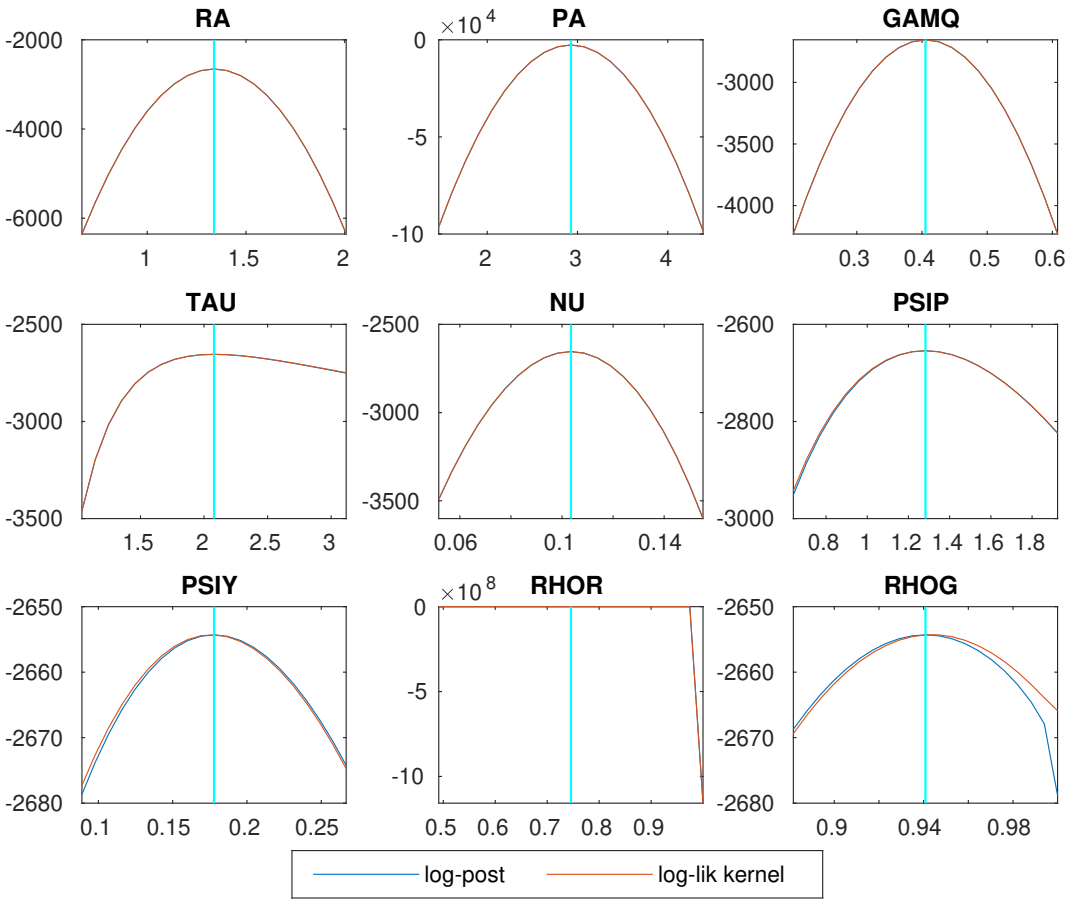

Figure 1: Check plots.

