Table 1: Results from posterior maximization (parameters)

	Prior			Posterior	
	Dist.	Mean	Stdev	Mode	Stdev
α	norm	0.300	0.0500	0.3886	0.0243
ψ	beta	0.500	0.1500	0.6040	0.0543
Φ	norm	1.250	0.1250	1.1772	0.0589
ι_w	beta	0.500	0.1500	0.1855	0.0814
ξ_w	beta	0.500	0.1000	0.9017	0.0211
ι_p	beta	0.500	0.1500	0.1765	0.0669
ξ_p	beta	0.500	0.1000	0.8591	0.0497
σ_c	norm	1.500	0.3750	1.4552	0.0774
σ_l	norm	2.000	0.7500	0.2507	0.5660
λ	beta	0.700	0.1000	0.3029	0.0662
φ	norm	4.000	1.5000	0.0754	0.0182
r_π	norm	1.500	0.2500	1.7601	0.2171
r_y	norm	0.125	0.0500	0.0664	0.0366
$r_{\Delta y}$	norm	0.125	0.0500	0.2894	0.0260
ρ	beta	0.750	0.1000	0.9368	0.0228
n_*	norm	0.000	2.0000	2.8671	0.8922
γ	norm	0.400	0.1000	0.5795	0.0853
ζ_{sp}	beta	0.050	0.0050	0.0433	0.0046
$\bar{\pi}$	gamm	0.625	0.2000	0.3966	0.0720
ρ_{ga}	beta	0.500	0.2000	0.6221	0.1945
ρ_a	beta	0.500	0.2000	0.9670	0.0113
ρ_b	beta	0.500	0.2000	0.8578	0.0236
ρ_g	beta	0.500	0.2000	0.9817	0.0078
ρ_i	beta	0.500	0.2000	0.9957	0.0021
ρ_r	beta	0.500	0.2000	0.0574	0.0367
ρ_p	beta	0.500	0.2000	0.9642	0.0294
ρ_w	beta	0.500	0.2000	0.2547	0.1439
ρ_{σ_w}	beta	0.750	0.1500	0.9906	0.0092
ρ_{π_*}	beta	0.750	0.1500	0.9936	0.0053
μ_p	beta	0.500	0.2000	0.8322	0.0541
μ_w	beta	0.500	0.2000	0.4369	0.1217

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

	Prior			Posterior	
	Dist.	Mean	Stdev	Mode	Stdev
η^a	invg	0.100	2.0000	0.5744	0.0307
η^b	invg	0.100	2.0000	0.1296	0.0136
η^g	invg	0.100	2.0000	2.5272	0.1214
η^i	invg	0.100	2.0000	1.8933	0.2760
η^m	invg	0.100	2.0000	0.3336	0.0269
η^p	invg	0.100	2.0000	0.1879	0.0126
η^w	invg	0.100	2.0000	0.4943	0.0300
η^{σ_w}	invg	0.100	2.0000	0.0746	0.0127
η^{π_*}	invg	0.100	2.0000	0.0608	0.0275

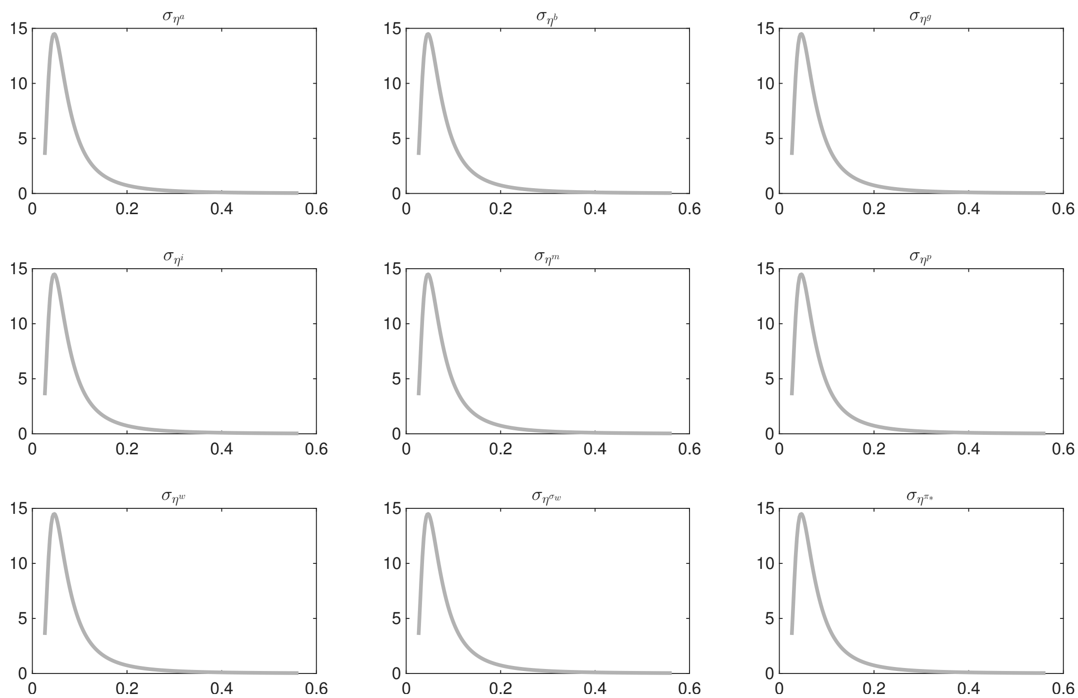

Figure 1: Priors.

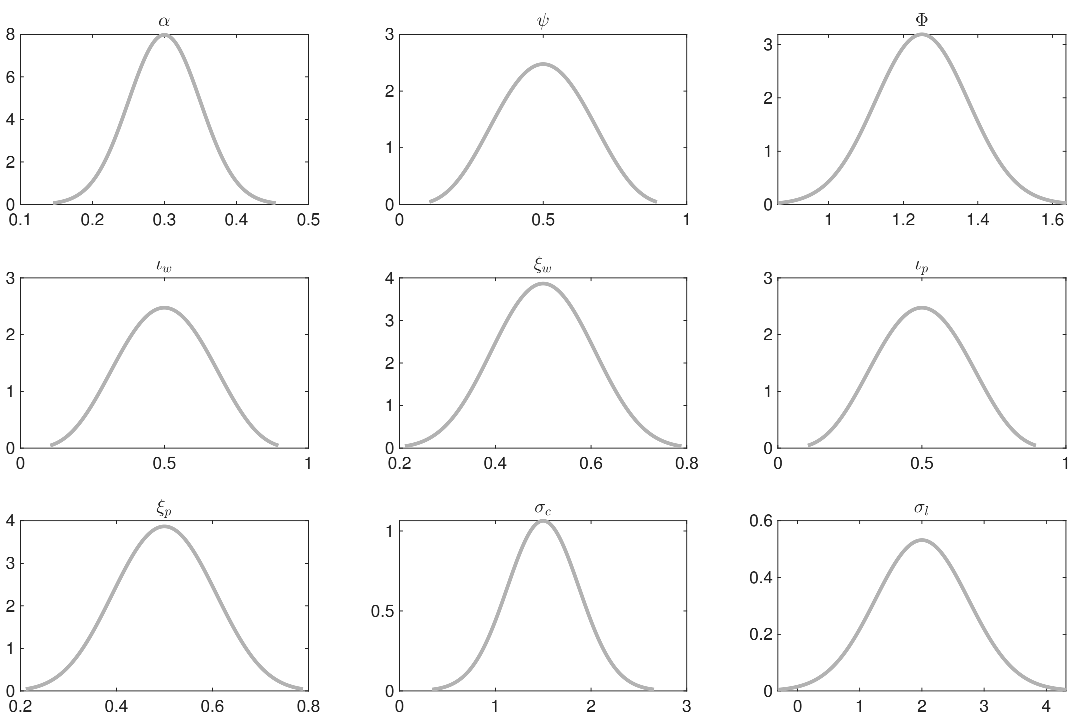

Figure 2: Priors.

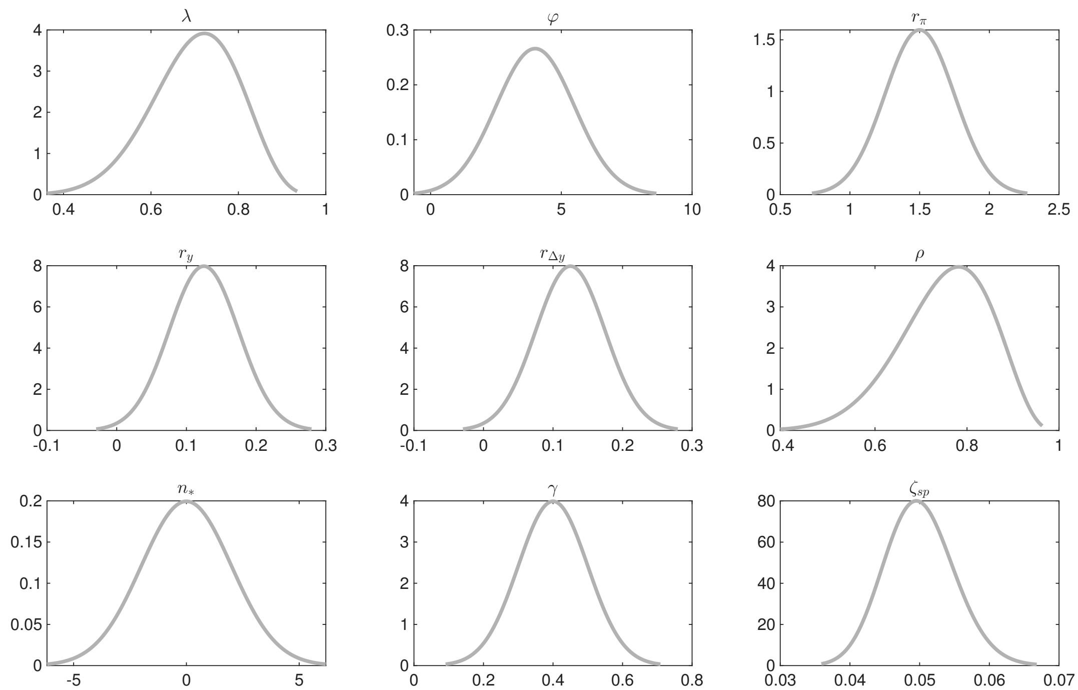

Figure 3: Priors.

