

Figure 1: Check plots.

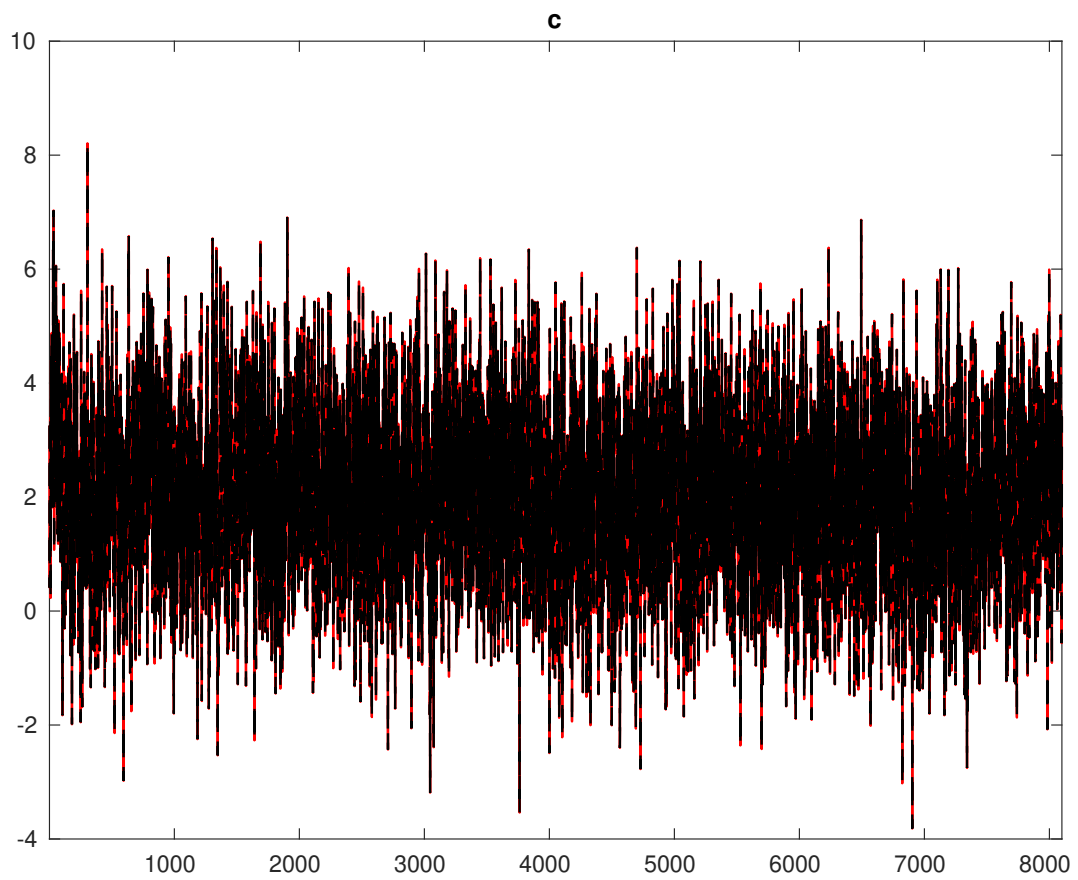


Figure 2: Historical and smoothed variables.