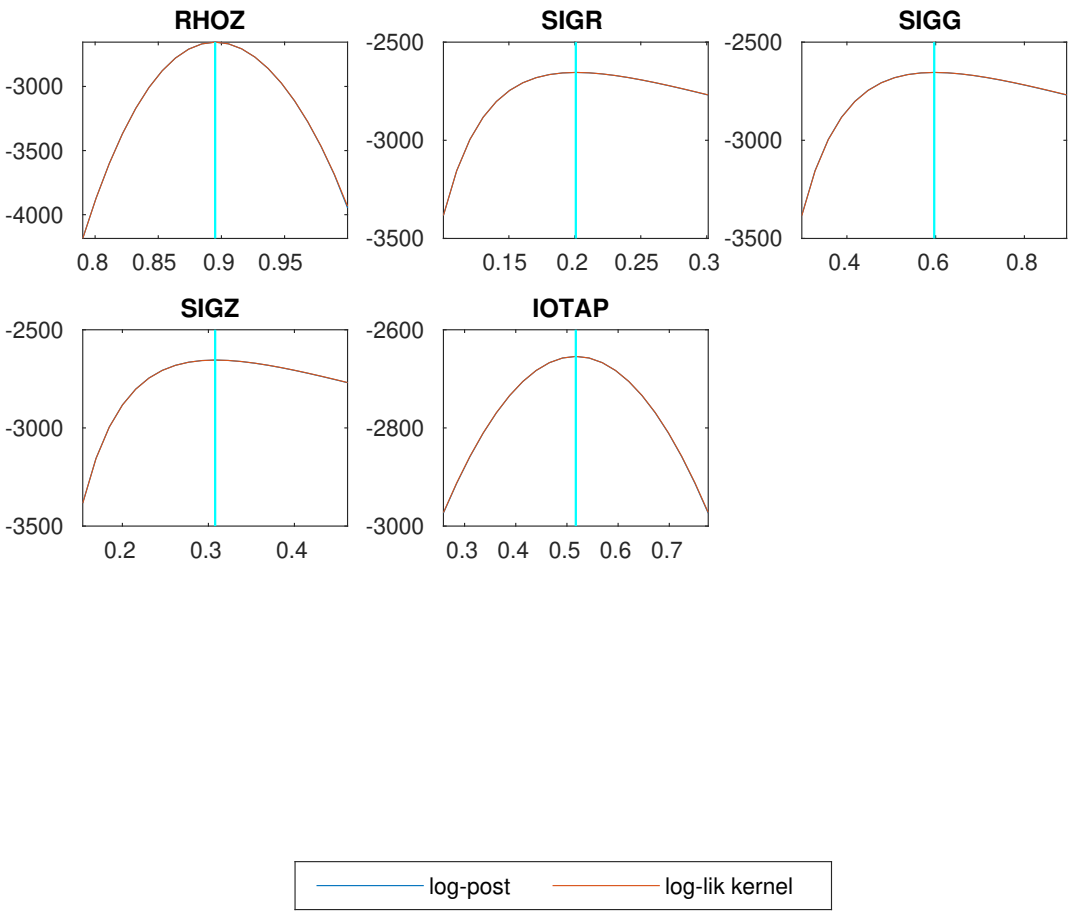

Figure 2: Check plots.

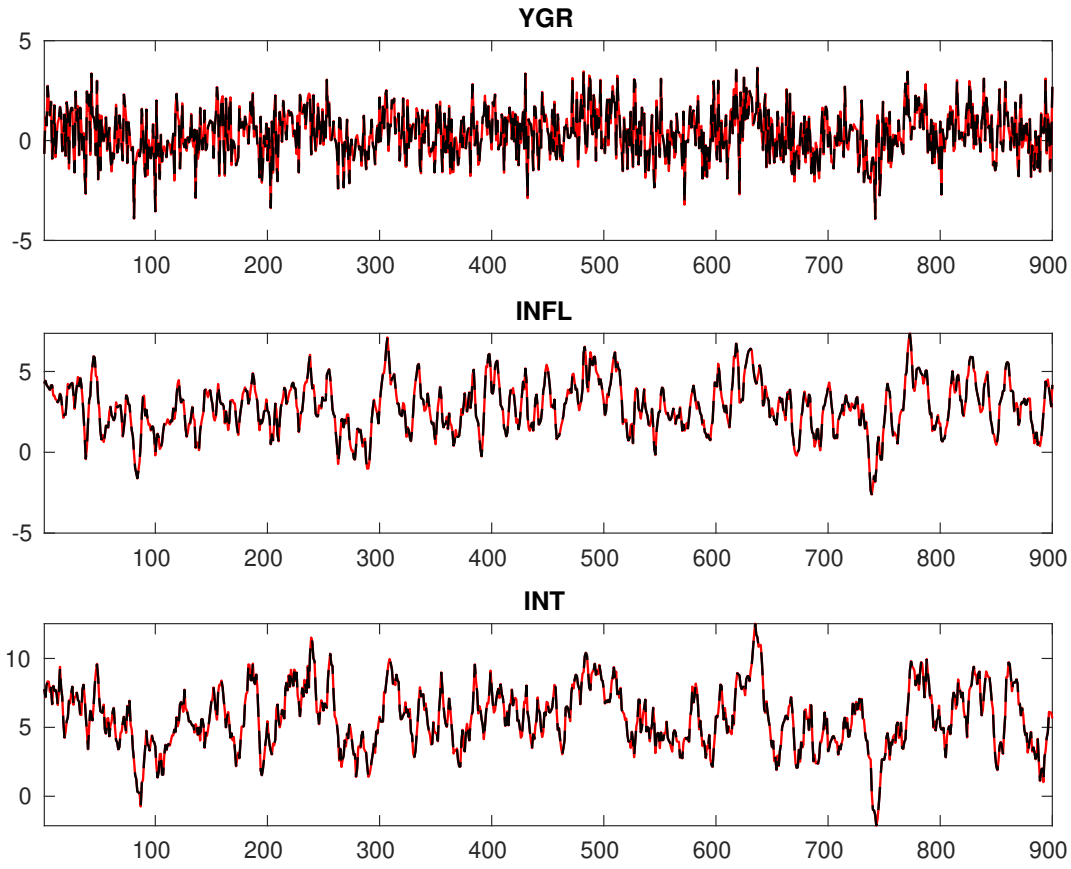

Figure 3: Historical and smoothed variables.