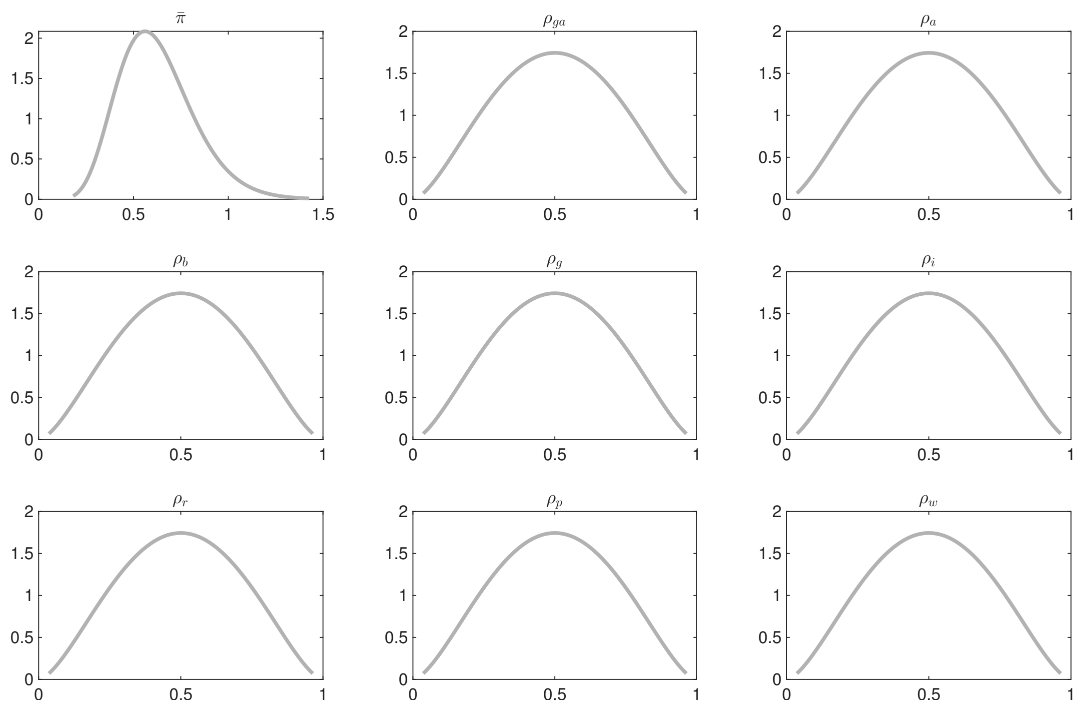

Figure 4: Priors.

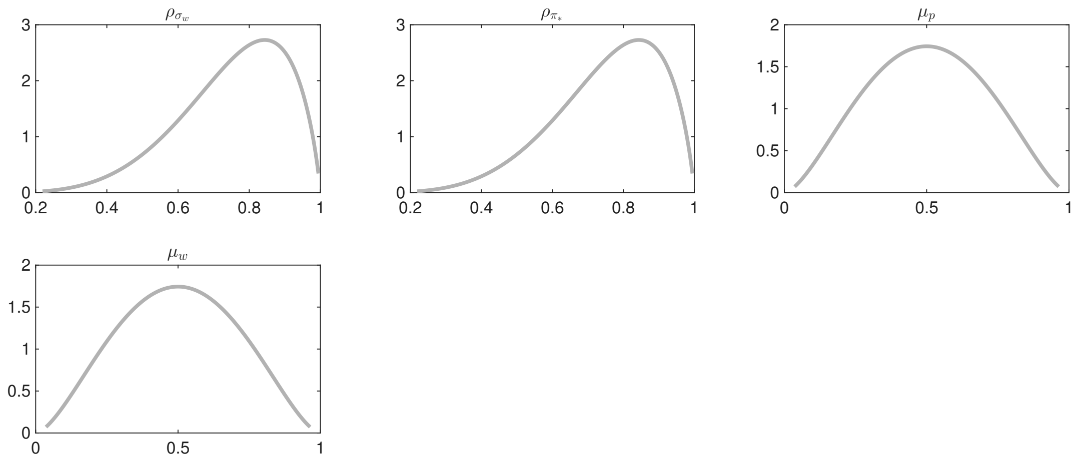

Figure 5: Priors.

Table 3: MATRIX OF COVARIANCE OF EXOGENOUS SHOCKS

$Variables$	η^a	η^b	η^g	η^i	η^m	η^p	η^w	η^{σ_w}	η^{π_*}	η^{z_p}
η^a	0.329923	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00000	
η^b	0.000000	0.016787	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00000	
η^g	0.000000	0.000000	6.386584	0.000000	0.000000	0.000000	0.000000	0.000000	0.00000	
η^i	0.000000	0.000000	0.000000	3.584607	0.000000	0.000000	0.000000	0.000000	0.00000	
η^m	0.000000	0.000000	0.000000	0.000000	0.111261	0.000000	0.000000	0.000000	0.00000	
η^p	0.000000	0.000000	0.000000	0.000000	0.000000	0.035302	0.000000	0.000000	0.00000	
η^w	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.244313	0.000000	0.00000	
η^{σ_w}	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.005568	0.00000	
η^{π_*}	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00369	
η^{z_p}	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00000	

Table 4: Endogenous

Variable	$\LaTeX$	Description
`c`	c	Consumption
`inve`	i	Investment
`y`	y	Output
`lab`	l	hours worked
`pinf`	π	Inflation
`w`	w	real wage
`r`	r	nominal interest rate
`rk`	r^k	rental rate of capital
`k`	k^s	Capital services
`mc`	μ_p	gross price markup
`spinf`	ε^p	Price markup shock process
`sw`	ε^w	Wage markup shock process
`g`	ε^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`	$Spread$	BBB-AAA Rate Spread
`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
`wh`	w^h	Marginal rate of substitution
`rktil`	r^{ktil}	Return to capital
`ztil`	z^{til}	Stationary Technology shock
`sigw`	σ_w	Financial shock
`pist`	π_*	Inflation Target
`og`	OG	OutputGap
`zp`	z_p	Permanent Technology shock
`n`	n	Entreprenurial Net Worth
`z`	w	Trend growth rate
`u`	u	Capital utilization rate
`mu`	ε^i	Investment-specific technology
`rm`	ε^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	η^a	TFP shock
eb	η^b	Risk Premium shock
eg	η^g	Spending shock
eqs	η^i	Investment-specific technology shock
em	η^m	Monetary policy shock
epinf	η^p	Price markup shock
ew	η^w	Wage markup shock
esigw	η^{σ_w}	Financial shock
epist	η^{π_*}	Inflation Target shock
ezp	η^{z_p}	Permanent technology shock

Table 6: Parameters

Variable	LaTeX	Description
cbeta	β	discount rate
cepsp	ε_w	Curvature Kimball aggregator wages
cepsw	ε_p	Curvature Kimball aggregator prices
calfa	α	capital share
czcap	ψ	capacity utilization cost
csadjcost	φ	investment adjustment cost
ctou	δ	depreciation rate
csigma	σ_c	risk aversion
chabb	λ	external habit degree
cfc	Φ	fixed cost share
cindw	ι_w	Indexation to past wages
cprobw	ξ_w	Calvo parameter wages
cindp	ι_p	Indexation to past prices
cprobp	ξ_p	Calvo parameter prices
csigl	σ_l	Frisch elasticity
crpi	r_π	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	ρ	interest rate persistence
czeta_spb	ζ_{sp}	Spread elasticity
cgammstar	γ^*	Wealth parameter
cvstar	v^*	Wealth parameter
cnstar	n_*	SS Entrepreneurial wealth
czeta_nRk	ζ_{nRk}	Net Worth parameter
czeta_nR	ζ_{nR}	Net Worth parameter
czeta_nsigw	$\zeta_{n\sigma_w}$	Net Worth parameter
czeta_spsigw	$\zeta_{sp\sigma_w}$	Net Worth parameter
czeta_nqk	ζ_{nqk}	Net Worth parameter
czeta_nn	ζ_{nn}	Net Worth parameter
cgy	ρ_{ga}	Feedback technology on exogenous spending
cmaw	μ_w	coefficient on MA term wage markup
cmap	μ_p	coefficient on MA term price markup
crhosigw	ρ_{σ_w}	persistence Financial shock
crhopist	ρ_{π_*}	persistence Inflation Target shock
crhozp	ρ_{zp}	persistence permanent technology shock
csigma_spinf	σ_{map}	price markup MA scaling
csigma_sw	σ_{maw}	wage markup MA scaling
crhoa	ρ_a	persistence productivity shock
crhob	ρ_b	persistence risk premium shock
crhog	ρ_g	persistence spending shock
crhoqs	ρ_i	persistence risk premium shock
crhoms	ρ_r	persistence monetary policy shock
crhopinf	ρ_p	persistence price markup shock
crhow	ρ_w	persistence wage markup shock
cgamma	$\underline{\gamma}$	Adjusted trend
crkstar	$\bar{rk}$	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	$\frac{\bar{yp}}{\bar{y}}$	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
β	0.999	discount rate
ε_w	10.000	Curvature Kimball aggregator wages
ε_p	10.000	Curvature Kimball aggregator prices
α	0.389	capital share
ψ	0.604	capacity utilization cost
φ	0.075	investment adjustment cost
δ	0.025	depreciation rate
σ_c	1.455	risk aversion
λ	0.303	external habit degree
Φ	1.177	fixed cost share
ι_w	0.186	Indexation to past wages
ξ_w	0.902	Calvo parameter wages
ι_p	0.177	Indexation to past prices
ξ_p	0.859	Calvo parameter prices
σ_l	0.251	Frisch elasticity
r_π	1.760	Taylor rule inflation feedback
$r_{\Delta y}$	0.289	Taylor rule output growth feedback
r_y	0.066	Taylor rule output level feedback
ρ	0.937	interest rate persistence
ζ_{sp}	0.043	Spread elasticity
γ^*	0.990	Wealth parameter
v^*	2.471	Wealth parameter
n_*	2.867	SS Entrepreneurial wealth
ζ_{nRk}	1.694	Net Worth parameter
ζ_{nR}	0.693	Net Worth parameter
$\zeta_{n\sigma_w}$	0.004	Net Worth parameter
$\zeta_{sp\sigma_w}$	0.028	Net Worth parameter
ζ_{nqk}	0.002	Net Worth parameter
ζ_{nn}	0.999	Net Worth parameter
ρ_{ga}	0.622	Feedback technology on exogenous spending
μ_w	0.437	coefficient on MA term wage markup
μ_p	0.832	coefficient on MA term price markup
ρ_{σ_w}	0.991	persistence Financial shock
ρ_{π_*}	0.994	persistence Inflation Target shock
ρ_{zp}	0.950	persistence permanent technology shock
σ_{map}	1.000	price markup MA scaling
σ_{maw}	1.000	wage markup MA scaling
ρ_a	0.967	persistence productivity shock
ρ_b	0.858	persistence risk premium shock
ρ_g	0.982	persistence spending shock
ρ_i	0.996	persistence risk premium shock
ρ_r	0.057	persistence monetary policy shock
ρ_p	0.964	persistence price markup shock

