

Figure 1: Check plots.

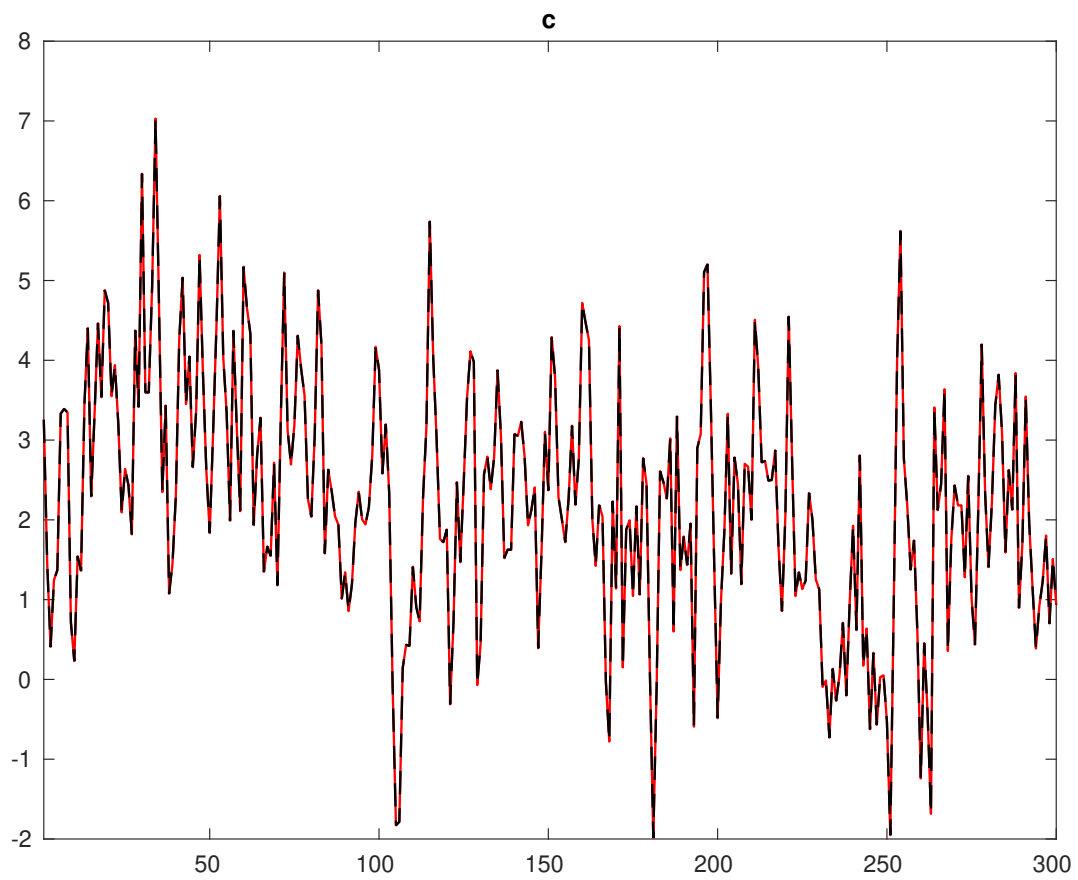


Figure 2: Historical and smoothed variables.