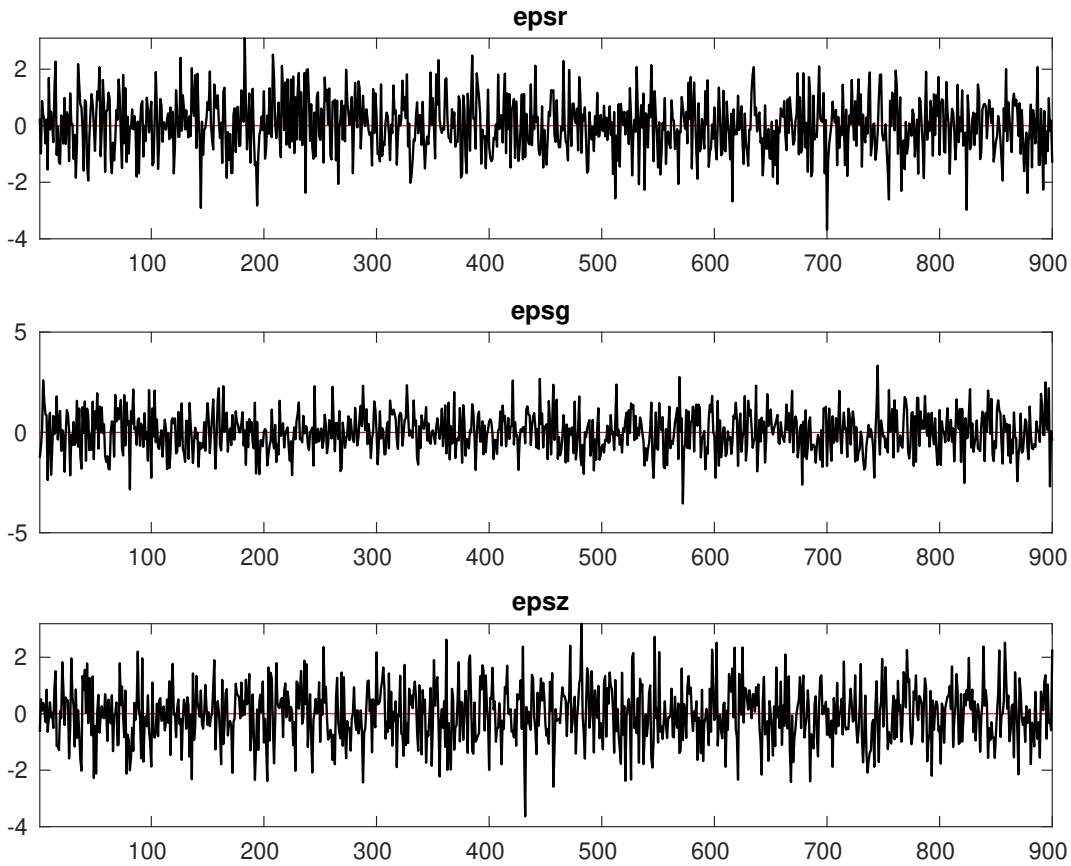

Figure 4: Smoothed shocks.

Table 1: MCMC Inefficiency factors per block

Parameter	*Block* 1	*Block* 2	*Block* 3	*Block* 4
r_A	622.536	611.437	642.795	592.869
$\pi^{(A)}$	617.416	607.699	639.332	588.026
$\gamma^{(Q)}$	570.389	562.260	598.083	537.521
τ	467.161	454.995	503.888	476.282
ν	430.638	415.148	465.375	438.276
ψ_π	166.975	161.732	164.429	164.824
ψ_y	150.360	145.135	150.392	144.658
ρ_R	132.069	120.320	135.054	127.669
ρ_g	50.544	49.463	50.986	52.042
ρ_z	120.939	114.253	137.997	115.064
σ_R	47.195	47.426	48.248	49.185
σ_g	51.008	52.332	49.410	48.808
σ_z	180.448	169.957	207.589	185.445
ι_p	111.752	102.959	111.261	106.239

