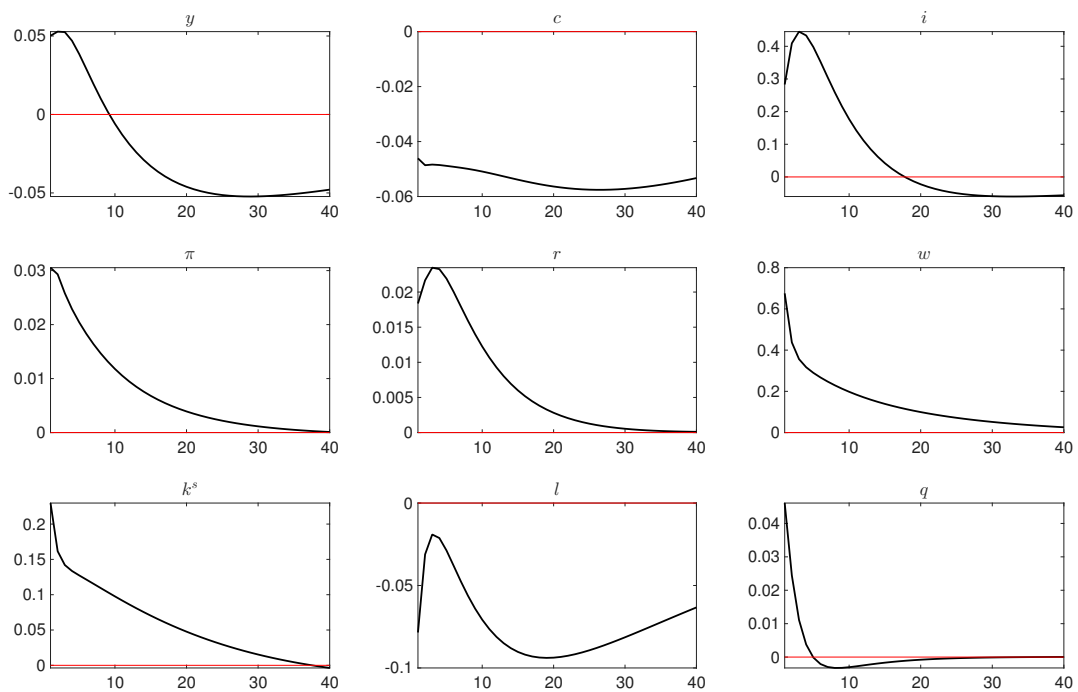


Figure 19: Impulse response functions (orthogonalized shock to  $\eta^w$ ).