Table 7 – Continued

Parameter	Value	Description
ρ_w	0.255	persistence wage markup shock
$\underline{\gamma}$	0.579	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
$\frac{\underline{yp}}{\bar{y}}$	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
$\bar{\pi}$	0.397	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* Lower	Bounds* Upper	90% HPDI Lower	90% HPDI Upper
σ_{η^a}	Inv. Gamma	0.1000	0.0461	2.0000	0.0118	5595.7204	0.0326	0.2490
σ_{η^b}	Inv. Gamma	0.1000	0.0461	2.0000	0.0118	5595.7204	0.0326	0.2490
σ_{η^g}	Inv. Gamma	0.1000	0.0461	2.0000	0.0118	5595.7204	0.0326	0.2490
σ_{η^i}	Inv. Gamma	0.1000	0.0461	2.0000	0.0118	5595.7204	0.0326	0.2490
σ_{η^m}	Inv. Gamma	0.1000	0.0461	2.0000	0.0118	5595.7204	0.0326	0.2490
σ_{η^p}	Inv. Gamma	0.1000	0.0461	2.0000	0.0118	5595.7204	0.0326	0.2490
σ_{η^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
α	Gaussian	0.3000	0.3000	0.0500	-0.0181	0.6181	0.2178	0.3822
ψ	Beta	0.5000	0.5000	0.1500	0.0040	0.9960	0.2526	0.7474
Φ	Gaussian	1.2500	1.2500	0.1250	0.4548	2.0452	1.0444	1.4556
ι_w	Beta	0.5000	0.5000	0.1500	0.0040	0.9960	0.2526	0.7474
ξ_w	Beta	0.5000	0.5000	0.1000	0.0471	0.9529	0.3351	0.6649
ι_p	Beta	0.5000	0.5000	0.1500	0.0040	0.9960	0.2526	0.7474
ξ_p	Beta	0.5000	0.5000	0.1000	0.0471	0.9529	0.3351	0.6649
σ_c	Gaussian	1.5000	1.5000	0.3750	-0.8855	3.8855	0.8832	2.1168
σ_l	Gaussian	2.0000	2.0000	0.7500	-2.7710	6.7710	0.7664	3.2336
λ	Beta	0.7000	0.7222	0.1000	0.1025	0.9960	0.5242	0.8525
φ	Gaussian	4.0000	4.0000	1.5000	-5.5420	13.5420	1.5327	6.4673
r_π	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
ρ	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
γ	Gaussian	0.4000	0.4000	0.1000	-0.2361	1.0361	0.2355	0.5645
ζ_{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
ρ_{ga}	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
ρ_a	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
ρ_b	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
ρ_g	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
ρ_i	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
ρ_r	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
ρ_p	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
ρ_w	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
ρ_{σ_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* Lower	Bounds* Upper	90% HPDI Lower	90% HPDI Upper
ρ_{π_*}	Beta	0.7500	0.8438	0.1500	0.0114	1.0000	0.4671	0.9519
μ_p	Beta	0.5000	0.5000	0.2000	0.0001	0.9999	0.1718	0.8282
μ_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

Order	1	2	3	4	5
y	0.9952	0.9886	0.9814	0.9740	0.9666
c	0.9965	0.9919	0.9870	0.9821	0.9771
i	0.9918	0.9760	0.9568	0.9364	0.9161
π	0.9187	0.8872	0.8638	0.8414	0.8187
r	0.9590	0.9074	0.8559	0.8072	0.7621
w	0.9954	0.9896	0.9823	0.9736	0.9637
k^s	0.9980	0.9954	0.9925	0.9892	0.9855
l	0.9934	0.9838	0.9731	0.9622	0.9511
q	0.9945	0.9896	0.9851	0.9807	0.9764
n	0.9962	0.9921	0.9877	0.9830	0.9779
r^{ktil}	0.3488	0.3629	0.3628	0.3564	0.3469
OG	0.9950	0.9874	0.9790	0.9705	0.9618

Table 10: MATRIX OF CORRELATIONS

$Variables$	y	c	i	π	r	w	k^s	l	q	n	r^{ktil}	OG
y	1.0000	0.9699	0.8832	0.2260	0.2402	0.2646	0.7432	0.7704	-0.3340	0.4390		
c	0.9699	1.0000	0.8369	0.2015	0.1885	0.2604	0.7509	0.7219	-0.3683	0.4516		
i	0.8832	0.8369	1.0000	0.3197	0.3361	0.4620	0.8212	0.5175	-0.4504	0.5242		
π	0.2260	0.2015	0.3197	1.0000	0.7921	0.6878	0.4814	-0.1211	-0.0109	0.4972		
r	0.2402	0.1885	0.3361	0.7921	1.0000	0.5741	0.3886	-0.0069	-0.0332	0.3239		
w	0.2646	0.2604	0.4620	0.6878	0.5741	1.0000	0.7747	-0.3433	-0.3329	0.7137		
k^s	0.7432	0.7509	0.8212	0.4814	0.3886	0.7747	1.0000	0.1487	-0.5851	0.7717		
l	0.7704	0.7219	0.5175	-0.1211	-0.0069	-0.3433	0.1487	1.0000	0.0648	-0.0813		
q	-0.3340	-0.3683	-0.4504	-0.0109	-0.0332	-0.3329	-0.5851	0.0648	1.0000	-0.2775		
n	0.4390	0.4516	0.5242	0.4972	0.3239	0.7137	0.7717	-0.0813	-0.2775	1.0000		
r^{ktil}	0.2122	0.1848	0.2458	0.6460	0.5109	0.4066	0.2993	0.0313	-0.0121	0.2918		
OG	0.9244	0.9038	0.7766	0.3043	0.3203	0.2101	0.5849	0.8154	-0.0107	0.3527		

Table 11: THEORETICAL MOMENTS

$VARIABLE$	$MEAN$	$STD.DEV.$	$VARIANCE$
y	0.0000	13.4465	180.8076
c	0.0000	16.0648	258.0792
i	0.0000	20.6222	425.2738
π	0.0000	0.7894	0.6231
r	0.0000	0.8766	0.7684
w	0.0000	14.2554	203.2155
k^s	0.0000	18.9735	359.9924
l	0.0000	12.5558	157.6480
q	0.0000	8.6563	74.9315
n	0.0000	20.1210	404.8535
r^{ktil}	0.0000	1.2034	1.4482
OG	0.0000	12.4090	153.9842

Table 12: VARIANCE DECOMPOSITION (in percent)

	η^a	η^b	η^g	η^i	η^m	η^p	η^w	η^{σ_w}	η^{π_*}	η^{z_p}
y	0.64	1.98	2.17	11.98	19.84	1.64	0.06	0.41	50.60	10.68
c	0.40	2.25	0.34	14.66	17.49	0.81	0.06	0.37	52.93	10.69
i	1.54	1.88	0.15	22.42	23.23	4.76	0.32	9.83	30.46	5.41
π	1.19	0.50	0.04	0.02	2.29	20.36	0.79	0.19	11.31	63.32
r	1.80	25.59	0.41	0.96	1.72	3.88	0.56	1.78	11.66	51.63
w	2.85	0.04	0.07	13.74	2.69	10.18	0.82	0.47	8.37	60.79
k^s	1.76	0.31	0.30	40.11	10.96	3.45	0.09	1.66	30.69	10.66
l	0.97	2.59	2.87	2.92	15.70	0.35	0.18	0.26	30.85	43.31
q	0.01	0.05	0.00	99.76	0.09	0.01	0.00	0.05	0.00	0.01
n	1.95	2.95	0.36	26.94	7.79	2.38	0.08	11.47	26.75	19.32
r^{ktil}	0.81	3.91	0.14	42.79	6.19	10.54	0.74	3.02	6.41	25.45
OG	0.49	2.32	0.13	0.28	23.29	1.93	0.07	0.48	59.41	11.59

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

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

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

$$clandap = \Phi$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$y3 = \bar{rk}\,\frac{k^*}{\frac{\bar{yp}}{\bar{y}}}$$

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

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

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

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

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

$$c_t = (-c2)\ (r_t - \pi_{t+1}) + c_2 * \varepsilon^b_{t\,t} + c1\ (c_{t-1} - w_t) + c3\ \left(c_{t+1} + c4\, {z^{til}}_t\right) + c5\ (l_t - l_{t+1}) \tag{1}$$

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

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

$${k^s}_t = k_{t-1} + u_t - w_t \tag{4}$$

$$u_t = u1\, {r^k}_t \tag{5}$$

$$\mu_{p_t} = w_t + \alpha\, l_t - \alpha\, {k^s}_t \tag{6}$$

$${k^s}_t = l_t + w_t - {r^k}_t \tag{7}$$

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

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

$$\pi_t = \mu_{p_t}\, pi1\, pi2 + pi3\, \pi_{t-1} + \pi_{t+1}\, pi4 + {\varepsilon^p}_t \tag{10}$$

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

$${w^h}_t = mrs1\ (c_t - \lambda\ \exp((-\gamma))\ c_{t-1} + \lambda\ \exp((-\gamma))\ w_t) + l_t\, \sigma_l \tag{12}$$

$$\begin{aligned} r_t = {} & \rho\, r_{t-1} + (1 - \rho)\ r_\pi\ (\pi_t - \pi_{*t}) + (1 - \rho)\ r_y\ \left(y_t - {y^{flex}}_t\right) \\ & + r_{\Delta y}\ \left(y_t - {y^{flex}}_t - \left(y_{t-1} - {y^{flex}}_{t-1}\right)\right) + {\varepsilon^r}_t \end{aligned} \tag{13}$$

$${r^{ktil}}_t = \pi_t + {r^k}_t\, ff1 + q_t\, ff2 - q_{t-1} \tag{14}$$

$$r^{ktil}{}_{t+1} - r_t = c_2 * \varepsilon^b_{t\,t}\ (-ff3) + \zeta_{sp}\ (q_t + k_t - n_t) + \sigma_{wt} \tag{15}$$

$$n_t = \zeta_{nRk}\ \left(r^{ktil}{}_t - \pi_t\right) - \zeta_{nR}\ (r_{t-1} - \pi_t) + \zeta_{nqk}\ (k_{t-1} + q_{t-1}) + \zeta_{nn}\, n_{t-1} - \frac{\zeta_{n\sigma_w}}{\zeta_{sp\sigma_w}}\, \sigma_{wt-1} - w_t\, ff4 \tag{16}$$

$$c^{flex}{}_t = c_2 * \varepsilon^b_{t\,t} + (-c2)\ r^{flex}{}_t + c1\ \left(c^{flex}{}_{t-1} - w_t\right) + c3\ \left(c4\, z^{til}{}_t + c^{flex}{}_{t+1}\right) + c5\ \left(l^{flex}{}_t - l^{flex}{}_{t+1}\right) \tag{17}$$

$$q^{flex}{}_t = i3\ \left(i^{flex}{}_t - i1\ \left(i^{flex}{}_{t-1} - w_t\right) - i2\, i^{flex}{}_{t+1} - z^{til}{}_t\, c4\, i2 - \varepsilon^i{}_t\right) \tag{18}$$

$$k^{flex}{}_t = \varepsilon^i{}_t\, k3 + k1\ \left(k^{flex}{}_{t-1} - w_t\right) + k2\, i^{flex}{}_t \tag{19}$$

