

Figure 1: Check plots.

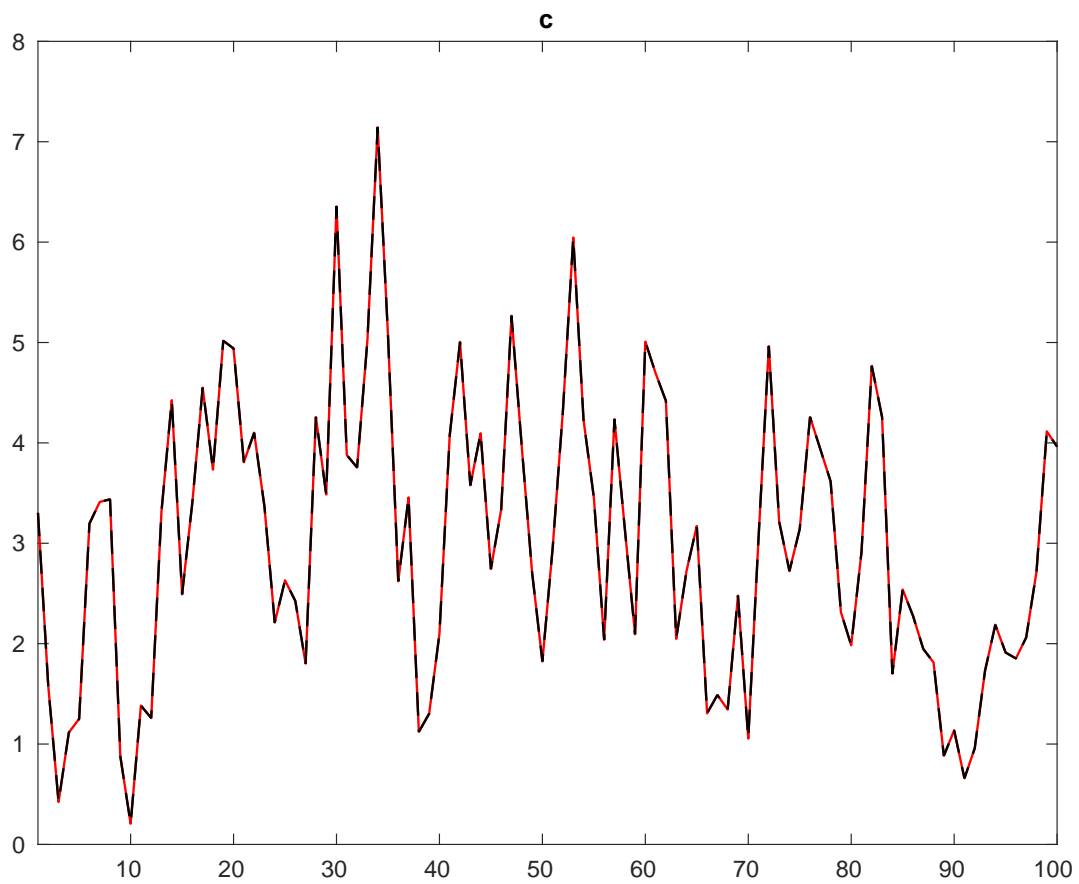


Figure 2: Historical and smoothed variables.

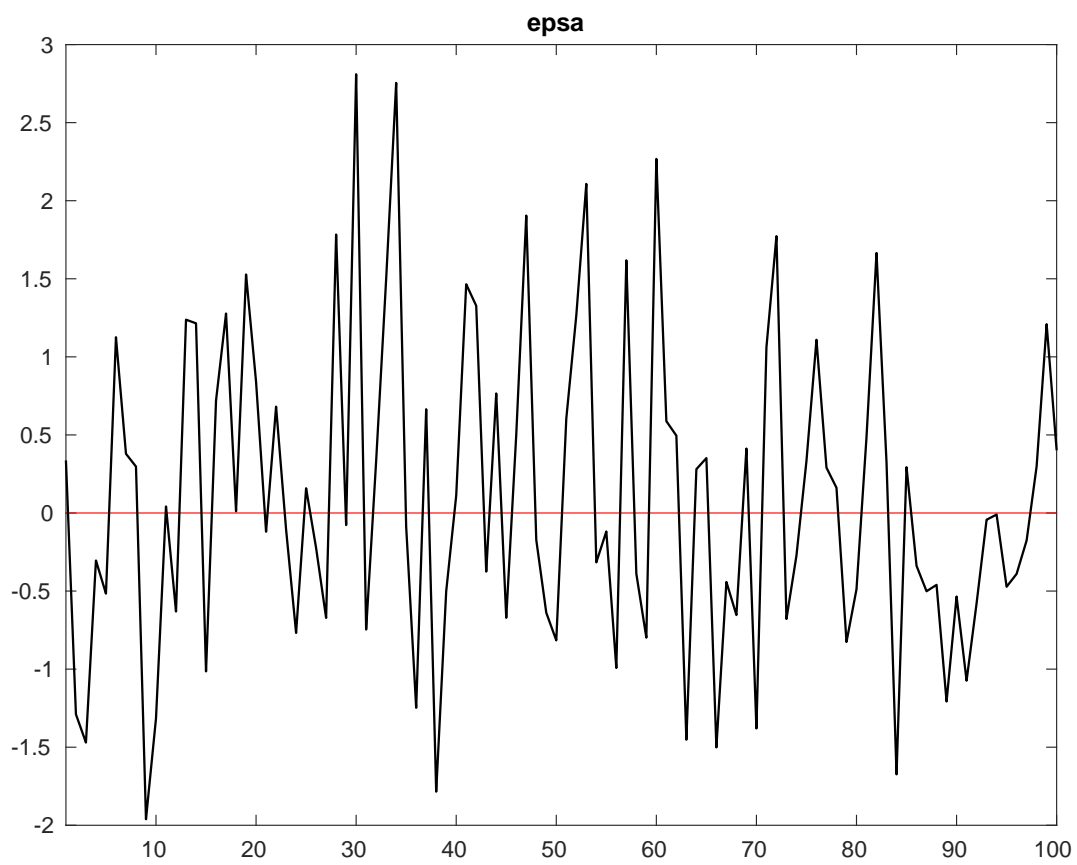


Figure 3: Smoothed shocks.