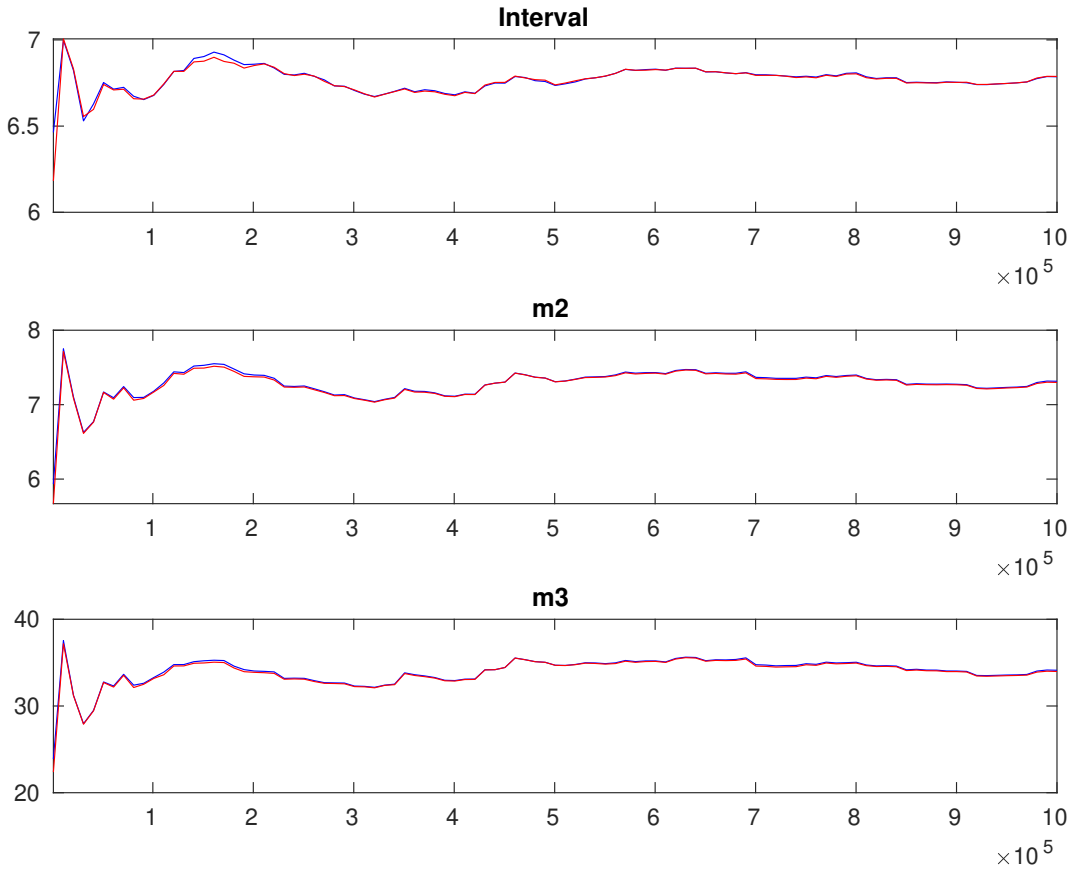

Figure 5: Multivariate convergence diagnostics for the Metropolis-Hastings. The first, second and third rows are respectively the criteria based on the eighty percent interval, the second and third moments. The different parameters are aggregated using the posterior kernel.

Table 2: Results from Metropolis-Hastings (parameters)

	Prior			Posterior			
	Dist.	Mean	Stdev.	Mean	Stdev.	HPD inf	HPD sup
r_A	gamm	0.800	0.5000	1.340	0.2343	0.9664	1.7328
$\pi^{(A)}$	gamm	4.000	2.0000	2.926	0.1778	2.6311	3.2125
$\gamma^{(Q)}$	norm	0.400	0.2000	0.405	0.0867	0.2616	0.5454
τ	gamm	2.000	0.5000	2.145	0.1973	1.8191	2.4607
ν	beta	0.100	0.0500	0.105	0.0064	0.0947	0.1158
ψ_π	gamm	1.500	0.2500	1.278	0.1329	1.0599	1.4971
ψ_y	gamm	0.500	0.2500	0.186	0.0571	0.0916	0.2784
ρ_R	beta	0.500	0.2000	0.748	0.0141	0.7248	0.7713
ρ_g	beta	0.800	0.1000	0.944	0.0112	0.9264	0.9631
ρ_z	beta	0.660	0.1500	0.896	0.0077	0.8835	0.9089
σ_R	invg	0.300	4.0000	0.201	0.0052	0.1929	0.2100
σ_g	invg	0.400	4.0000	0.599	0.0143	0.5759	0.6228
σ_z	invg	0.400	4.0000	0.312	0.0150	0.2870	0.3359
ι_p	beta	0.500	0.1500	0.520	0.0209	0.4863	0.5551

Table 3: Results from posterior maximization (parameters)

	Prior			Posterior	
	Dist.	Mean	Stdev	Mode	Stdev
r_A	gamm	0.800	0.5000	1.3383	0.0351
$\pi^{(A)}$	gamm	4.000	2.0000	2.9267	0.0308
$\gamma^{(Q)}$	norm	0.400	0.2000	0.4053	0.0299
τ	gamm	2.000	0.5000	2.0787	0.0540
ν	beta	0.100	0.0500	0.1035	0.0025
ψ_π	gamm	1.500	0.2500	1.2826	0.0732
ψ_y	gamm	0.500	0.2500	0.1779	0.0365
ρ_R	beta	0.500	0.2000	0.7456	0.0131
ρ_g	beta	0.800	0.1000	0.9408	0.0112
ρ_z	beta	0.660	0.1500	0.8950	0.0072
σ_R	invg	0.300	4.0000	0.2008	0.0052
σ_g	invg	0.400	4.0000	0.5968	0.0139
σ_z	invg	0.400	4.0000	0.3078	0.0104
ι_p	beta	0.500	0.1500	0.5174	0.0165

