Sample size: 1993Q2:2016Q1

Observables:Y,R,Π_c,Π_d,C,I_d,N

Prior for ω = 0.35, adjustment costs

2 million draws

Chain 1: 25.9431%
Chain 2: 25.9551%

Log data density: -1089.906880

Tables

Table 1: Structural parameters estimations

	Prior mean	Prior Variance	Posterior Mean	Posterior LB	Posterior UB
sigma	1.00	0.01	1.14	1.00	1.29
phi	2.00	0.01	1.95	1.79	2.12
h	0.40	0.00	0.25	0.20	0.30
omega	0.35	0.00	0.19	0.14	0.24
rhor	0.75	0.00	0.78	0.74	0.82
phip	2.00	0.01	2.06	1.90	2.22
phiy	0.20	0.01	0.22	0.08	0.36
thetac	0.75	0.00	0.66	0.61	0.72
thetad	0.65	0.00	0.54	0.49	0.59
iotac	0.50	0.01	0.31	0.18	0.44
iotad	0.50	0.01	0.35	0.20	0.49
nud	0.83	0.01	1.06	0.91	1.22
rhoac	0.50	0.01	0.51	0.45	0.58
rhoad	0.50	0.01	0.50	0.34	0.67
rhocstar	0.50	0.01	0.92	0.89	0.95
rhomuc	0.50	0.01	0.39	0.28	0.51
rhomud	0.50	0.01	0.95	0.95	0.95
rhogamma	0.50	0.01	0.74	0.63	0.85

Table 2: Shock parameters estimations

	Prior mean	Posterior Mean	Posterior LB	Posterior UB
eac	1.00	2.53	2.22	2.84
ead	1.00	16.22	13.57	18.85
em	1.00	0.24	0.20	0.27
ecstar	1.00	1.46	1.23	1.69
emuc	1.00	1.45	1.14	1.75
emud	1.00	2.83	1.88	3.74
eg	1.00	2.86	2.36	3.34

Table 3: Standard deviations

	Data	Model
y	1.00	6.00
R	0.41	0.66
pic	0.47	0.89
pid	1.94	3.04
c	1.02	3.65
id	8.33	107.52
n	1.49	3.62

Table 4: Correlations

	Data	Model
y,y	1.00	1.00
y,R	-0.39	0.26
y,pic	-0.26	0.13
y,pid	0.03	0.01
y,c	0.50	-0.67
y,id	0.61	0.89
y,n	0.11	0.79
R,y	-0.39	0.26
R,R	1.00	1.00
R,pic	0.31	0.54
R,pid	-0.11	0.29
R,c	-0.22	-0.56
R,id	-0.42	0.25
R,n	-0.23	0.22
pic,y	-0.26	0.13
pic,R	0.31	0.54
pic,pic	1.00	1.00
pic,pid	-0.11	0.28
pic,c	-0.14	-0.25
pic,id	-0.17	0.16
pic,n	0.09	0.26
pid,y	0.03	0.01
pid,R	-0.11	0.29
pid,pic	-0.11	0.28
pid,pid	1.00	1.00
pid,c	0.34	0.02
pid,id	0.33	-0.00
pid,n	0.32	0.16
c,y	0.50	-0.67
c,R	-0.22	-0.56
c,pic	-0.14	-0.25
c,pid	0.34	0.02
c,c	1.00	1.00
c,id	0.50	-0.71
c,n	0.19	-0.52
id,y	0.61	0.89
id,R	-0.42	0.25
id,pic	-0.17	0.16
id,pid	0.33	-0.00
id,c	0.50	-0.71
id,id	1.00	1.00
id,n	0.53	0.86
n,y	0.11	0.79
n,R	-0.23	0.22
n,pic	0.09	0.26
n,pid	0.32	0.16
n,c	0.19	-0.52
n,id	0.53	0.86
n,n	1.00	1.00

Table 5: Variance decomposition

variable	horizon	eac	ead	em	ecstar	emuc	emud	eg
y	1	0.21	0.32	0.05	0.00	0.30	0.01	0.11
	2	0.20	0.41	0.02	0.01	0.23	0.06	0.07
	4	0.15	0.47	0.01	0.02	0.15	0.16	0.04
	8	0.09	0.43	0.01	0.02	0.08	0.34	0.03
	Inf	0.03	0.19	0.00	0.01	0.03	0.73	0.01
R	1	0.05	0.07	0.02	0.29	0.11	0.14	0.32
	2	0.09	0.05	0.01	0.24	0.18	0.15	0.28
	4	0.10	0.04	0.01	0.23	0.19	0.19	0.25
	8	0.09	0.08	0.01	0.24	0.16	0.20	0.23
	Inf	0.06	0.14	0.01	0.20	0.11	0.33	0.16
pic	1	0.07	0.09	0.22	0.20	0.13	0.11	0.18
	2	0.08	0.09	0.21	0.19	0.15	0.11	0.17
	4	0.08	0.10	0.21	0.18	0.15	0.11	0.17
	8	0.08	0.11	0.20	0.18	0.15	0.11	0.16
	Inf	0.08	0.12	0.19	0.17	0.15	0.14	0.15
pid	1	0.00	0.20	0.04	0.05	0.02	0.68	0.02
	2	0.00	0.19	0.04	0.05	0.02	0.67	0.03
	4	0.00	0.19	0.04	0.05	0.03	0.66	0.03
	8	0.00	0.19	0.04	0.06	0.03	0.66	0.03
	Inf	0.00	0.19	0.03	0.06	0.03	0.66	0.03
c	1	0.05	0.02	0.02	0.57	0.25	0.04	0.05
	2	0.07	0.03	0.02	0.52	0.28	0.04	0.04
	4	0.06	0.08	0.01	0.50	0.25	0.06	0.04
	8	0.04	0.14	0.01	0.47	0.18	0.12	0.03
	Inf	0.02	0.12	0.00	0.32	0.10	0.42	0.02
id	1	0.03	0.88	0.01	0.02	0.00	0.02	0.03
	2	0.02	0.91	0.00	0.01	0.00	0.04	0.02
	4	0.01	0.84	0.00	0.00	0.01	0.13	0.01
	8	0.01	0.65	0.00	0.00	0.01	0.32	0.01
	Inf	0.00	0.26	0.00	0.00	0.00	0.73	0.00
n	1	0.47	0.18	0.03	0.03	0.24	0.03	0.02
	2	0.37	0.16	0.03	0.03	0.35	0.03	0.03
	4	0.27	0.29	0.02	0.02	0.32	0.06	0.02
	8	0.18	0.37	0.01	0.01	0.21	0.19	0.02
	Inf	0.07	0.22	0.01	0.01	0.08	0.60	0.01