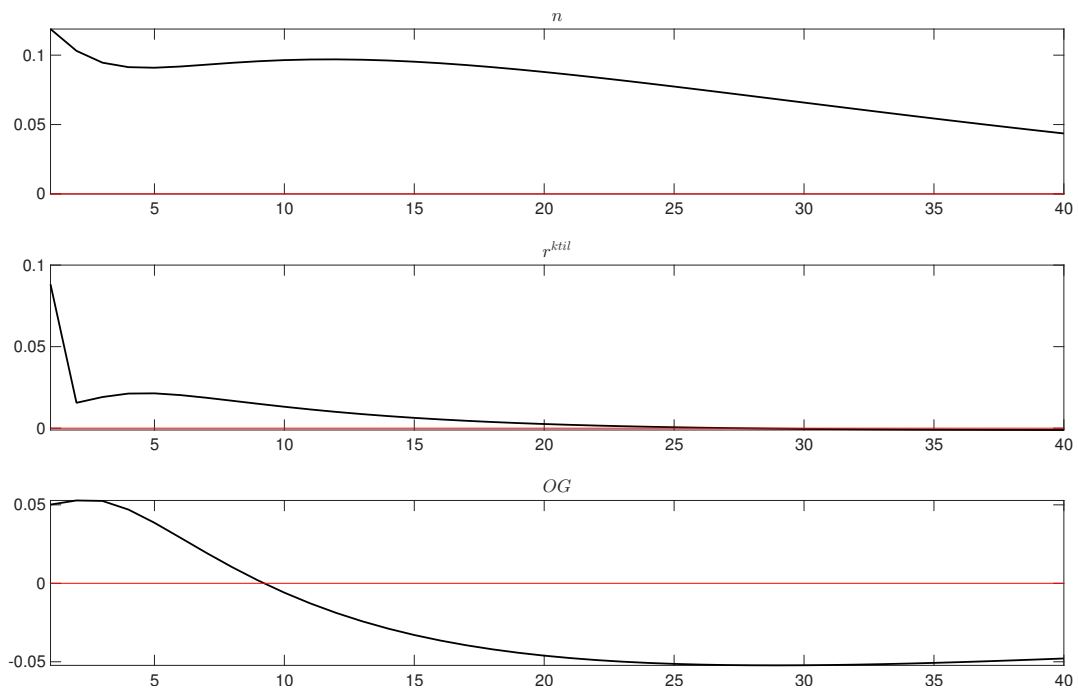


Figure 20: Impulse response functions (orthogonalized shock to  $\eta^w$ ).

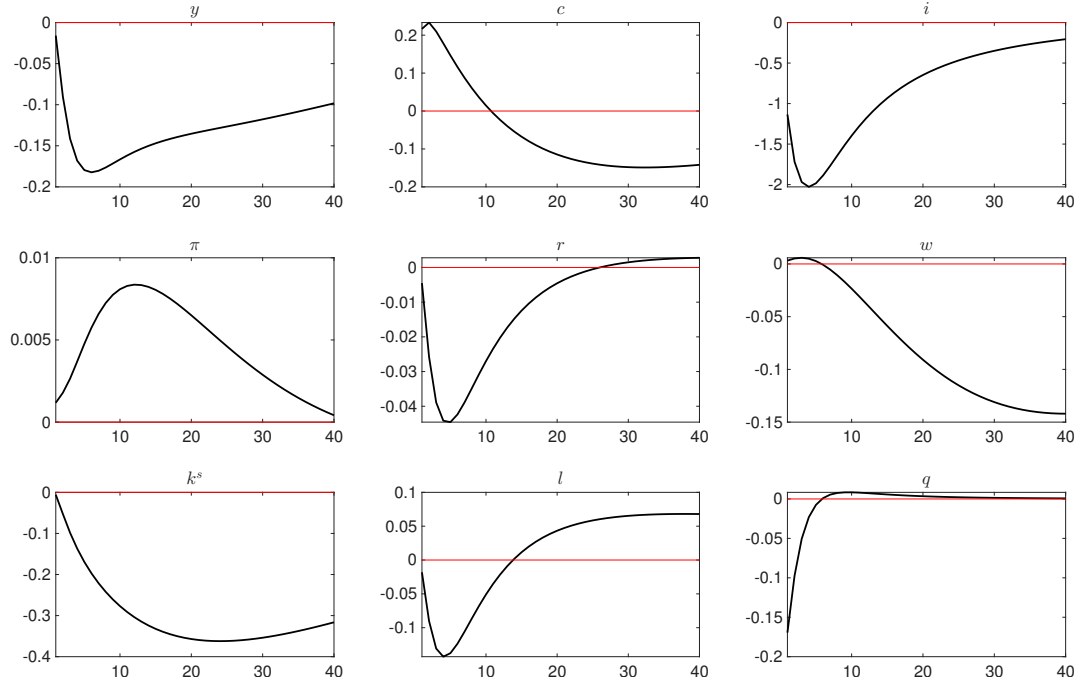


Figure 21: Impulse response functions (orthogonalized shock to  $\eta^{\sigma_w}$ ).