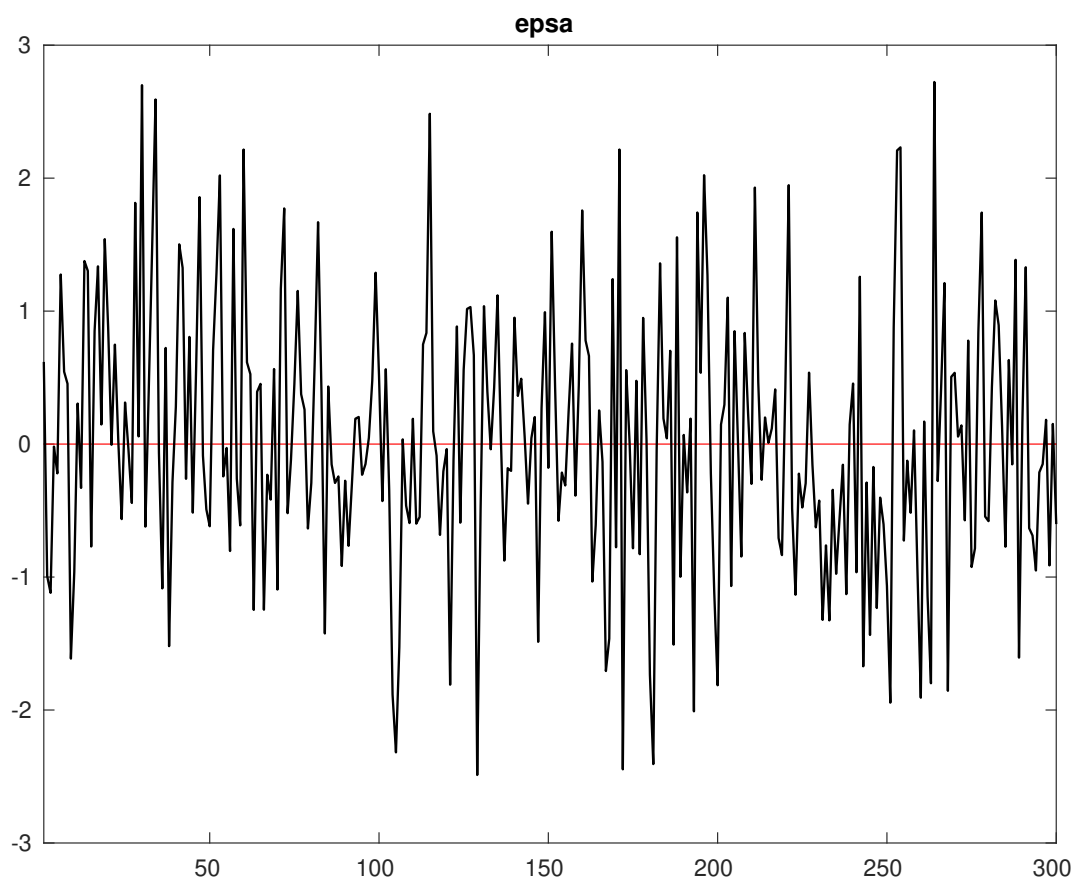


Figure 3: Smoothed shocks.

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	88.821	83.628	93.163	81.948
r_A	46.186	43.458	45.911	45.397
δ	139.426	141.869	161.927	131.642
ρ_A	48.216	42.834	50.431	42.669
σ_A	132.760	86.426	120.034	84.468
θ	68.003	58.407	62.377	58.133
κ	280.051	246.236	249.363	248.037