FIGURES

Figure 1: Priors

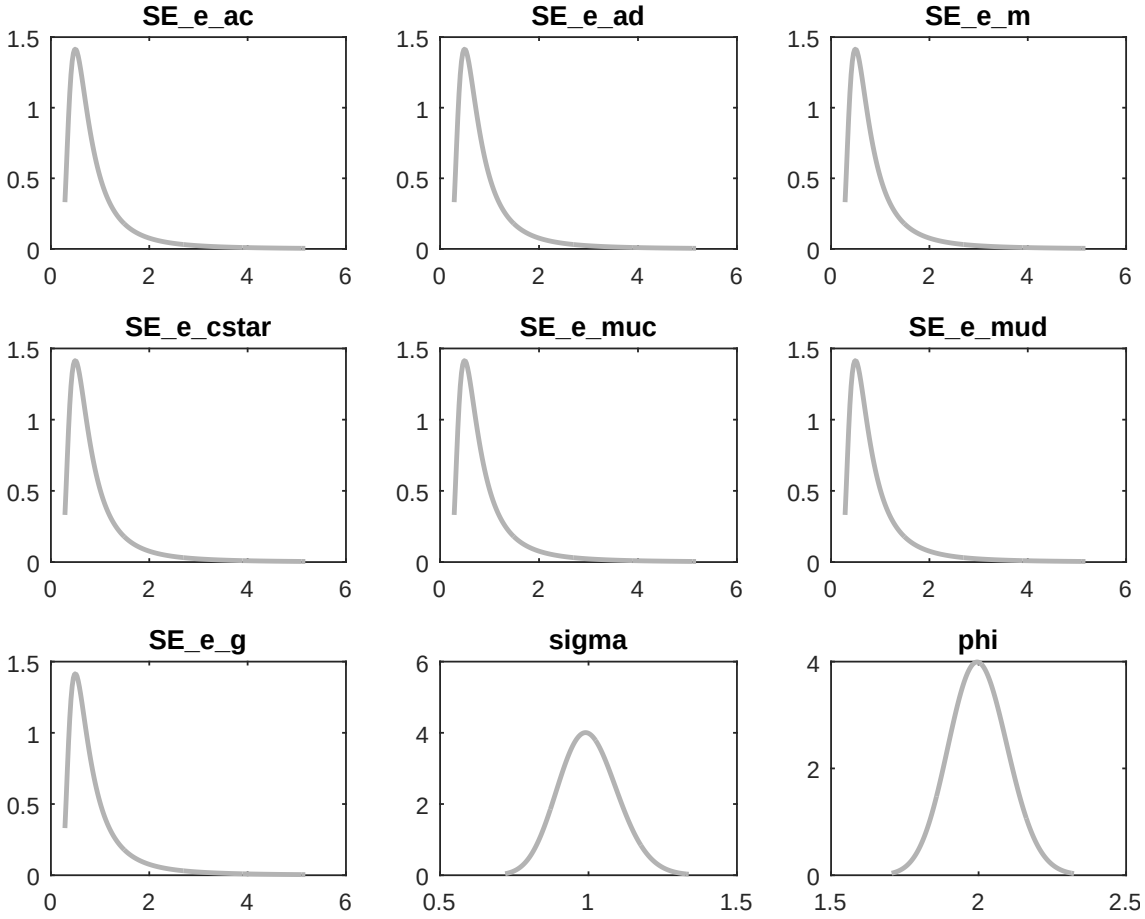

Figure 2: Priors

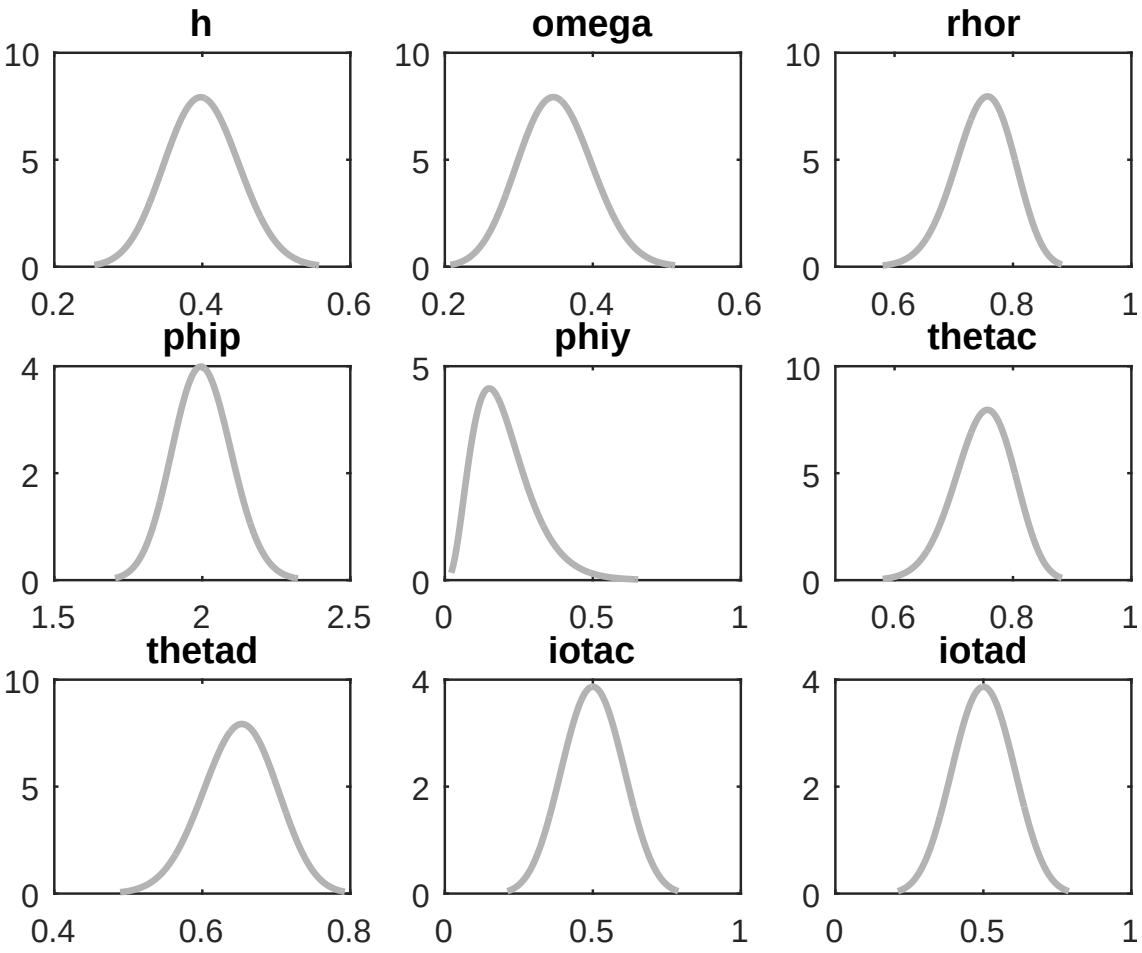

Figure 3: Priors

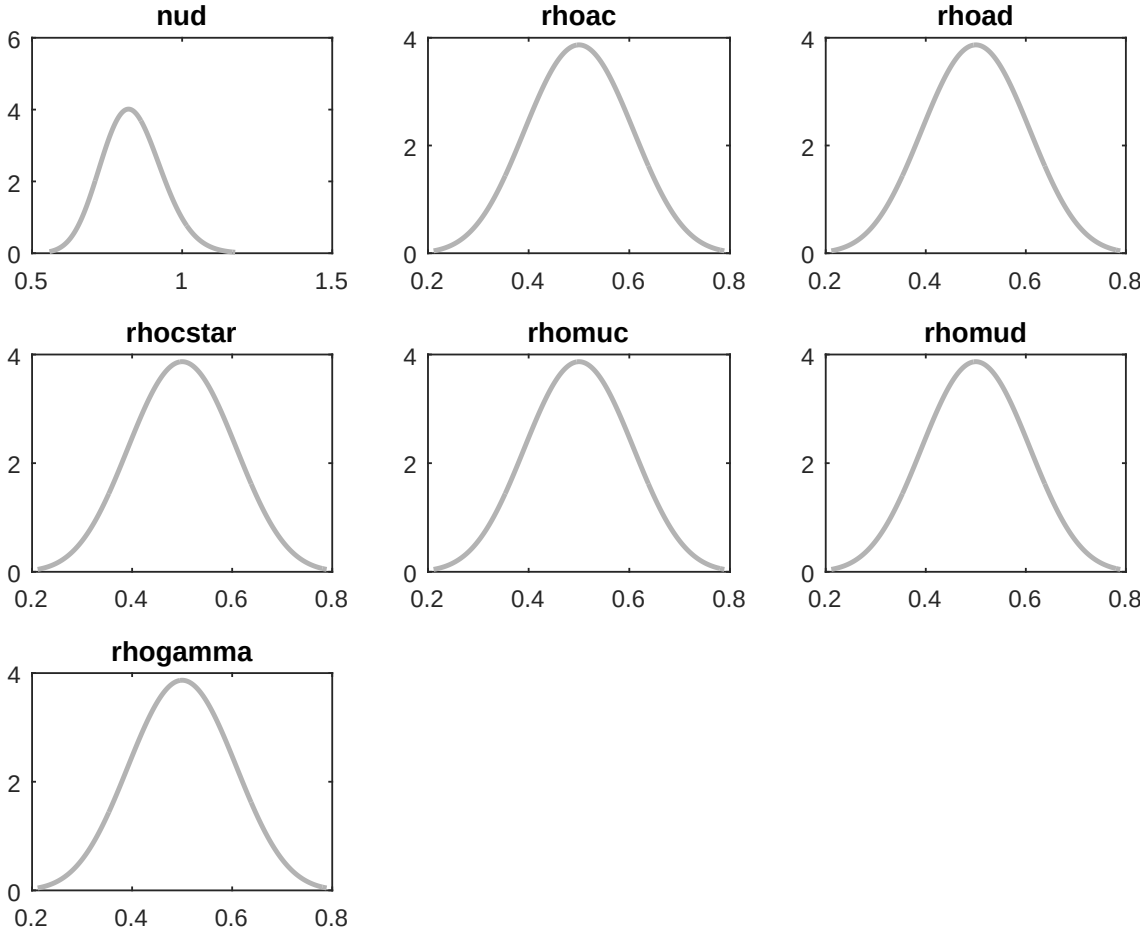

Figure 4: Mode check plots

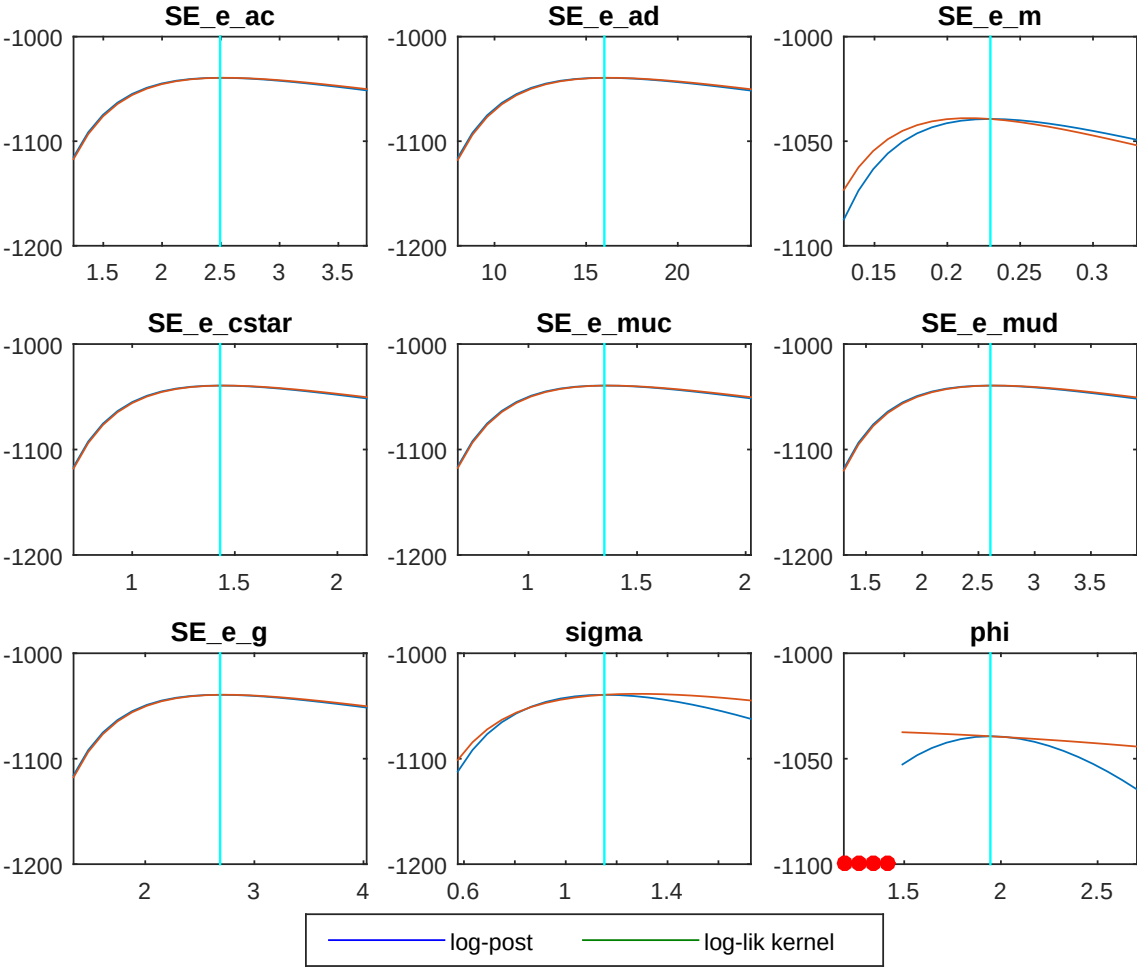

Figure 5: Mode check plots

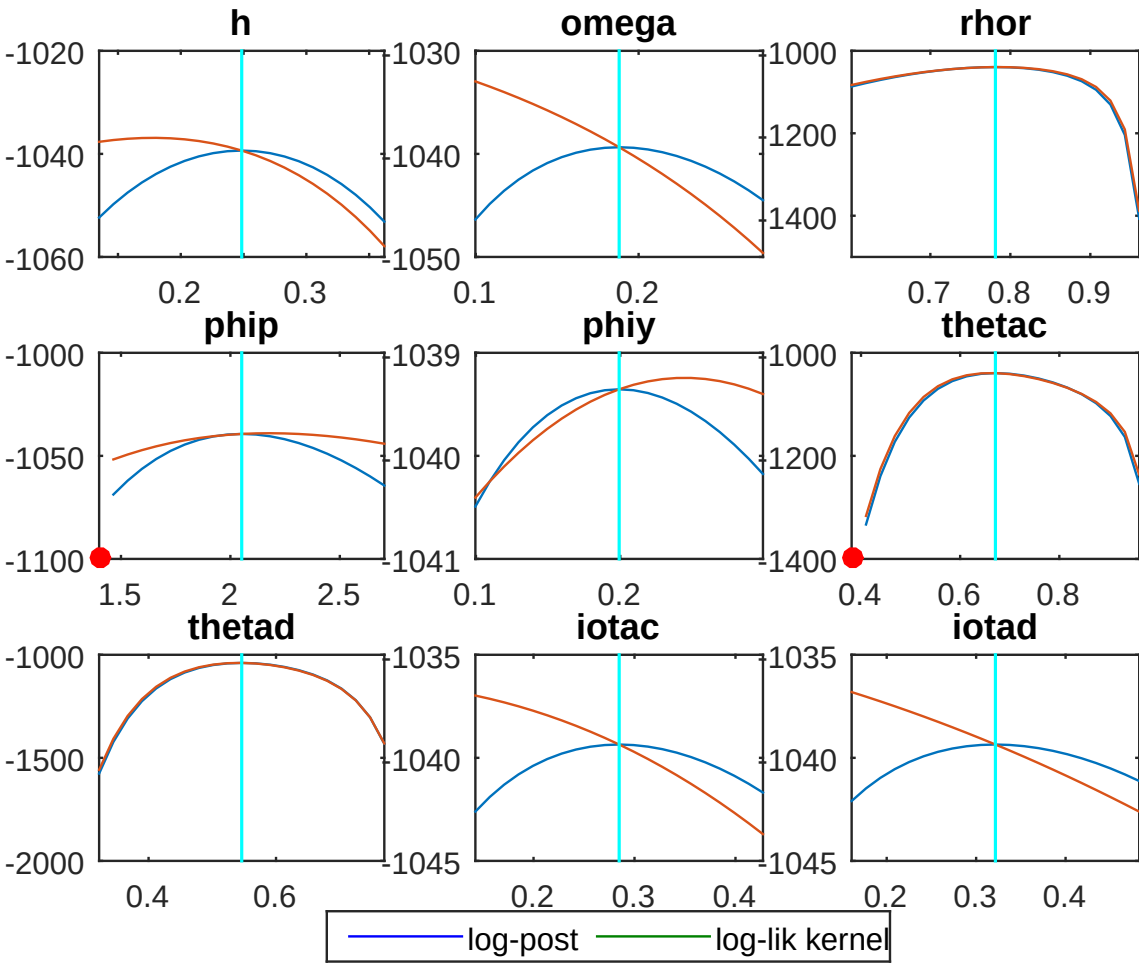

Figure 6: Mode check plots

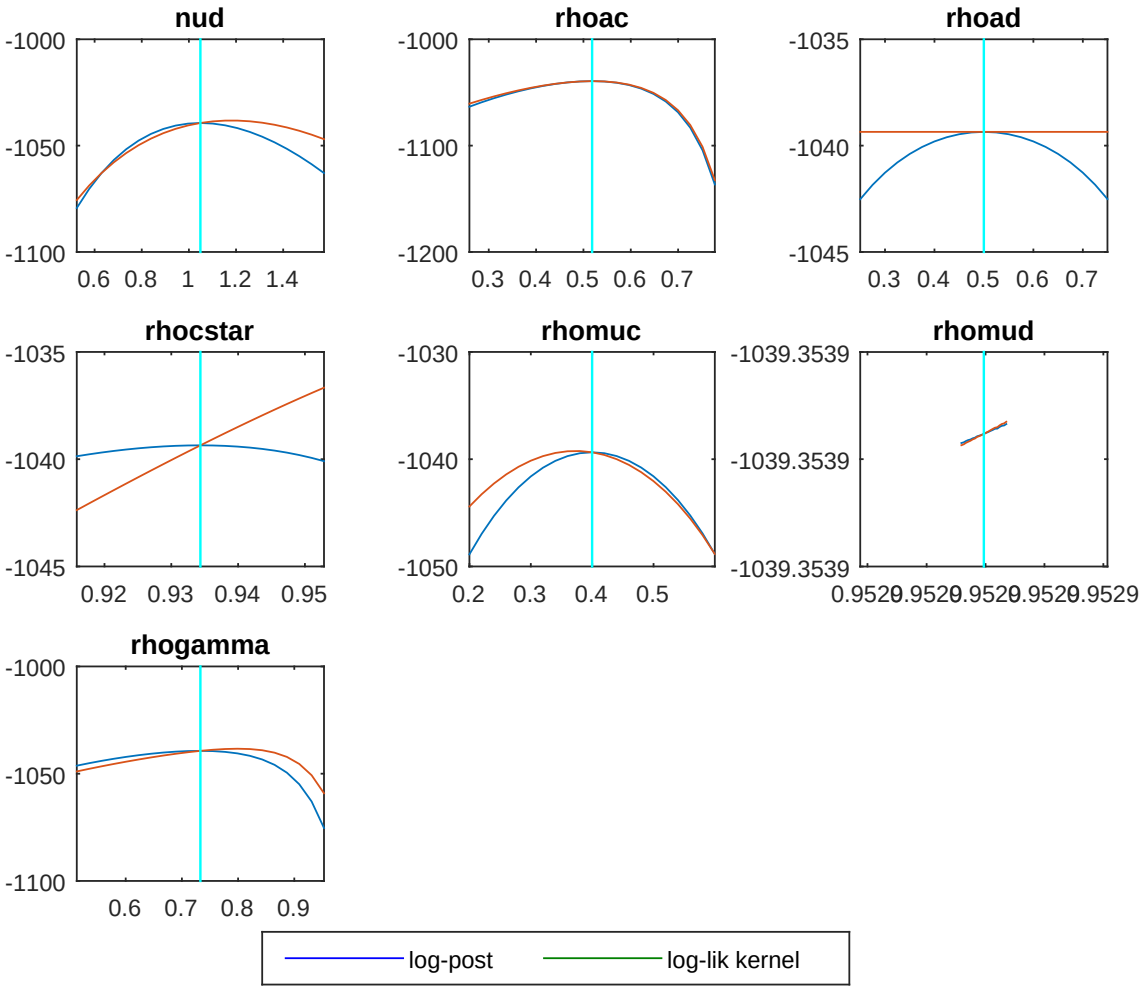

Figure 7: MCMC univariate convergence diagnostic (Brooks and Gelman, 1998)

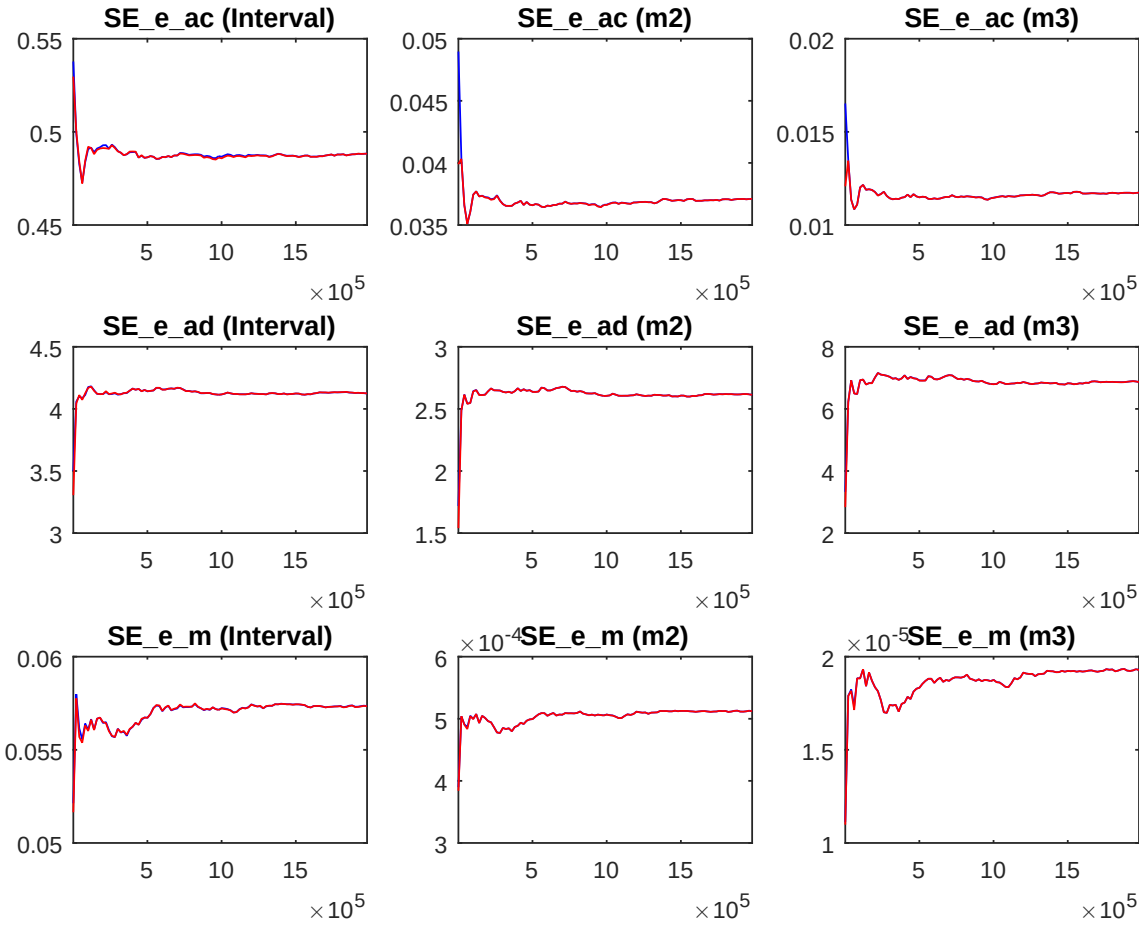

Figure 8: MCMC univariate convergence diagnostic (Brooks and Gelman, 1998)

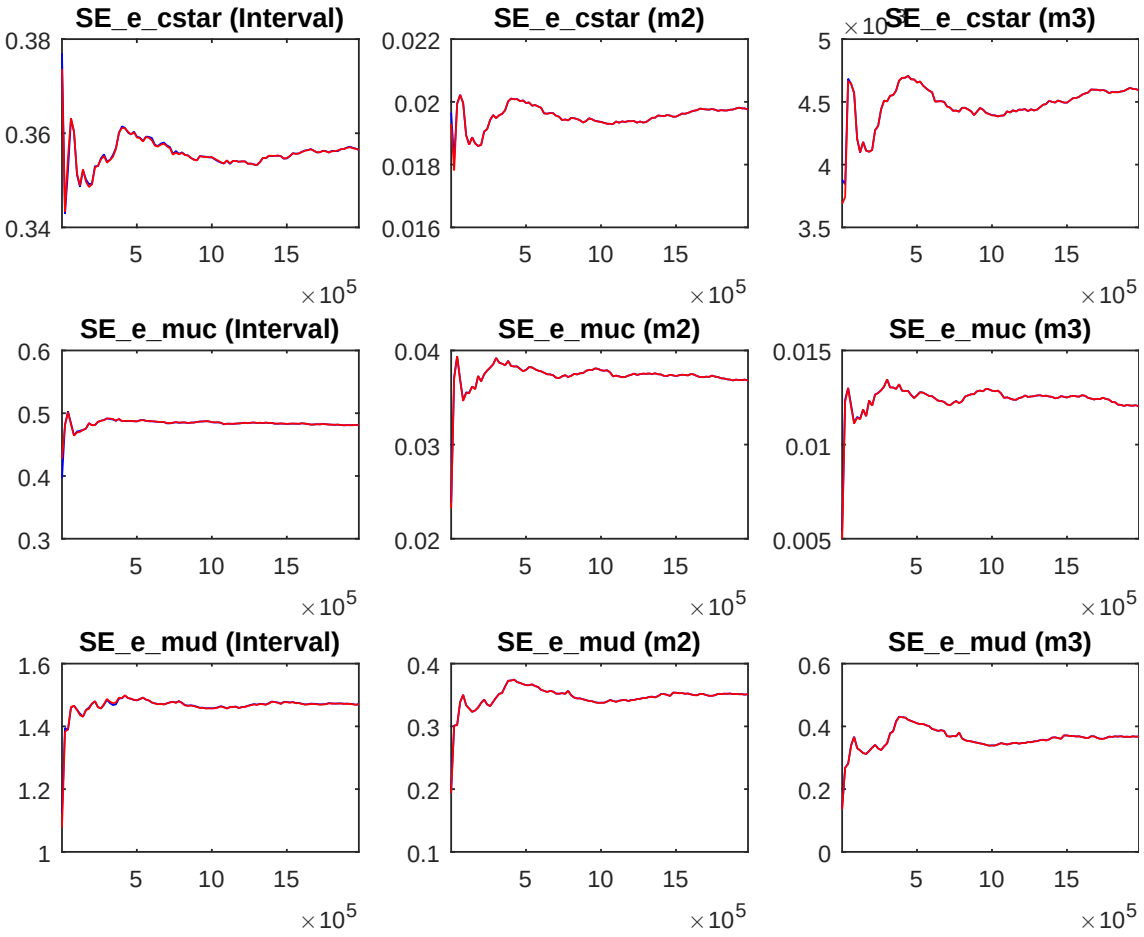

Figure 9: MCMC univariate convergence diagnostic (Brooks and Gelman, 1998)