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

$$z^{flex}{}_t = u1\, r^{k,flex}{}_t \tag{21}$$

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

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

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

$$y^{flex}{}_t = \frac{\bar{g}}{\bar{y}}\, \varepsilon^g{}_t + y1\, c^{flex}{}_t + y2\, i^{flex}{}_t + y3\, z^{flex}{}_t - z^{til}{}_t\, c4\, \frac{\bar{g}}{\bar{y}} \tag{25}$$

$$w^{flex}{}_t = mrs1\ \left(\lambda\, \exp\left((-\gamma)\right)\, w_t + c^{flex}{}_t - \lambda\, \exp\left((-\gamma)\right)\, c^{flex}{}_{t-1}\right) + \sigma_l\, l^{flex}{}_t \tag{26}$$

$$q^{flex}{}_t = ff1\, r^{k,flex}{}_{t+1} + ff2\, q^{flex}{}_{t+1} - r^{flex}{}_t + c_2 * \varepsilon^b_{t\,t}\, ff3 \tag{27}$$

$$OG_t = y_t - y^{flex}{}_t \tag{28}$$

$$w_t = c4\, z^{til}{}_{t-1} + \frac{1}{1 - \alpha}\, \eta^a{}_t + z_{p_t} \tag{29}$$

$$z^{til}{}_t = \eta^a{}_t + \rho_a\, z^{til}{}_{t-1} \tag{30}$$

$$\varepsilon^g{}_t = \rho_g\, \varepsilon^g{}_{t-1} + \eta^g{}_t + \eta^a{}_t\, \rho_{ga} \tag{31}$$

$$c_2 * \varepsilon^b_{t\,t} = \rho_b\, c_2 * \varepsilon^b_{t\,t-1} + \eta^b{}_t \tag{32}$$

$$\varepsilon^{i}{}_{t} = \rho_i \, \varepsilon^{i}{}_{t-1} + \eta^{i}{}_{t} \tag{33}$$

$$\varepsilon^{p}{}_{t} = \rho_p \, \varepsilon^{p}{}_{t-1} + \eta^{p}{}_{t} - \mu_p \, \sigma_{map} \, \eta^{p}{}_{t-1} \tag{34}$$

$$\varepsilon^{w}{}_{t} = \rho_w \, \varepsilon^{w}{}_{t-1} + \eta^{w}{}_{t} - \mu_w \, \sigma_{maw} \, \eta^{w}{}_{t-1} \tag{35}$$

$$\varepsilon^{r}{}_{t} = \rho_r \, \varepsilon^{r}{}_{t-1} + \eta^{m}{}_{t} \tag{36}$$

$$\sigma_{wt} = \sigma_{wt-1} \, \rho_{\sigma_w} + \eta^{\sigma_w}{}_{t} \tag{37}$$

$$\pi_{*t} = \rho_{\pi_*} \, \pi_{*t-1} + \eta^{\pi_*}{}_{t} \tag{38}$$

$$z_{p_t} = \rho_{zp} \, z_{p_{t-1}} + \eta^{z_p}{}_{t} \tag{39}$$

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

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

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

$$dlWAG_t = w_t + \bar{\gamma} + w_t - w_{t-1} \tag{43}$$

$$lHOURS_t = l_t + \bar{l} \tag{44}$$

$$FEDFUNDS_t = r_t + \bar{r} \tag{45}$$

$$dlP_t = \bar{\pi} + \pi_t \tag{46}$$

$$Spread_t = 100 \, \left(r^{ktil}{}_{t} - r_t \right) + 0.02 \tag{47}$$

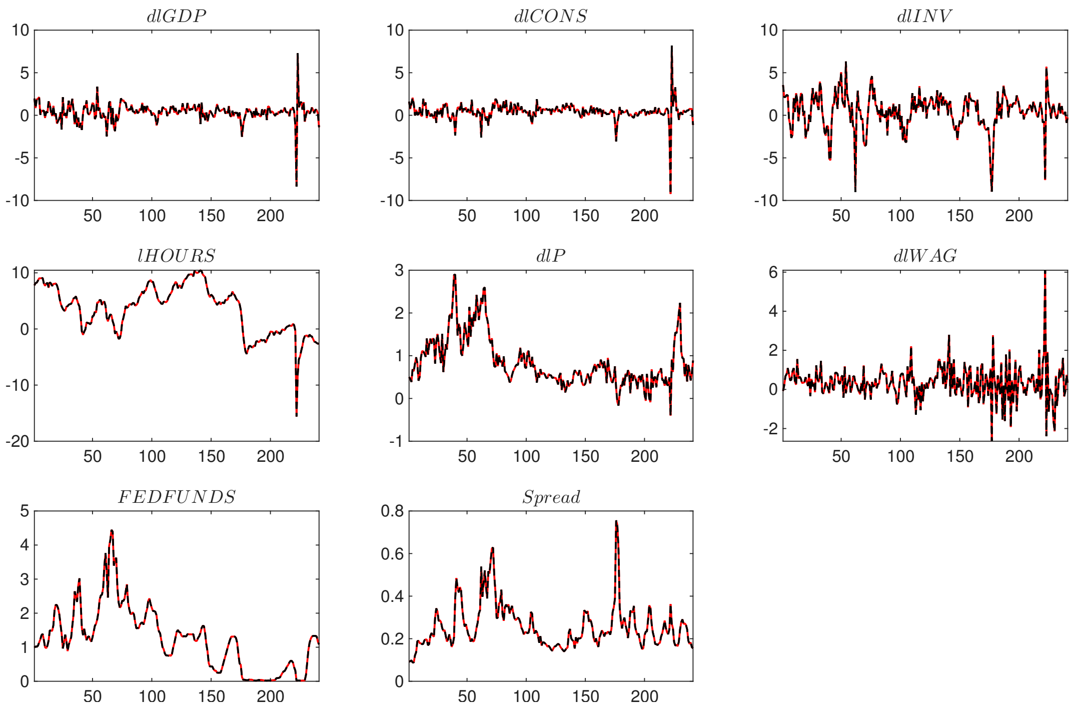

Figure 6: Historical and smoothed variables.

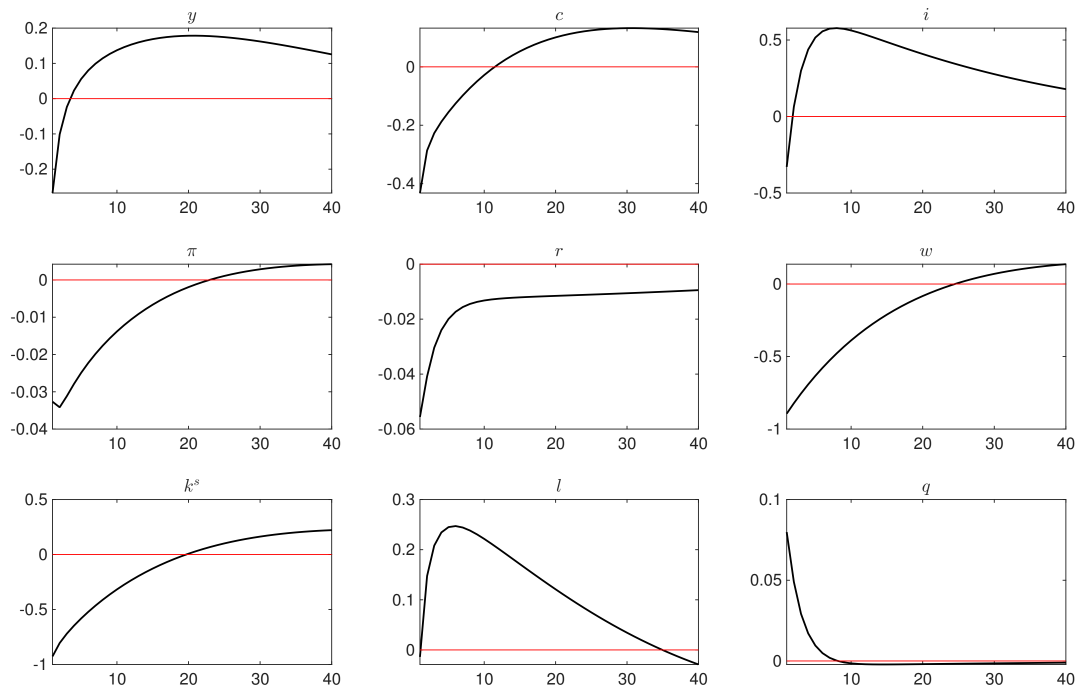

Figure 7: Impulse response functions (orthogonalized shock to η^a).

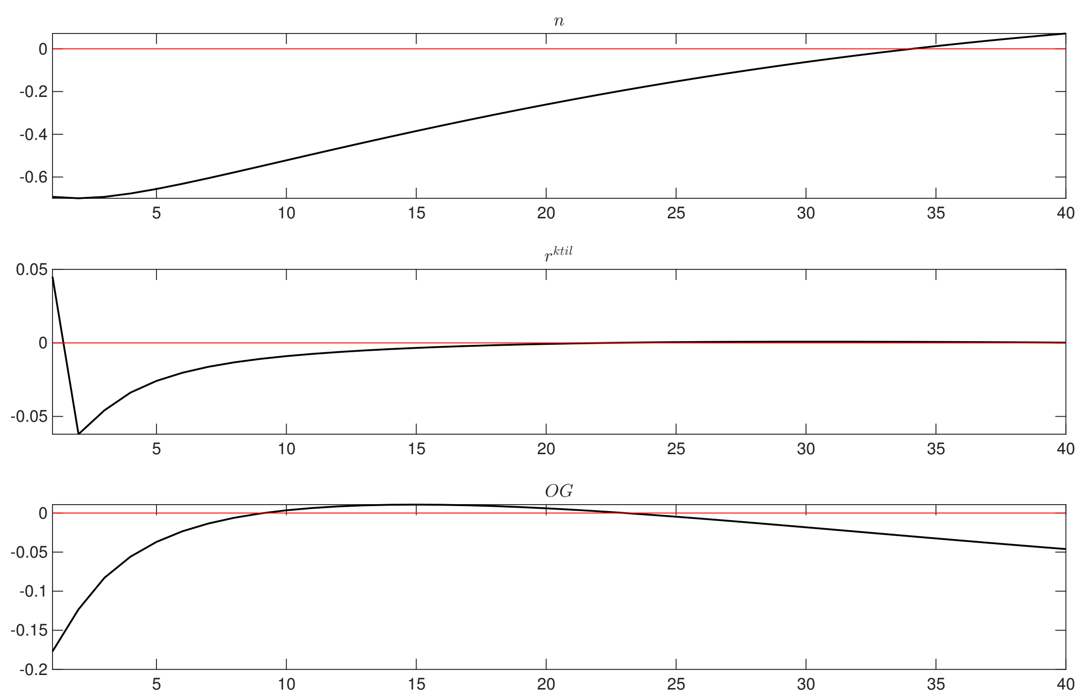

Figure 8: Impulse response functions (orthogonalized shock to η^a).

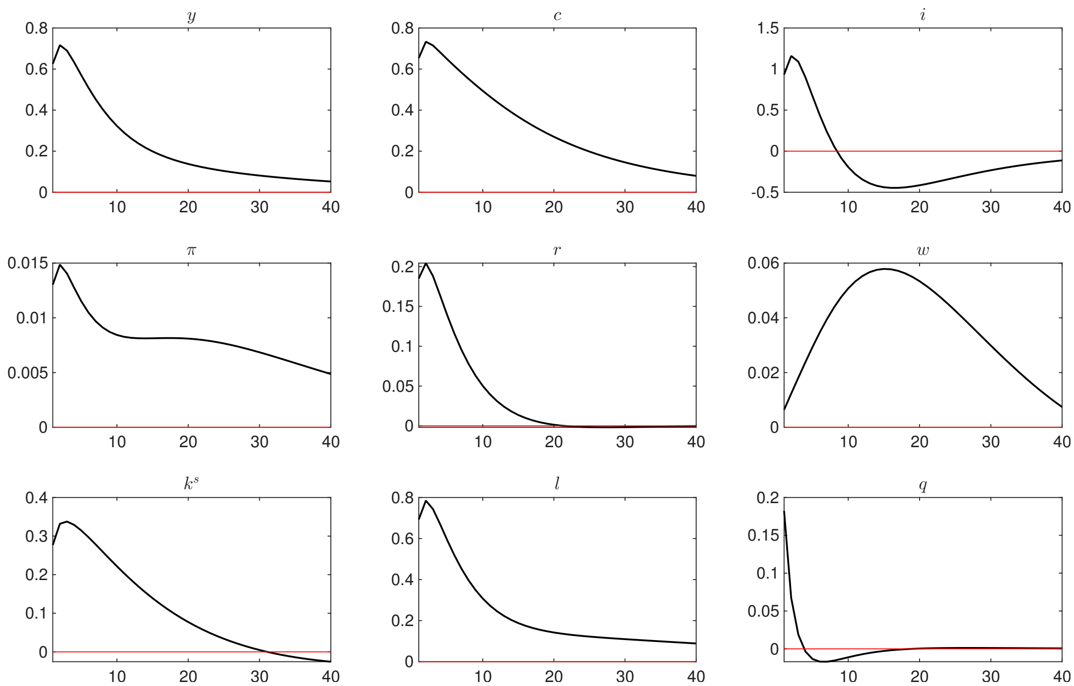

Figure 9: Impulse response functions (orthogonalized shock to η^b).