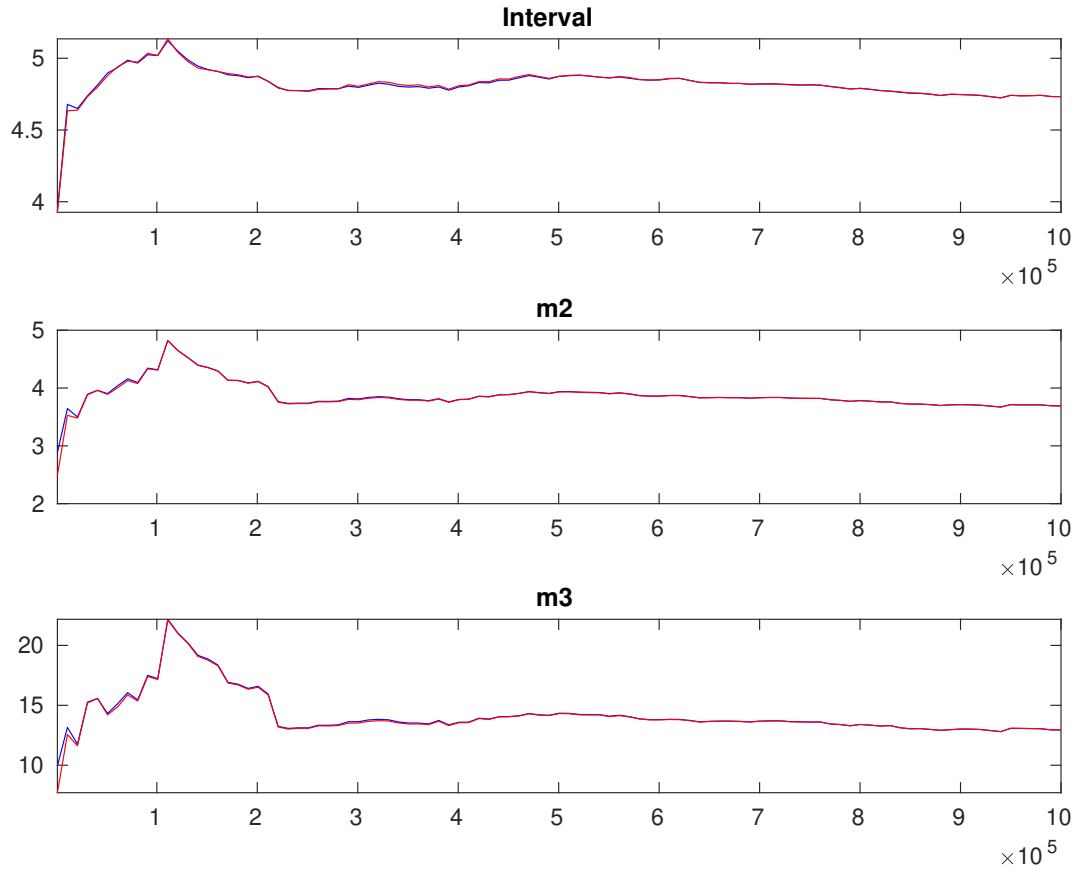


Figure 4: Multivariate convergence diagnostics for the Metropolis-Hastings. The first, second and third rows are respectively the criteria based on the eighty percent interval, the second and third moments. The different parameters are aggregated using the posterior kernel.

Table 2: Results from Metropolis-Hastings (parameters)

		Prior			Posterior		
		Dist.	Mean	Stdev.	Mean	Stdev.	HPD inf HPD sup
α	norm		0.300	0.0500	0.336	0.0407	0.2677 0.4015
r_A	gamm		2.000	0.2500	2.005	0.2495	1.5954 2.4117
δ	unif		0.500	0.2887	0.035	0.0155	0.0097 0.0586
ρ_A	beta		0.500	0.1000	0.594	0.0488	0.5153 0.6754
σ_A	invga		0.600	2.0000	0.557	0.0879	0.4161 0.6915
θ	gamm		1.500	0.7500	1.451	0.7504	0.2965 2.5397
κ	gamm		2.000	1.5000	1.968	1.4868	0.0188 4.0495

Table 3: Results from posterior maximization (parameters)

	Prior			Posterior	
	Dist.	Mean	Stdev	Mode	Stdev
α	norm	0.300	0.0500	0.3213	0.0417
r_A	gamm	2.000	0.2500	1.9738	0.2485
δ	unif	0.500	0.2887	0.0250	0.0133
ρ_A	beta	0.500	0.1000	0.5926	0.0644
σ_A	invlg	0.600	2.0000	0.5462	0.1113
θ	gamm	1.500	0.7500	1.1007	0.7457
κ	gamm	2.000	1.5000	0.9641	1.6132