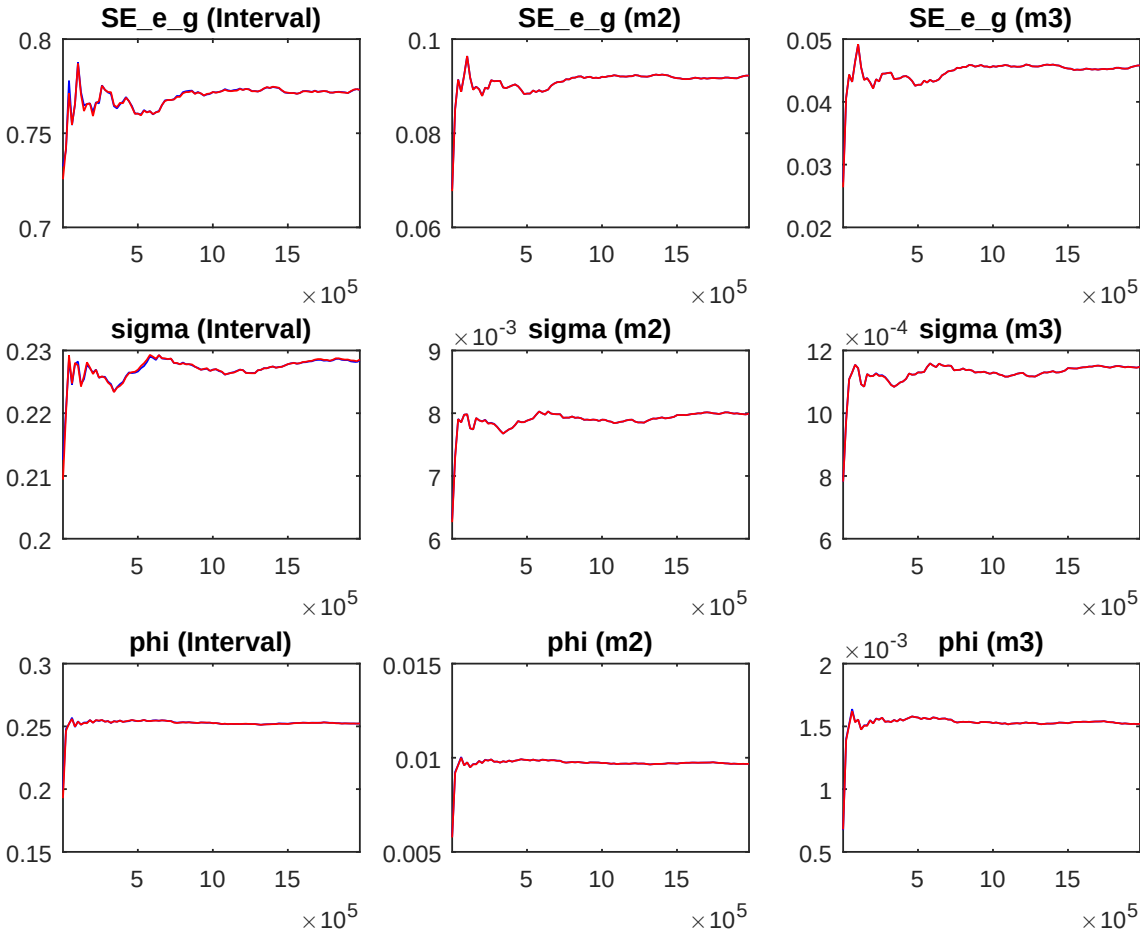

Figure 10: MCMC univariate convergence diagnostic (Brooks and Gelman, 1998)

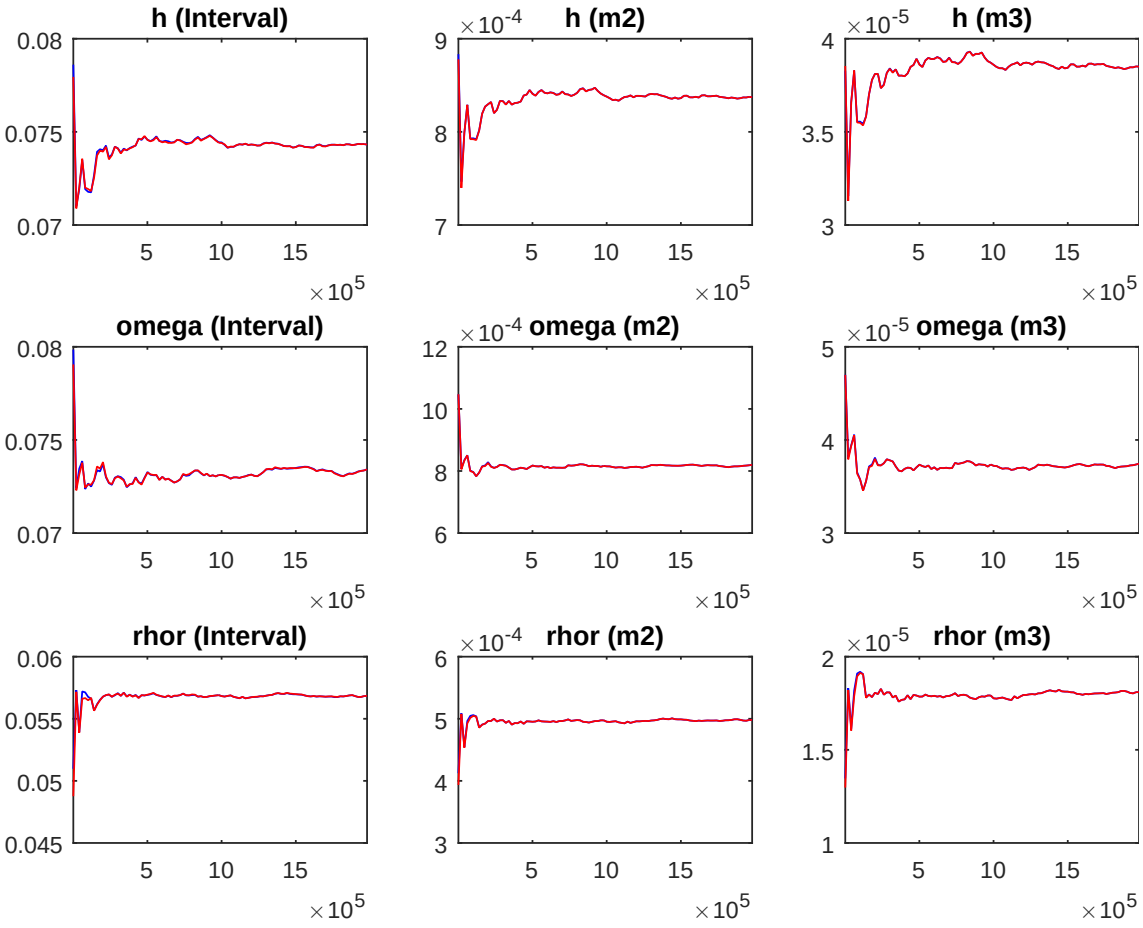

Figure 11: MCMC univariate convergence diagnostic (Brooks and Gelman, 1998)