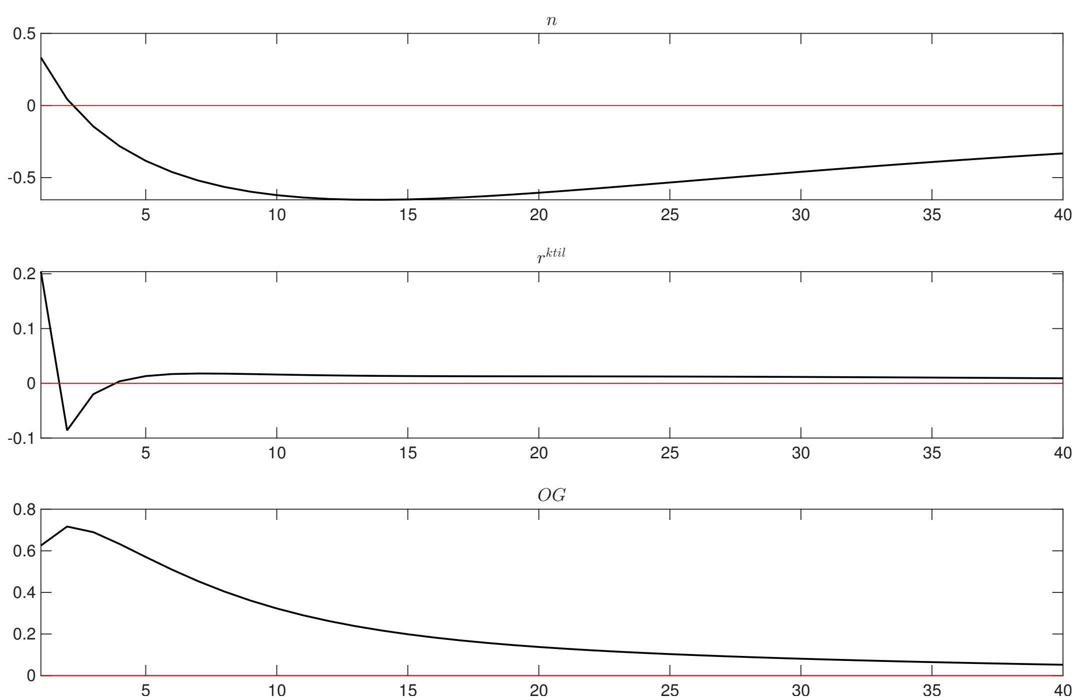

Figure 10: Impulse response functions (orthogonalized shock to η^b).

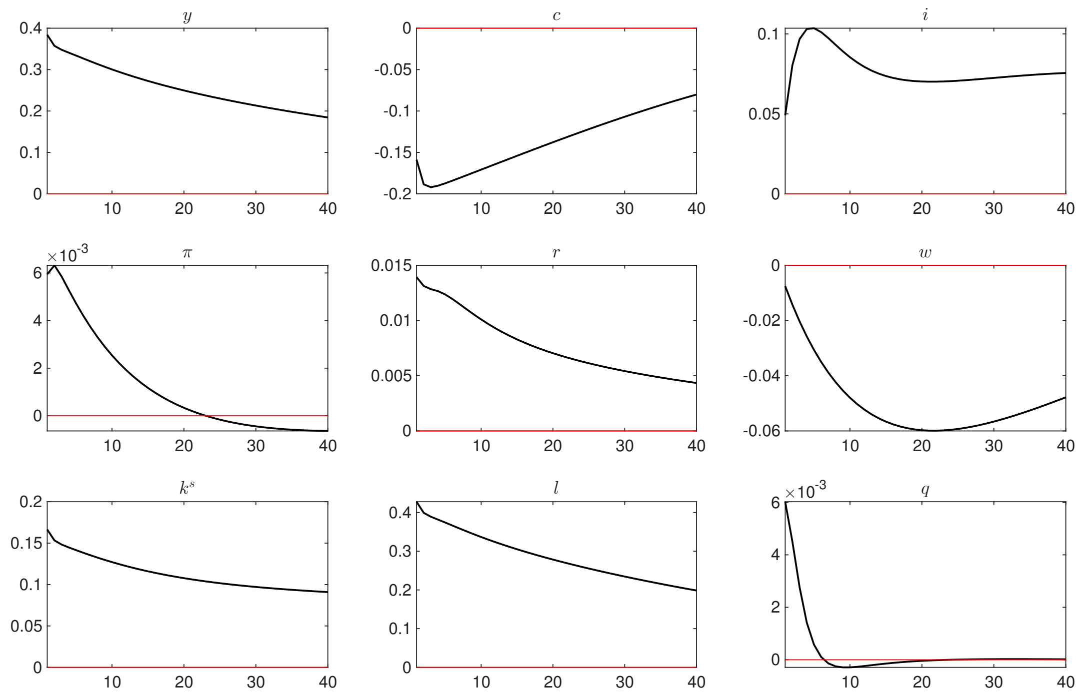

Figure 11: Impulse response functions (orthogonalized shock to η^g).

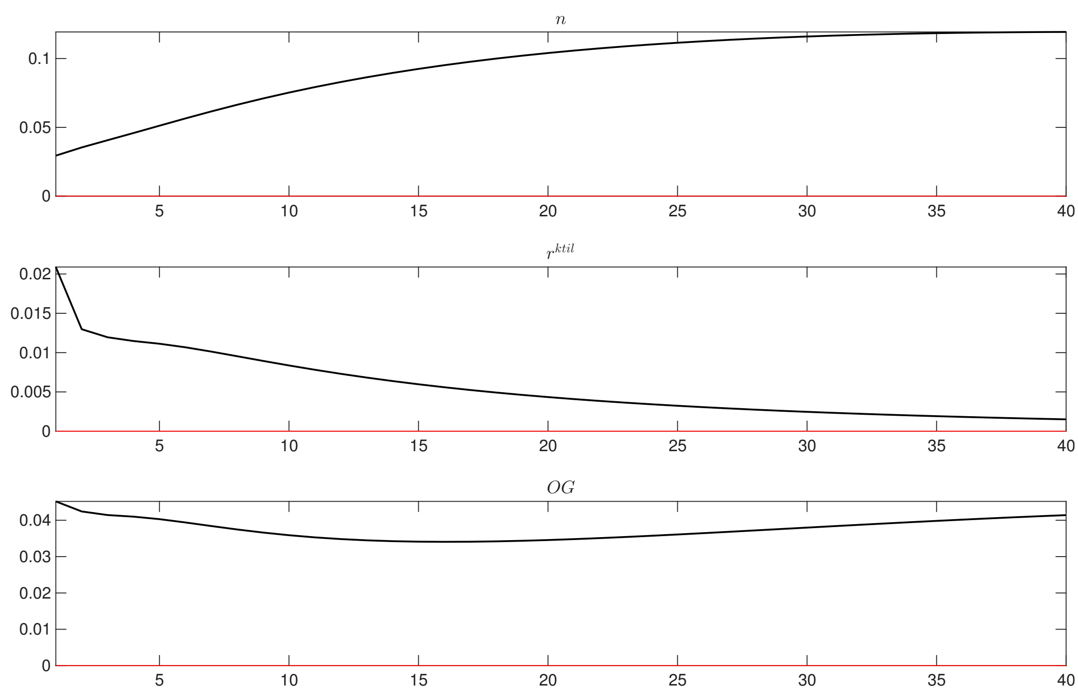

Figure 12: Impulse response functions (orthogonalized shock to η^g).

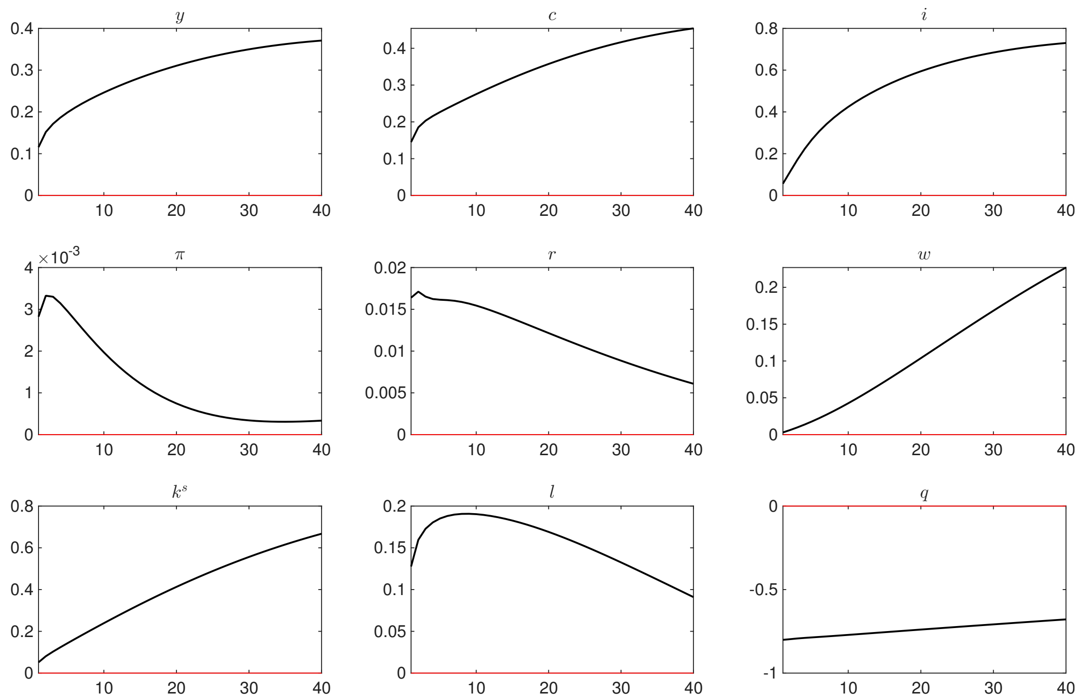

Figure 13: Impulse response functions (orthogonalized shock to η^i).

