

Table 1: MCMC Inefficiency factors per block

<i>Parameter</i>	<i>Block 1</i>	<i>Block 2</i>
σ_{η^a}	353.795	428.823
σ_{η^b}	427.142	406.861
σ_{η^g}	216.951	197.552
σ_{η^i}	254.051	441.071
σ_{η^m}	276.108	271.643
σ_{η^p}	441.306	426.112
σ_{η^w}	360.687	304.707
α	374.580	468.230
φ	397.047	527.016
μ_w	684.368	397.440
μ_p	513.106	295.922
σ_c	373.432	450.275
λ	456.521	504.751
ξ_w	244.859	642.121
σ_l	512.278	618.734
ξ_p	366.859	418.237
ι_w	398.341	626.330
ι_p	453.353	519.773
ψ	375.974	392.767
Φ	567.321	660.928
$\bar{\pi}$	333.635	410.665
$100(\beta^{-1} - 1)$	398.953	600.017
\bar{l}	407.940	384.030
$\bar{\gamma}$	344.632	301.096
r_π	339.540	572.707
ρ	360.104	428.312
r_y	480.873	433.341
$r_{\Delta y}$	495.096	461.150
ρ_a	284.498	407.774
ρ_b	401.513	316.020
ρ_g	323.487	378.664
ρ_i	349.911	509.116
ρ_r	320.169	269.487
ρ_p	462.152	412.309
ρ_w	684.387	442.120
ρ_{ga}	378.348	411.340

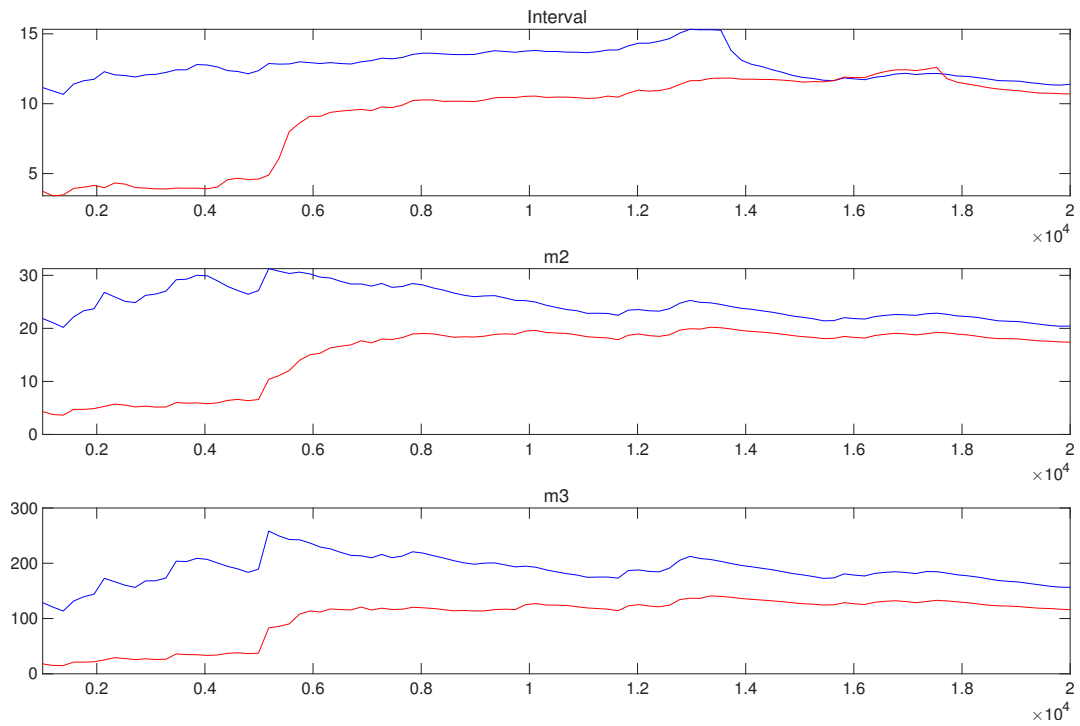


Figure 1: Multivariate convergence diagnostics for the Metropolis-Hastings. The first, second and third rows are respectively the criteria based on the eighty percent interval, the second and third moments. The different parameters are aggregated using the posterior kernel.

Table 2: Results from Metropolis-Hastings (parameters)

	Prior			Posterior			
	Dist.	Mean	Stdev.	Mean	Stdev.	HPD inf	HPD sup
α	norm	0.300	0.1500	0.205	0.0200	0.1721	0.2368
φ	norm	4.000	4.5000	8.404	1.4476	6.1047	10.8848
μ_w	unif	0.000	1.0000	0.719	0.2416	0.2381	0.9831
μ_p	unif	0.000	1.0000	0.749	0.0936	0.5974	0.8960
σ_c	norm	1.500	1.1100	1.676	0.1967	1.3338	1.9590
λ	unif	0.000	1.0000	0.719	0.0443	0.6450	0.7939
ξ_w	unif	0.000	1.0000	0.933	0.0168	0.9085	0.9500
σ_l	norm	2.000	2.2500	3.947	1.1497	2.3006	5.8884
ξ_p	unif	0.000	1.0000	0.738	0.0506	0.6497	0.8167
ι_w	unif	0.000	1.0000	0.824	0.1569	0.5809	0.9899
ι_p	unif	0.000	1.0000	0.183	0.1297	0.0105	0.3784
ψ	unif	0.000	1.0000	0.754	0.1235	0.5505	0.9561
Φ	norm	1.250	0.3600	1.850	0.1605	1.6198	2.1152
$\bar{\pi}$	gamm	0.620	0.3000	1.119	0.1078	0.9471	1.2983
$100(\beta^{-1} - 1)$	gamm	0.250	0.1000	0.229	0.0753	0.1175	0.3656
\bar{l}	norm	0.000	6.0000	5.497	1.0407	3.7766	7.2263
$\bar{\gamma}$	norm	0.400	0.3000	0.399	0.0169	0.3700	0.4261
r_π	norm	1.500	0.7500	2.778	0.1854	2.5253	3.0000
ρ	unif	0.000	1.0000	0.882	0.0139	0.8593	0.9046
r_y	norm	0.120	0.1500	0.136	0.0282	0.0887	0.1801
$r_{\Delta y}$	norm	0.120	0.1500	0.247	0.0338	0.1818	0.2967
ρ_a	unif	0.000	1.0000	0.962	0.0100	0.9452	0.9774
ρ_b	unif	0.000	1.0000	0.137	0.0770	0.0108	0.2445
ρ_g	unif	0.000	1.0000	0.978	0.0078	0.9657	0.9910
ρ_i	unif	0.000	1.0000	0.698	0.0645	0.5912	0.8025
ρ_r	unif	0.000	1.0000	0.053	0.0376	0.0100	0.1167
ρ_p	unif	0.000	1.0000	0.918	0.0406	0.8619	0.9916
ρ_w	unif	0.000	1.0000	0.768	0.2033	0.3656	0.9895
ρ_{ga}	unif	0.000	1.0000	0.476	0.1114	0.2899	0.6532

Table 3: Results from Metropolis-Hastings (standard deviation of structural shocks)

		Prior		Posterior			
		Dist.	Mean	Stdev.	Mean	Stdev.	HPD inf HPD sup
η^a	invg	0.100	2.0000	0.429	0.0278	0.3824	0.4762
η^b	invg	0.100	2.0000	0.257	0.0252	0.2129	0.2979
η^g	invg	0.100	2.0000	0.540	0.0273	0.4958	0.5834
η^i	invg	0.100	2.0000	0.423	0.0435	0.3503	0.4911
η^m	invg	0.100	2.0000	0.228	0.0124	0.2082	0.2487
η^p	invg	0.100	2.0000	0.100	0.0191	0.0686	0.1298
η^w	invg	0.100	2.0000	0.259	0.0225	0.2243	0.2976

Table 4: Results from posterior maximization (parameters)

	Prior			Posterior		
	Dist.	Mean	Stdev	Mode	Stdev	
α	norm	0.300	0.1500	0.2127	NaN	
φ	norm	4.000	4.5000	5.9647	NaN	
μ_w	unif	0.000	1.0000	0.7089	NaN	
μ_p	unif	0.000	1.0000	0.8621	NaN	
σ_c	norm	1.500	1.1100	1.7159	NaN	
λ	unif	0.000	1.0000	0.6842	NaN	
ξ_w	unif	0.000	1.0000	0.9500	NaN	
σ_l	norm	2.000	2.2500	3.2325	NaN	
ξ_p	unif	0.000	1.0000	0.7487	NaN	
ν_w	unif	0.000	1.0000	0.9900	NaN	
ν_p	unif	0.000	1.0000	0.0986	NaN	
ψ	unif	0.000	1.0000	0.8195	NaN	
Φ	norm	1.250	0.3600	1.8773	NaN	
$\bar{\pi}$	gamm	0.620	0.3000	1.2176	NaN	
$100(\beta^{-1} - 1)$	gamm	0.250	0.1000	0.1384	NaN	
\bar{l}	norm	0.000	6.0000	4.7180	NaN	
$\bar{\gamma}$	norm	0.400	0.3000	0.3949	NaN	
r_π	norm	1.500	0.7500	2.6839	NaN	
ρ	unif	0.000	1.0000	0.8810	NaN	
r_y	norm	0.120	0.1500	0.1204	NaN	
$r_{\Delta y}$	norm	0.120	0.1500	0.2637	NaN	
ρ_a	unif	0.000	1.0000	0.9640	NaN	
ρ_b	unif	0.000	1.0000	0.1539	NaN	
ρ_g	unif	0.000	1.0000	0.9754	NaN	
ρ_i	unif	0.000	1.0000	0.7329	NaN	
ρ_r	unif	0.000	1.0000	0.0100	NaN	
ρ_p	unif	0.000	1.0000	0.9708	NaN	
ρ_w	unif	0.000	1.0000	0.7405	NaN	
ρ_{ga}	unif	0.000	1.0000	0.4786	NaN	

Table 5: Results from posterior maximization (standard deviation of structural shocks)

		Prior		Posterior	
	Dist.	Mean	Stdev	Mode	Stdev
η^a	invg	0.100	2.0000	0.4148	NaN
η^b	invg	0.100	2.0000	0.2436	NaN
η^g	invg	0.100	2.0000	0.5341	NaN
η^i	invg	0.100	2.0000	0.4261	NaN
η^m	invg	0.100	2.0000	0.2276	NaN
η^p	invg	0.100	2.0000	0.0899	NaN
η^w	invg	0.100	2.0000	0.2690	NaN

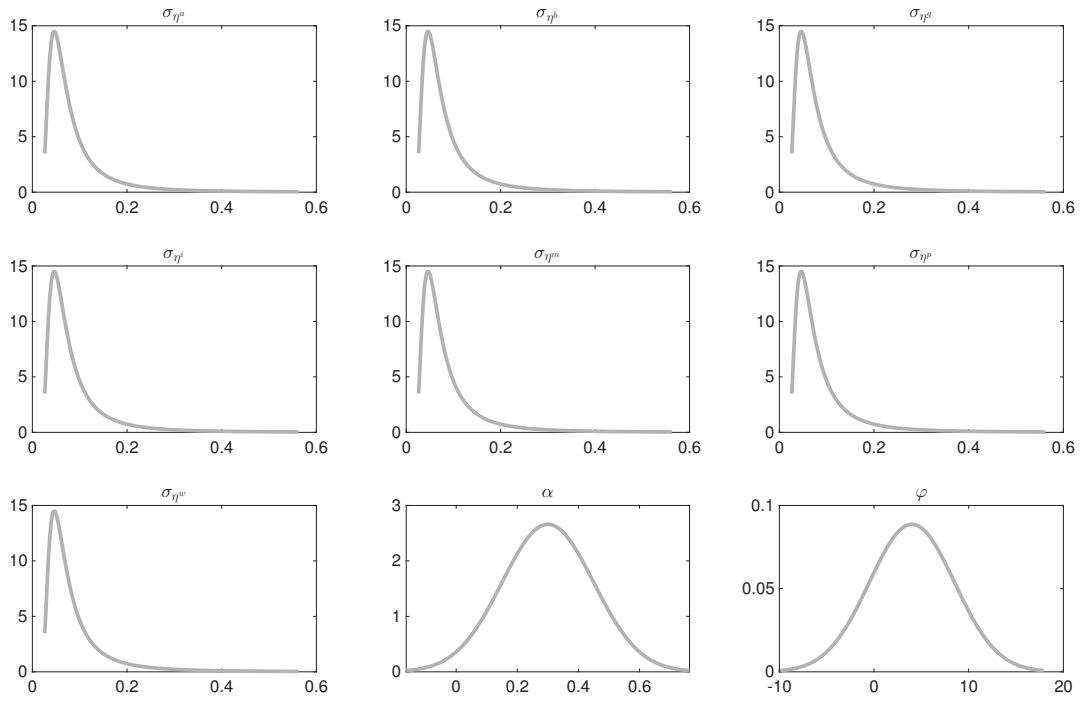


Figure 2: Priors.