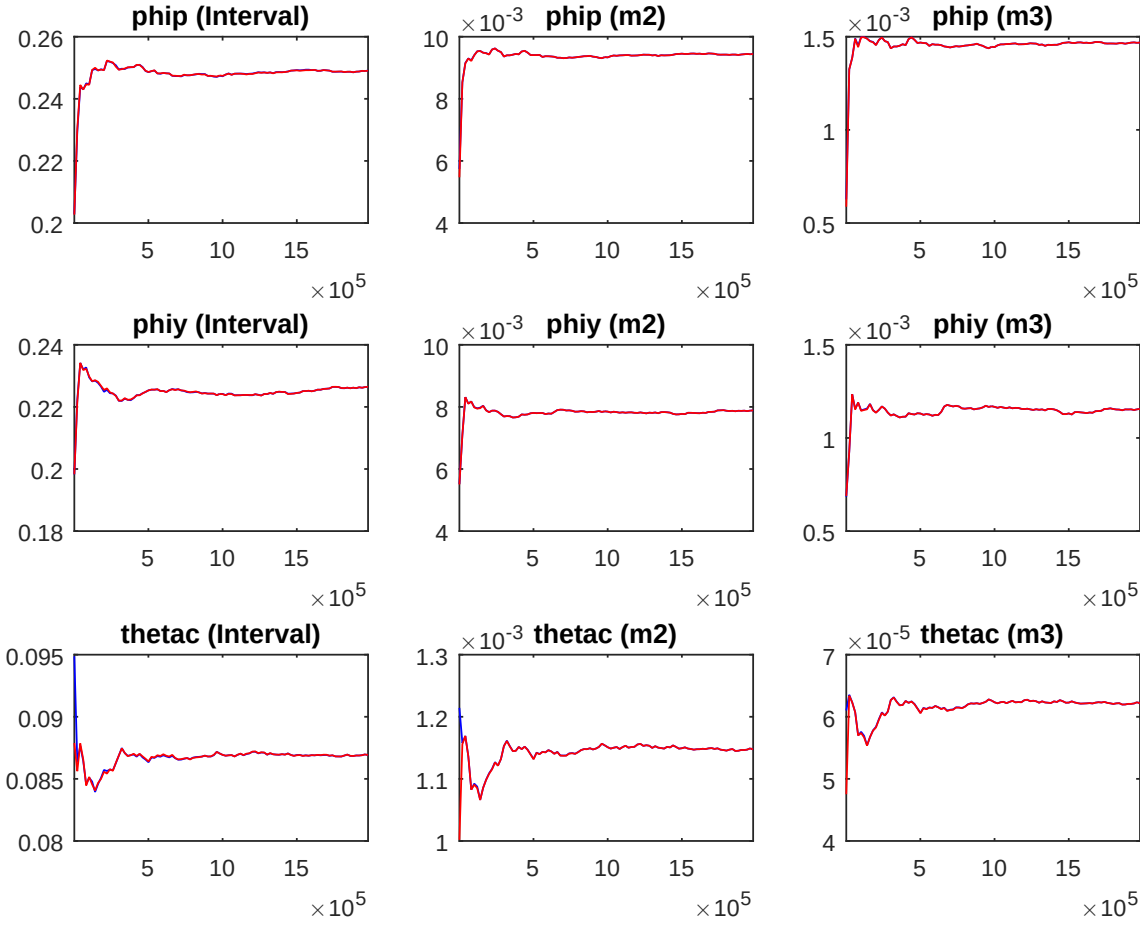

Figure 12: Convergence diagnostic

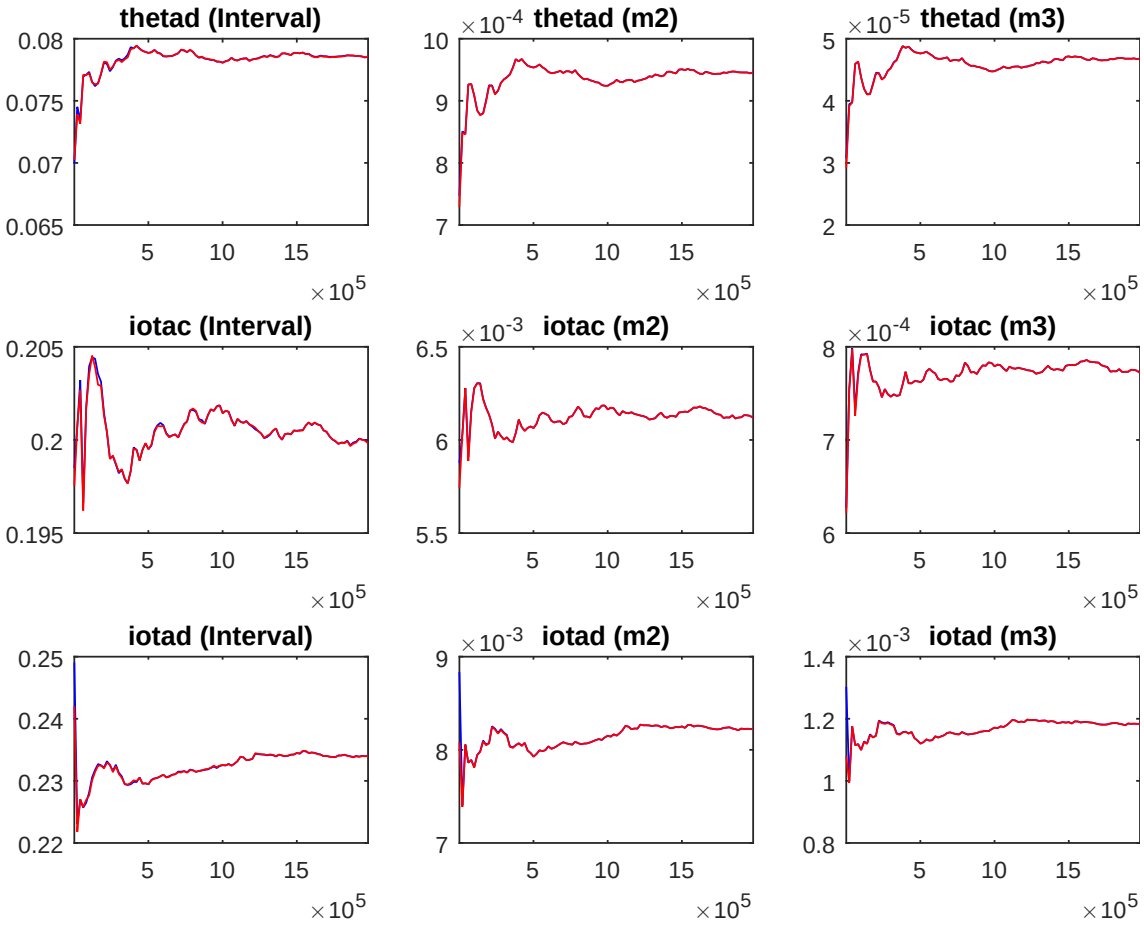

Figure 13: Convergence diagnostic

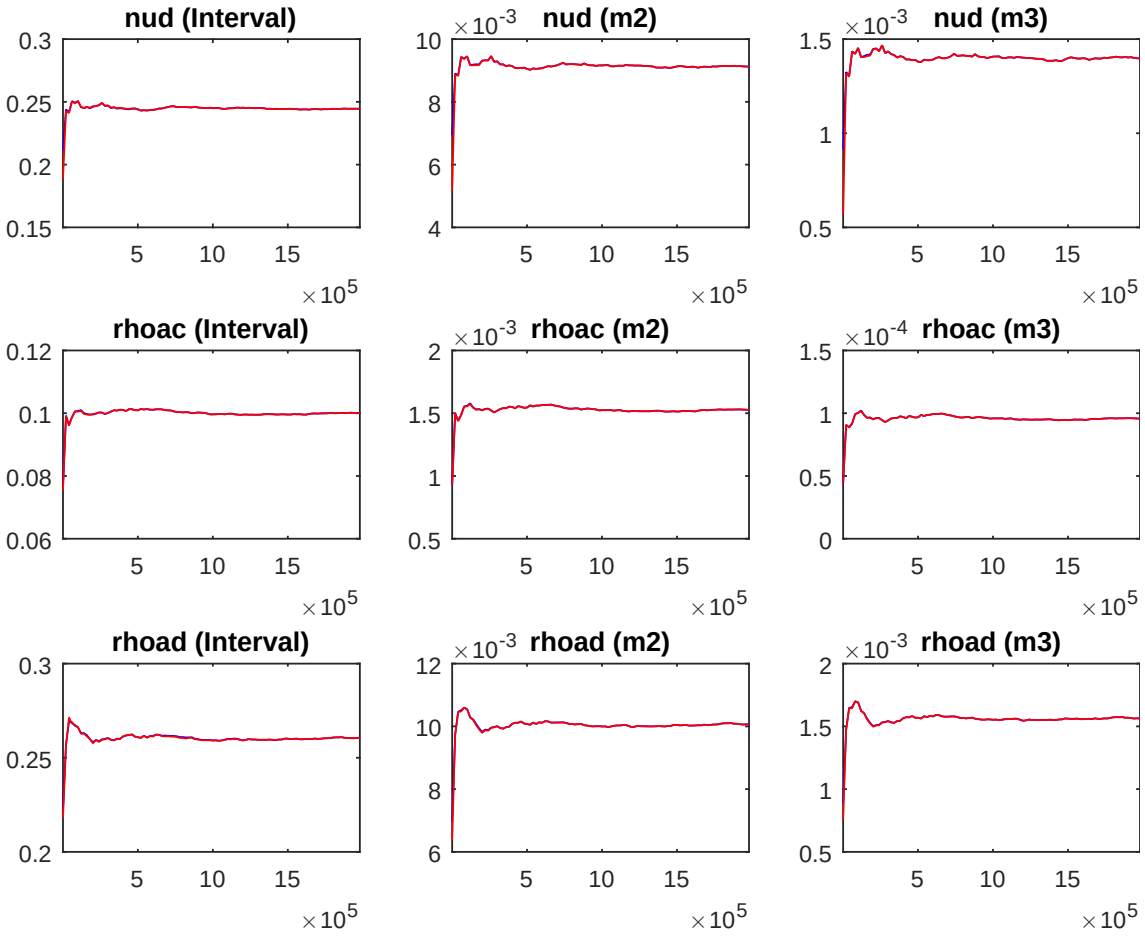

Figure 14: Convergence diagnostic

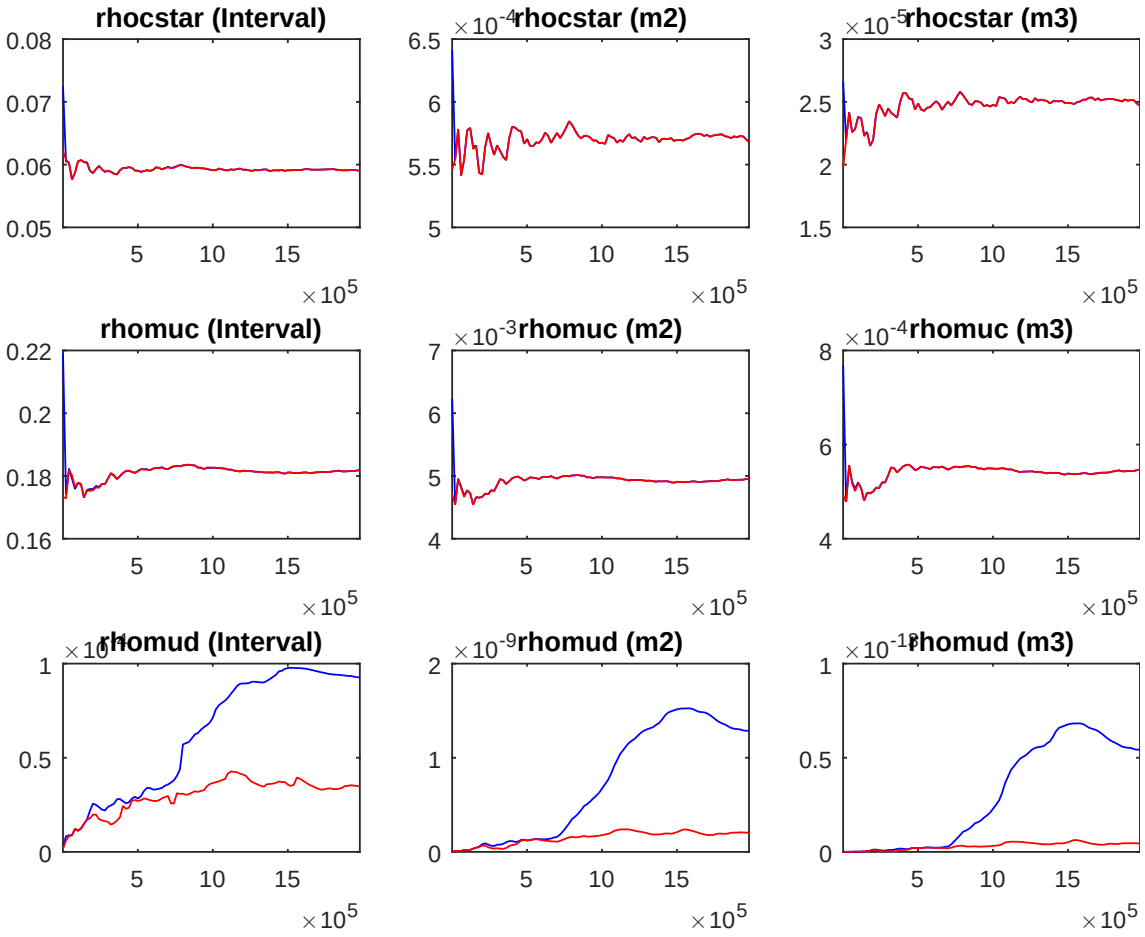

Figure 15: Convergence diagnostic

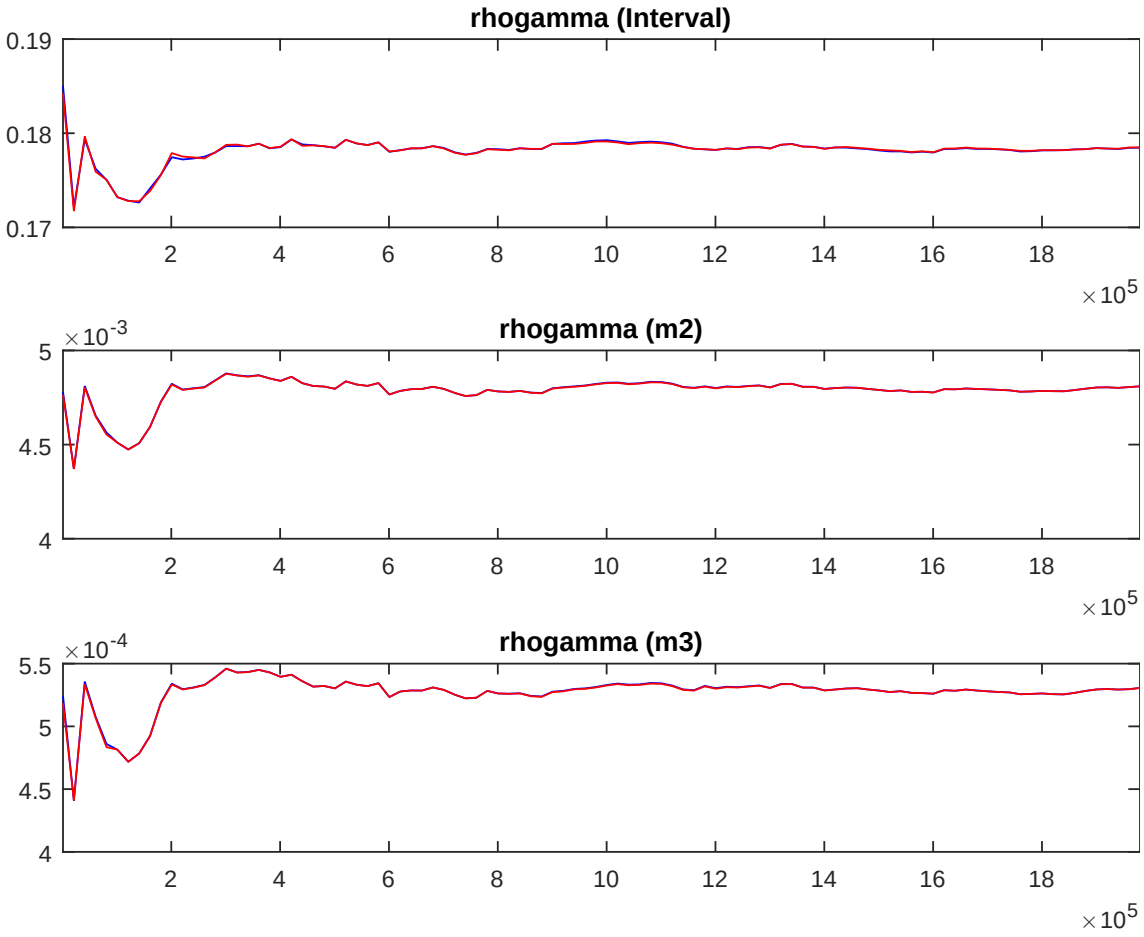

Figure 16: Convergence diagnostic

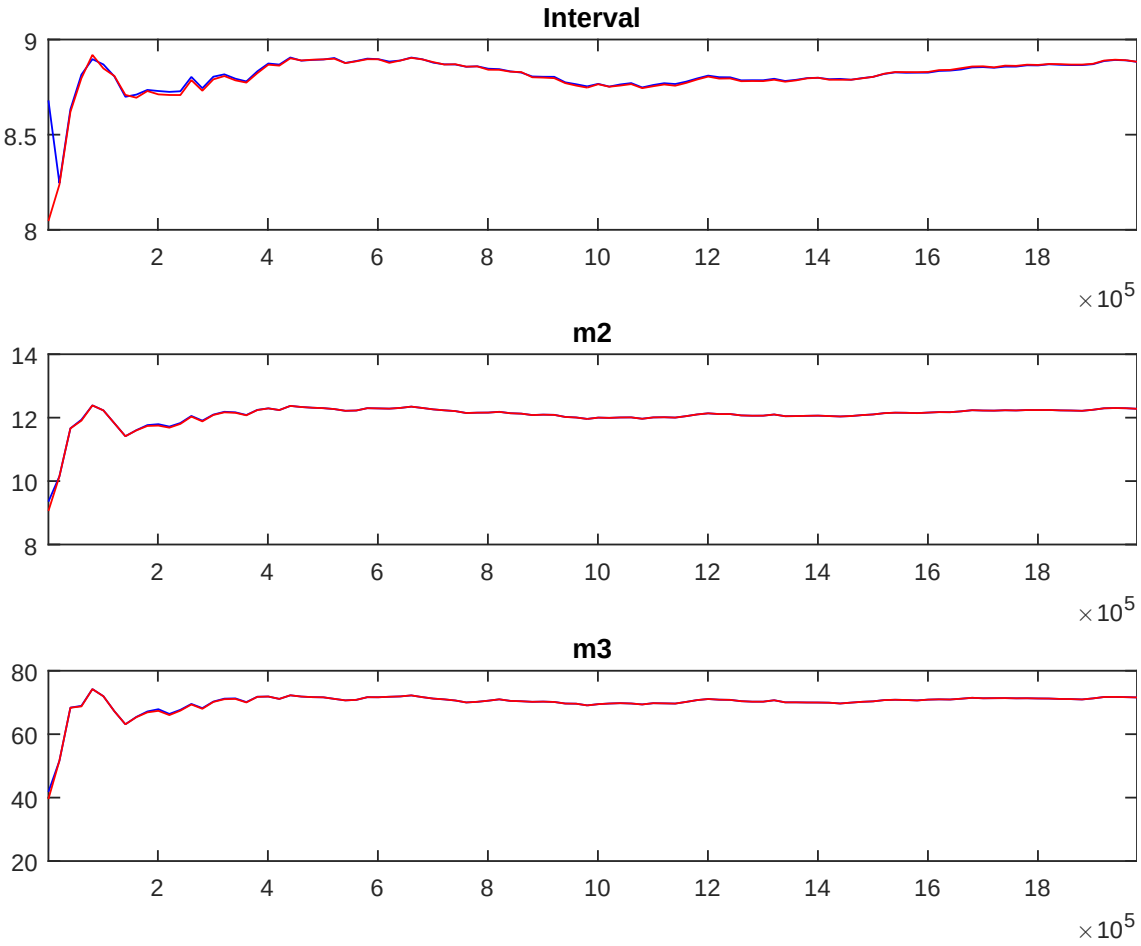

Figure 17: Priors and posteriors

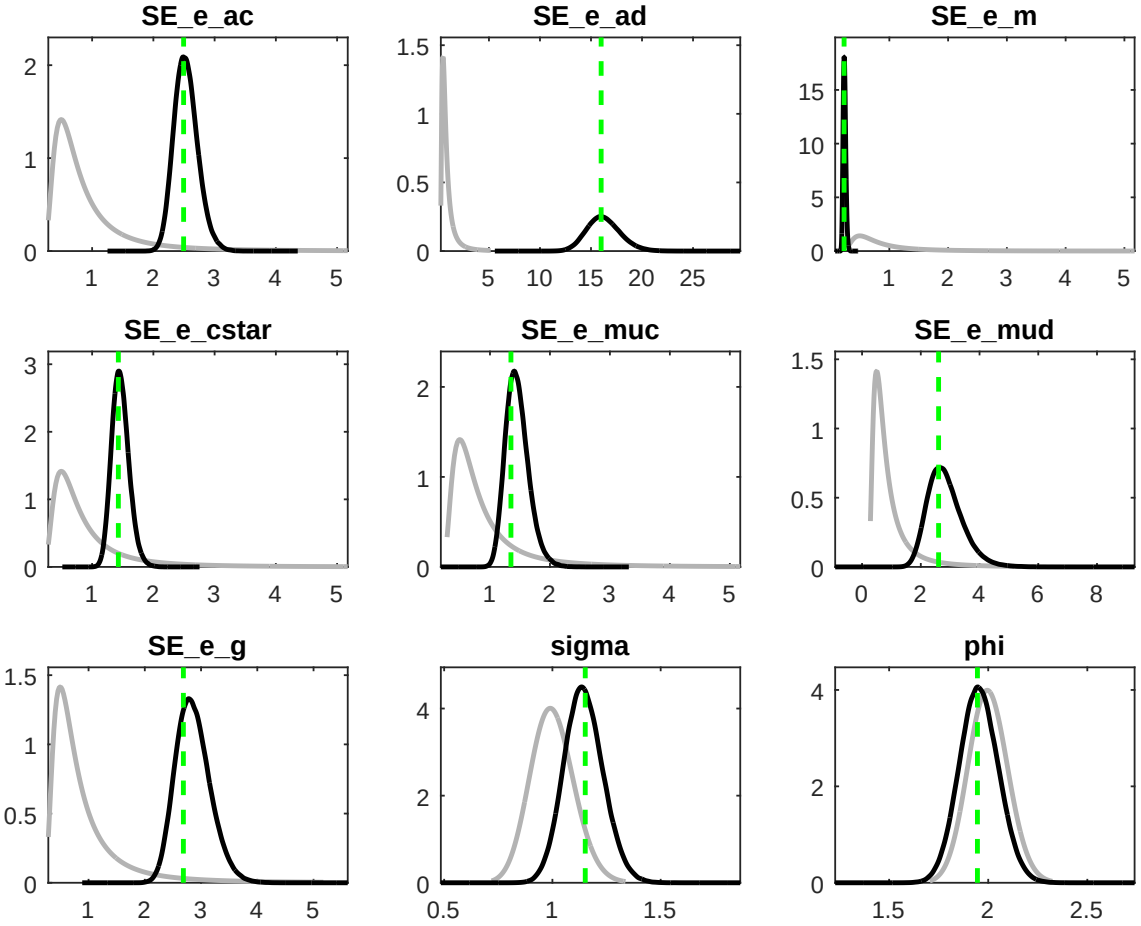