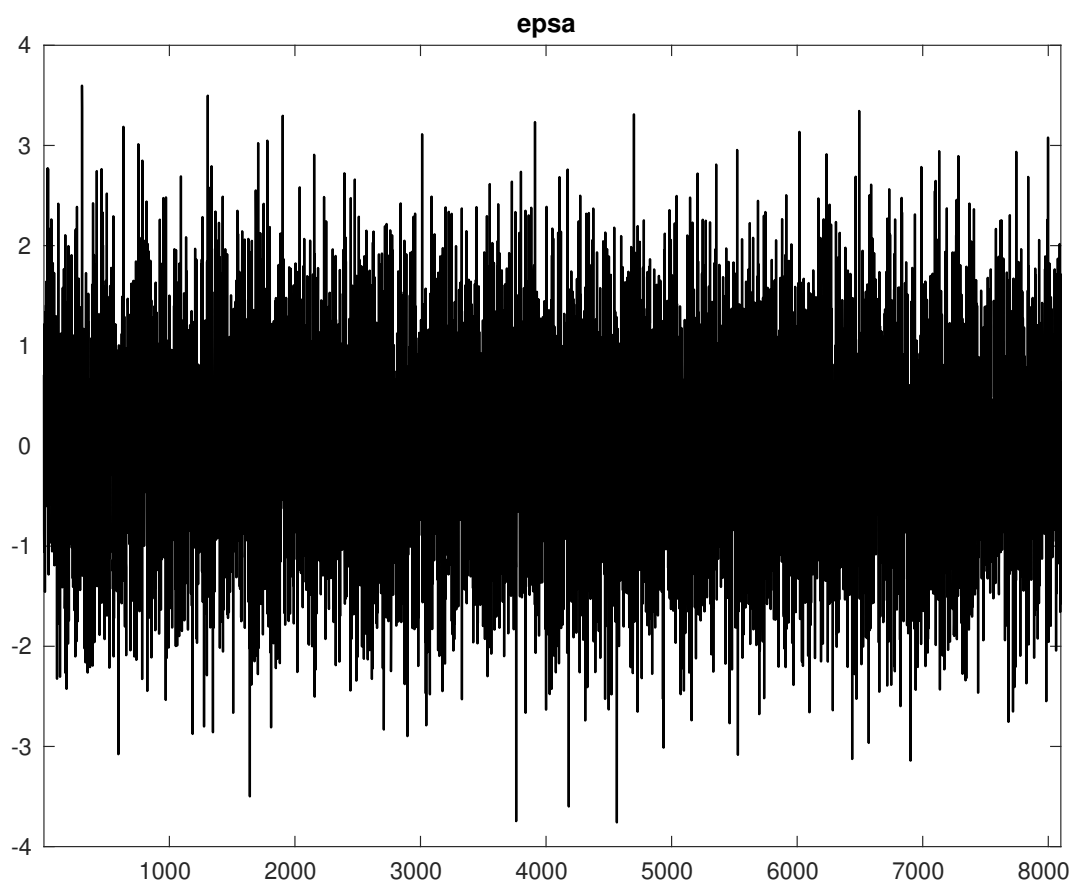


Figure 3: Smoothed shocks.

Table 1: MCMC Inefficiency factors per block

<i>Parameter</i>	<i>Block 1</i>	<i>Block 2</i>	<i>Block 3</i>	<i>Block 4</i>
α	281.582	243.060	265.124	186.457
r_A	66.648	76.916	70.781	62.962
δ	306.095	265.767	262.151	202.194
ρ_A	199.577	202.883	198.513	129.456
σ_A	271.901	315.246	286.955	221.475
θ	83.771	99.037	94.506	99.607
κ	253.101	268.704	259.436	289.171