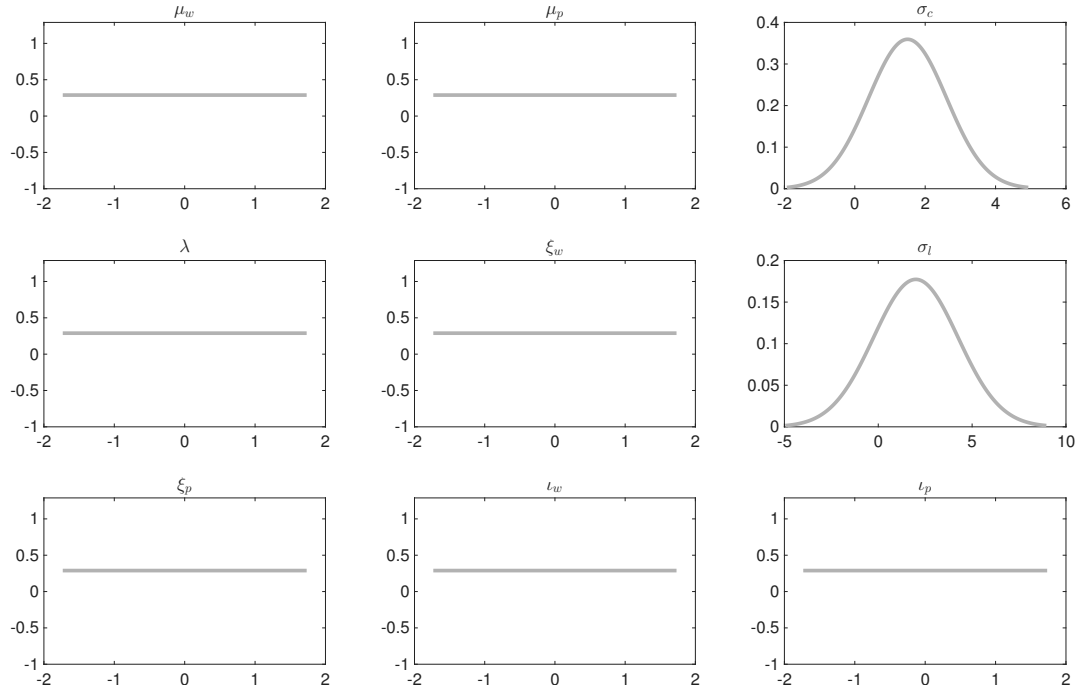


Figure 3: Priors.

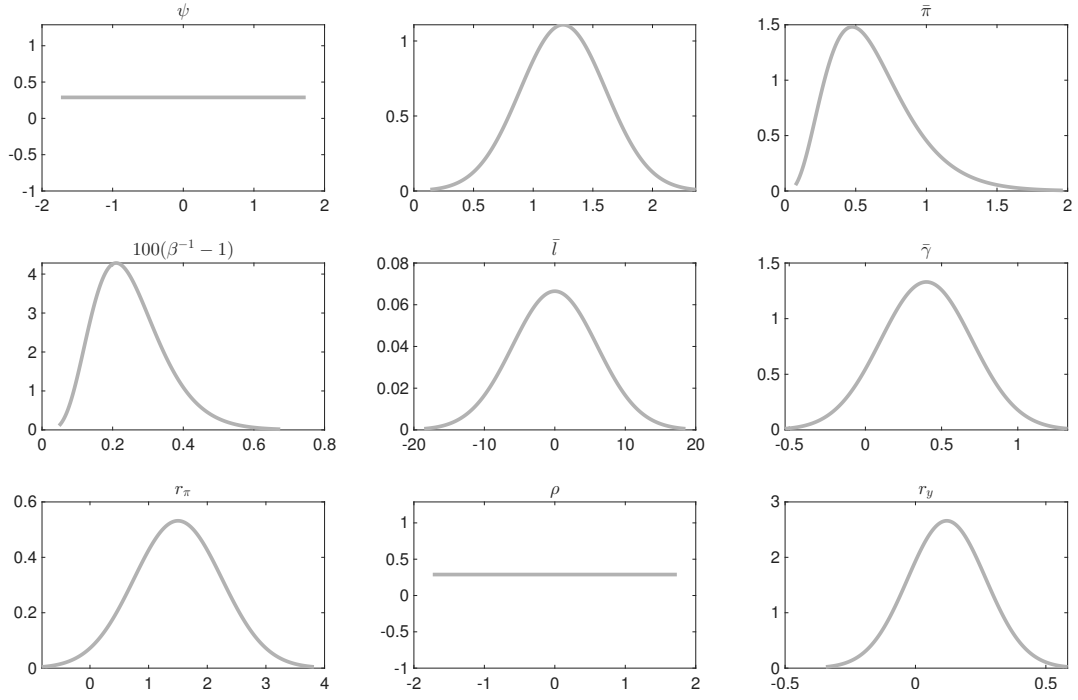


Figure 4: Priors.

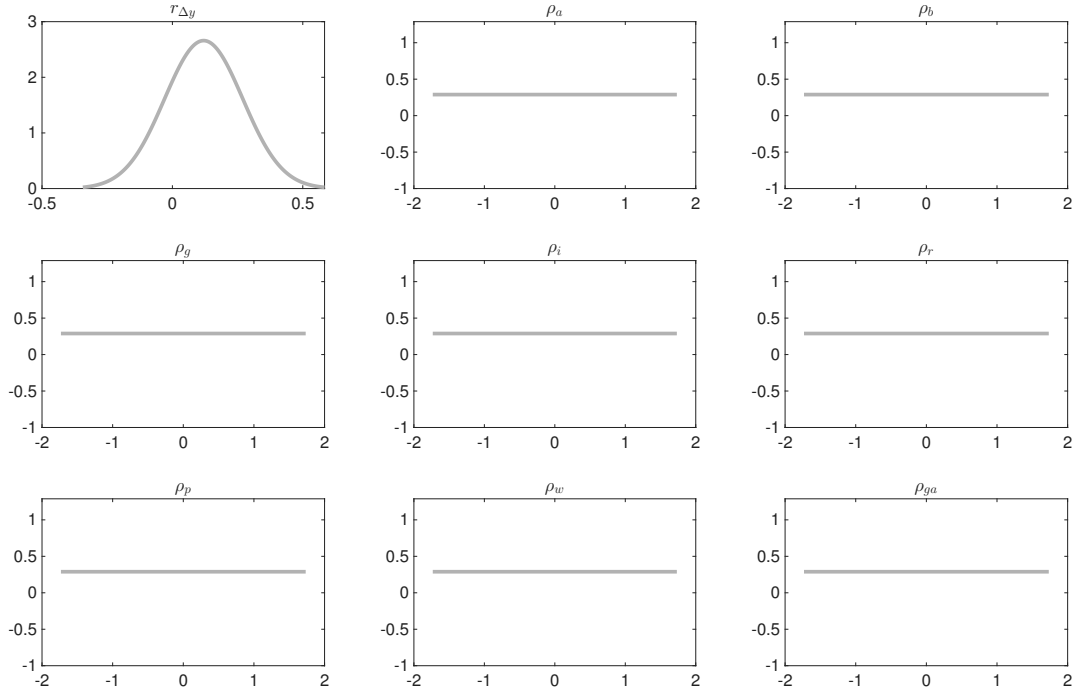


Figure 5: Priors.

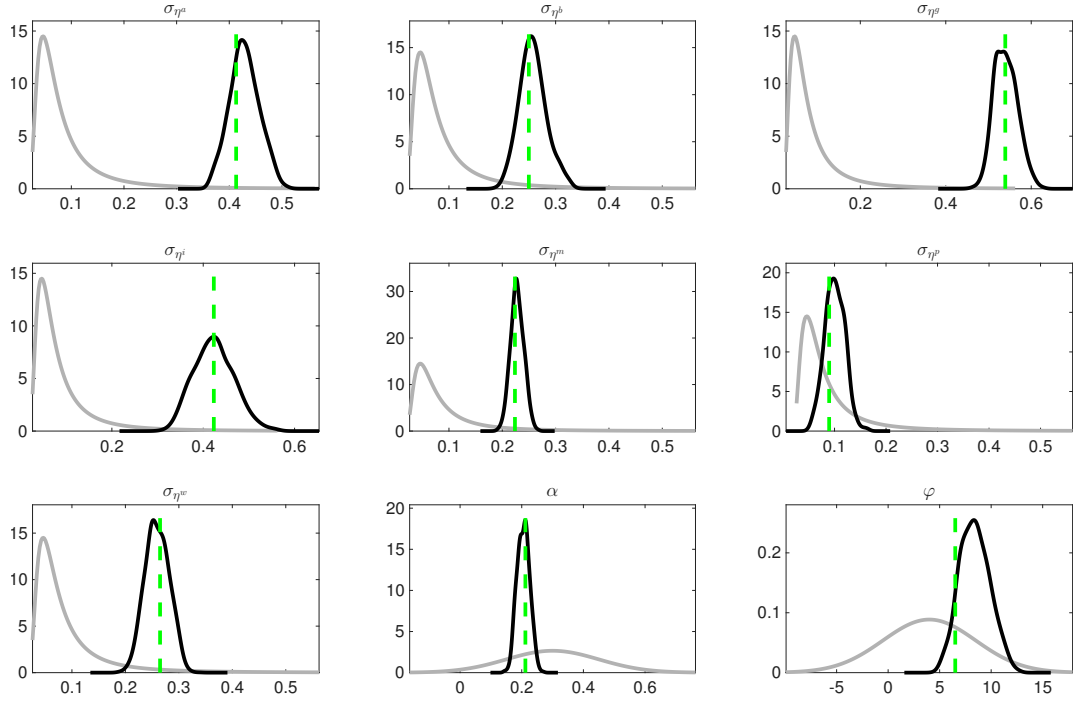


Figure 6: Priors and posteriors.

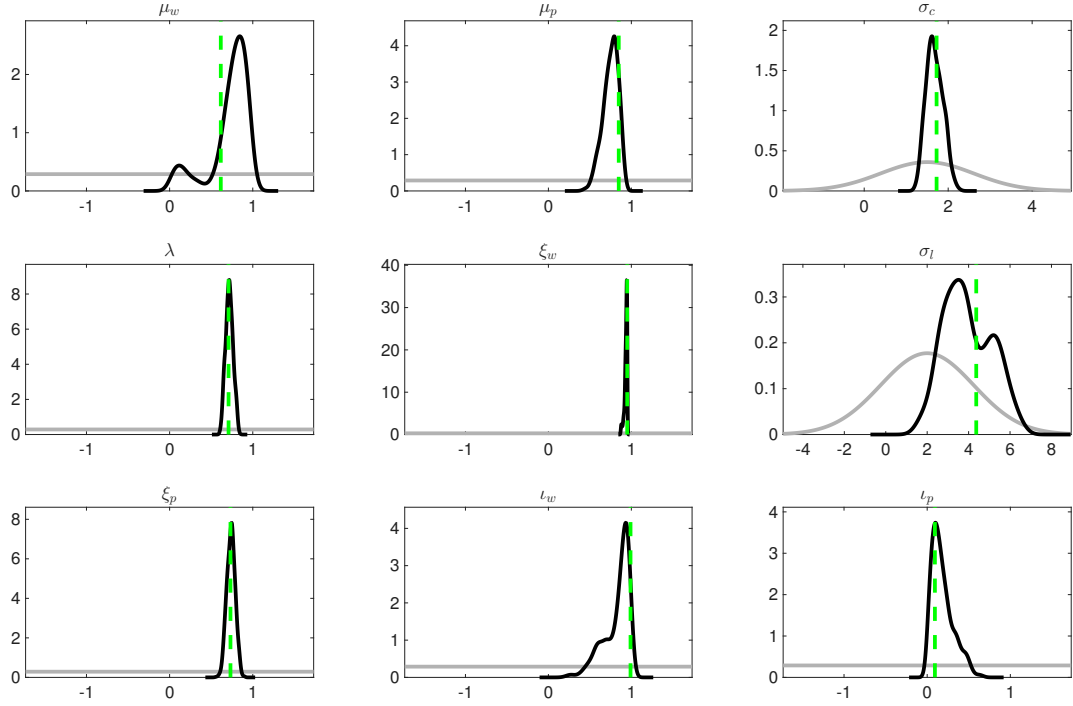


Figure 7: Priors and posteriors.