Figure 18: Priors and posteriors

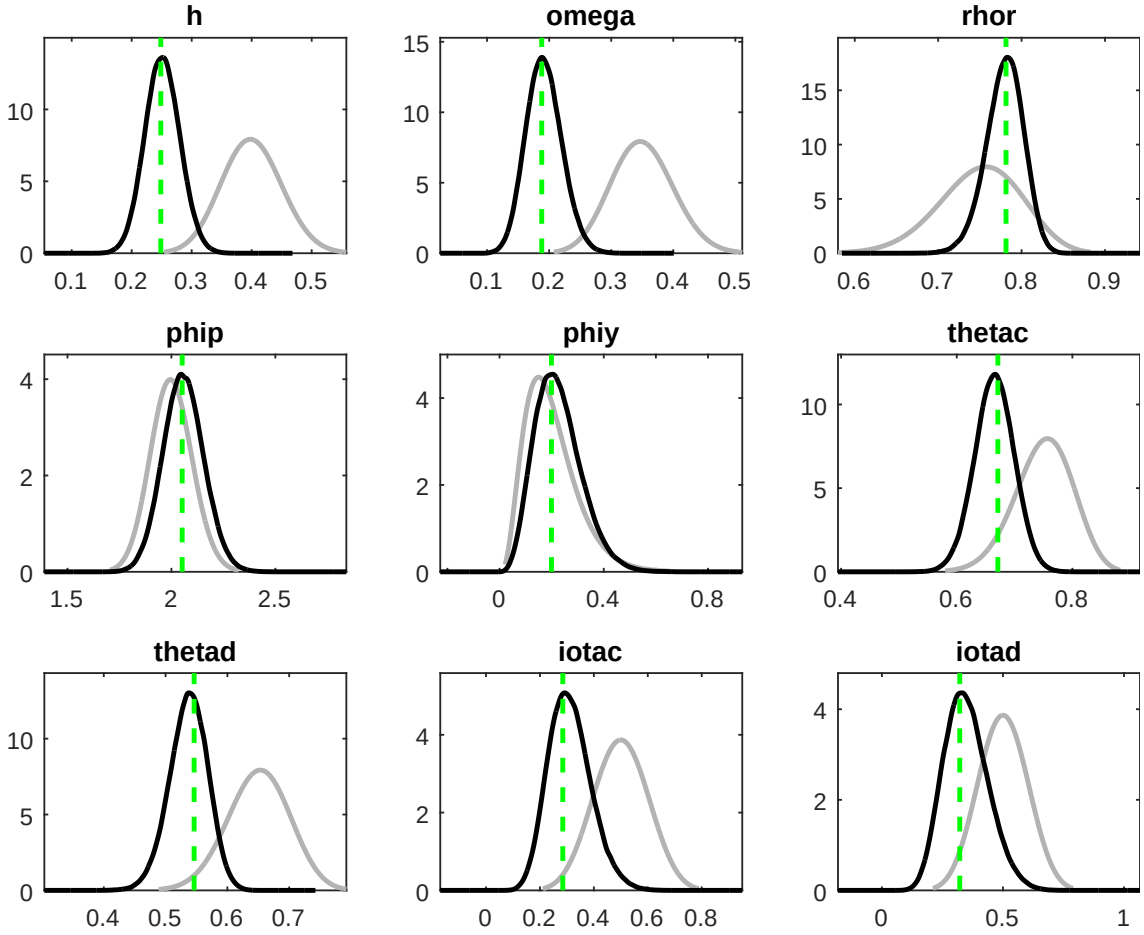

Figure 19: Priors and posteriors

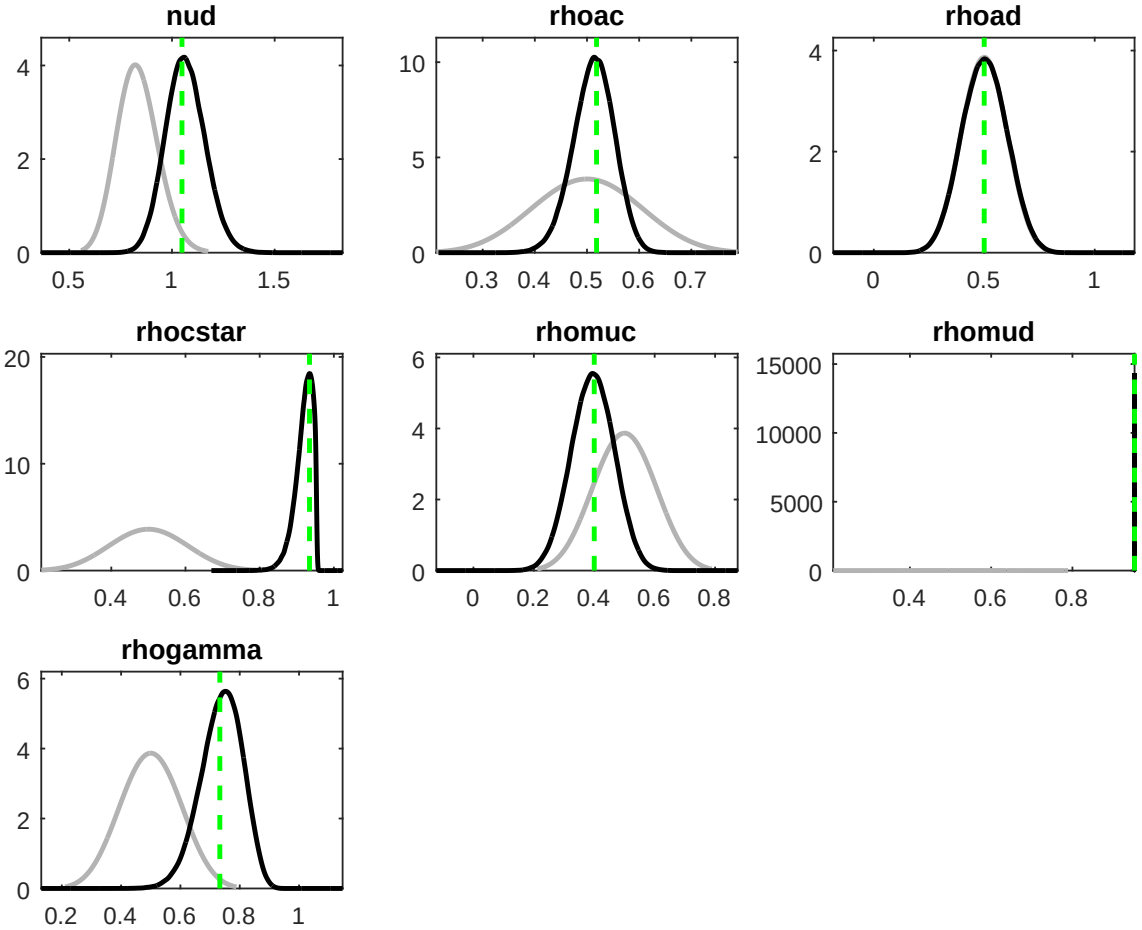

Figure 20: Orthogonalized shock to e_{ac}

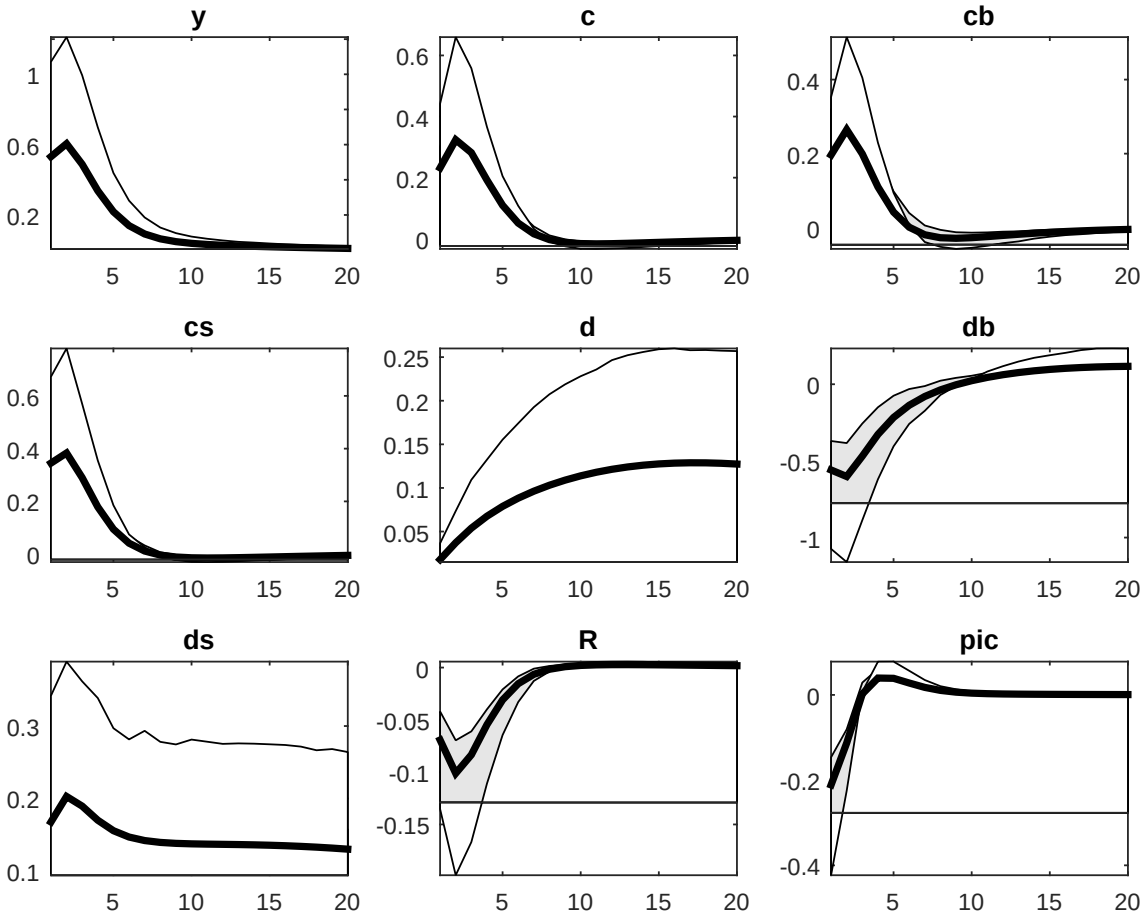

Figure 21: Orthogonalized shock to e_{ac}

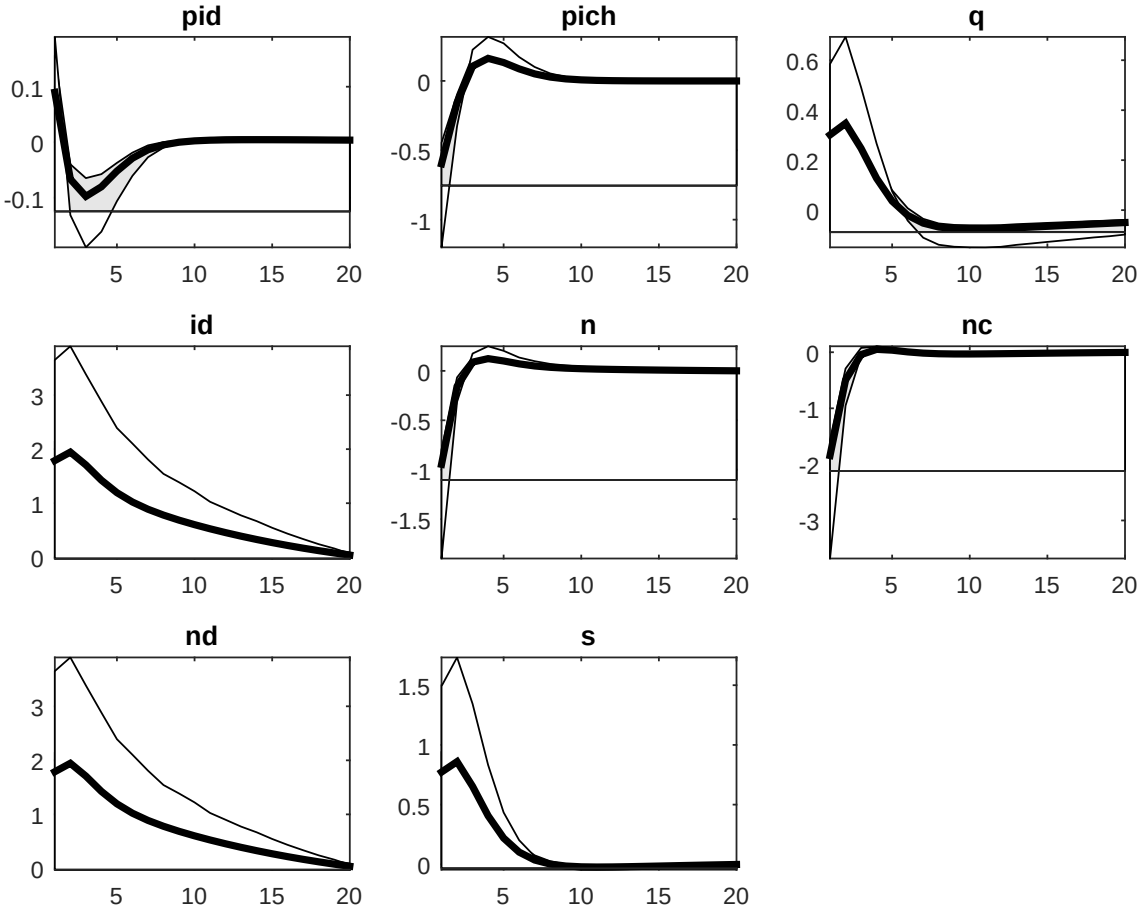

Figure 22: Orthogonalized shock to e_{ad}

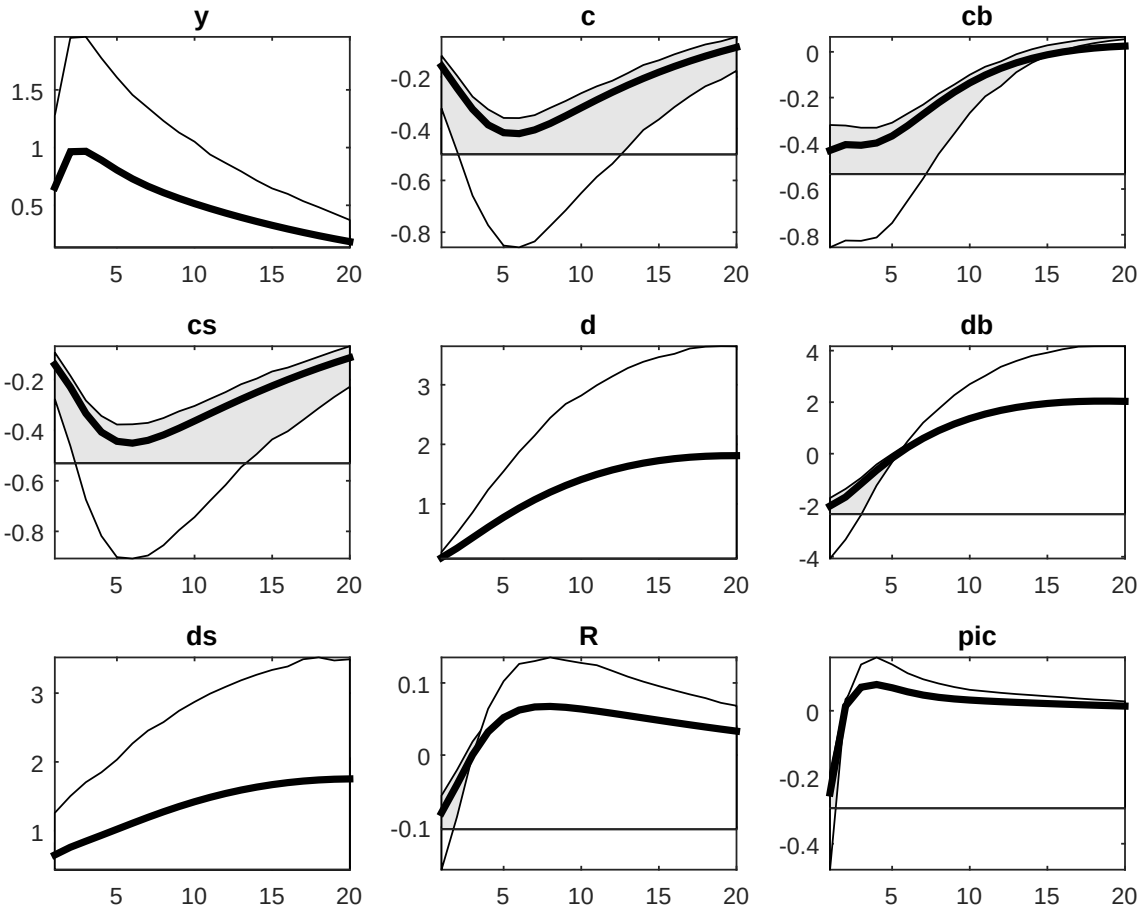

Figure 23: Orthogonalized shock to e_{ad}

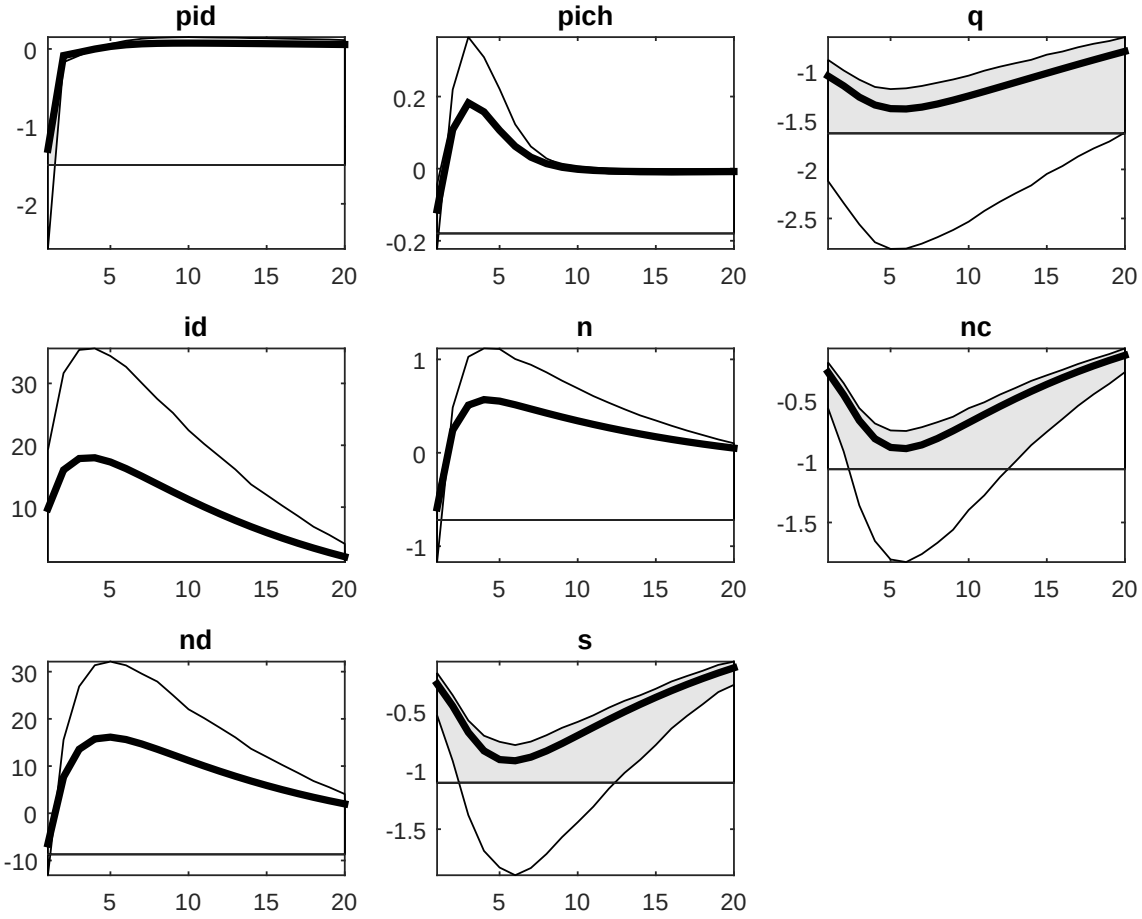

Figure 24: Orthogonalized shock to e_m