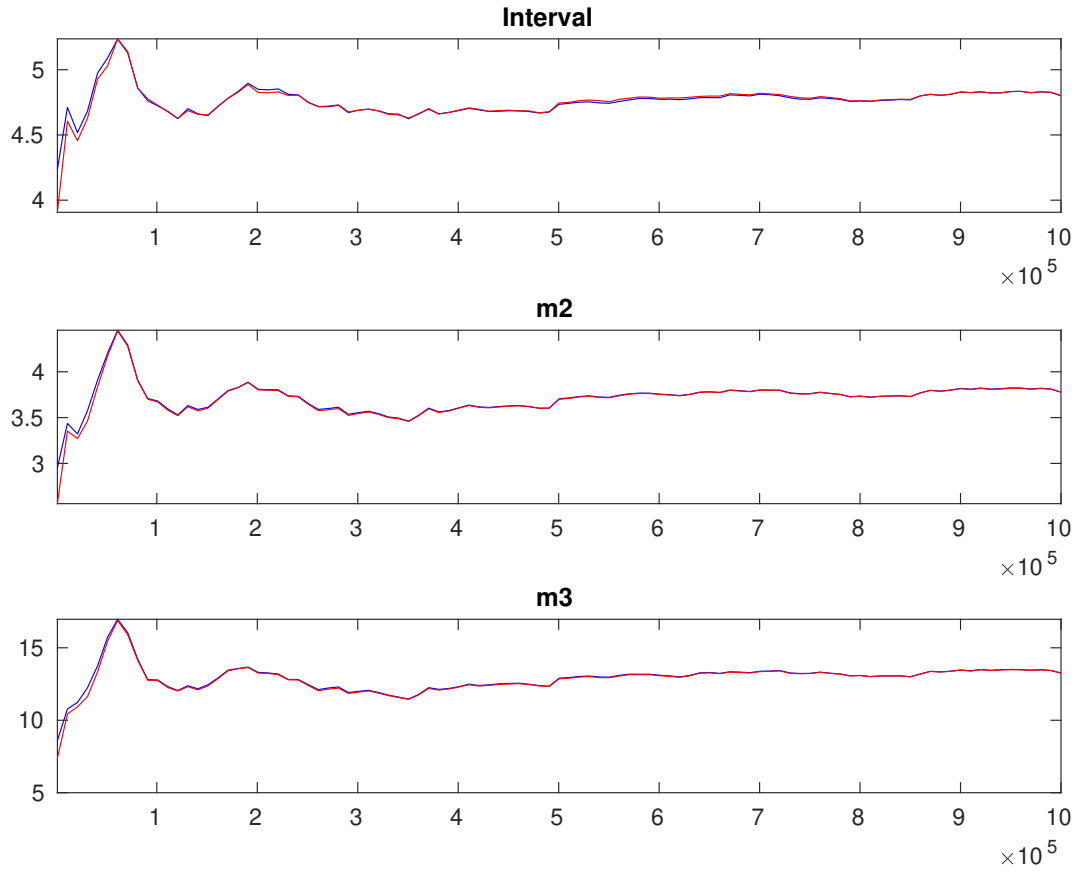


Figure 4: Multivariate convergence diagnostics for the Metropolis-Hastings. The first, second and third rows are respectively the criteria based on the eighty percent interval, the second and third moments. The different parameters are aggregated using the posterior kernel.

Table 2: Results from Metropolis-Hastings (parameters)

		Prior			Posterior		
		Dist.	Mean	Stdev.	Mean	Stdev.	HPD inf HPD sup
α	norm		0.300	0.0500	0.263	0.0245	0.2230 0.3033
r_A	gamm		2.000	0.2500	2.003	0.2506	1.5937 2.4118
δ	unif		0.500	0.2887	0.015	0.0058	0.0060 0.0245
ρ_A	beta		0.500	0.1000	0.497	0.0180	0.4669 0.5264
σ_A	invga		0.600	2.0000	0.611	0.0346	0.5556 0.6693
θ	gamm		1.500	0.7500	1.747	0.7580	0.5798 2.8688
κ	gamm		2.000	1.5000	2.072	1.3680	0.0963 3.9506

Table 3: Results from posterior maximization (parameters)

	Prior			Posterior	
	Dist.	Mean	Stdev	Mode	Stdev
α	norm	0.300	0.0500	0.2600	0.0256
r_A	gamm	2.000	0.2500	1.9994	0.2520
δ	unif	0.500	0.2887	0.0140	0.0058
ρ_A	beta	0.500	0.1000	0.5023	0.0169
σ_A	invlg	0.600	2.0000	0.6026	0.0388
θ	gamm	1.500	0.7500	1.4995	0.7573
κ	gamm	2.000	1.5000	2.0003	1.5685