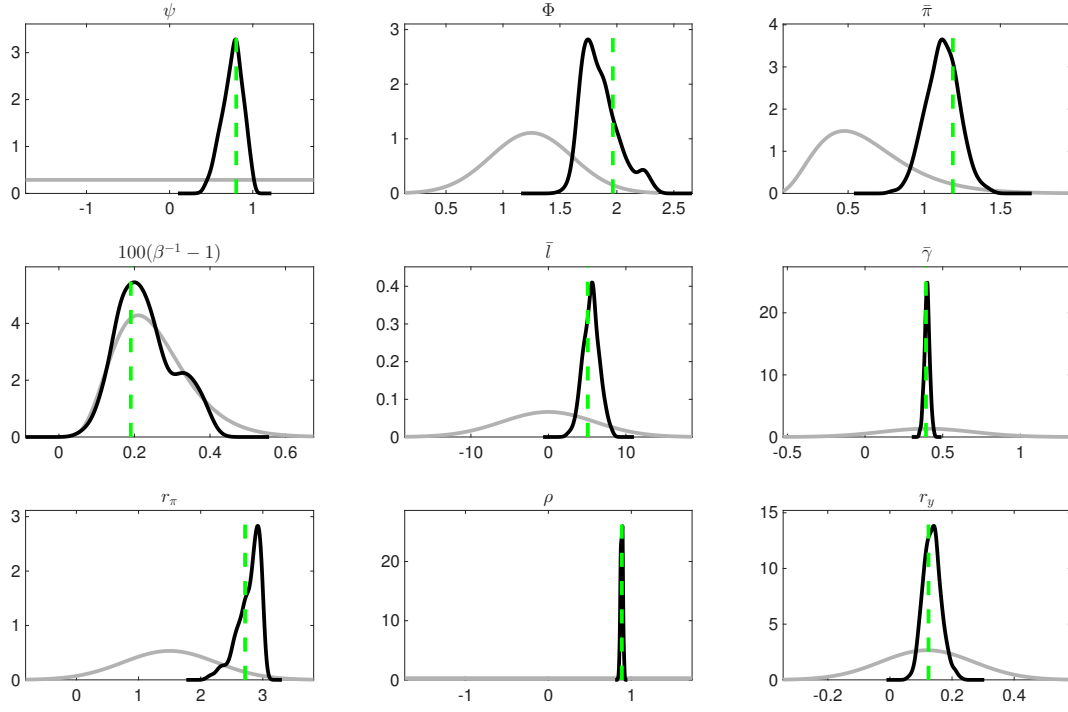


Figure 8: Priors and posteriors.

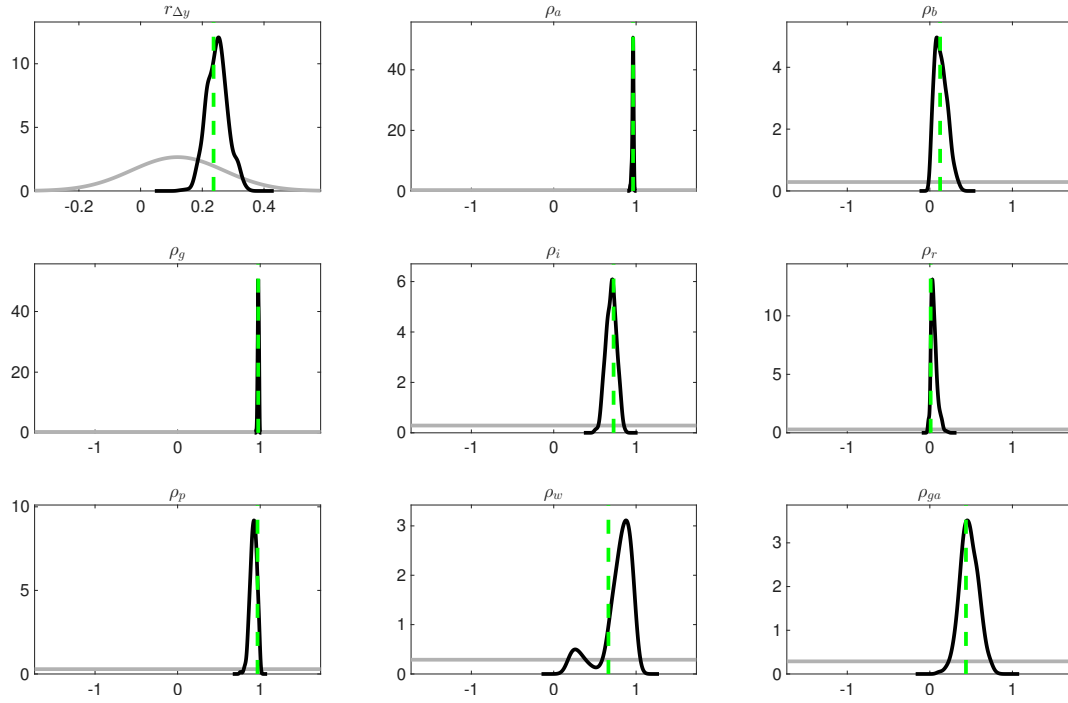


Figure 9: Priors and posteriors.