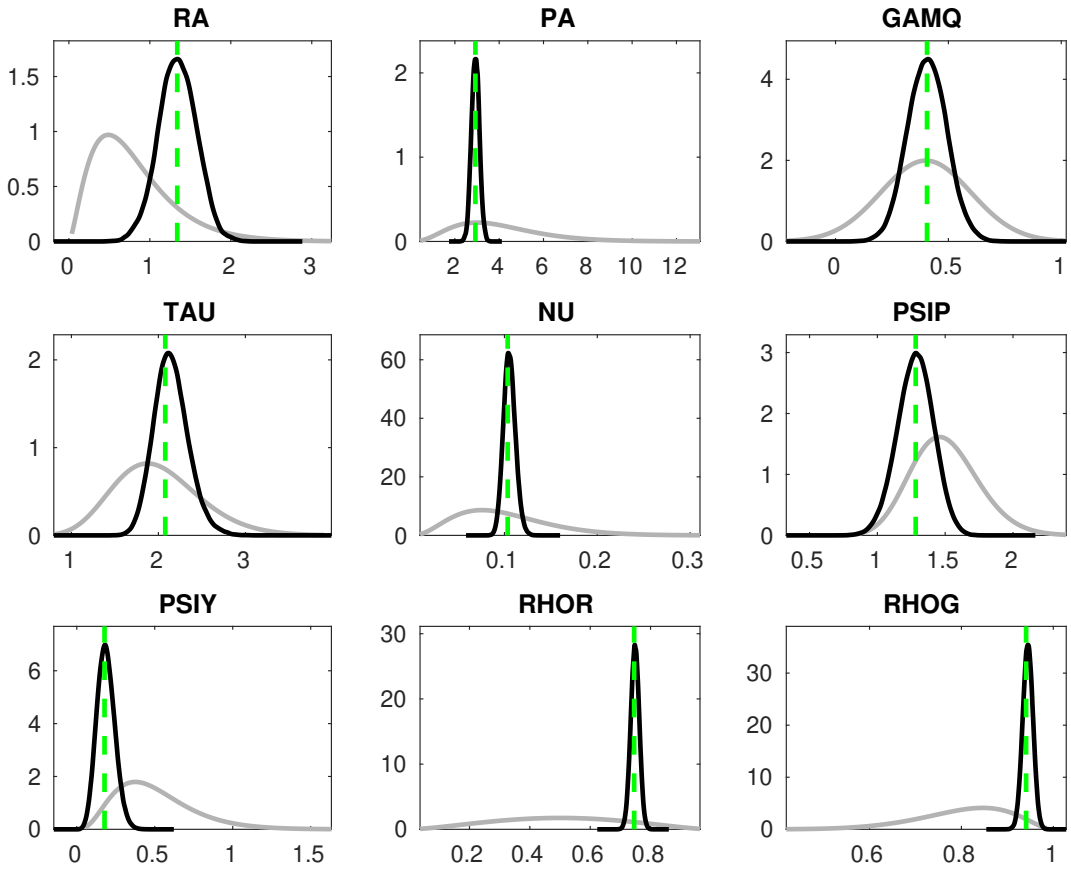

Figure 6: Priors and posteriors.

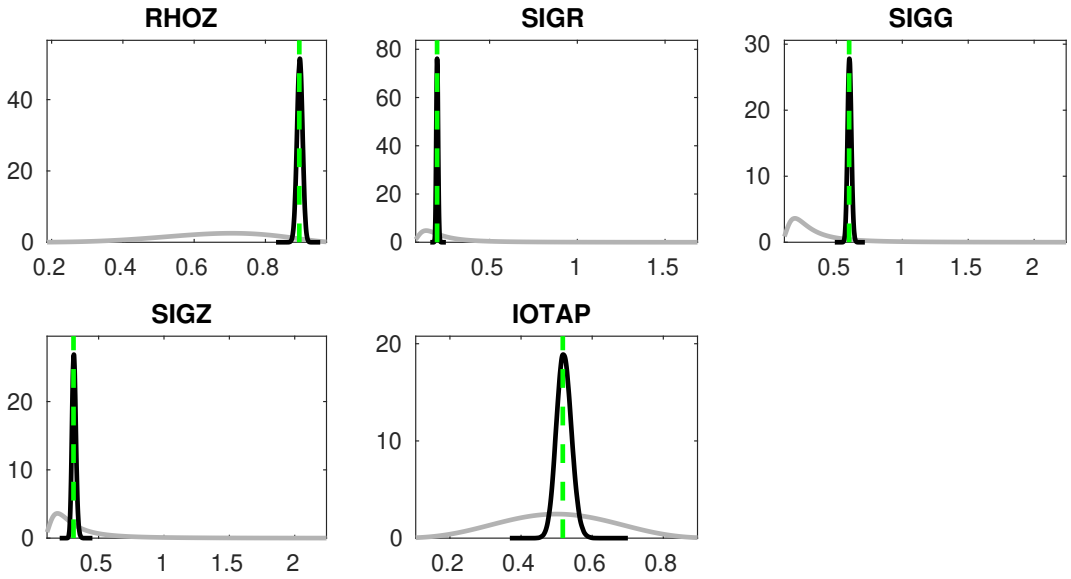

Figure 7: Priors and posteriors.