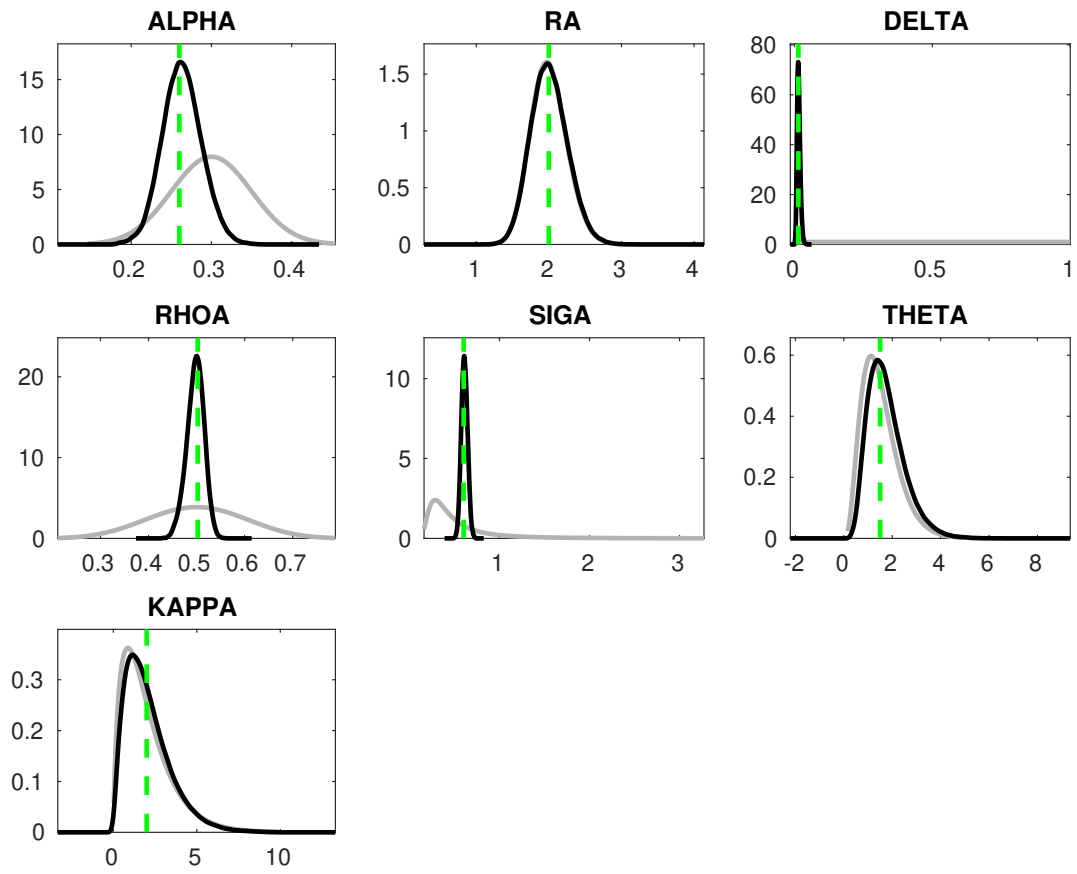


Figure 5: Priors and posteriors.