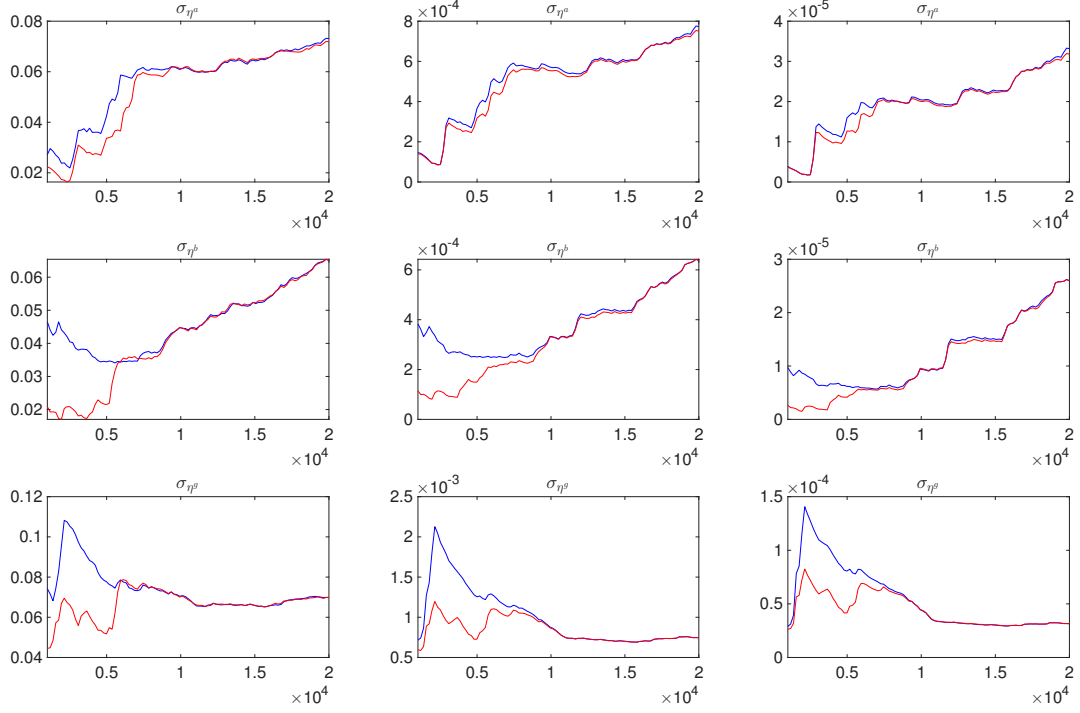


Figure 10: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

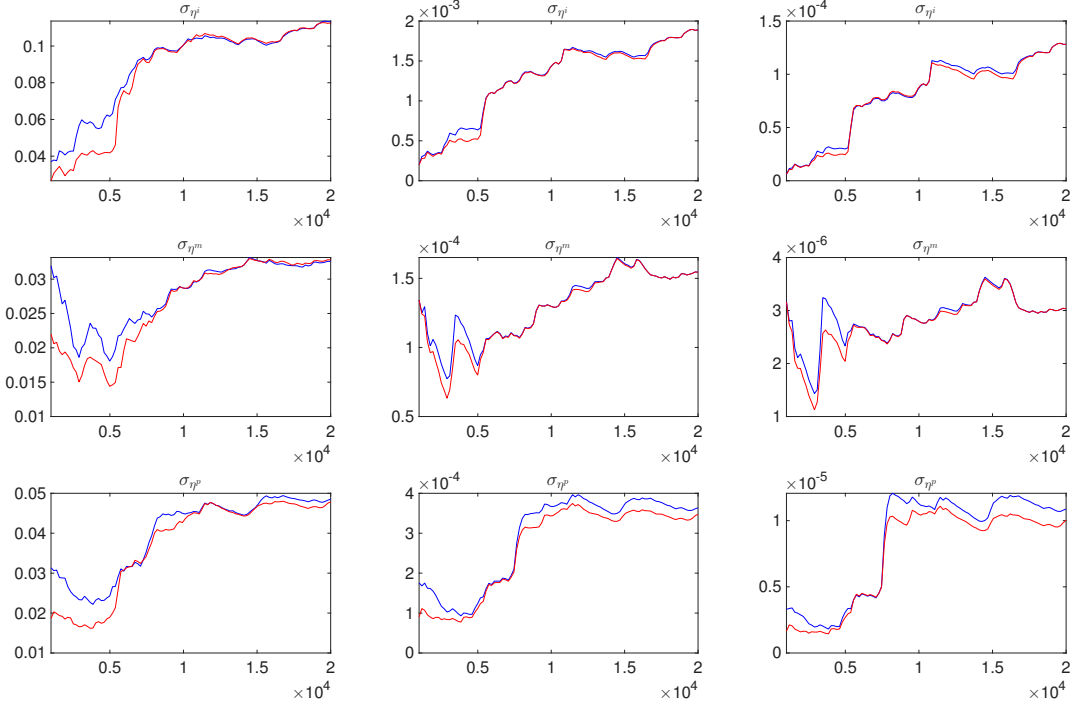


Figure 11: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

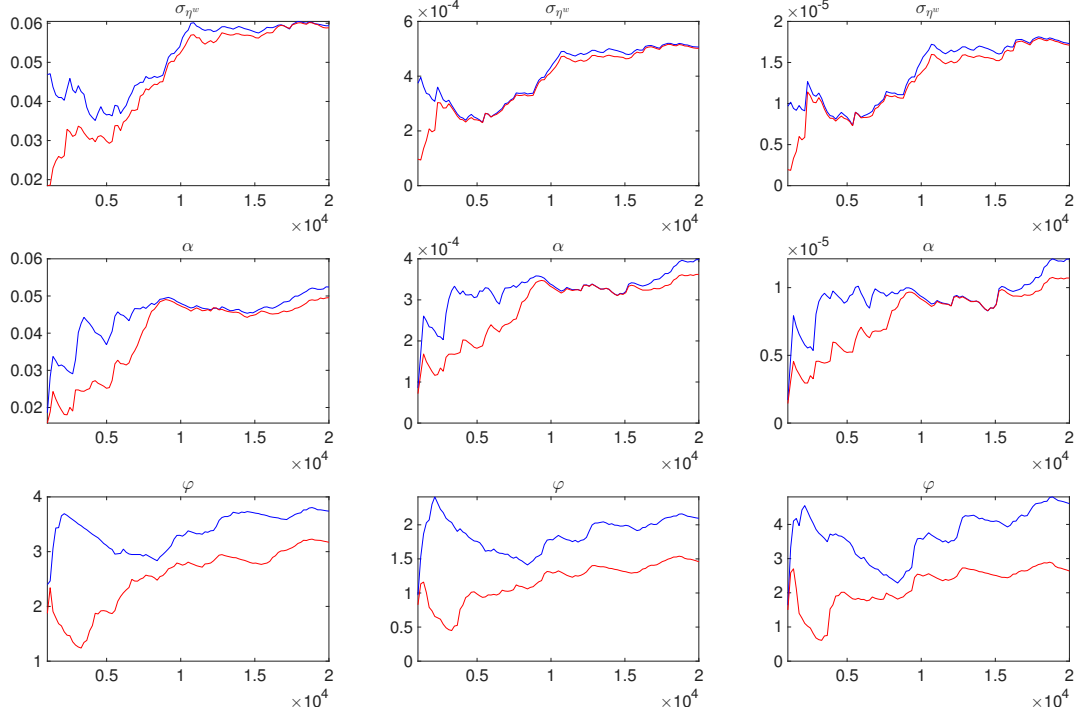


Figure 12: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

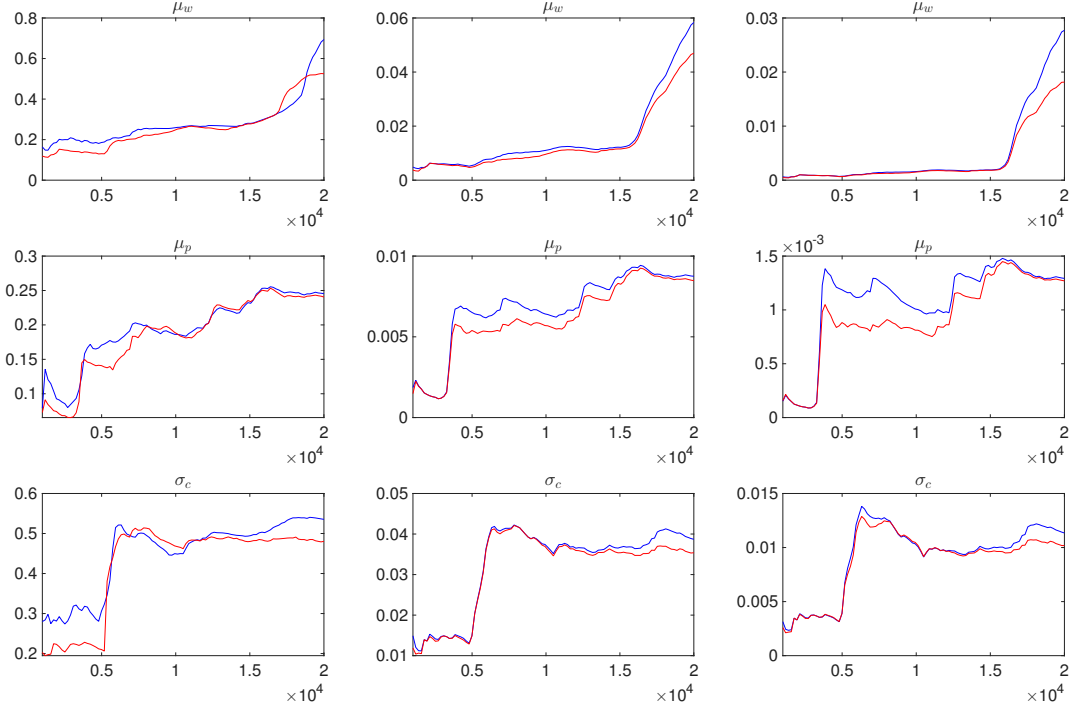


Figure 13: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

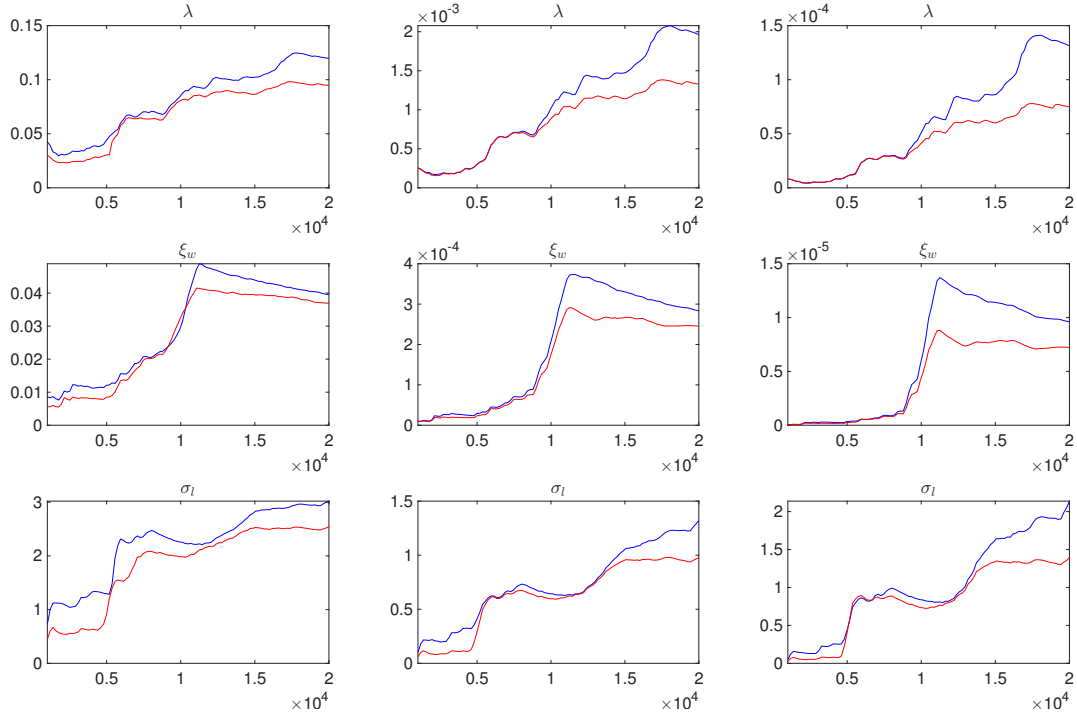


Figure 14: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

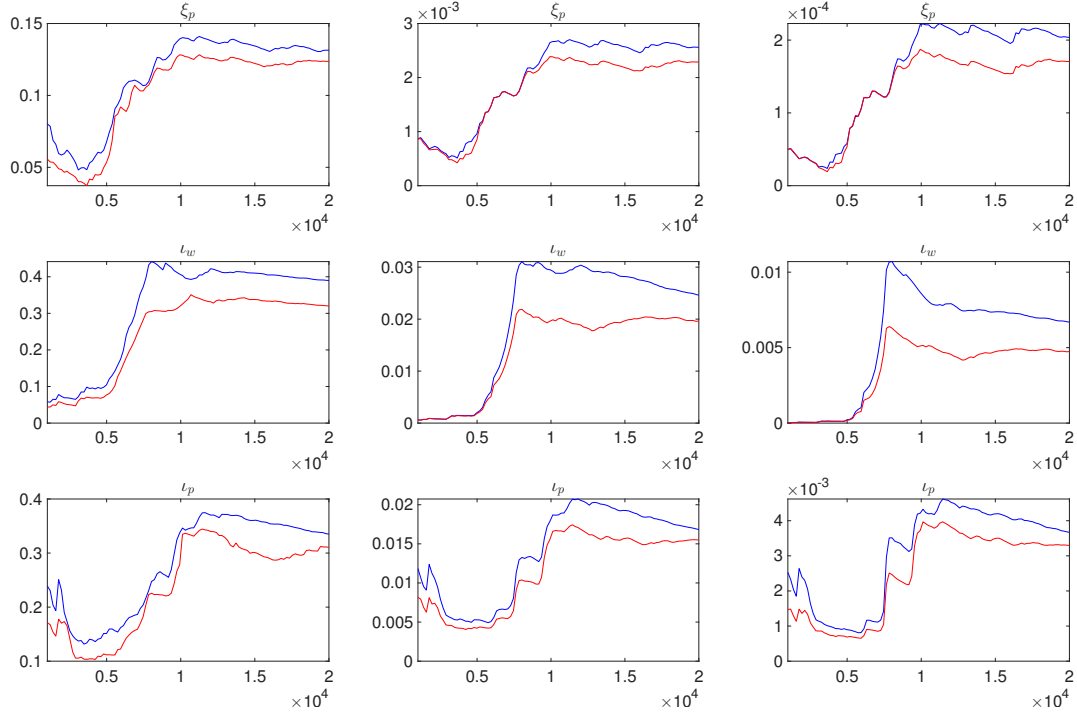


Figure 15: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

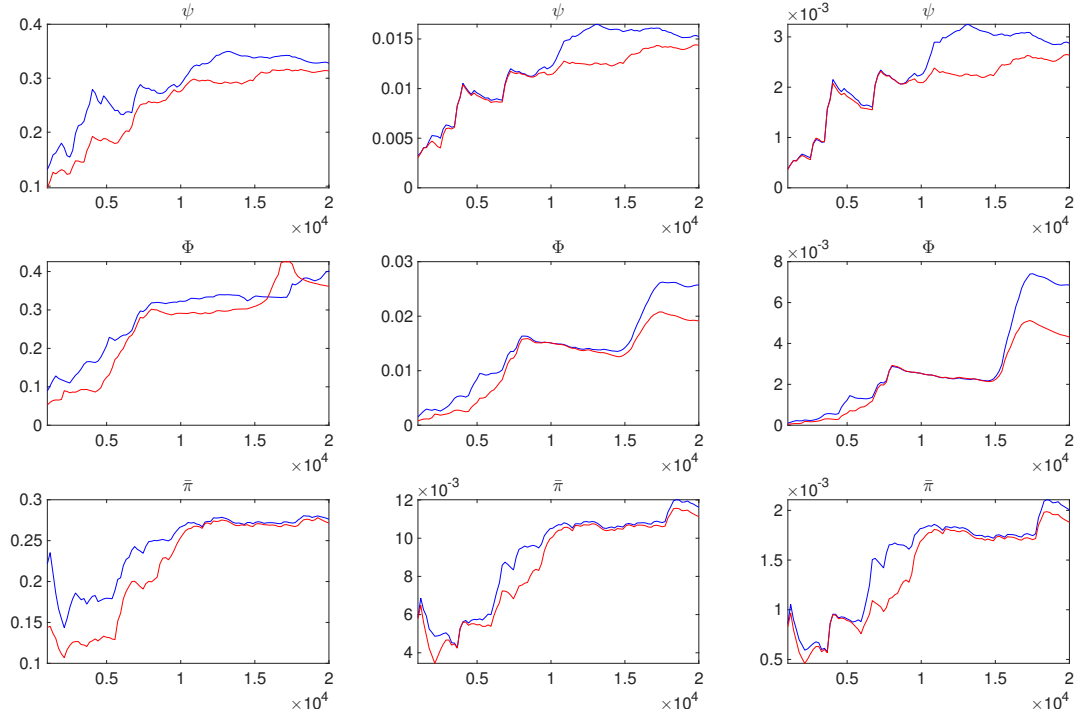


Figure 16: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

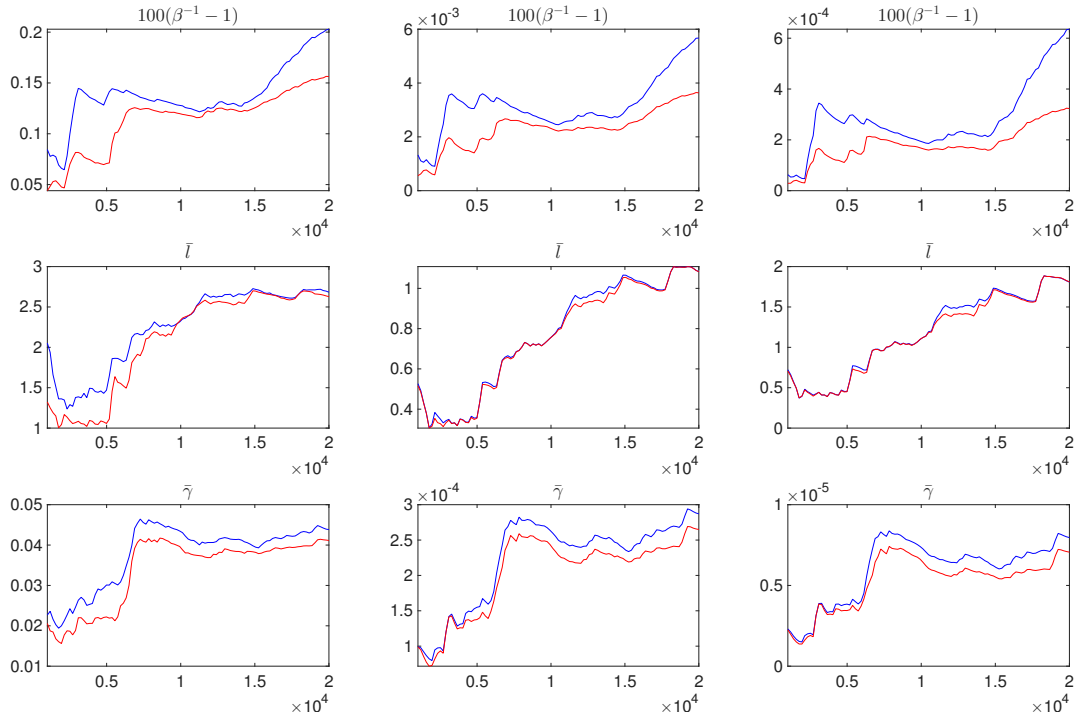


Figure 17: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

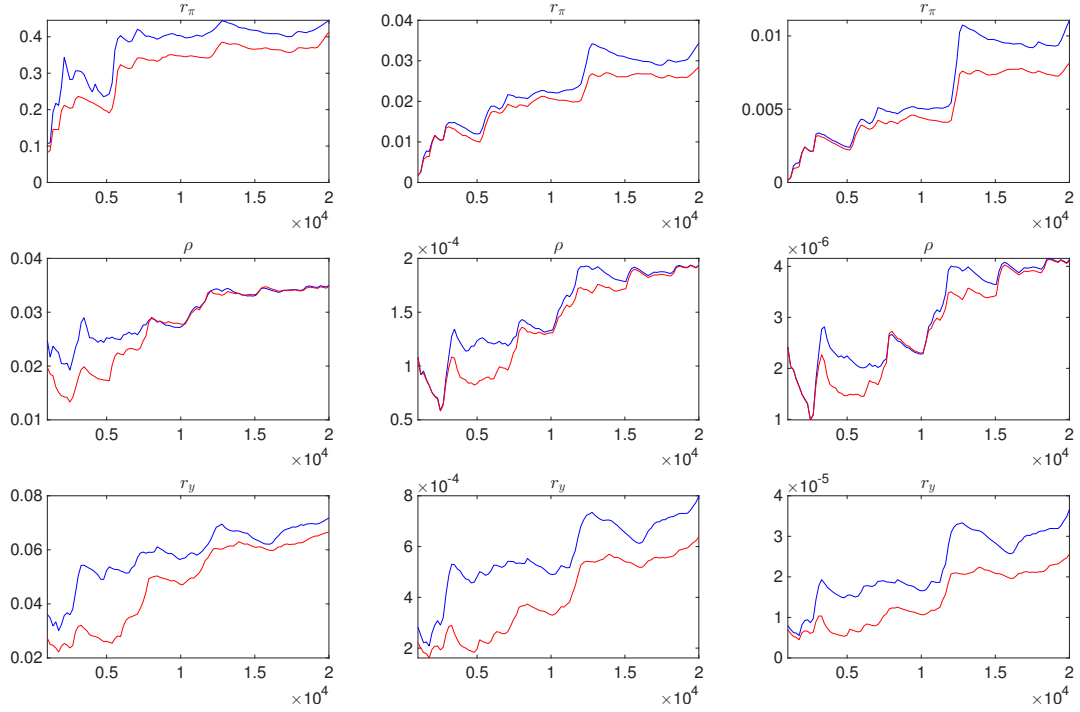


Figure 18: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

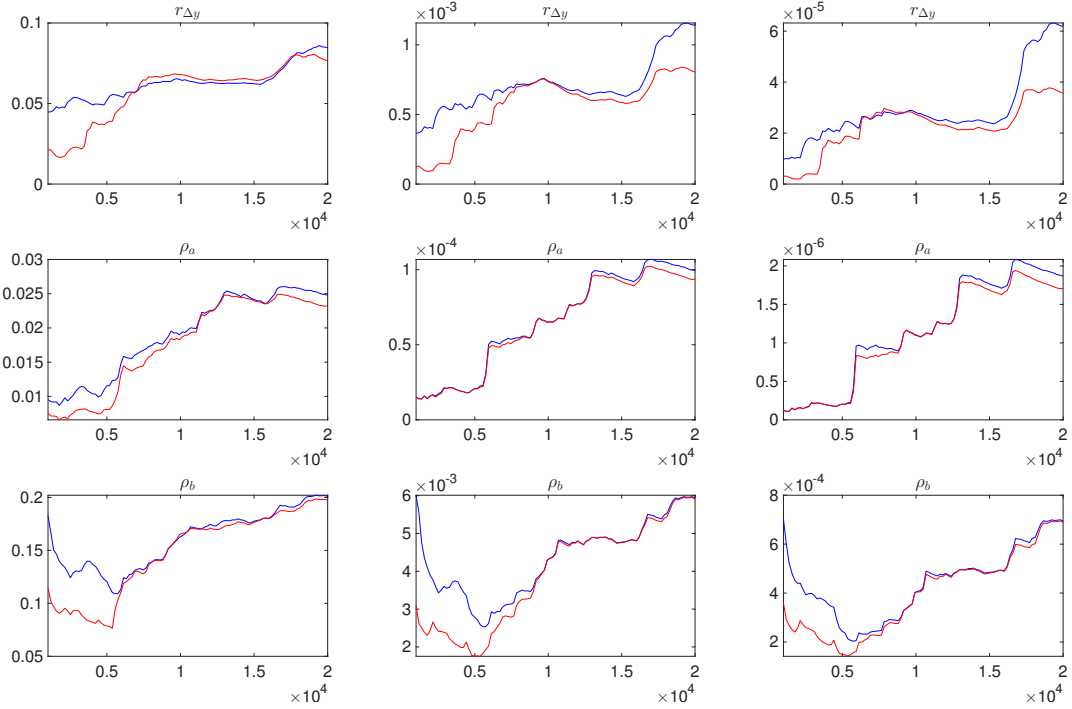


Figure 19: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

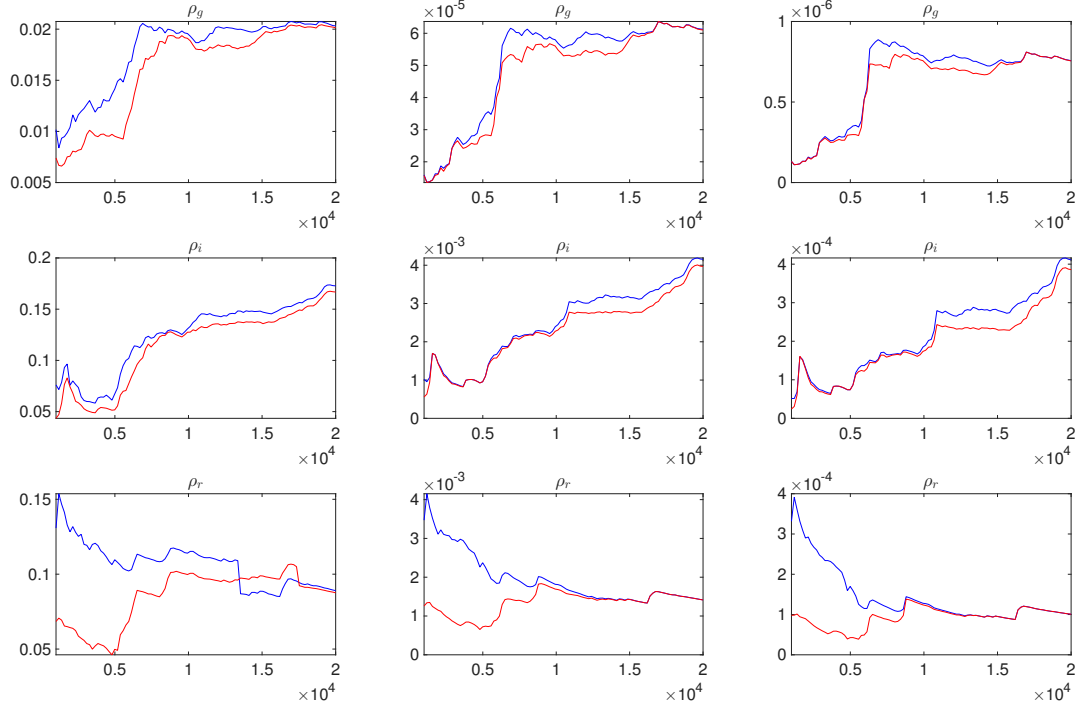


Figure 20: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

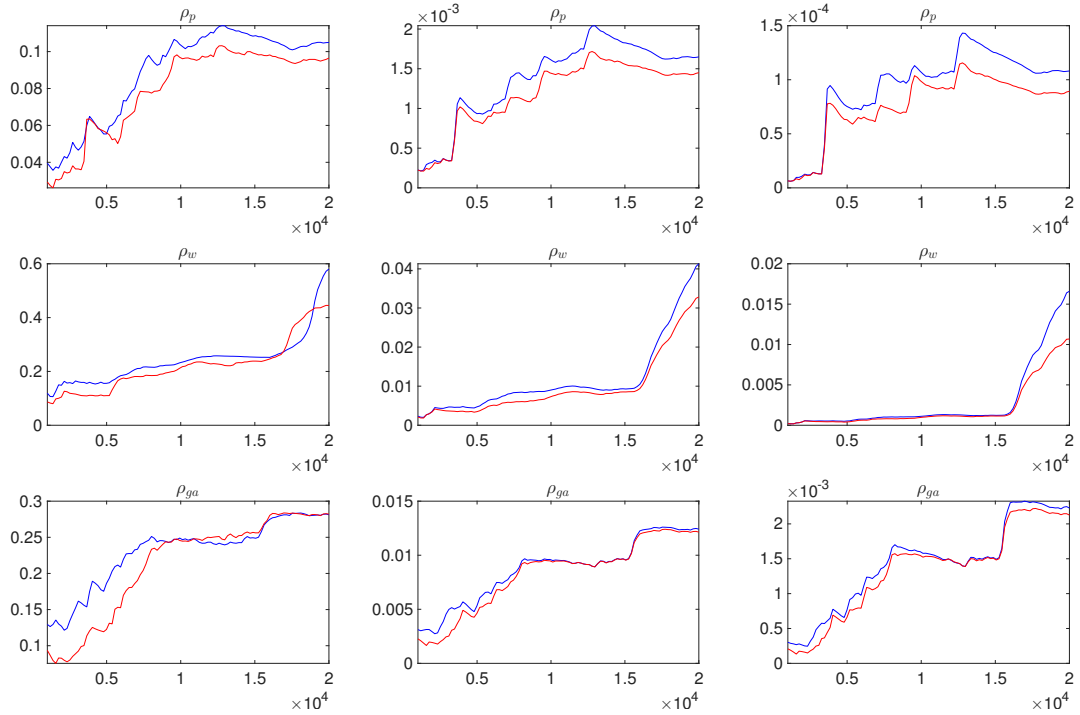


Figure 21: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

Table 6: MATRIX OF COVARIANCE OF EXOGENOUS SHOCKS

		<i>Variables</i>	η^a	η^b	η^g	η^i	η^m	η^p	η^w
η^a	0.172085	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
η^b	0.000000	0.059350	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
η^g	0.000000	0.000000	0.285296	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
η^i	0.000000	0.000000	0.000000	0.181581	0.000000	0.000000	0.000000	0.000000	0.000000
η^m	0.000000	0.000000	0.000000	0.000000	0.051822	0.000000	0.000000	0.000000	0.000000
η^p	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.008075	0.000000	0.000000
η^w	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.072352	

Table 7: Geweke (1992) Convergence Tests, based on means of draws 4000 to 7200 vs 12000 to 20000 for chain 1. p-values are for χ^2 -test for equality of means.