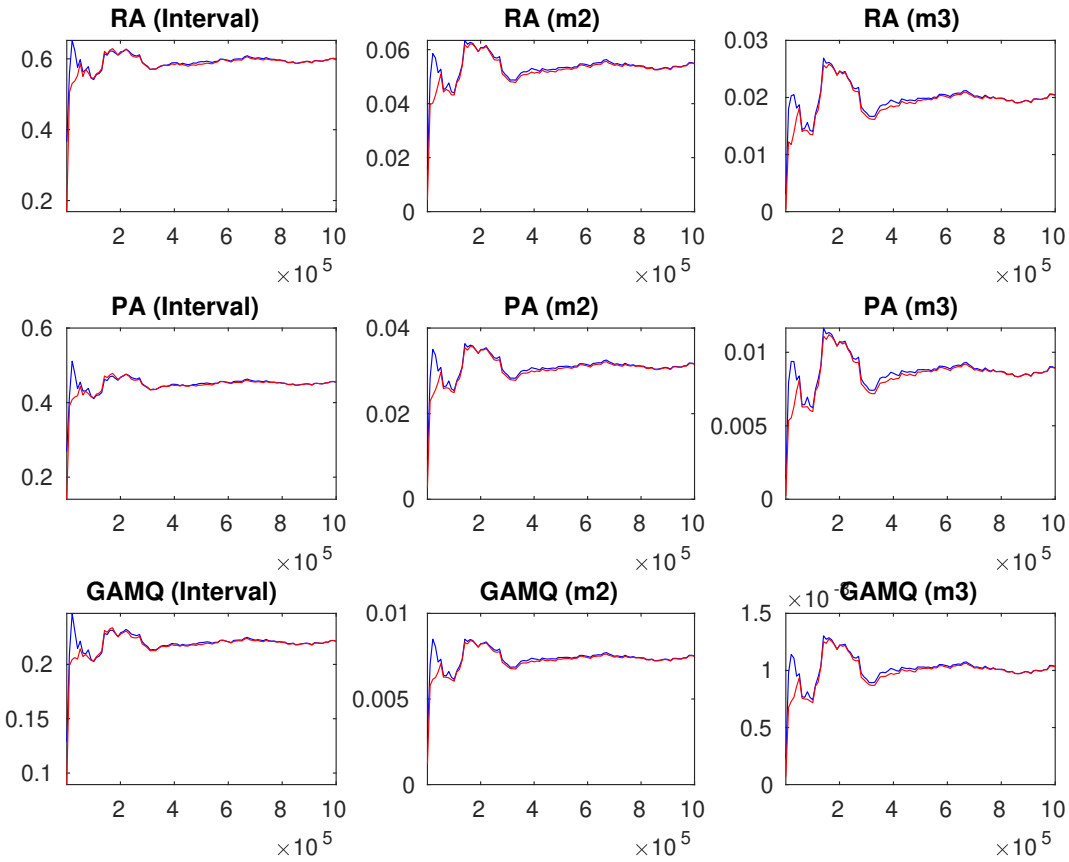

Figure 8: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

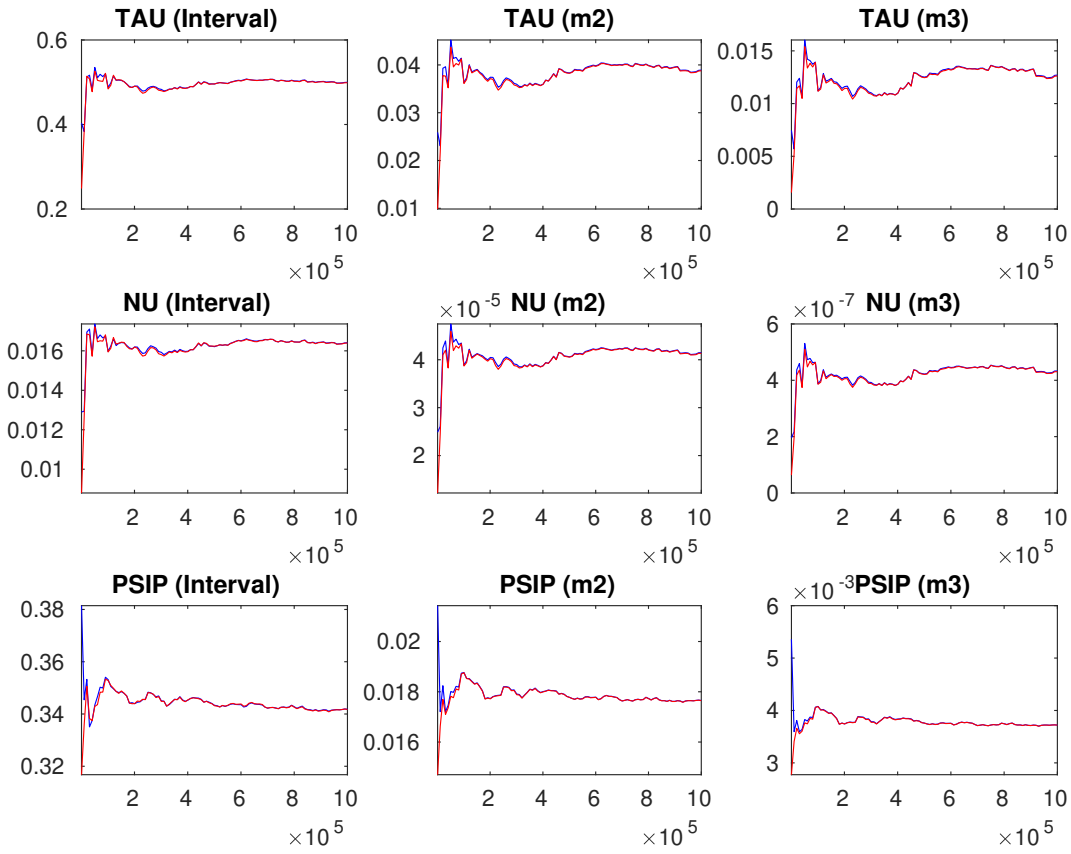

Figure 