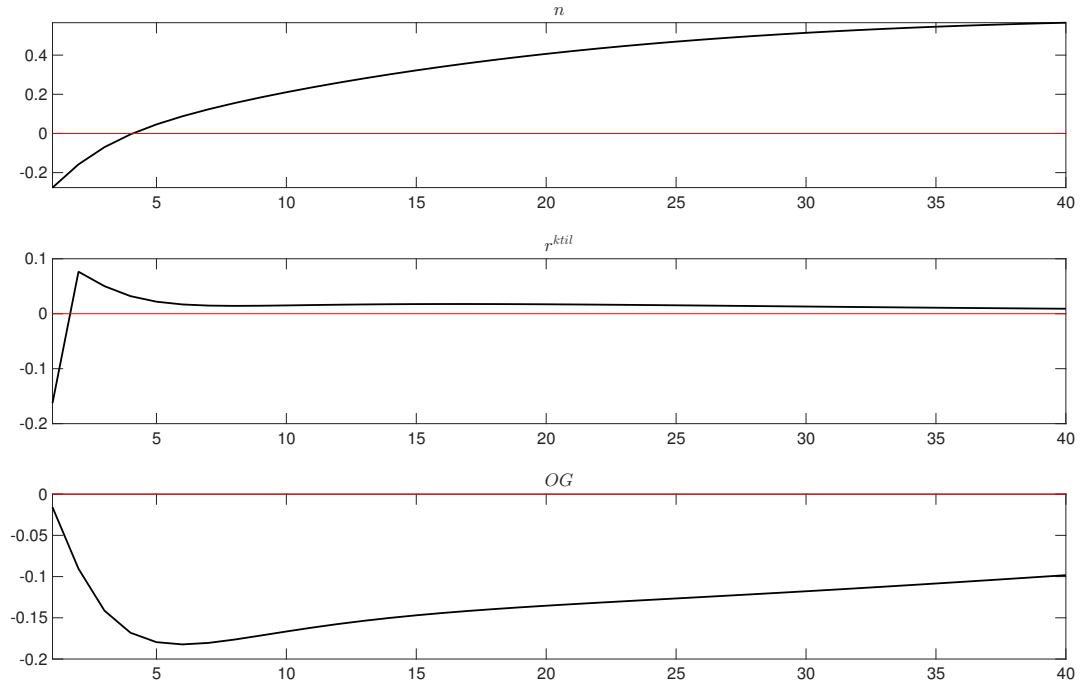


Figure 22: Impulse response functions (orthogonalized shock to  $\eta^{\sigma_w}$ ).