<i>Parameter</i>	Posterior		p-values			
	<i>Mean</i>	<i>Std</i>	<i>No Taper</i>	<i>4% Taper</i>	<i>8% Taper</i>	<i>15% Taper</i>
σ_{η^a}	0.4304	0.0218	0.4072	0.9423	0.9553	0.9620
σ_{η^b}	0.2584	0.0229	0.0000	0.0457	0.1112	0.1704
σ_{η^g}	0.5347	0.0274	0.0000	0.5493	0.6271	0.6839
σ_{η^i}	0.4256	0.0334	0.6595	0.9690	0.9753	0.9778
σ_{η^m}	0.2273	0.0105	0.0000	0.6343	0.6848	0.6851
σ_{η^p}	0.0939	0.0181	0.0000	0.5257	0.6185	0.6722
σ_{η^w}	0.2591	0.0204	0.0013	0.7788	0.8212	0.8402
α	0.2016	0.0158	0.0000	0.0000	0.0004	0.0010
φ	7.4671	1.0368	0.0000	0.0632	0.1386	0.2089
μ_w	0.6250	0.2614	0.0000	0.0000	0.0005	0.0079
μ_p	0.7737	0.0922	0.0000	0.0002	0.0046	0.0222
σ_c	1.7785	0.1913	0.0000	0.0559	0.1452	0.2319
λ	0.6923	0.0316	0.0000	0.0033	0.0225	0.0480
ξ_w	0.9403	0.0076	0.0000	0.3122	0.3897	0.4239
σ_l	3.4702	0.7655	0.0000	0.0036	0.0265	0.0724
ξ_p	0.7534	0.0389	0.0391	0.8552	0.8870	0.9084
ι_w	0.9016	0.0749	0.0000	0.1363	0.1700	0.1451
ι_p	0.1351	0.0954	0.0000	0.0278	0.0637	0.1143
ψ	0.7848	0.1043	0.0000	0.1889	0.2934	0.3655
Φ	1.8159	0.1303	0.0000	0.0042	0.0351	0.1017
$\bar{\pi}$	1.0995	0.0889	0.0000	0.0177	0.0617	0.1215
$100(\beta^{-1} - 1)$	0.1784	0.0438	0.0000	0.0000	0.0000	0.0006
\bar{l}	5.5049	0.9556	0.0000	0.7048	0.7697	0.8034
$\bar{\gamma}$	0.4036	0.0138	0.0000	0.0172	0.0650	0.1200
r_π	2.8281	0.1095	0.0000	0.0704	0.1518	0.1990
ρ	0.8850	0.0132	0.0000	0.0553	0.1127	0.1601
r_y	0.1485	0.0240	0.0000	0.3195	0.4390	0.5079
$r_{\Delta y}$	0.2553	0.0335	0.0000	0.0000	0.0002	0.0031
ρ_a	0.9642	0.0074	0.0000	0.0406	0.1081	0.1663
ρ_b	0.1277	0.0779	0.0933	0.8939	0.9142	0.9235
ρ_g	0.9779	0.0063	0.0000	0.0007	0.0064	0.0128
ρ_i	0.7111	0.0465	0.0000	0.0201	0.0594	0.0820
ρ_r	0.0406	0.0449	0.0000	0.0119	0.0476	0.1008
ρ_p	0.9352	0.0343	0.0000	0.0006	0.0056	0.0175
ρ_w	0.6809	0.2171	0.0000	0.0000	0.0012	0.0137
ρ_{ga}	0.4915	0.0872	0.0000	0.0100	0.0354	0.0436

Table 8: Geweke (1992) Convergence Tests, based on means of draws 4000 to 7200 vs 12000 to 20000 for chain 2. p-values are for χ^2 -test for equality of means.