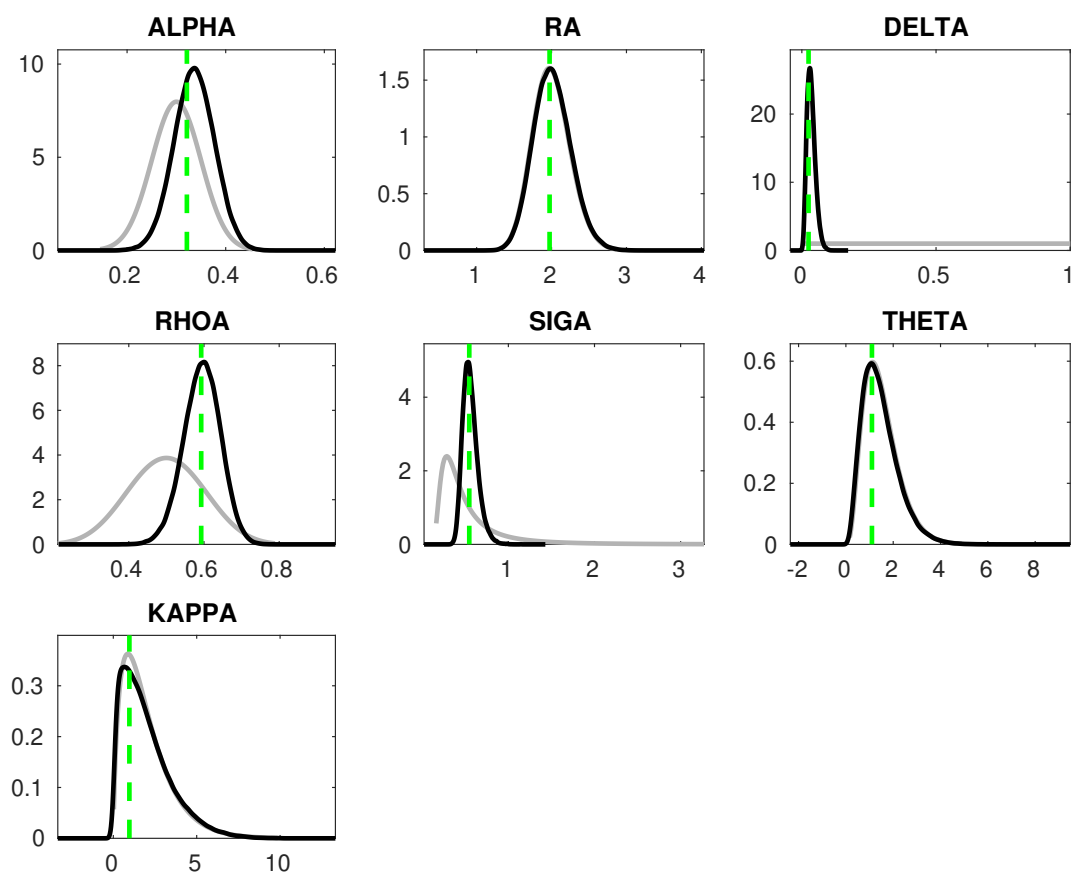


Figure 5: Priors and posteriors.