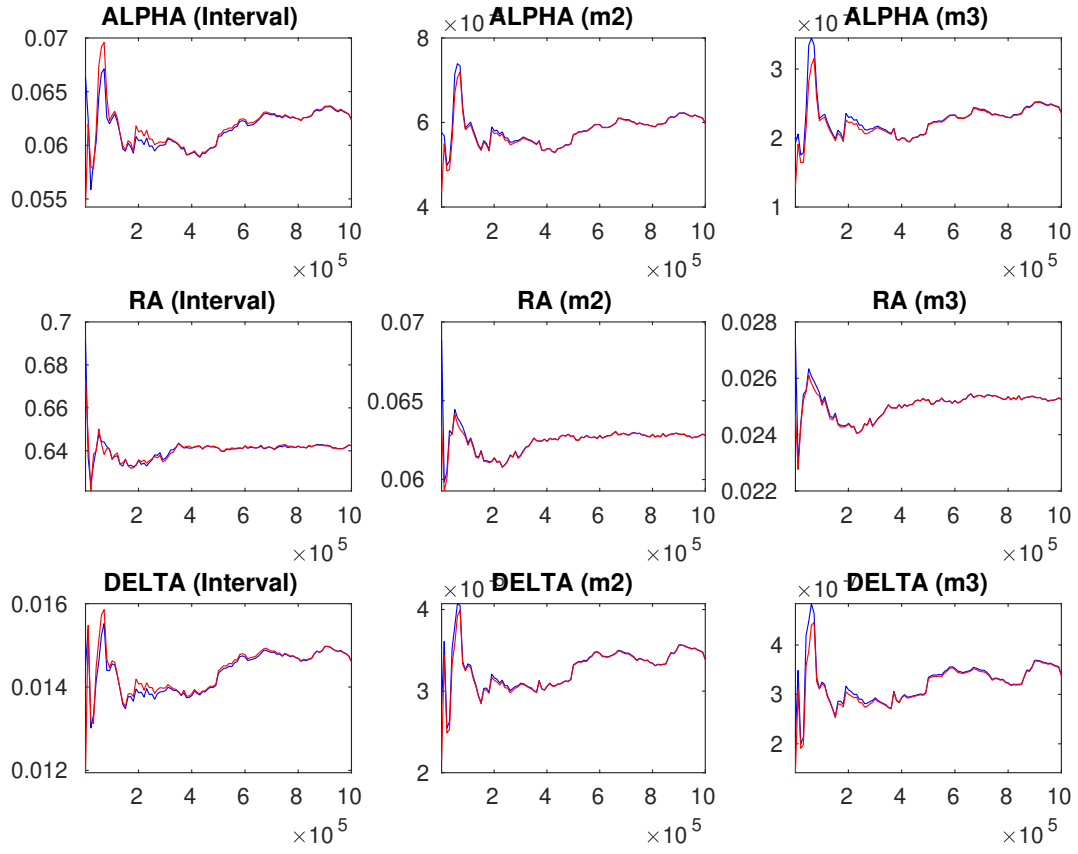


Figure 6: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

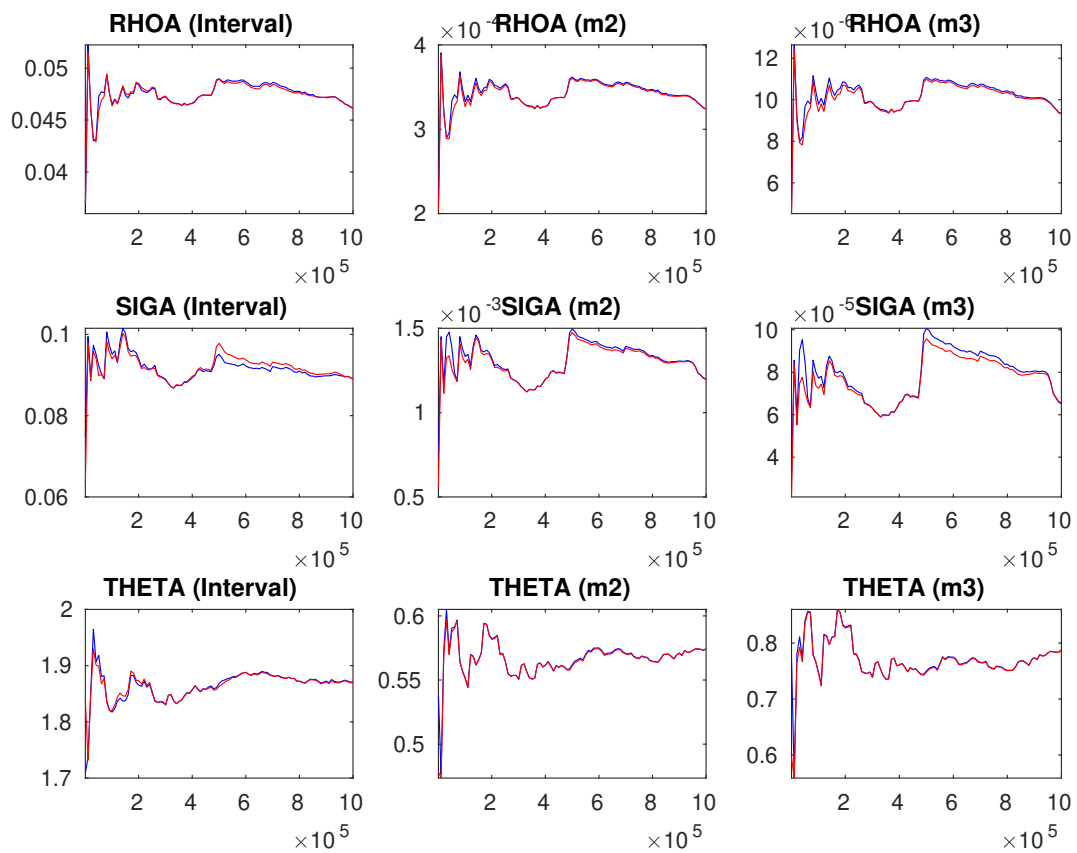


Figure 7: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