<i>Parameter</i>	Posterior		p-values			
	<i>Mean</i>	<i>Std</i>	<i>No Taper</i>	<i>4% Taper</i>	<i>8% Taper</i>	<i>15% Taper</i>
σ_{η^a}	0.4242	0.0296	0.0000	0.0000	0.0007	0.0044
σ_{η^b}	0.2536	0.0247	0.0000	0.0022	0.0134	0.0277
σ_{η^g}	0.5444	0.0304	0.0000	0.0004	0.0015	0.0008
σ_{η^i}	0.4208	0.0462	0.0000	0.0013	0.0118	0.0272
σ_{η^m}	0.2285	0.0134	0.0001	0.7374	0.7782	0.7953
σ_{η^p}	0.1022	0.0177	0.6007	0.9604	0.9670	0.9699
σ_{η^w}	0.2578	0.0227	0.0000	0.0065	0.0226	0.0359
α	0.2076	0.0220	0.0000	0.0000	0.0002	0.0016
φ	9.0880	1.3518	0.0000	0.3313	0.4696	0.5700
μ_w	0.8007	0.1102	0.0000	0.2238	0.3538	0.4526
μ_p	0.7392	0.0883	0.0000	0.1241	0.2044	0.2379
σ_c	1.6755	0.2171	0.0000	0.0000	0.0003	0.0037
λ	0.7333	0.0408	0.0000	0.0000	0.0002	0.0029
ξ_w	0.9296	0.0197	0.3391	0.9426	0.9553	0.9610
σ_l	4.5633	1.0403	0.0000	0.0000	0.0000	0.0000
ξ_p	0.7230	0.0489	0.0000	0.0001	0.0025	0.0104
ι_w	0.7868	0.1763	0.0000	0.0000	0.0000	0.0012
ι_p	0.2090	0.1371	0.0000	0.2074	0.3169	0.3825
ψ	0.7328	0.1258	0.0000	0.0627	0.1318	0.1737
Φ	1.9280	0.1536	0.0000	0.0000	0.0000	0.0001
$\bar{\pi}$	1.1366	0.1109	0.0000	0.6685	0.7375	0.7860
$100(\beta^{-1} - 1)$	0.2662	0.0694	0.0000	0.0000	0.0000	0.0003
\bar{l}	5.5238	0.9839	0.0000	0.0000	0.0007	0.0026
$\bar{\gamma}$	0.3953	0.0169	0.0000	0.0586	0.1248	0.1929
r_π	2.6910	0.2023	0.0000	0.6243	0.7141	0.7654
ρ	0.8820	0.0137	0.0000	0.0949	0.1730	0.2062
r_y	0.1223	0.0233	0.0000	0.0774	0.1590	0.2388
$r_{\Delta y}$	0.2314	0.0275	0.0000	0.0000	0.0002	0.0033
ρ_a	0.9604	0.0104	0.0000	0.0000	0.0001	0.0003
ρ_b	0.1370	0.0710	0.7627	0.9792	0.9830	0.9848
ρ_g	0.9774	0.0082	0.0000	0.0000	0.0002	0.0021
ρ_i	0.6910	0.0693	0.0000	0.0024	0.0197	0.0549
ρ_r	0.0547	0.0369	0.0000	0.7039	0.7480	0.7500
ρ_p	0.9099	0.0415	0.0000	0.2483	0.3599	0.4165
ρ_w	0.8386	0.0940	0.0000	0.2350	0.3698	0.4705
ρ_{ga}	0.4541	0.1165	0.0000	0.0009	0.0072	0.0175

Table 9: 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	μ_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	π	Inflation
w	w	real wage
r	r	nominal interest rate
a	ε_a	productivity process
b	$c_2 * \varepsilon_t^b$	Scaled risk premium shock
g	ε^g	Exogenous spending
qs	ε^i	Investment-specific technology
ms	ε^r	Monetary policy shock process
spinf	ε^p	Price markup shock process
sw	ε^w	Wage markup shock process
kpf	k^{flex}	Capital stock flex price economy
kp	k	Capital stock
muw	μ_w	wage markup

Table 10: Exogenous

Variable	\LaTeX	Description
ea	η^a	productivity shock
eb	η^b	Investment-specific technology 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

Table 11: Parameters

Variable	\LaTeX	Description
curvw	ε_w	Curvature Kimball aggregator wages
cgy	ρ_{ga}	Feedback technology on exogenous spending
curvp	ε_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
cmaw	μ_w	coefficient on MA term wage markup
cmap	μ_p	coefficient on MA term price markup
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
clandaw	ϕ_w	Gross markup wages
crpi	r_π	Taylor rule inflation feedback
crdy	$r_{\Delta y}$	Taylor rule output growth feedback
cry	r_y	Taylor rule output level feedback
crr	ρ	interest rate persistence
crhoa	ρ_a	persistence productivity shock
crhoas	d_2	Unused parameter
crhob	ρ_b	persistence risk premium shock
crhog	ρ_g	persistence spending shock
crhols	d_1	Unused parameter

Table 11 – Continued

	Variable	\LaTeX	Description
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
ctrend	$\bar{\gamma}$		net growth rate in percent
cg	$\frac{\bar{g}}{\bar{y}}$		steady state exogenous spending share

Table 12: Parameter Values

Parameter	Value	Description
ε_w	10.000	Curvature Kimball aggregator wages
ρ_{ga}	0.479	Feedback technology on exogenous spending
ε_p	10.000	Curvature Kimball aggregator prices
\bar{l}	4.718	steady state hours
$\bar{\pi}$	1.218	steady state inflation rate
$100(\beta^{-1} - 1)$	0.138	time preference rate in percent
μ_w	0.709	coefficient on MA term wage markup
μ_p	0.862	coefficient on MA term price markup
α	0.213	capital share
ψ	0.820	capacity utilization cost
φ	5.965	investment adjustment cost
δ	0.025	depreciation rate
σ_c	1.716	risk aversion
λ	0.684	external habit degree
Φ	1.877	fixed cost share
ι_w	0.990	Indexation to past wages
ξ_w	0.950	Calvo parameter wages
ι_p	0.099	Indexation to past prices
ξ_p	0.749	Calvo parameter prices
σ_l	3.233	Frisch elasticity
ϕ_w	1.500	Gross markup wages
r_π	2.684	Taylor rule inflation feedback
$r_{\Delta y}$	0.264	Taylor rule output growth feedback
r_y	0.120	Taylor rule output level feedback
ρ	0.881	interest rate persistence
ρ_a	0.964	persistence productivity shock
d_2	1.000	Unused parameter
ρ_b	0.154	persistence risk premium shock
ρ_g	0.975	persistence spending shock
d_1	0.993	Unused parameter
ρ_i	0.733	persistence risk premium shock
ρ_r	0.010	persistence monetary policy shock
ρ_p	0.971	persistence price markup shock
ρ_w	0.740	persistence wage markup shock
$\bar{\gamma}$	0.395	net growth rate in percent
$\frac{\bar{g}}{\bar{y}}$	0.180	steady state exogenous spending share

Table 13: Prior information (parameters)

	Distribution	Mean	Mode	Std.dev.	Bounds*		90% HPDI	
					Lower	Upper	Lower	Upper
σ_{η^a}	Inv. Gamma	0.1000	0.0461	2.0000	0.0118		5595.7204	0.0326
σ_{η^b}	Inv. Gamma	0.1000	0.0461	2.0000	0.0118		5595.7204	0.0326
σ_{η^g}	Inv. Gamma	0.1000	0.0461	2.0000	0.0118		5595.7204	0.0326
σ_{η^i}	Inv. Gamma	0.1000	0.0461	2.0000	0.0118		5595.7204	0.0326
σ_{η^m}	Inv. Gamma	0.1000	0.0461	2.0000	0.0118		5595.7204	0.0326
σ_{η^p}	Inv. Gamma	0.1000	0.0461	2.0000	0.0118		5595.7204	0.0326
σ_{η^w}	Inv. Gamma	0.1000	0.0461	2.0000	0.0118		5595.7204	0.0326
α	Gaussian	0.3000	0.3000	0.1500	-0.6542		1.2542	0.0533
φ	Gaussian	4.0000	4.0000	4.5000	-24.6260		32.6260	-3.4018
μ_w	Uniform	0.0000	NaN	1.0000	-1.7321		1.7321	-1.5588
μ_p	Uniform	0.0000	NaN	1.0000	-1.7321		1.7321	-1.5588
σ_c	Gaussian	1.5000	1.5000	1.1100	-5.5611		8.5611	-0.3258
λ	Uniform	0.0000	NaN	1.0000	-1.7321		1.7321	-1.5588
ξ_w	Uniform	0.0000	NaN	1.0000	-1.7321		1.7321	-1.5588
σ_l	Gaussian	2.0000	2.0000	2.2500	-12.3130		16.3130	-1.7009
ξ_p	Uniform	0.0000	NaN	1.0000	-1.7321		1.7321	-1.5588
ι_w	Uniform	0.0000	NaN	1.0000	-1.7321		1.7321	-1.5588
ι_p	Uniform	0.0000	NaN	1.0000	-1.7321		1.7321	-1.5588
ψ	Uniform	0.0000	NaN	1.0000	-1.7321		1.7321	-1.5588
Φ	Gaussian	1.2500	1.2500	0.3600	-1.0401		3.5401	0.6579
$\bar{\pi}$	Gamma	0.6200	0.4748	0.3000	0.0015		4.6974	0.2214
$100(\beta^{-1} - 1)$	Gamma	0.2500	0.2100	0.1000	0.0031		1.4759	0.1111
\bar{l}	Gaussian	0.0000	0.0000	6.0000	-38.1680		38.1680	-9.8691
$\bar{\gamma}$	Gaussian	0.4000	0.4000	0.3000	-1.5084		2.3084	-0.0935
r_π	Gaussian	1.5000	1.5000	0.7500	-3.2710		6.2710	0.2664
ρ	Uniform	0.0000	NaN	1.0000	-1.7321		1.7321	-1.5588
r_y	Gaussian	0.1200	0.1200	0.1500	-0.8342		1.0742	-0.1267
$r_{\Delta y}$	Gaussian	0.1200	0.1200	0.1500	-0.8342		1.0742	-0.1267
ρ_a	Uniform	0.0000	NaN	1.0000	-1.7321		1.7321	-1.5588
ρ_b	Uniform	0.0000	NaN	1.0000	-1.7321		1.7321	-1.5588
ρ_g	Uniform	0.0000	NaN	1.0000	-1.7321		1.7321	-1.5588
ρ_i	Uniform	0.0000	NaN	1.0000	-1.7321		1.7321	-1.5588
ρ_r	Uniform	0.0000	NaN	1.0000	-1.7321		1.7321	-1.5588
ρ_p	Uniform	0.0000	NaN	1.0000	-1.7321		1.7321	-1.5588
ρ_w	Uniform	0.0000	NaN	1.0000	-1.7321		1.7321	-1.5588
ρ_{ga}	Uniform	0.0000	NaN	1.0000	-1.7321		1.7321	-1.5588

Note: Displayed bounds are after applying a prior truncation of options_prior_trunc=1.00e-10

Table 14: COEFFICIENTS OF AUTOCORRELATION

	<i>Order</i>	1	2	3	4	5
y	0.9934	0.9827	0.9690	0.9532	0.9356	
c	0.9963	0.9896	0.9807	0.9699	0.9576	
i	0.9891	0.9651	0.9333	0.8975	0.8601	
π	0.9070	0.8513	0.8019	0.7556	0.7120	
r	0.9250	0.8471	0.7757	0.7120	0.6557	
w	0.9914	0.9820	0.9711	0.9592	0.9464	
k^s	0.9991	0.9968	0.9931	0.9882	0.9821	
l	0.9823	0.9588	0.9321	0.9032	0.8727	