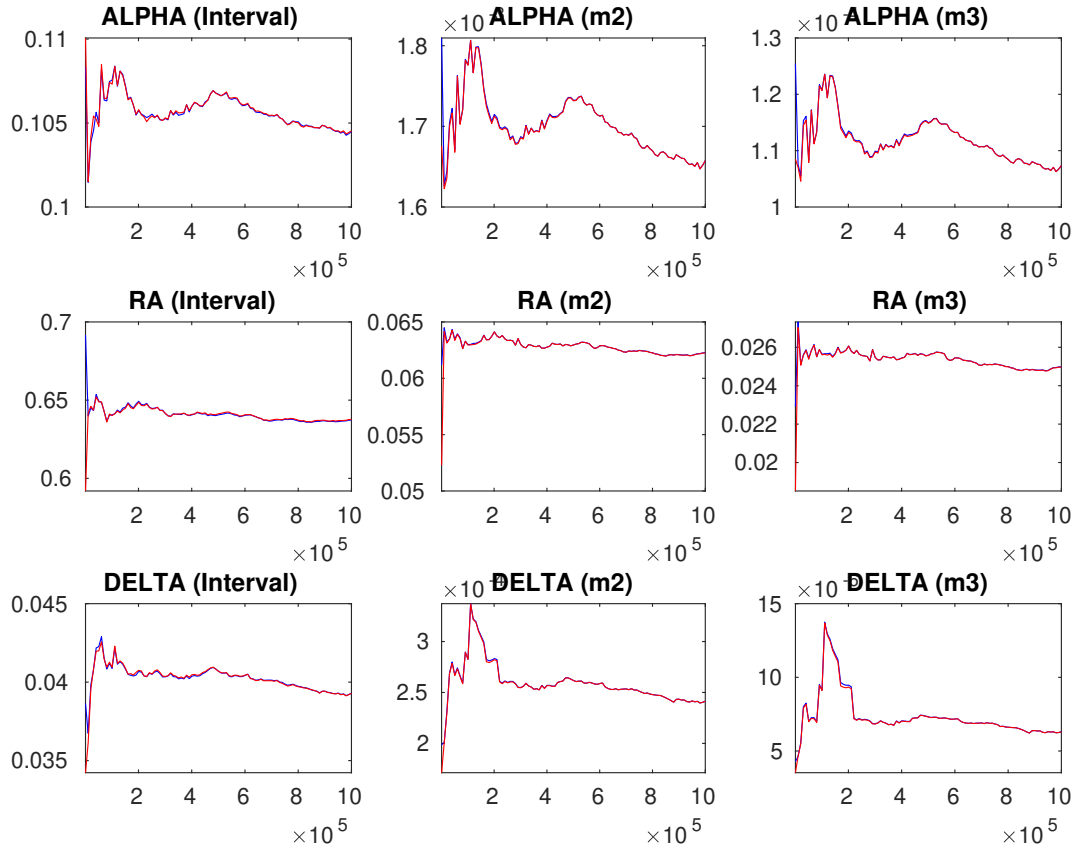


Figure 6: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

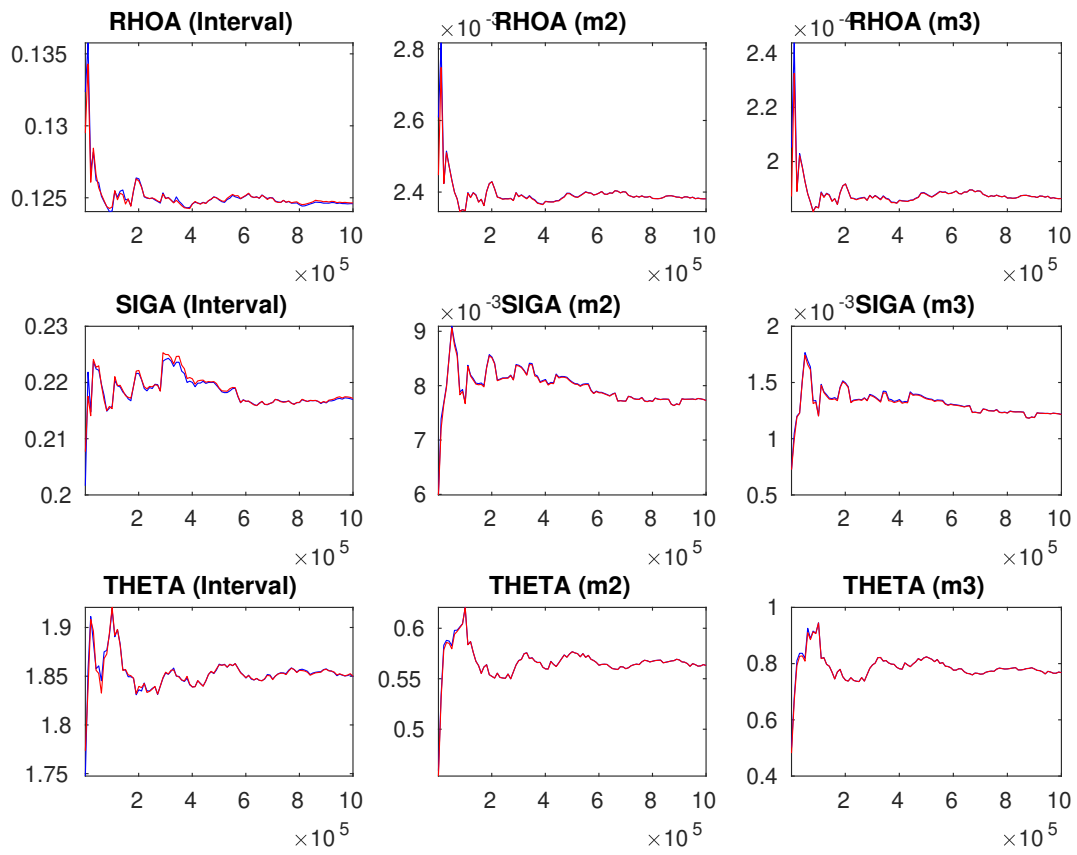


Figure 7: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