9: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

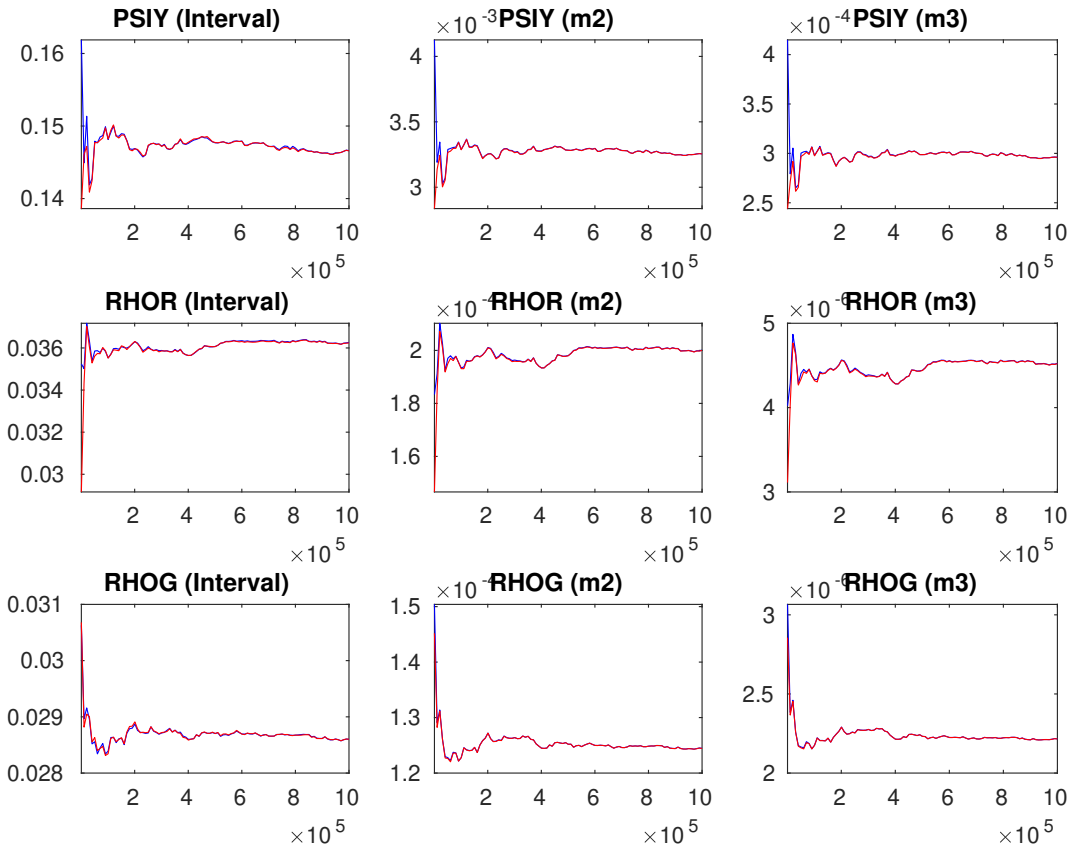

Figure 10: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

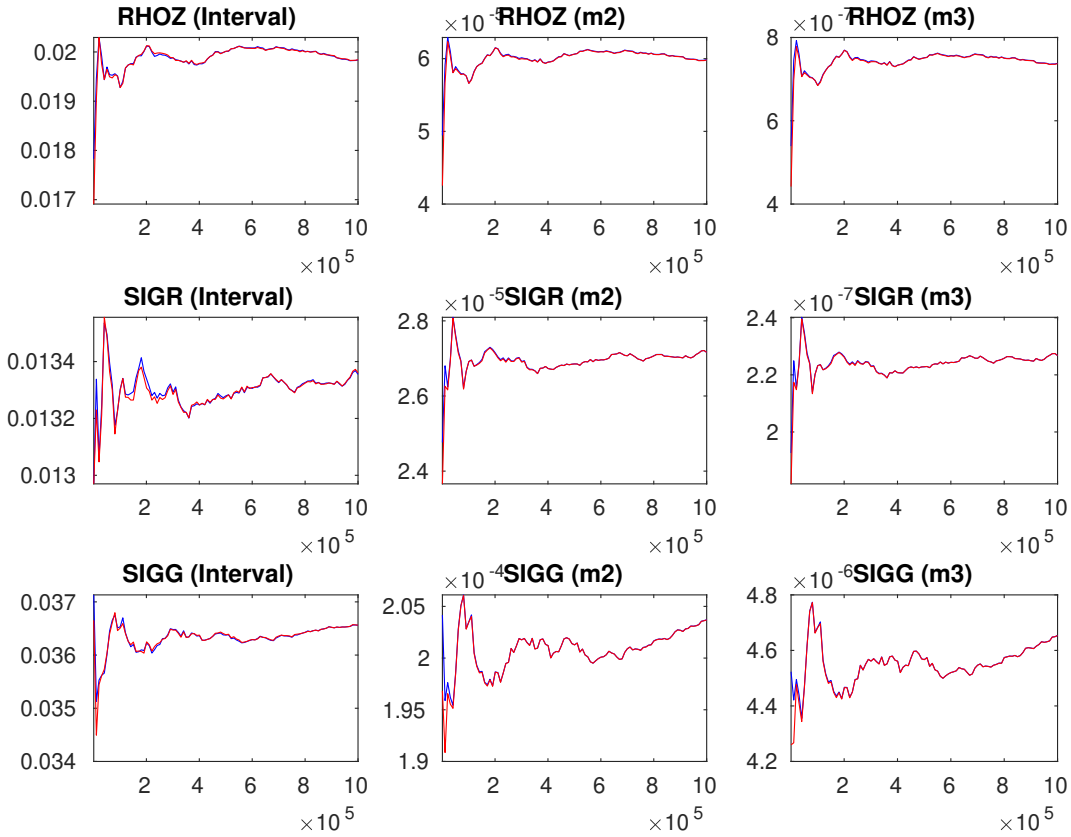