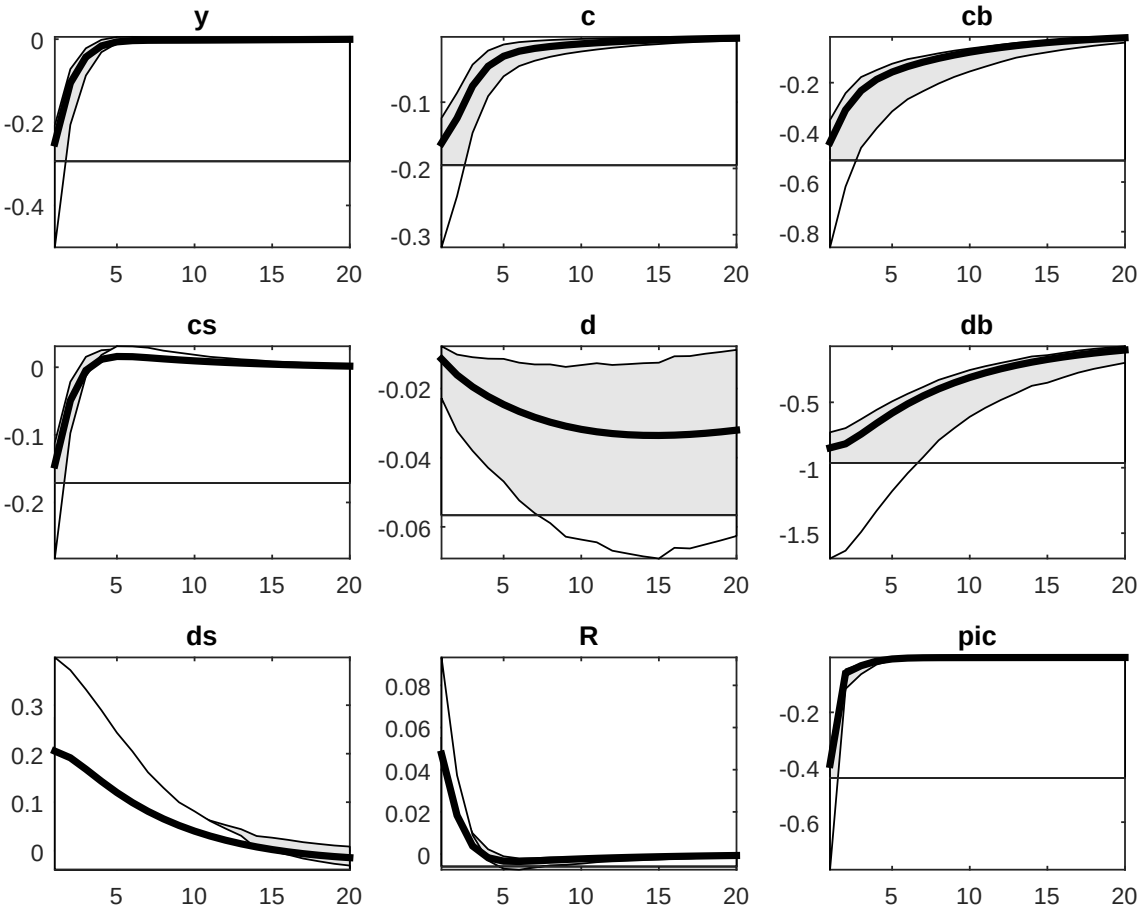

Figure 25: Orthogonalized shock to e_m

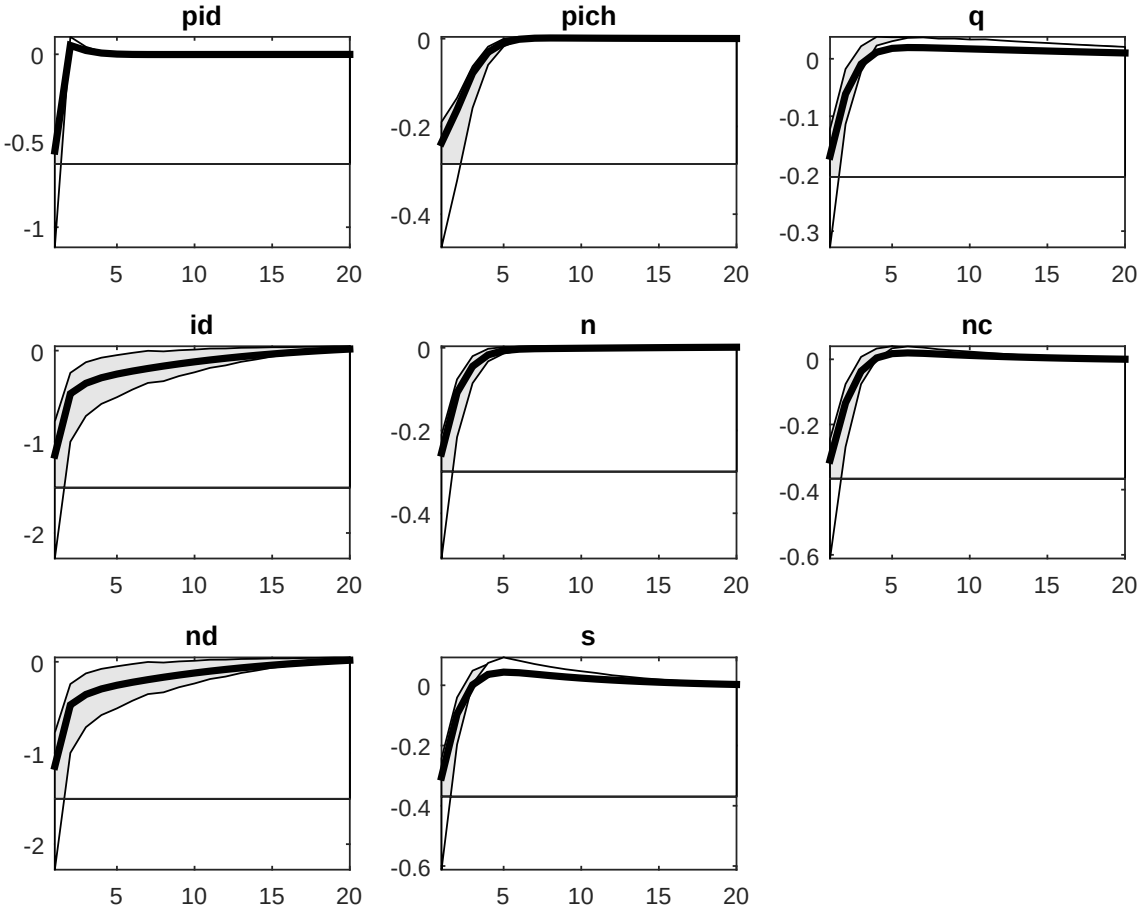

Figure 26: Orthogonalized shock to e_{cstar}

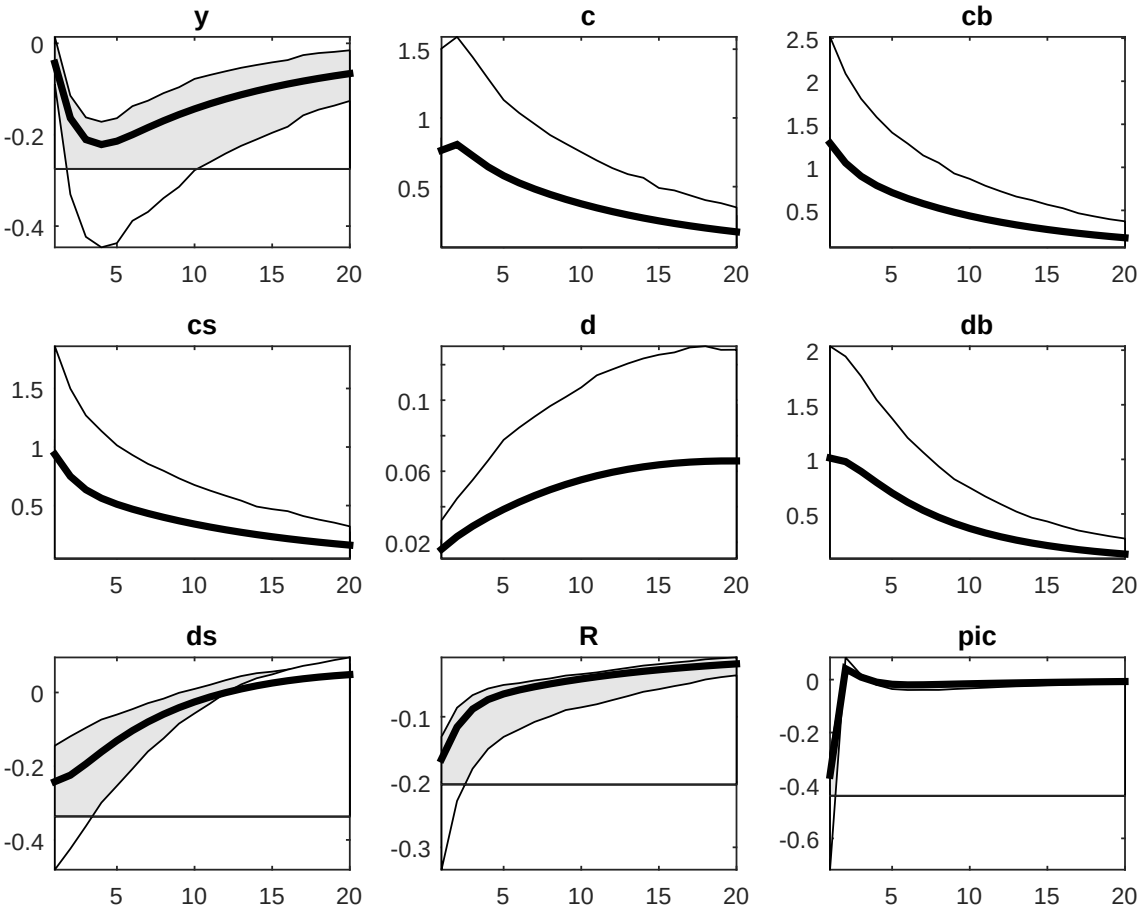

Figure 27: Orthogonalized shock to e_{cstar}

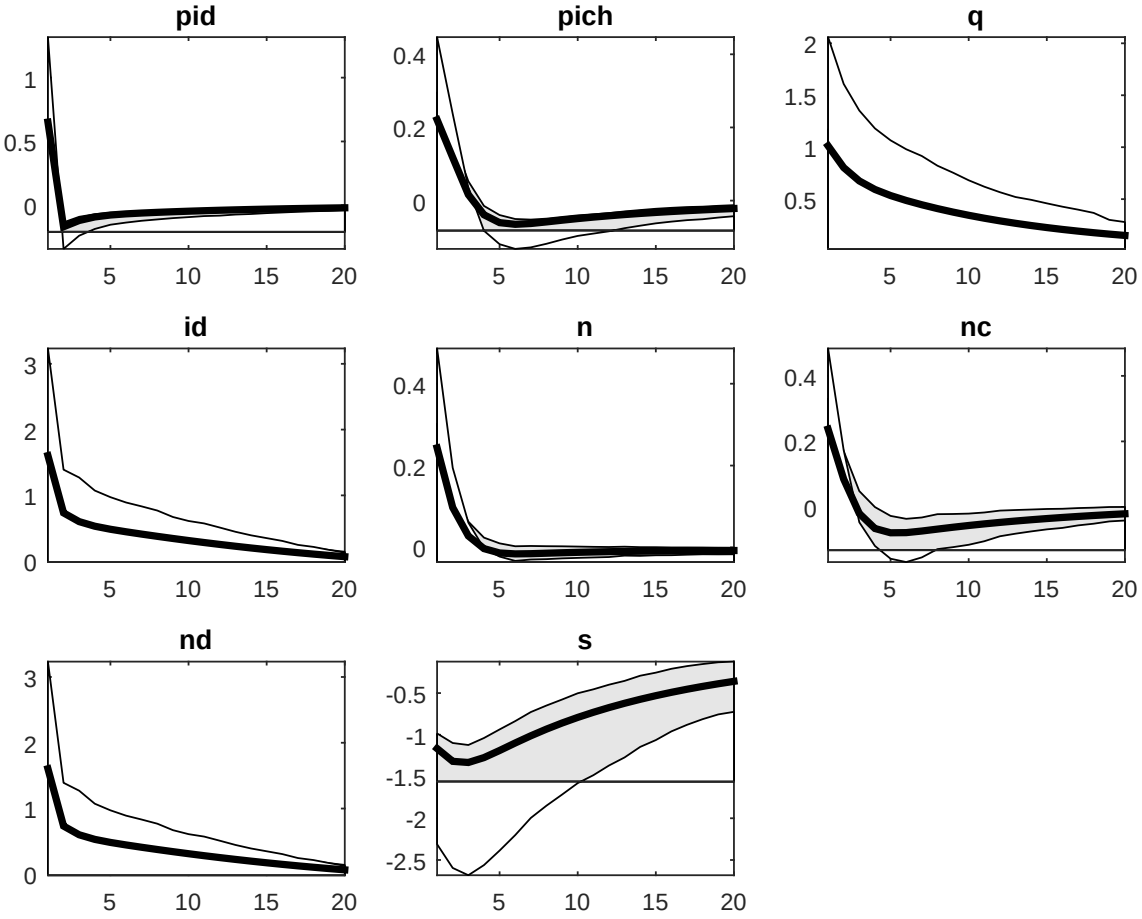

Figure 28: Orthogonalized shock to e_{muc}

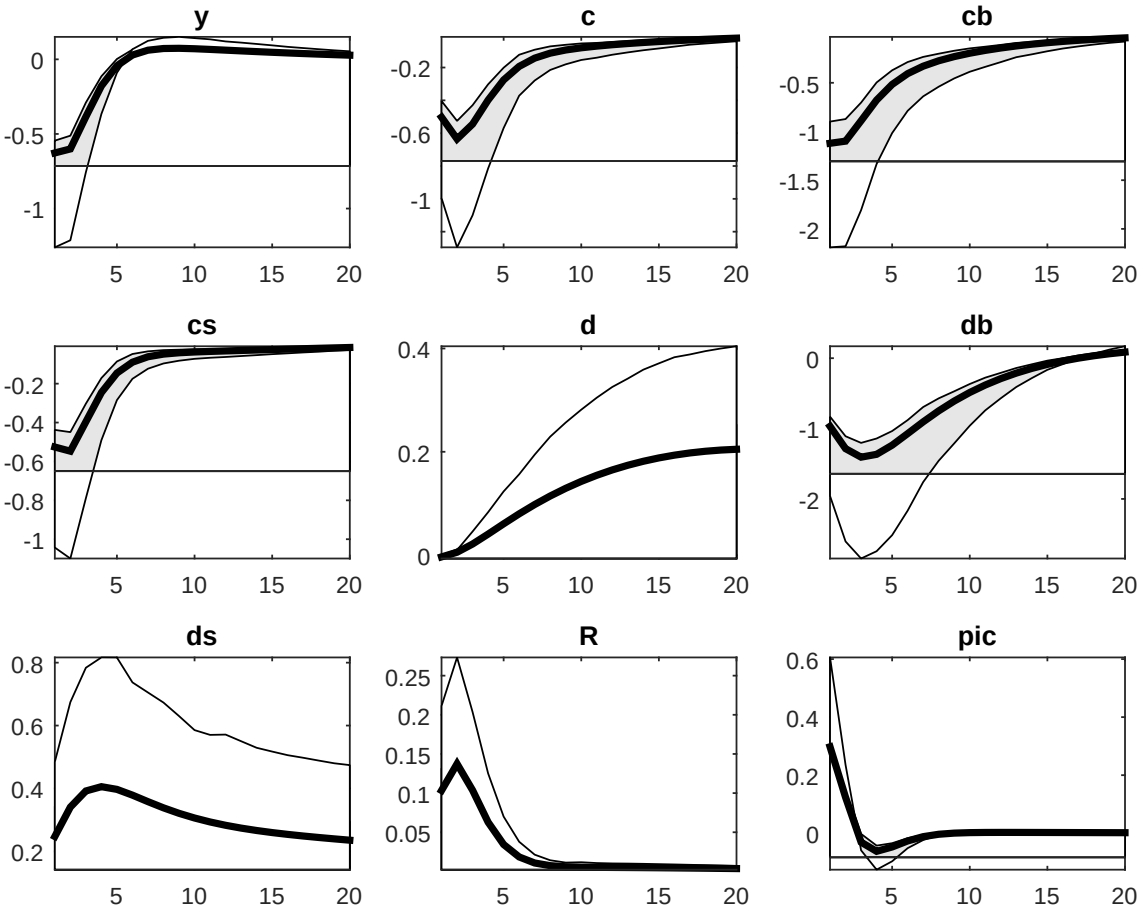

Figure 29: Orthogonalized shock to e_{muc}

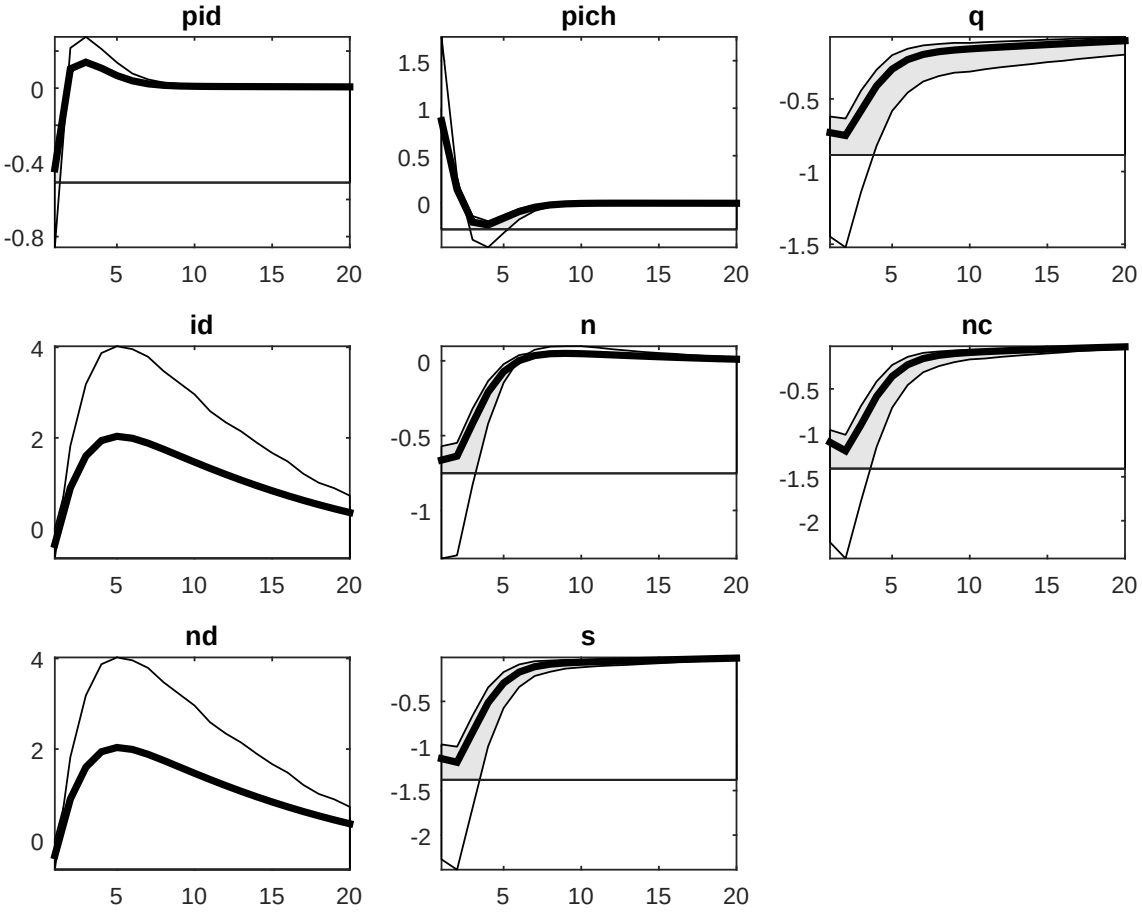

Figure 30: Orthogonalized shock to e_{mud}