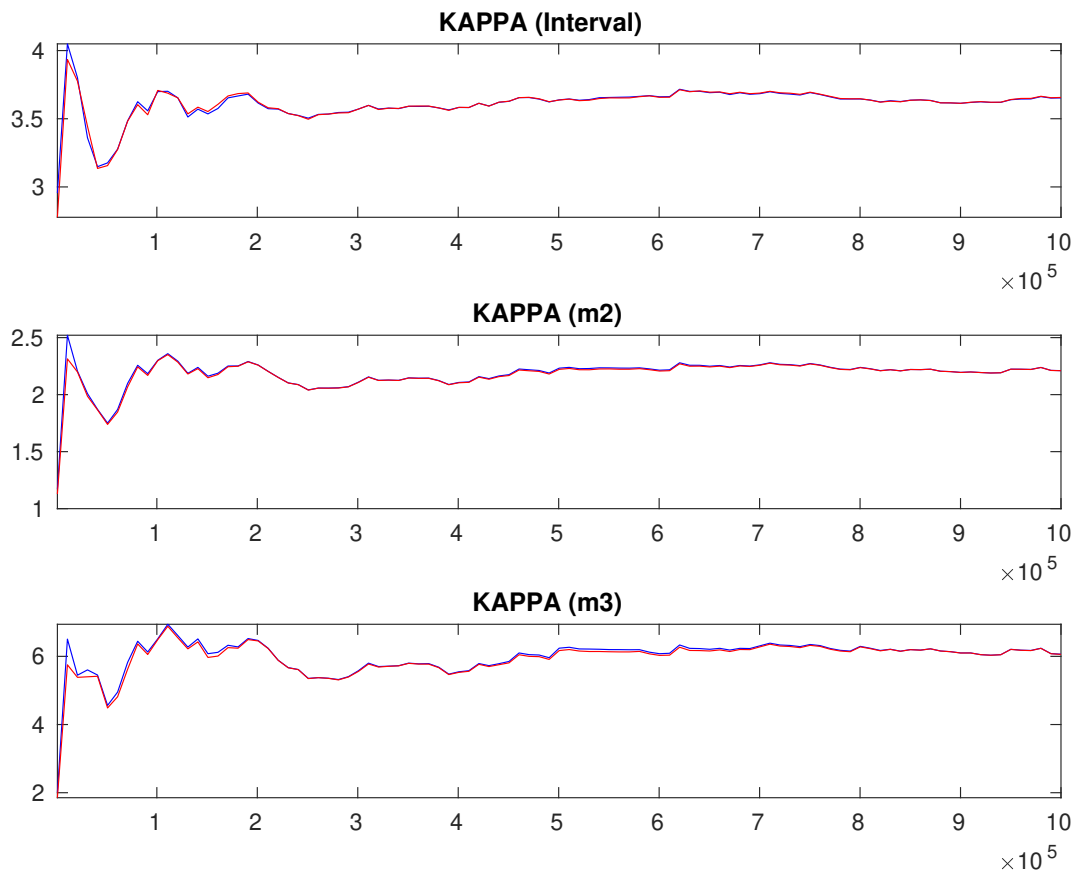


Figure 8: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third rows are respectively the criteria based on the eighty percent interval, the second and third moments.