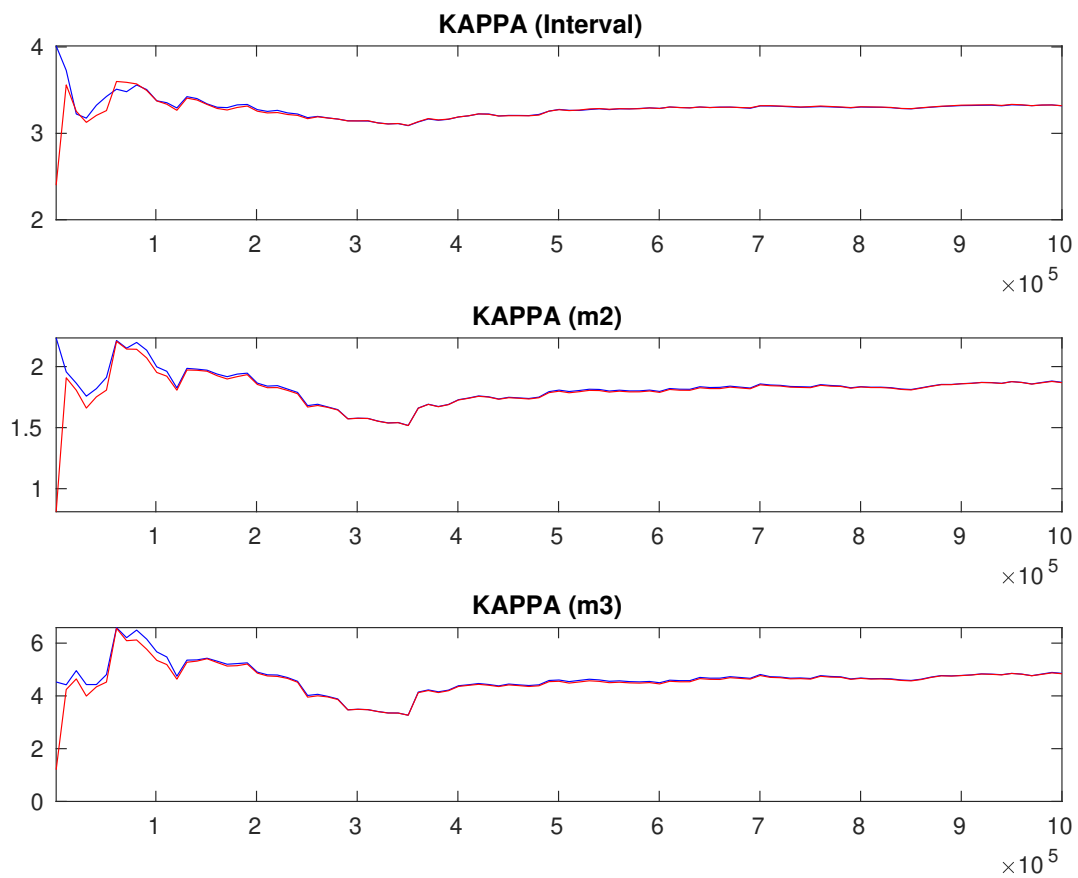


Figure 8: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third rows are respectively the criteria based on the eighty percent interval, the second and third moments.