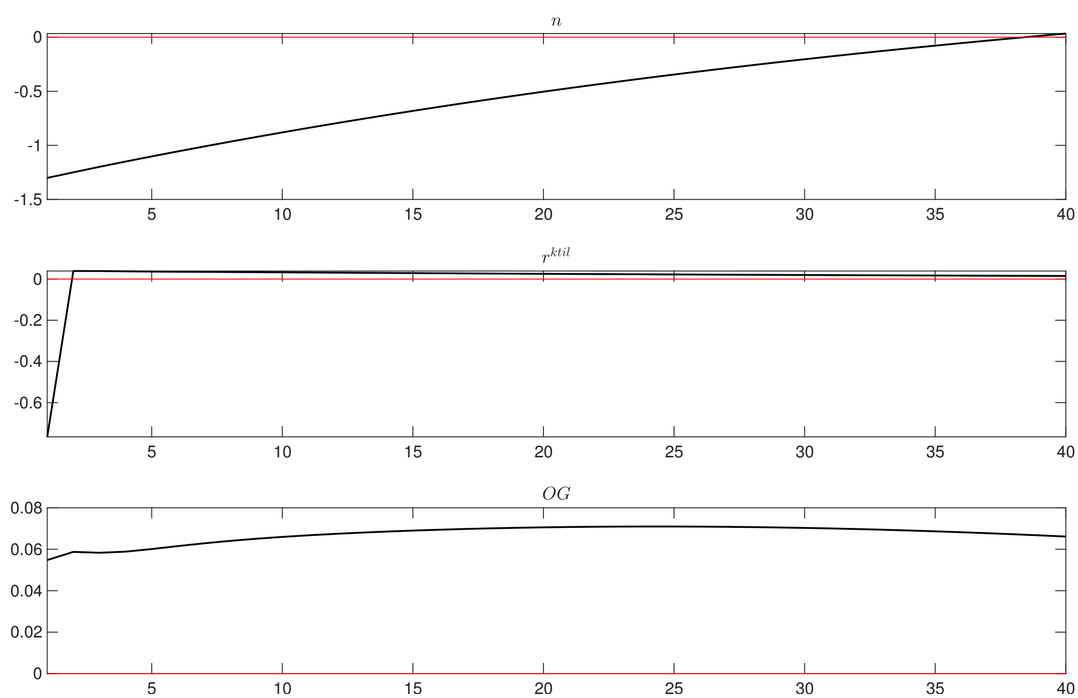

Figure 14: Impulse response functions (orthogonalized shock to η^i).

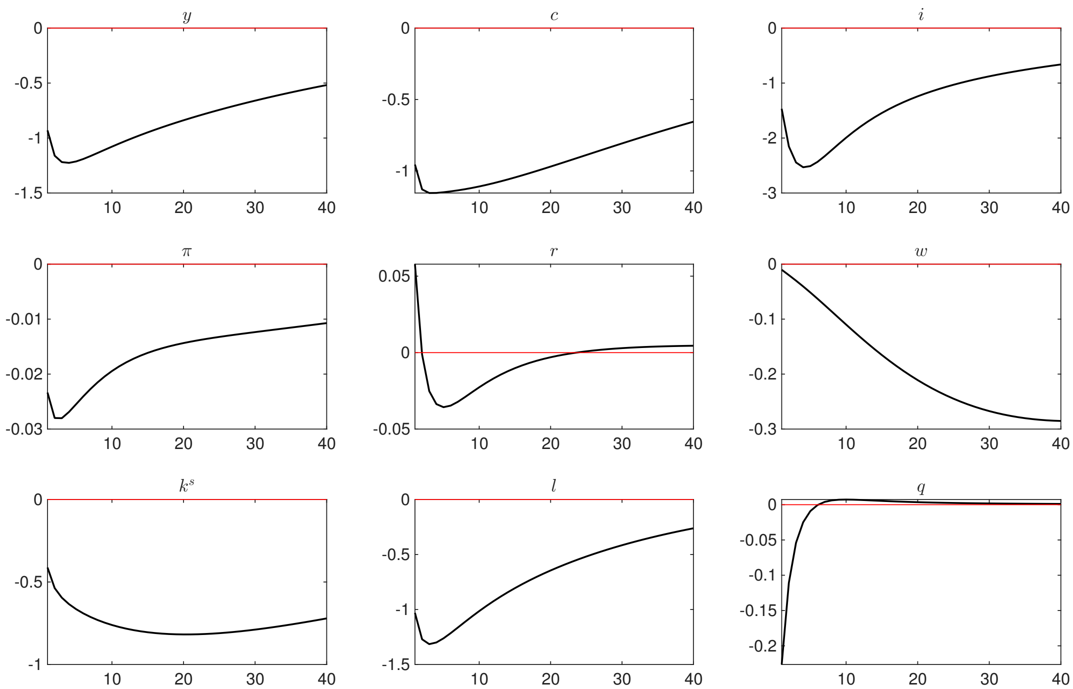

Figure 15: Impulse response functions (orthogonalized shock to η^m).

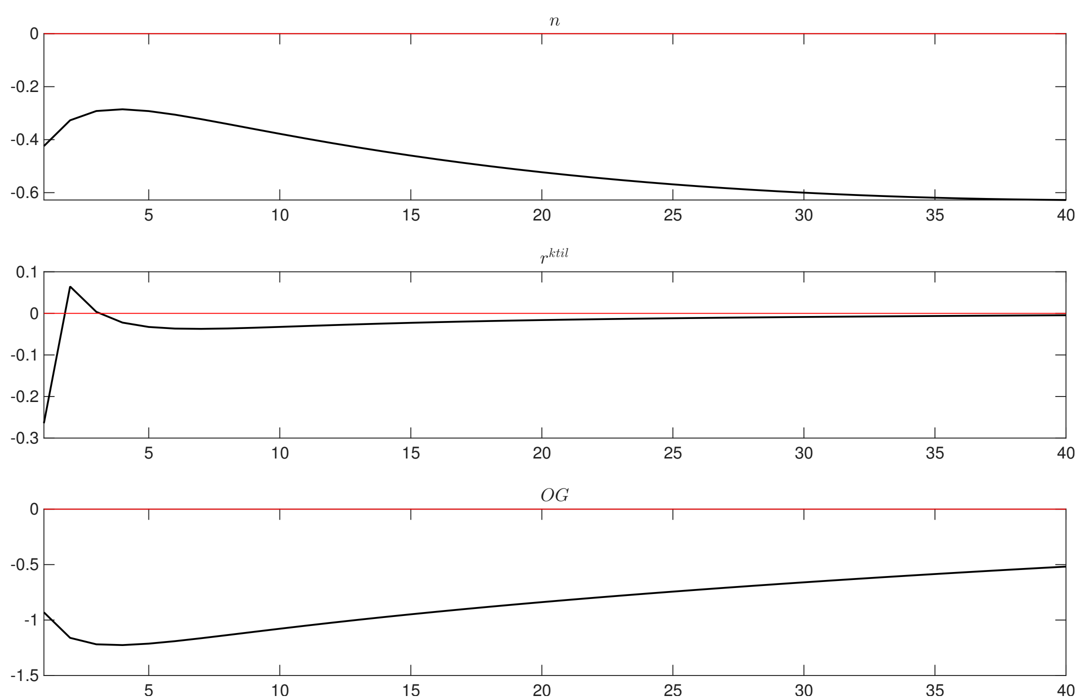

Figure 16: Impulse response functions (orthogonalized shock to η^m).

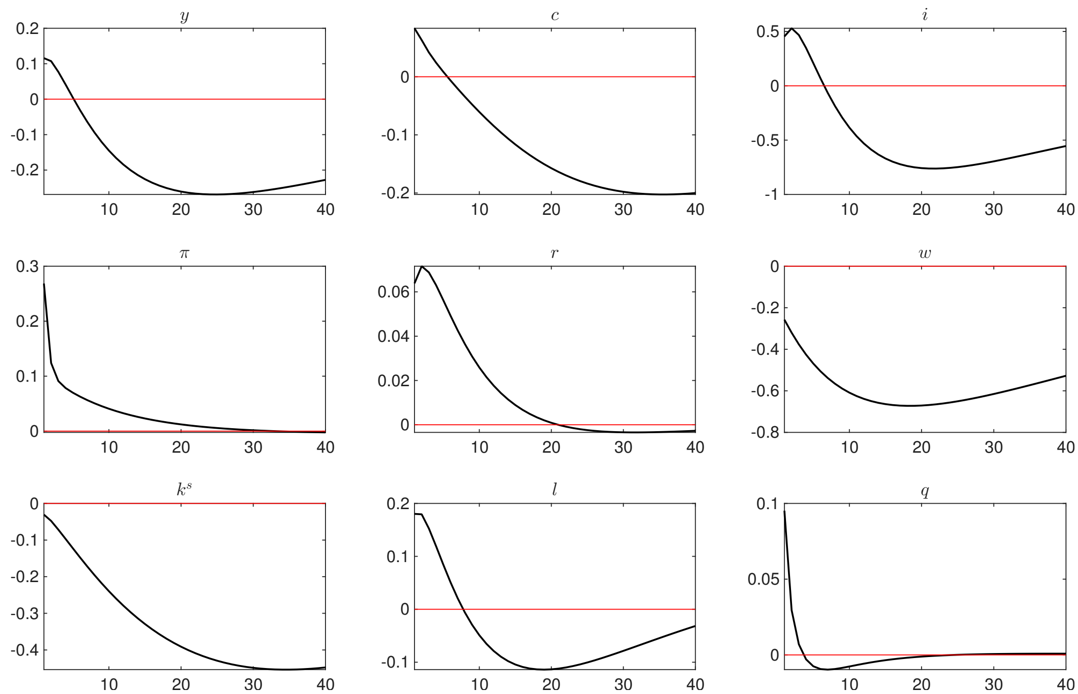

Figure 17: Impulse response functions (orthogonalized shock to η^p).

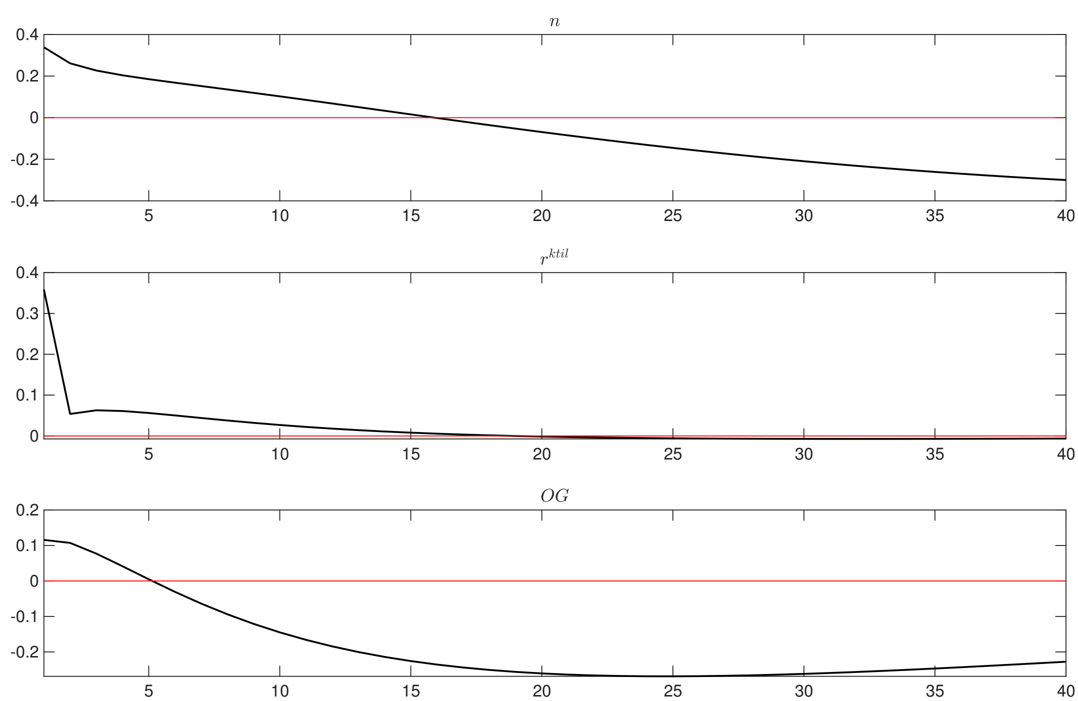

Figure 18: Impulse response functions (orthogonalized shock to η^p).