Figure 11: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

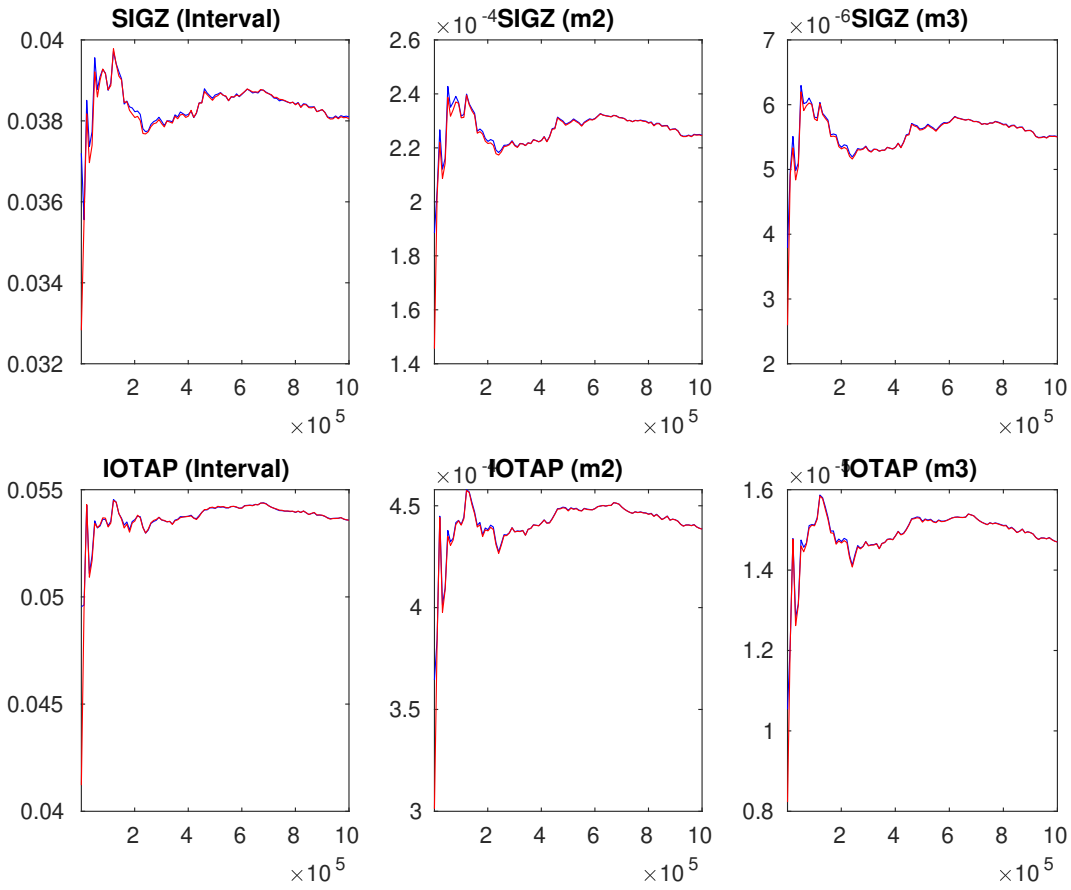

Figure 12: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.