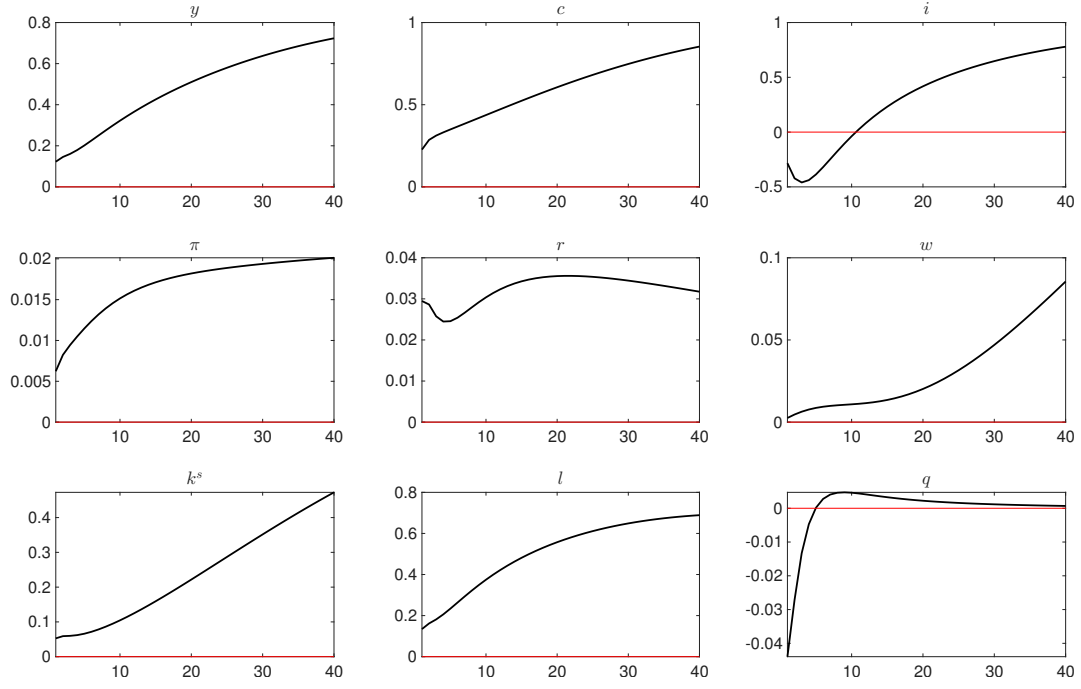


Figure 23: Impulse response functions (orthogonalized shock to  $\eta^{\pi*}$ ).

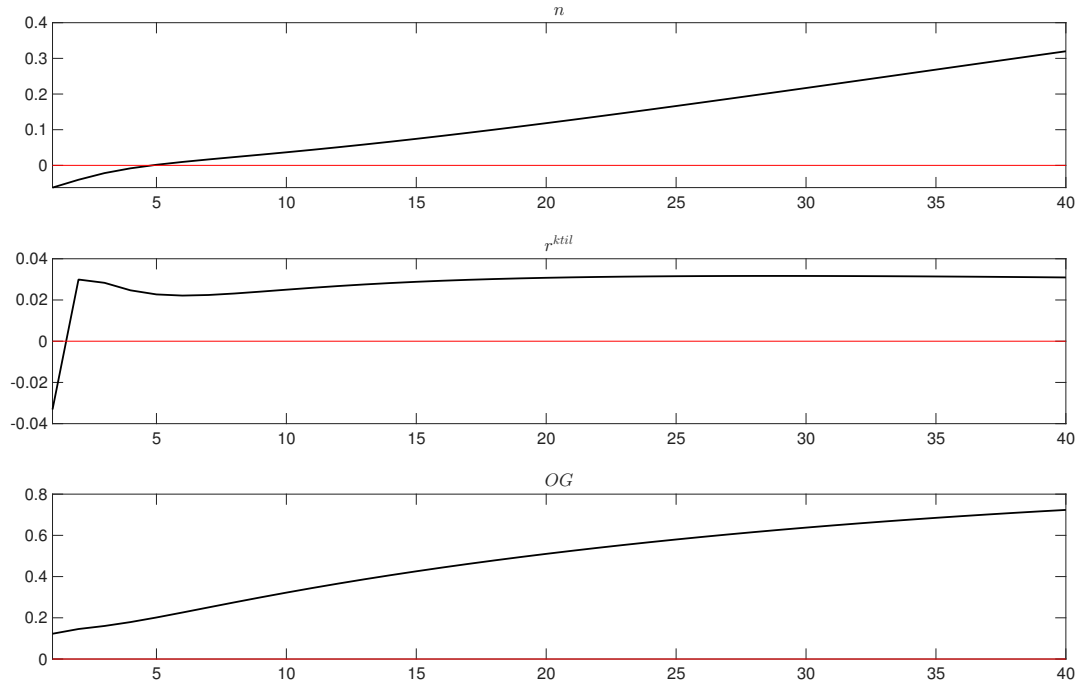


Figure 24: Impulse response functions (orthogonalized shock to  $\eta^{\pi*}$ ).