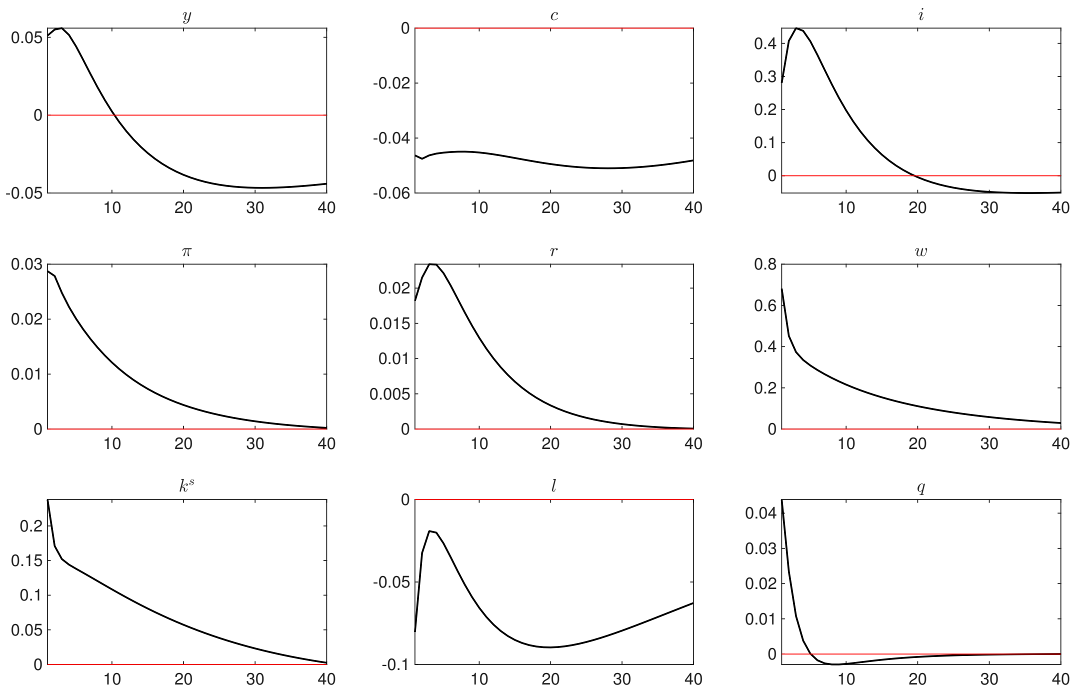

Figure 19: Impulse response functions (orthogonalized shock to η^w).

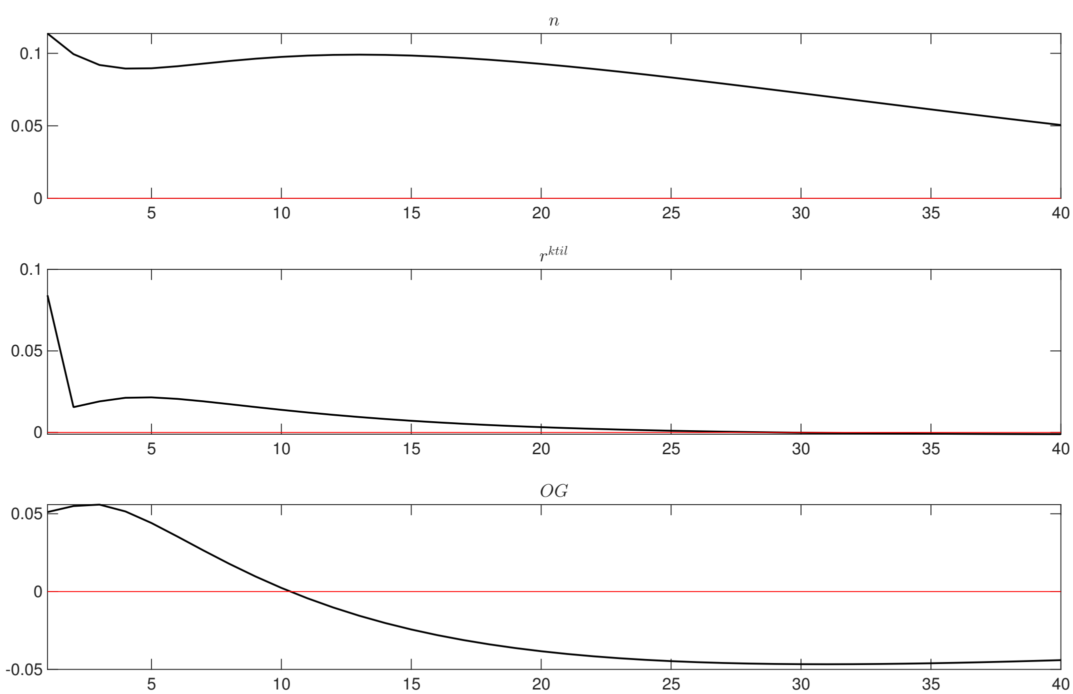

Figure 20: Impulse response functions (orthogonalized shock to η^w).

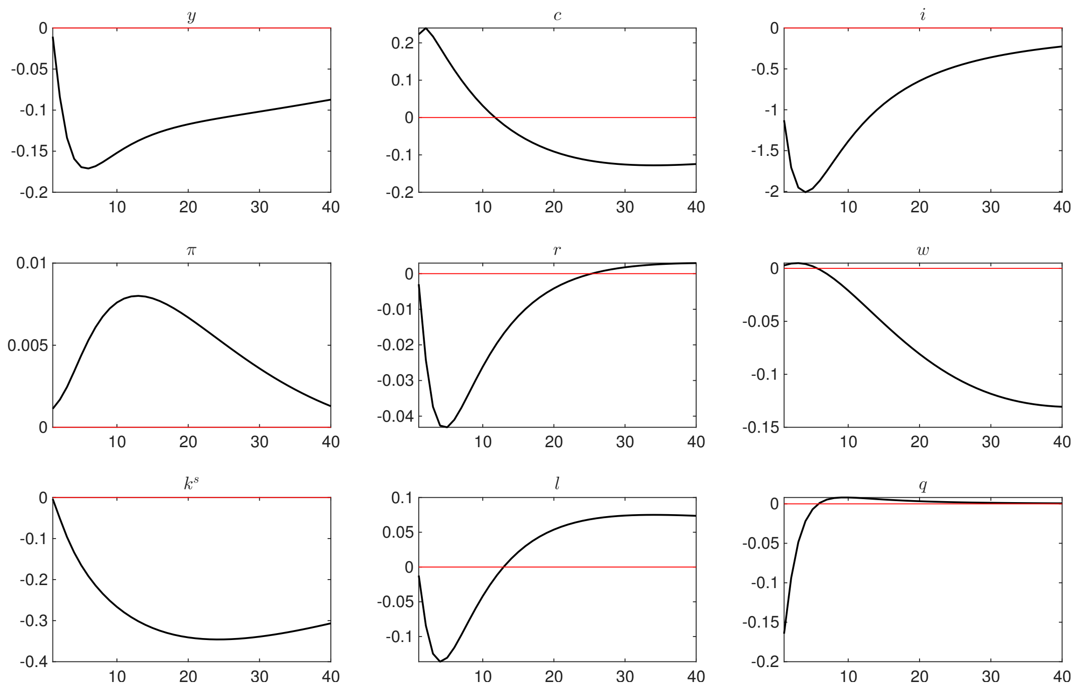

Figure 21: Impulse response functions (orthogonalized shock to η^{σ_w}).

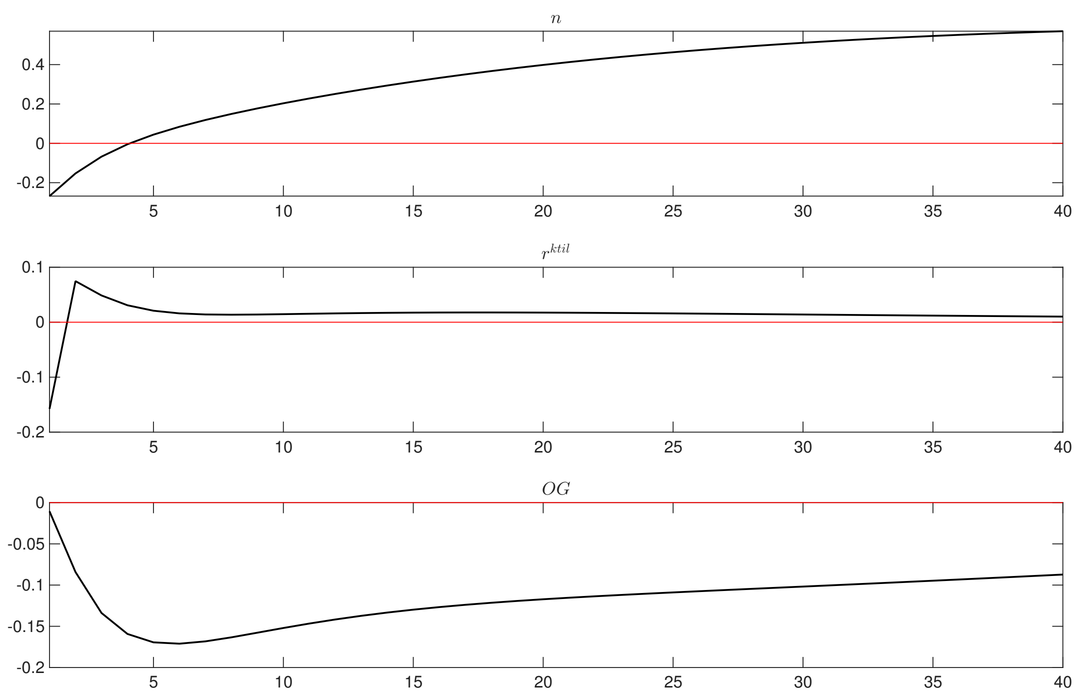

Figure 22: Impulse response functions (orthogonalized shock to η^{σ_w}).

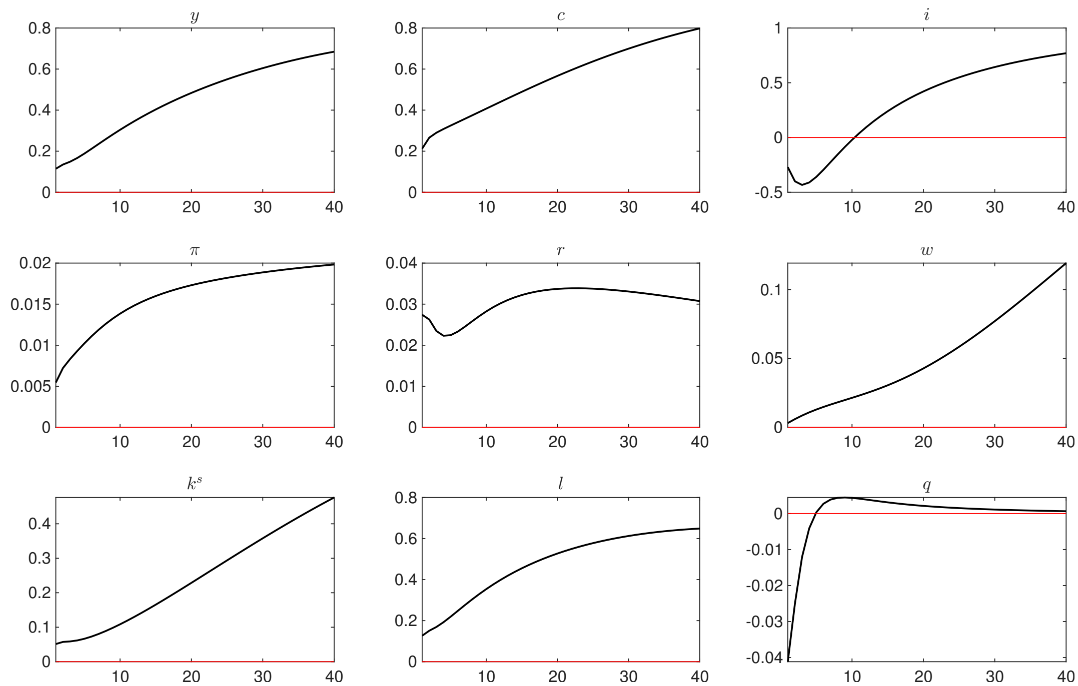

Figure 23: Impulse response functions (orthogonalized shock to η^{π_*}).