Table 15: MATRIX OF CORRELATIONS

		<hr/> <i>Variables</i> y c i π r w k^s l <hr/>							
y	1.0000	0.9218	0.8920	-0.5880	-0.5046	0.5612	0.7603	0.7900	
c	0.9218	1.0000	0.8414	-0.6039	-0.6218	0.5540	0.8204	0.6887	
i	0.8920	0.8414	1.0000	-0.5169	-0.3225	0.5386	0.6789	0.7312	
π	-0.5880	-0.6039	-0.5169	1.0000	0.6728	-0.2171	-0.3320	-0.5668	
r	-0.5046	-0.6218	-0.3225	0.6728	1.0000	-0.2938	-0.4075	-0.3037	
w	0.5612	0.5540	0.5386	-0.2171	-0.2938	1.0000	0.7598	0.2342	
k^s	0.7603	0.8204	0.6789	-0.3320	-0.4075	0.7598	1.0000	0.3702	
l	0.7900	0.6887	0.7312	-0.5668	-0.3037	0.2342	0.3702	1.0000	

Table 16: THEORETICAL MOMENTS

<i>VARIABLE</i>	<i>MEAN</i>	<i>STD.DEV.</i>	<i>VARIANCE</i>
y	0.0000	8.0865	65.3913
c	0.0000	8.7093	75.8518
i	0.0000	14.7233	216.7760
π	0.0000	0.6175	0.3814
r	0.0000	0.6717	0.4512
w	0.0000	4.3055	18.5374
k^s	0.0000	8.9191	79.5510
l	0.0000	3.3756	11.3947

Table 17: VARIANCE DECOMPOSITION (in percent)

		η^a	η^b	η^g	η^i	η^m	η^p	η^w
y	28.75	0.75	1.46	11.72	3.17	40.44	13.71	
c	18.99	1.08	7.85	9.10	3.23	40.53	19.22	
i	18.54	0.17	4.18	33.84	2.64	35.06	5.56	
π	6.77	0.01	0.73	0.90	0.23	67.10	24.25	
r	15.60	6.28	4.93	16.08	12.79	29.15	15.17	
w	9.87	0.02	0.88	2.71	0.52	63.95	22.05	
k^s	19.30	0.08	4.65	24.52	1.65	44.13	5.68	
l	4.21	1.67	4.95	9.98	5.53	48.87	24.80	

$$c_{pie} = 1 + \frac{\bar{\pi}}{100}$$

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

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

$$c_{landap} = \Phi$$

$$c_{betabar} = c_{beta} c_{gamma}^{(-\sigma_c)}$$

$$c_r = \frac{c_{pie}}{c_{beta} c_{gamma}^{(-\sigma_c)}}$$

$$c_{rk} = c_{beta}^{(-1)} c_{gamma}^{\sigma_c} - (1 - \delta)$$

$$c_w = \left(\frac{\alpha^\alpha (1 - \alpha)^{1-\alpha}}{c_{landap} c_{rk}^\alpha} \right)^{\frac{1}{1-\alpha}}$$

$$c_{ikbar} = 1 - \frac{1 - \delta}{c_{gamma}}$$

$$c_{ik} = c_{gamma} \left(1 - \frac{1 - \delta}{c_{gamma}} \right)$$

$$c_{lk} = \frac{1 - \alpha}{\alpha} \frac{c_{rk}}{c_w}$$

$$c_{ky} = \Phi c_{lk}^{\alpha-1}$$

$$c_{iy} = c_{ik} c_{ky}$$

$$c_{cy} = 1 - \frac{\bar{g}}{\bar{y}} - c_{ik} c_{ky}$$

$$c_{rkky} = c_{rk} c_{ky}$$

$$c_{whlc} = \frac{c_{ky} c_{rk} \frac{(1-\alpha)^{\frac{1}{\phi_w}}}{\alpha}}{c_{cy}}$$

$$cwly = 1 - crk cky$$

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

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

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

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

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

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

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

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

$$k1 = 1 - cikbar$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

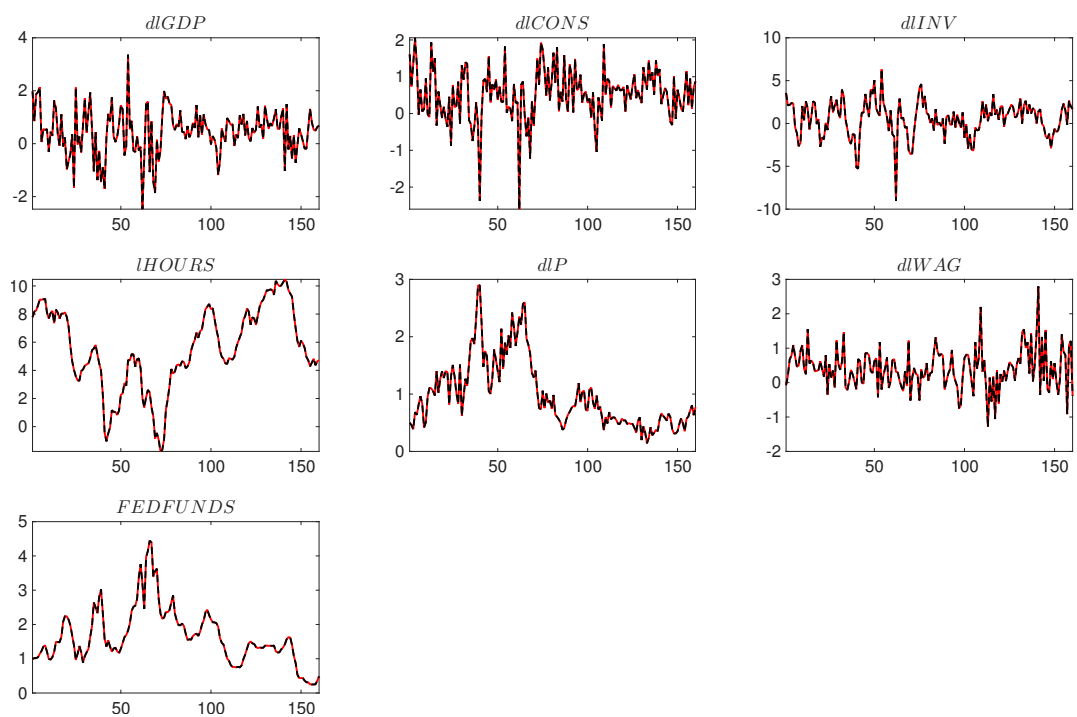


Figure 22: Historical and smoothed variables.

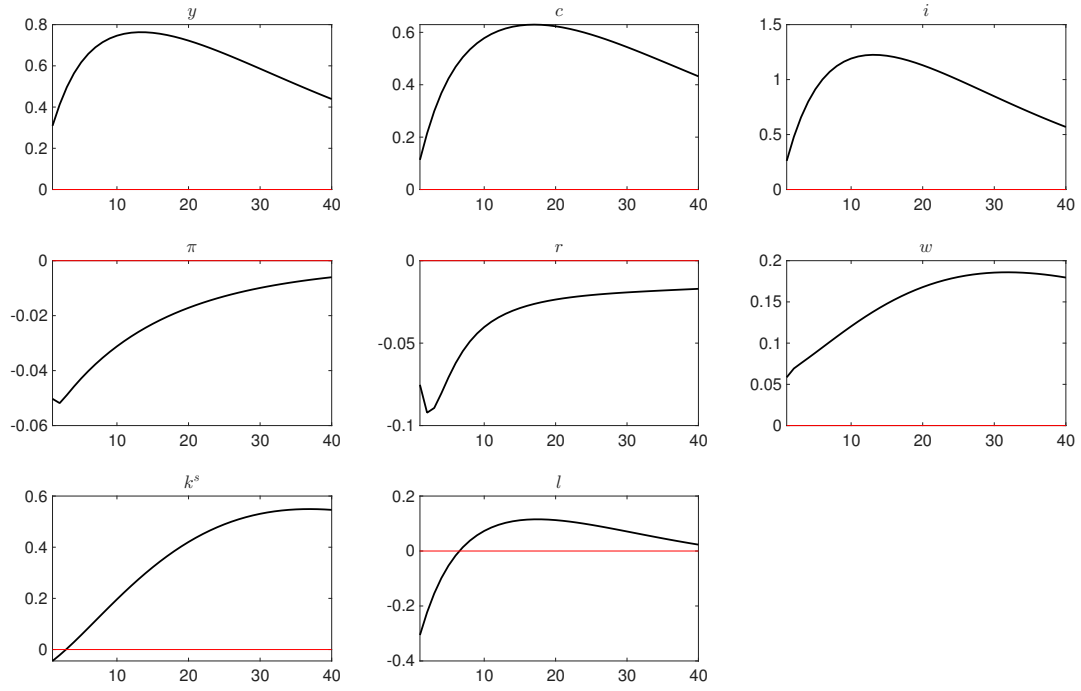


Figure 23: Impulse response functions (orthogonalized shock to η^a).

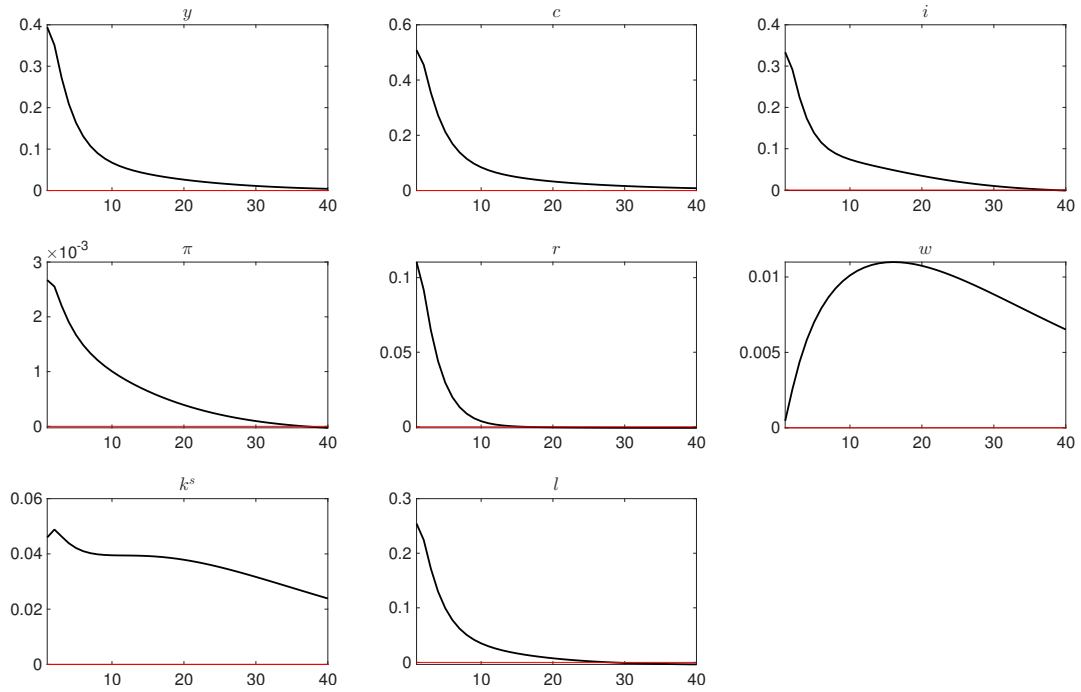


Figure 24: Impulse response functions (orthogonalized shock to η^b).

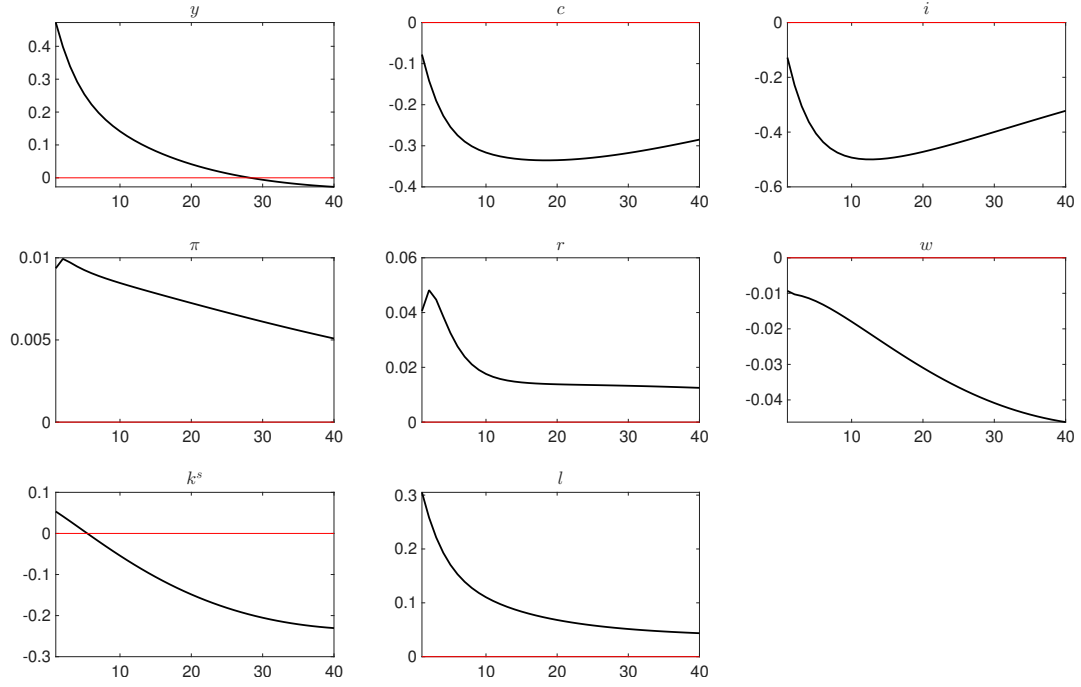


Figure 25: Impulse response functions (orthogonalized shock to η^g).