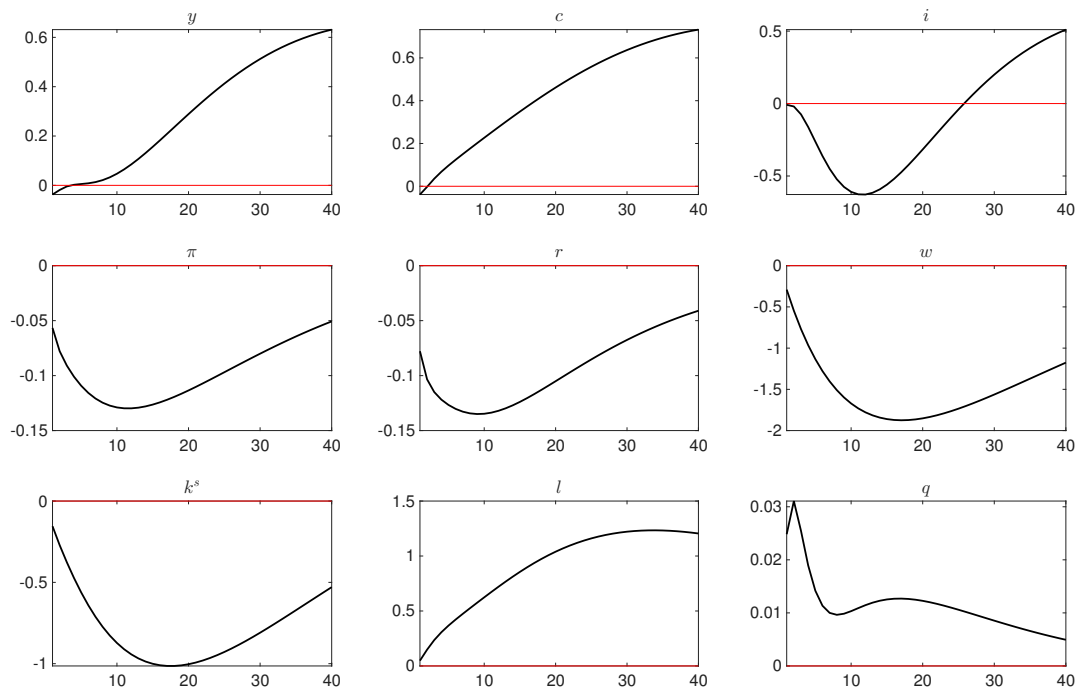


Figure 25: Impulse response functions (orthogonalized shock to  $\eta^{z_p}$ ).