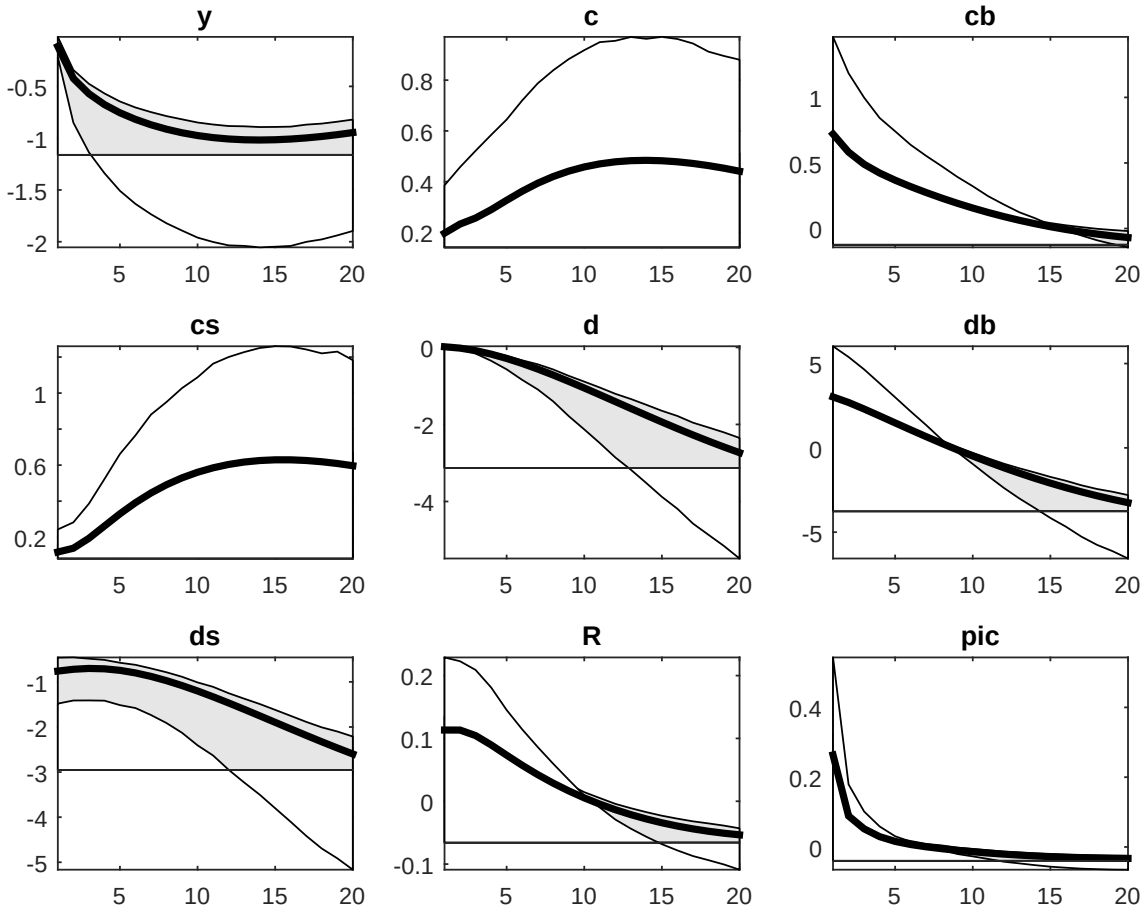

Figure 31: Orthogonalized shock to e_{mud}

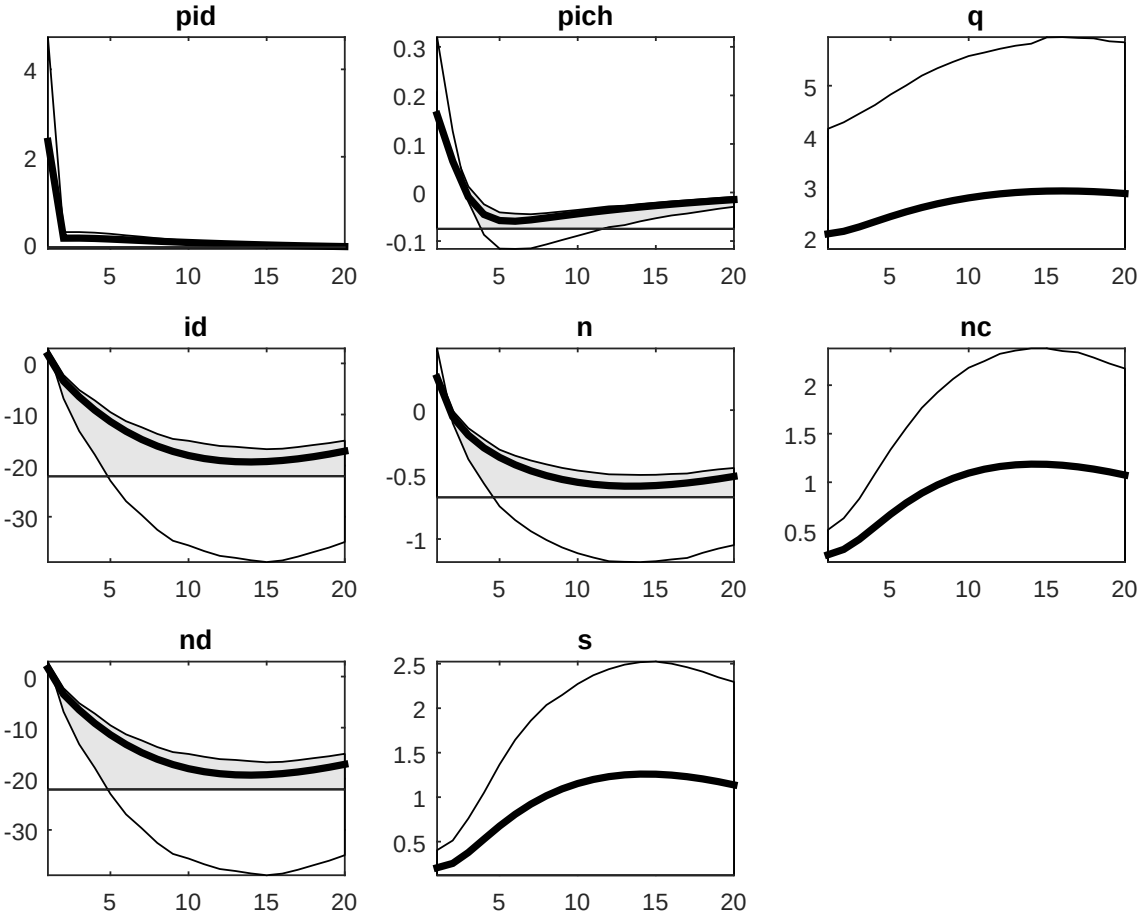

Figure 32: Orthogonalized shock to e_g

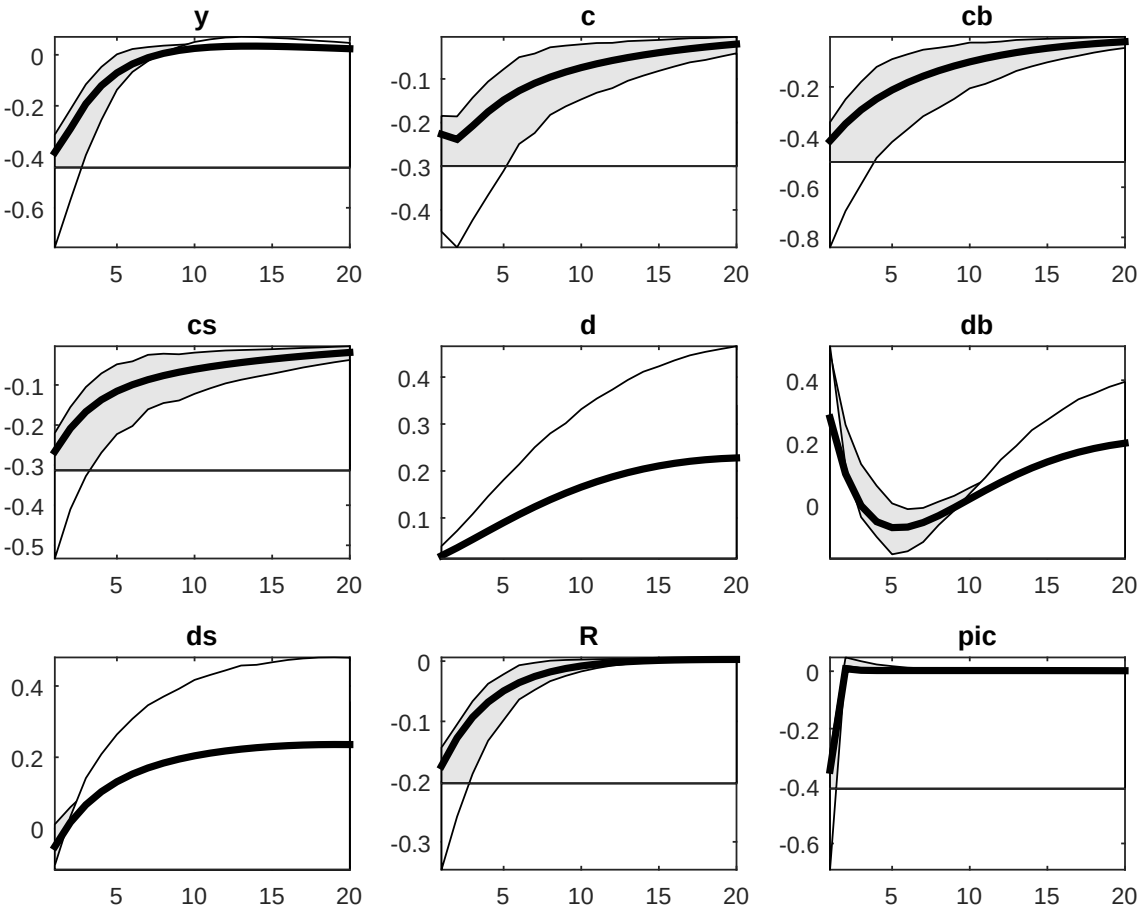

Figure 33: Orthogonalized shock to e_g

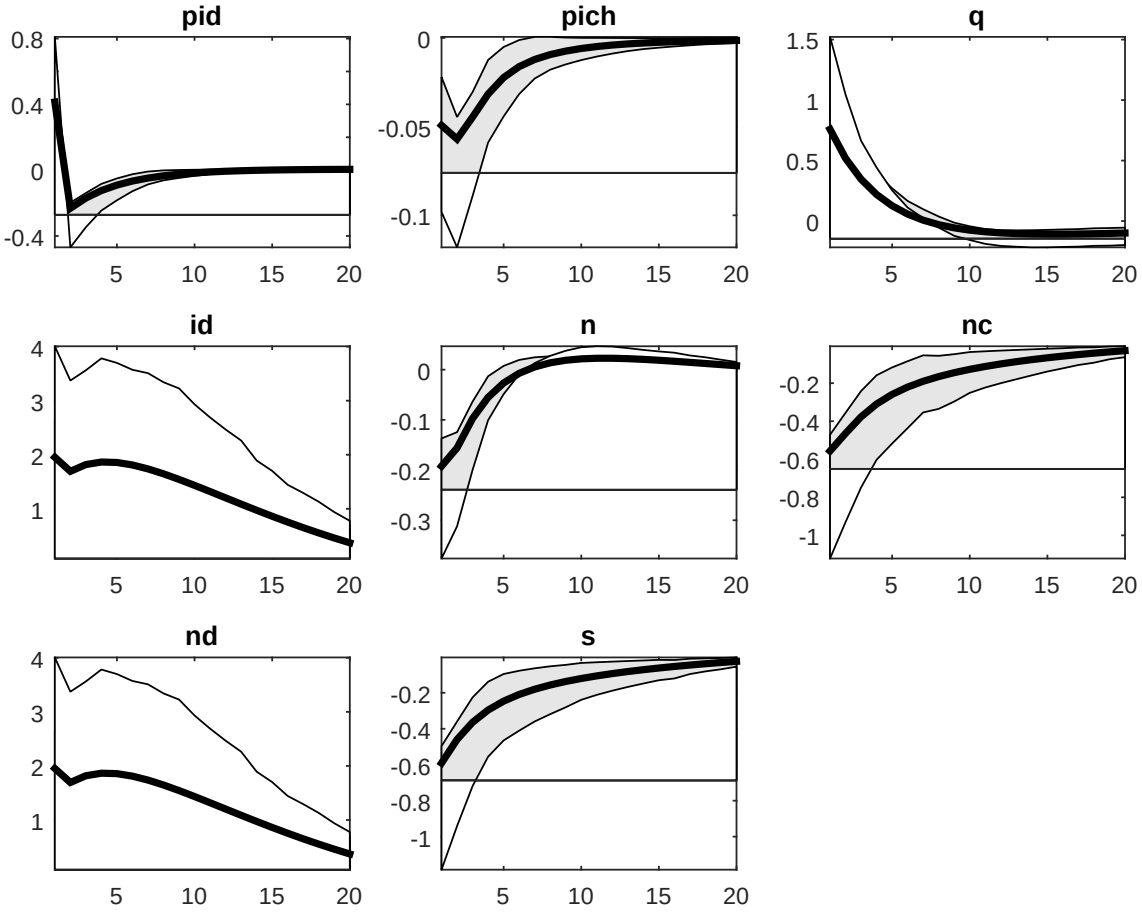

Figure 34: Smoothed shocks

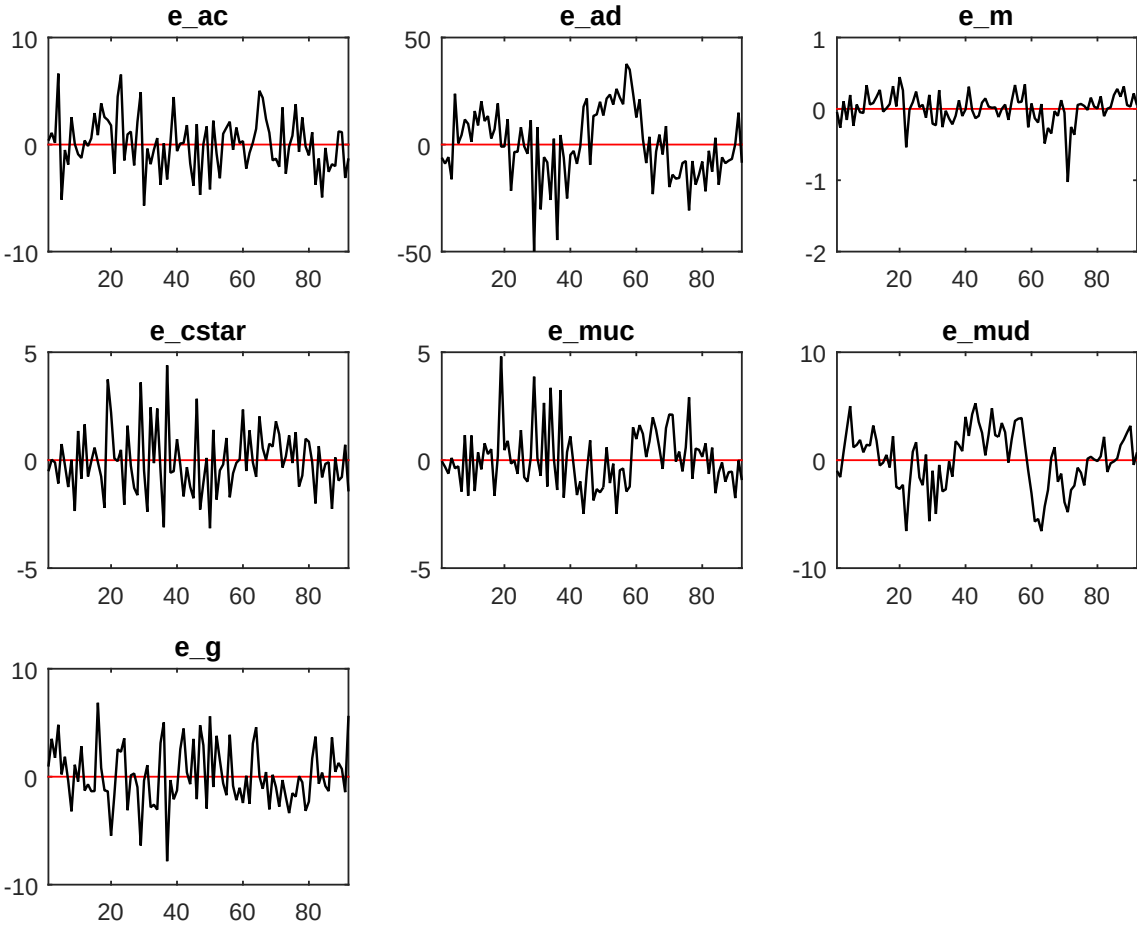

Figure 35: Historical and smoothed variables

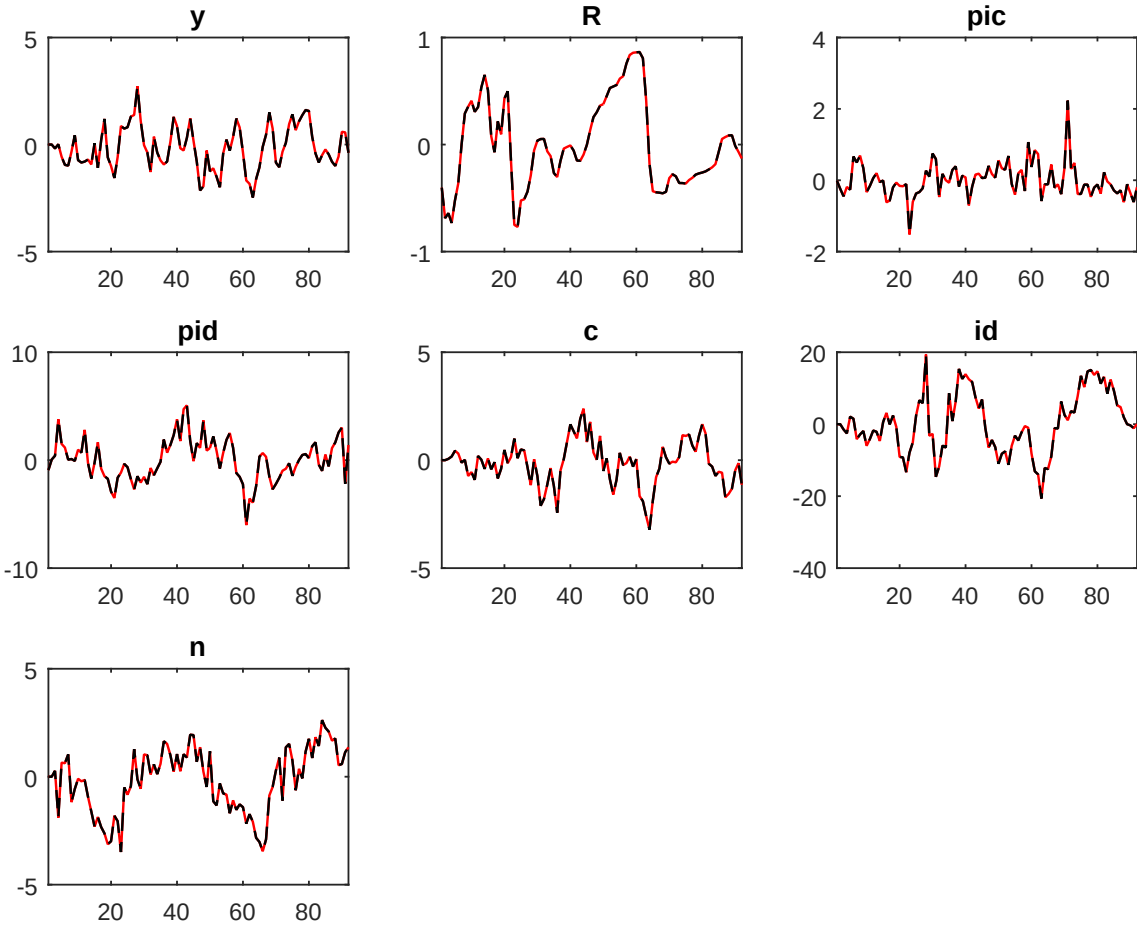

Figure 36: Historical Shock Decomposition: Output