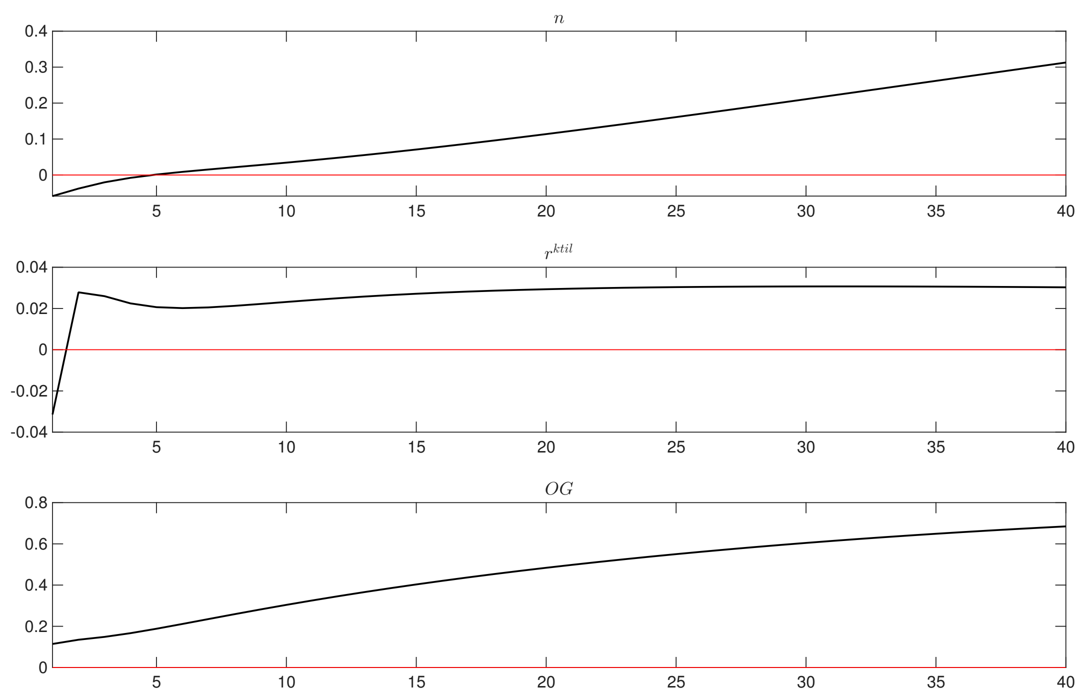

Figure 24: Impulse response functions (orthogonalized shock to η^{π_*}).

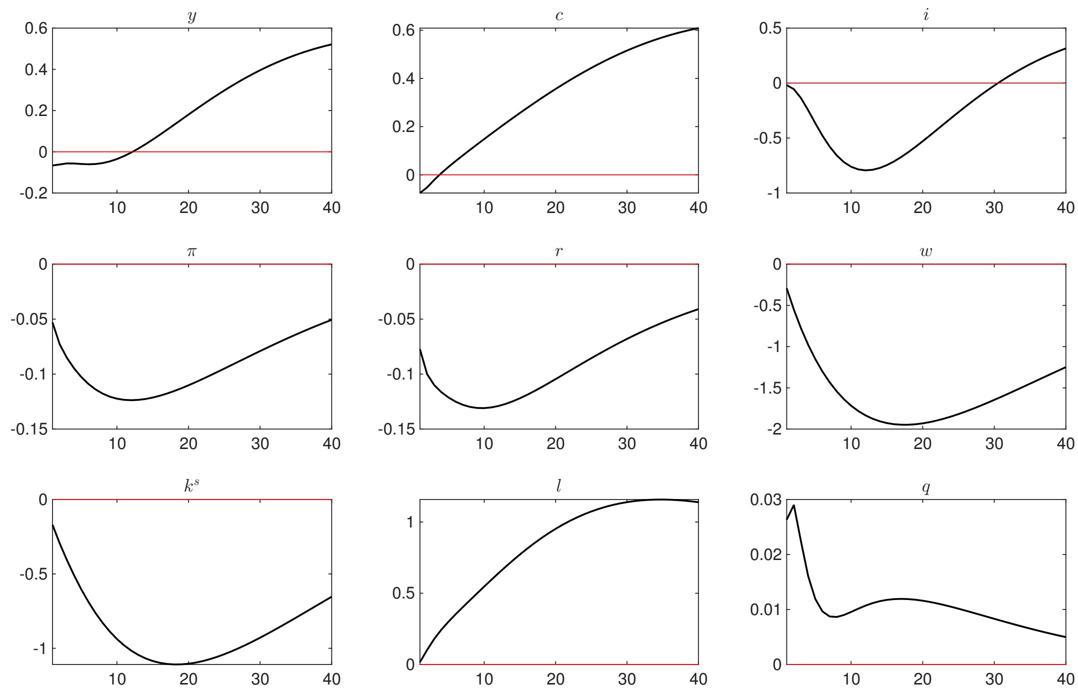

Figure 25: Impulse response functions (orthogonalized shock to η^{z_p}).

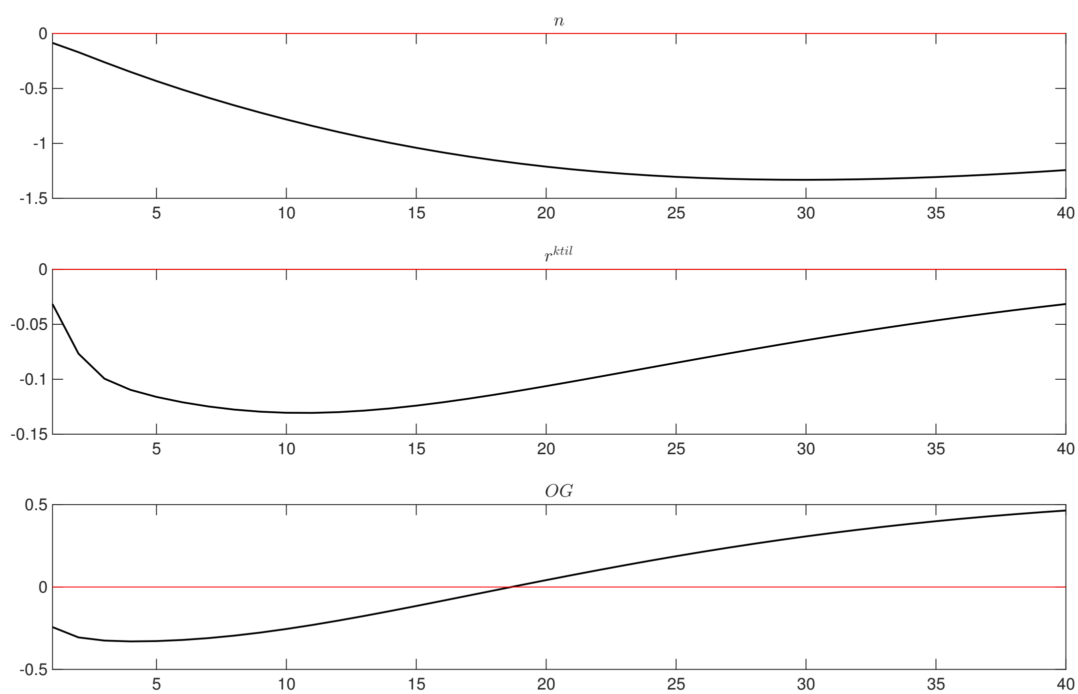

Figure 26: Impulse response functions (orthogonalized shock to η^{z_p}).

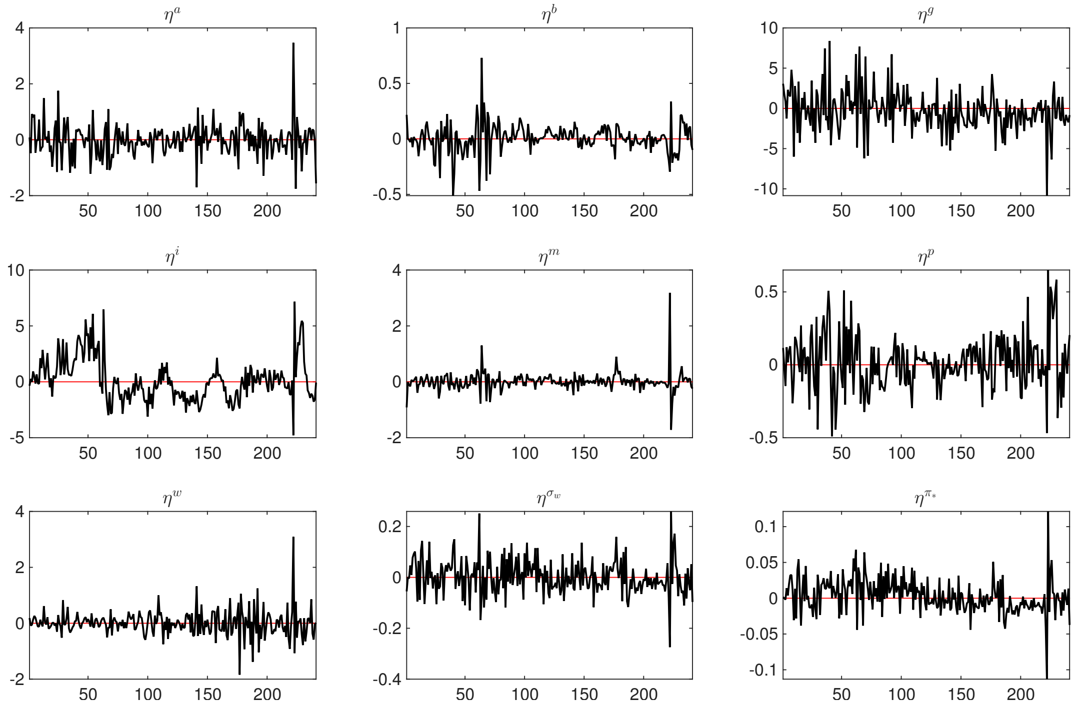

Figure 27: Smoothed shocks.

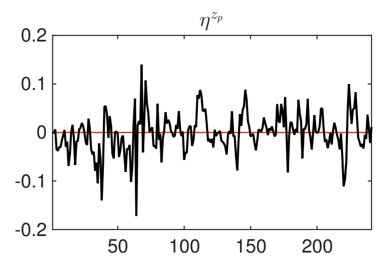

Figure 28: Smoothed shocks.