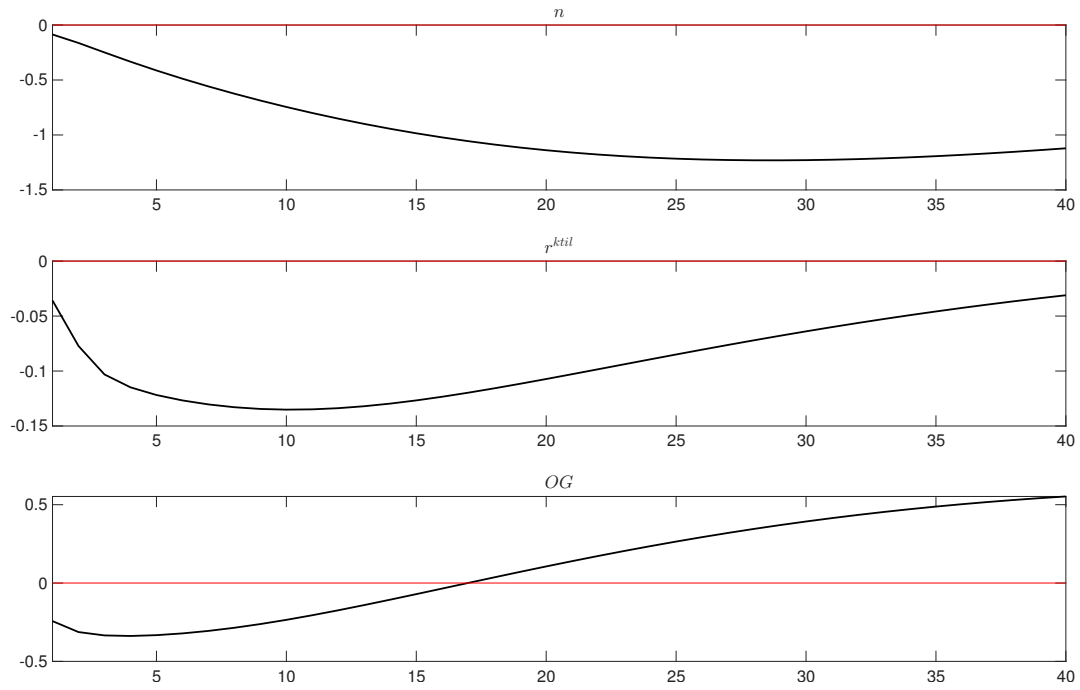


Figure 26: Impulse response functions (orthogonalized shock to  $\eta^{z_p}$ ).

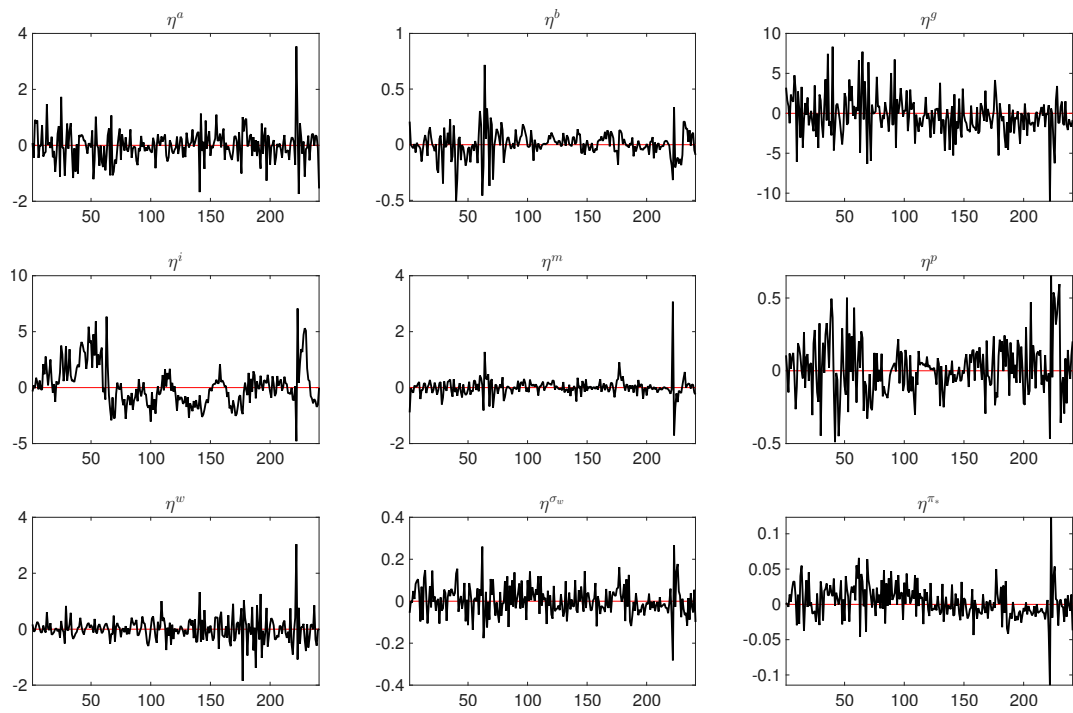


Figure 27: Smoothed shocks.

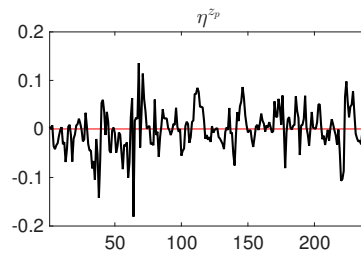


Figure 28: Smoothed shocks.