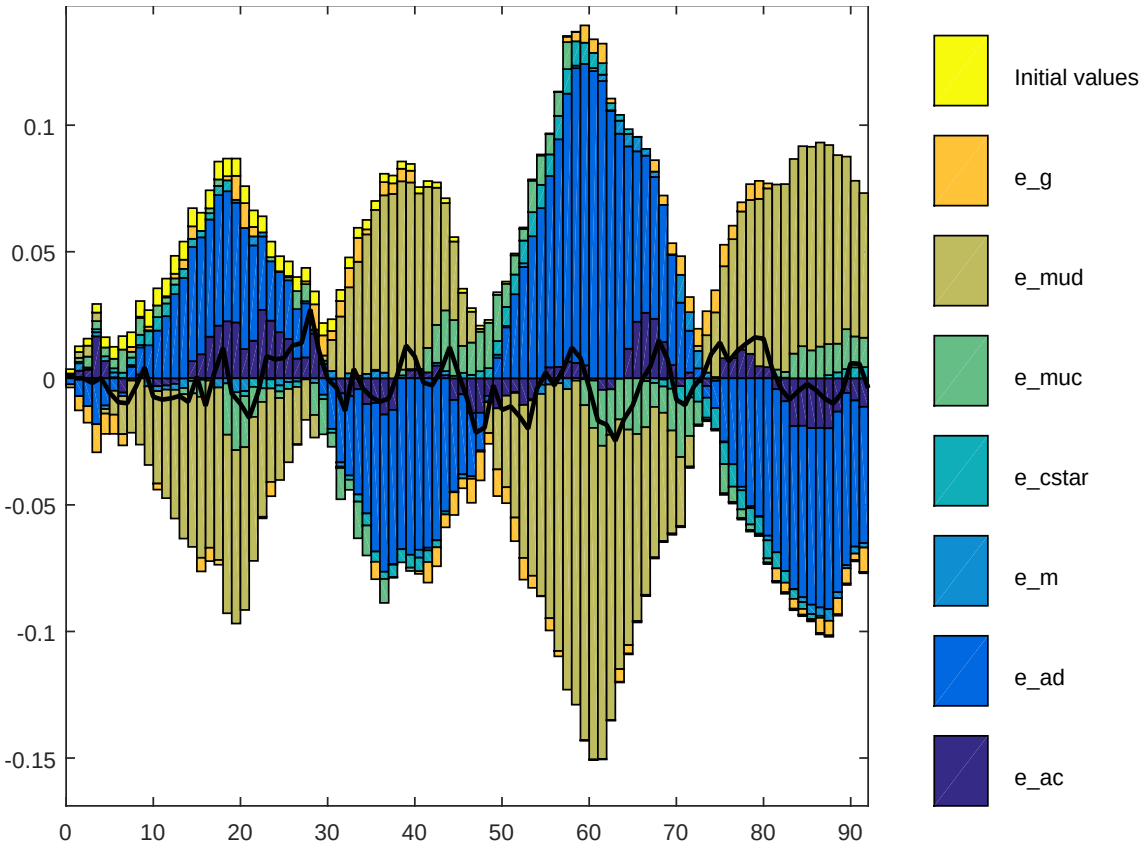

Figure 37: Historical Shock Decomposition: Interest Rate

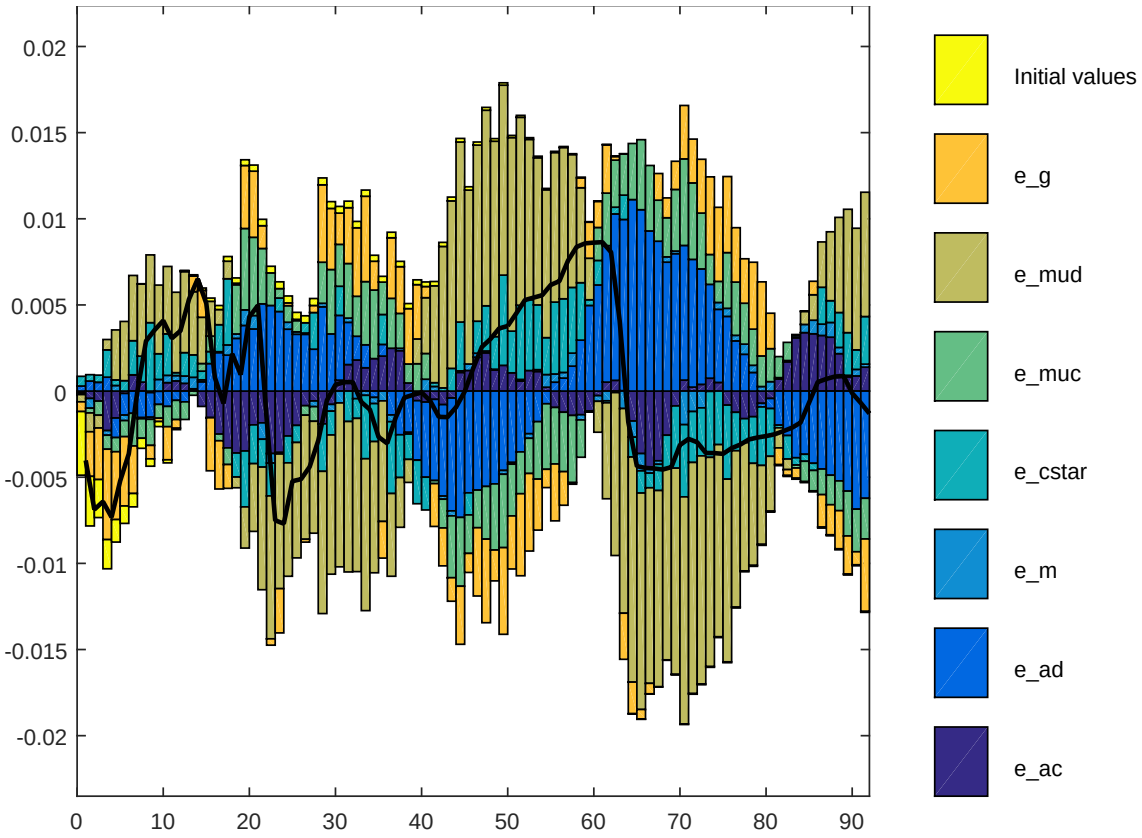

Figure 38: Historical Shock Decomposition: CPI Inflation

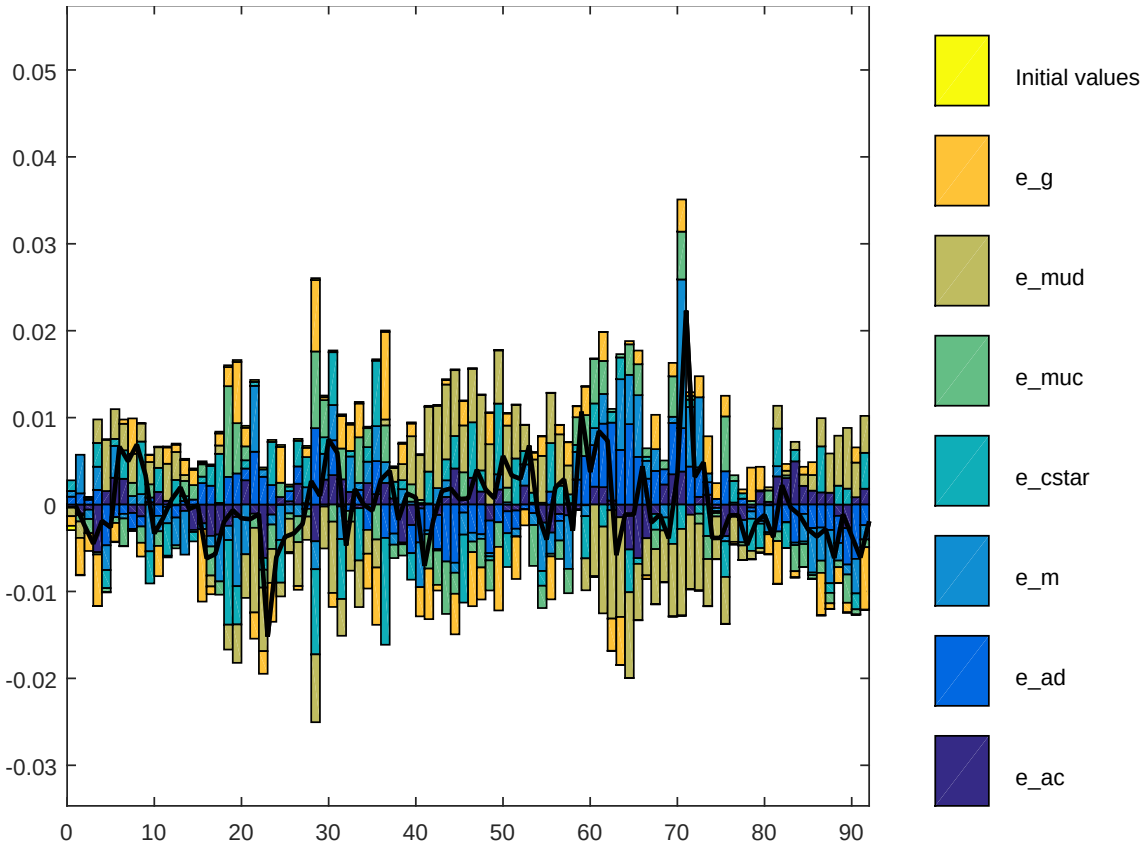

Figure 39: Historical Shock Decomposition: Property price inflation

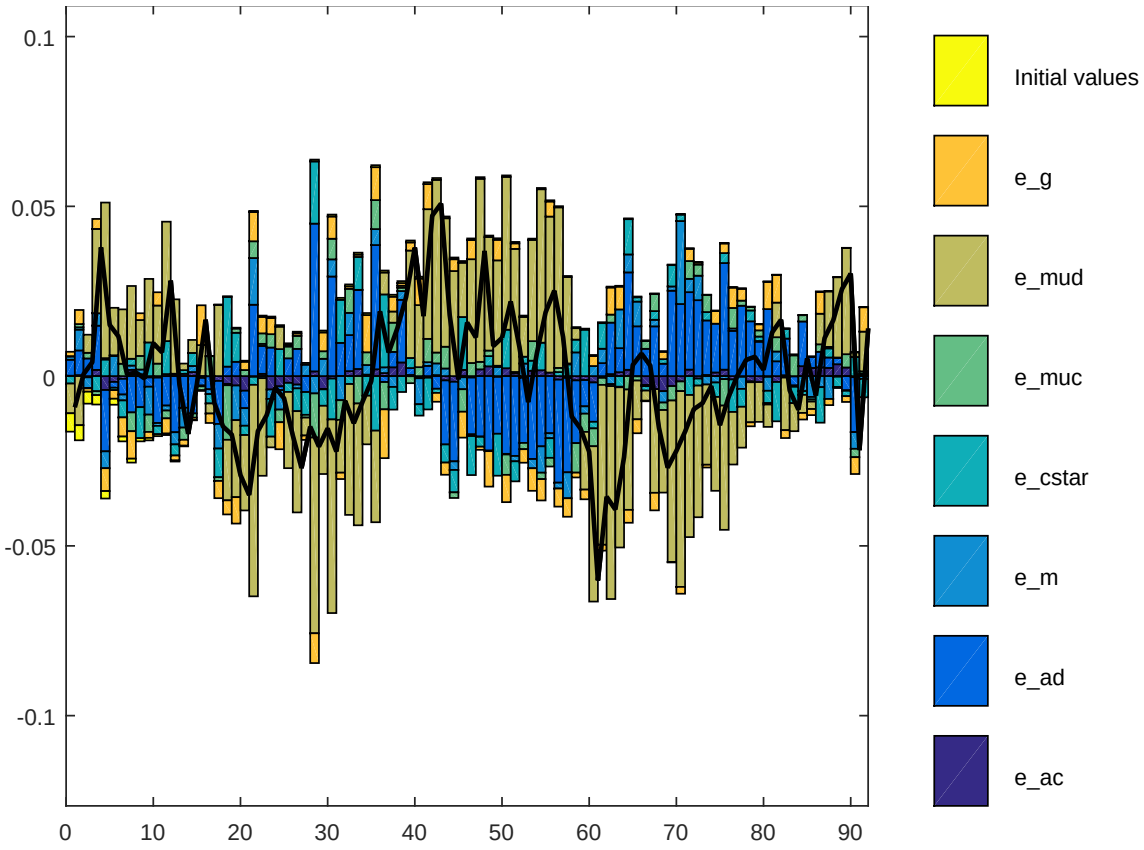

Figure 40: Historical Shock Decomposition: Consumption

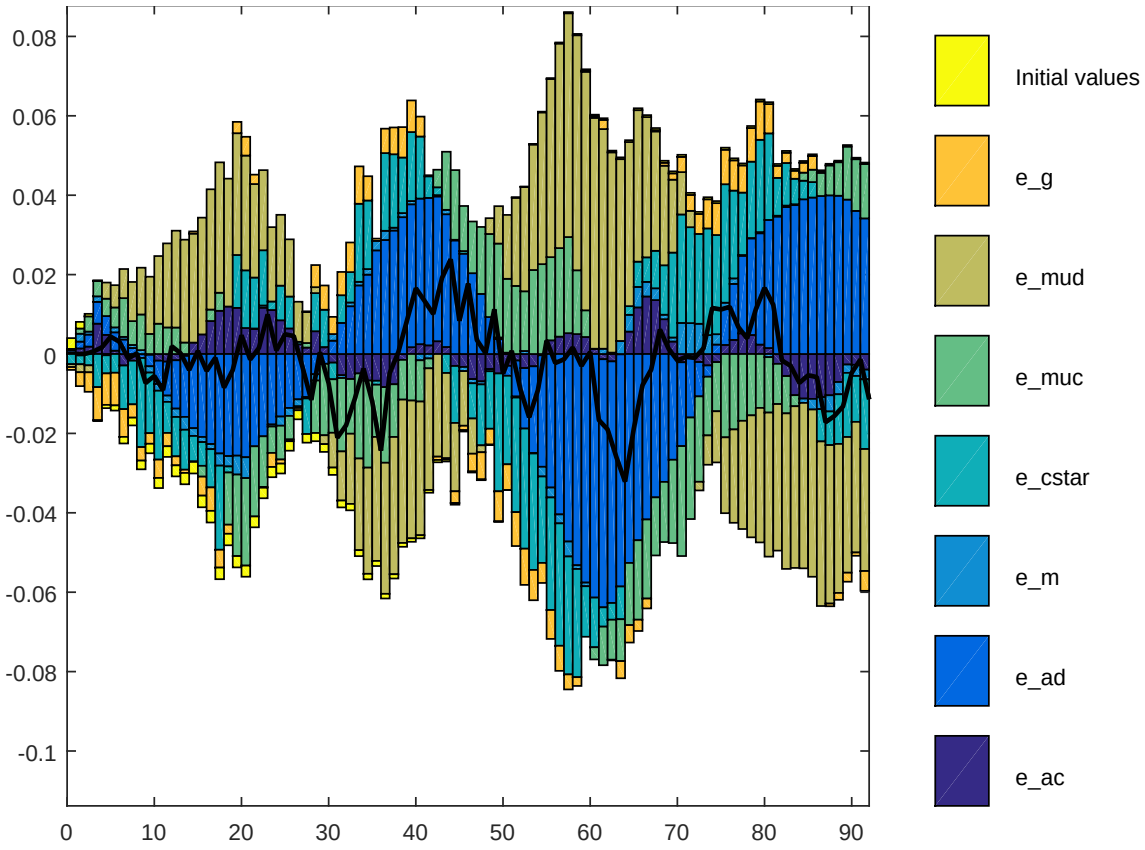

Figure 41: Historical Shock Decomposition: Real housing investment