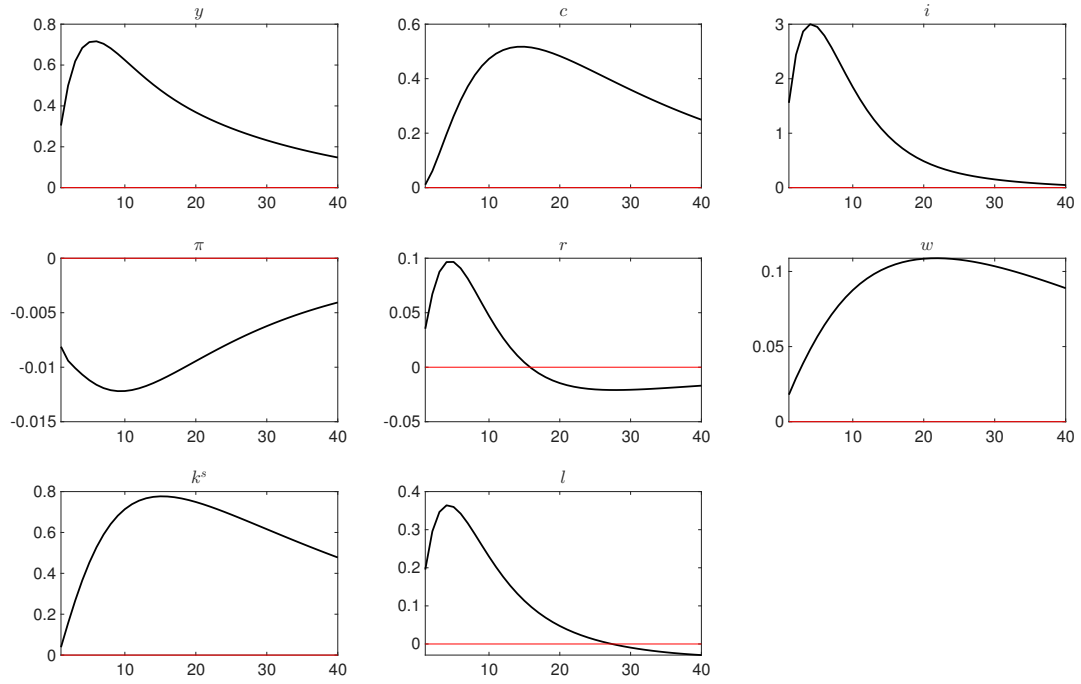


Figure 26: Impulse response functions (orthogonalized shock to η^i).

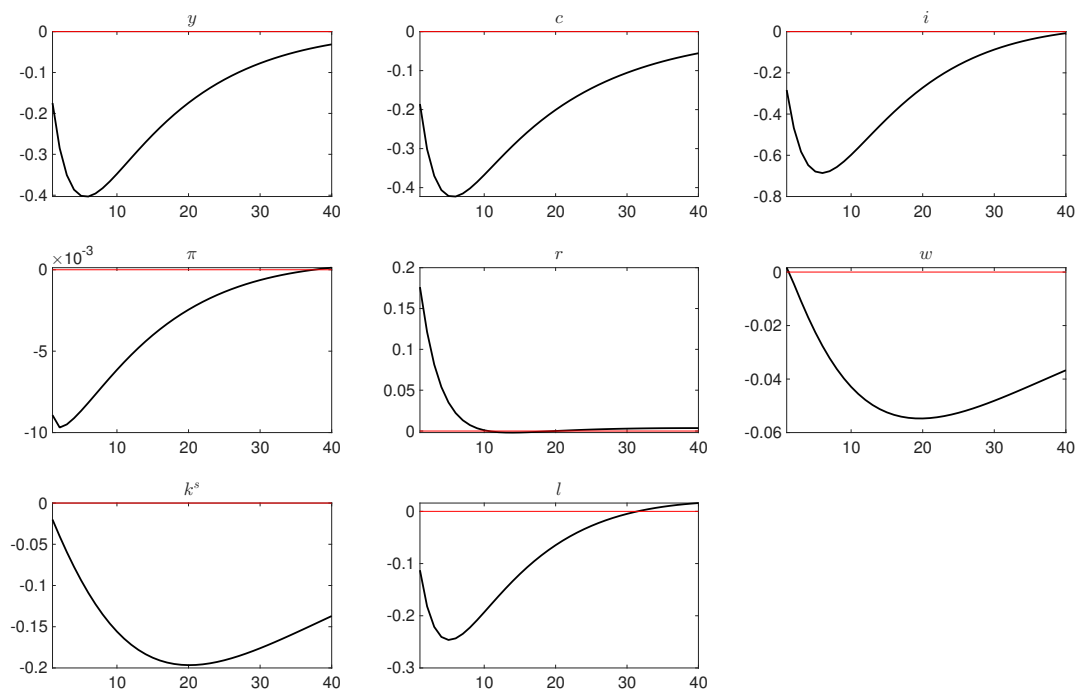


Figure 27: Impulse response functions (orthogonalized shock to η^m).

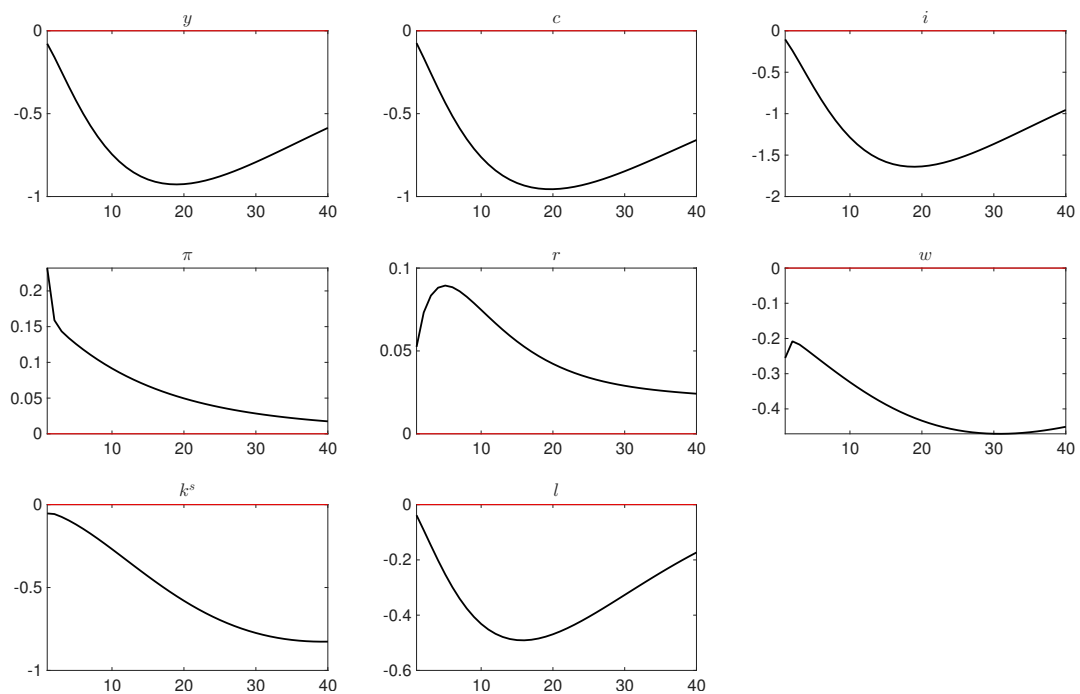


Figure 28: Impulse response functions (orthogonalized shock to η^p).

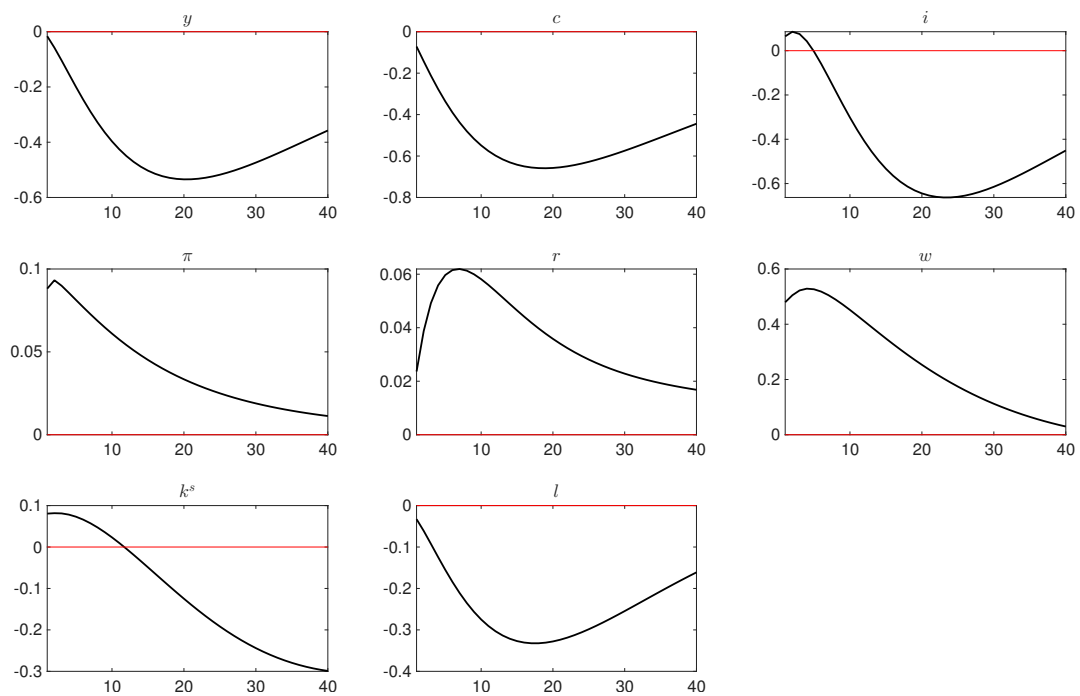


Figure 29: Impulse response functions (orthogonalized shock to η^w).

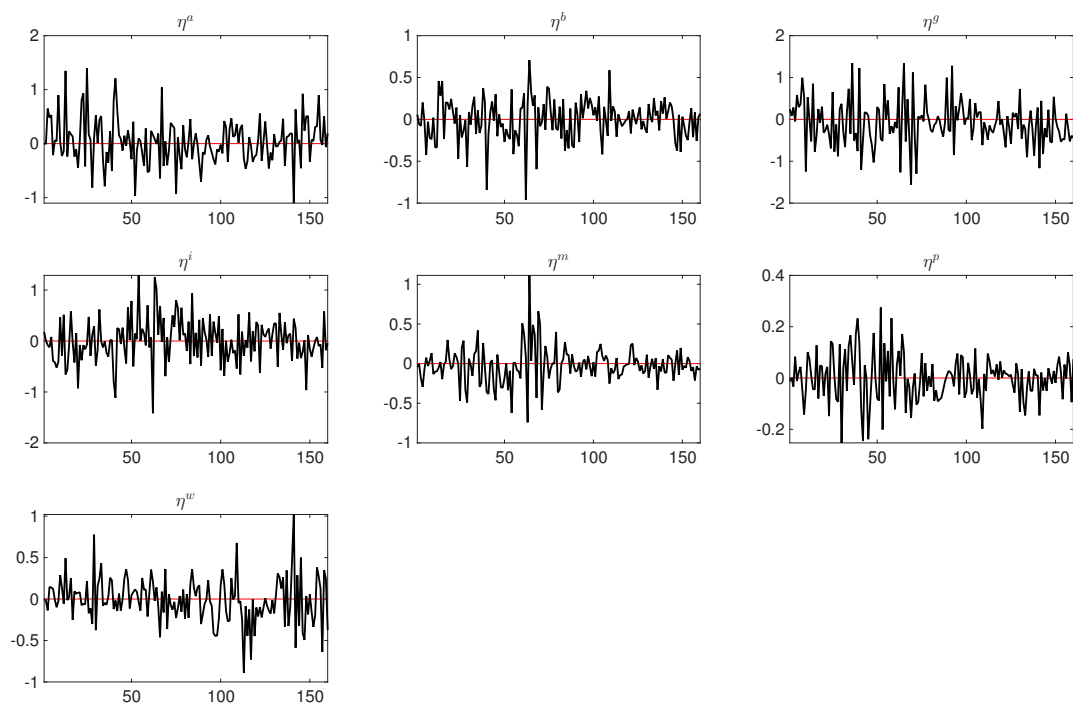


Figure 30: Smoothed shocks.