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	227.243	199.772	269.419	226.386
r_A	35.945	35.341	37.363	34.900
δ	397.205	355.169	483.129	395.479
ρ_A	35.094	36.552	37.772	35.842
σ_A	125.963	137.843	189.204	107.082
θ	49.010	52.833	50.192	50.190
κ	92.491	113.569	104.792	106.406

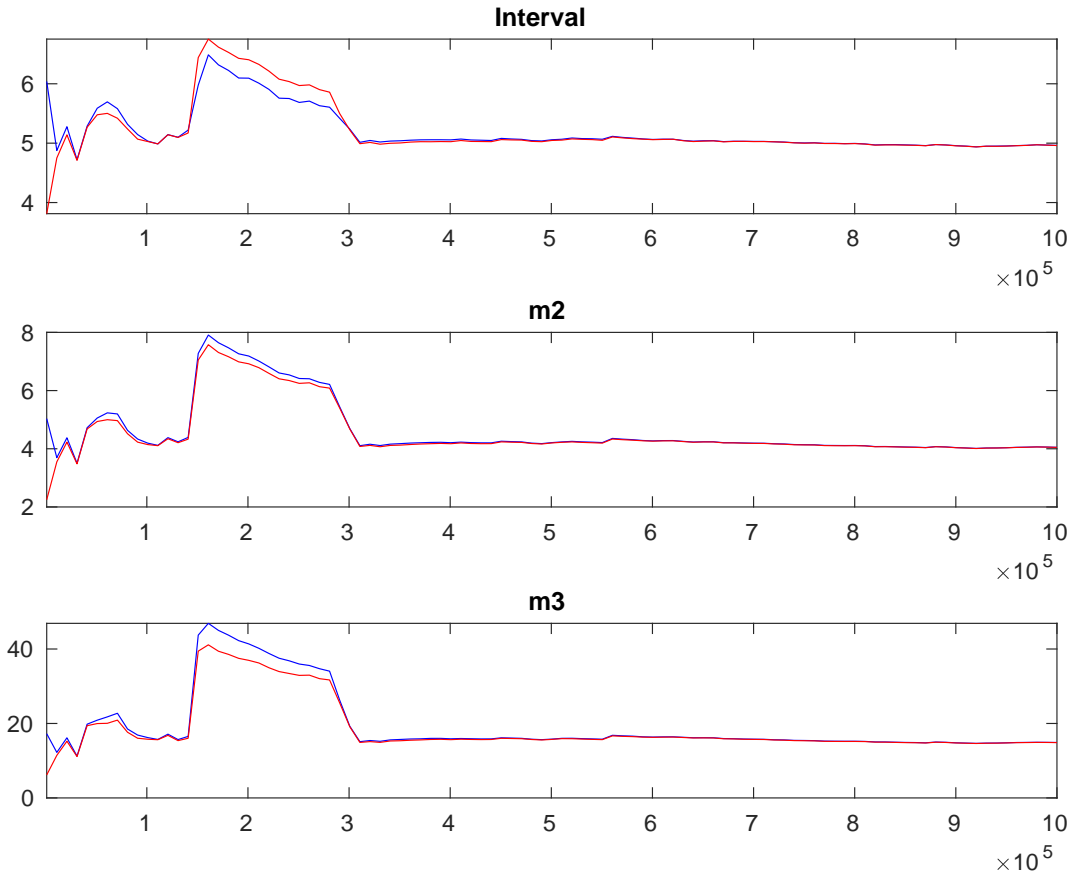


Figure 4: Multivariate convergence diagnostics for the Metropolis-Hastings. The first, second and third rows are respectively the criteria based on the eighty percent interval, the second and third moments. The different parameters are aggregated using the posterior kernel.

Table 2: Results from Metropolis-Hastings (parameters)

	Prior			Posterior			
	Dist.	Mean	Stdev.	Mean	Stdev.	HPD inf	HPD sup
α	norm	0.300	0.0500	0.325	0.0446	0.2506	0.3976
r_A	gamm	2.000	0.2500	2.000	0.2500	1.5903	2.4104
δ	unif	0.500	0.2887	0.017	0.0121	0.0000	0.0333
ρ_A	beta	0.500	0.1000	0.546	0.0651	0.4392	0.6533
σ_A	invga	0.600	4.0000	0.389	0.0668	0.2881	0.4834
θ	gamm	1.500	0.7500	1.503	0.7477	0.3635	2.6167
κ	gamm	2.000	1.5000	2.004	1.4747	0.0389	4.0119

Table 3: Results from posterior maximization (parameters)

	Dist.	Prior		Posterior	
		Mean	Stdev	Mode	Stdev
α	norm	0.300	0.0500	0.2952	0.0497
r_A	gamm	2.000	0.2500	1.9692	0.2481
δ	unif	0.500	0.2887	0.0077	0.0081
ρ_A	beta	0.500	0.1000	0.5405	0.0645
σ_A	invlg	0.600	4.0000	0.3710	0.0509
θ	gamm	1.500	0.7500	1.1228	0.6497
κ	gamm	2.000	1.5000	1.0661	1.0979

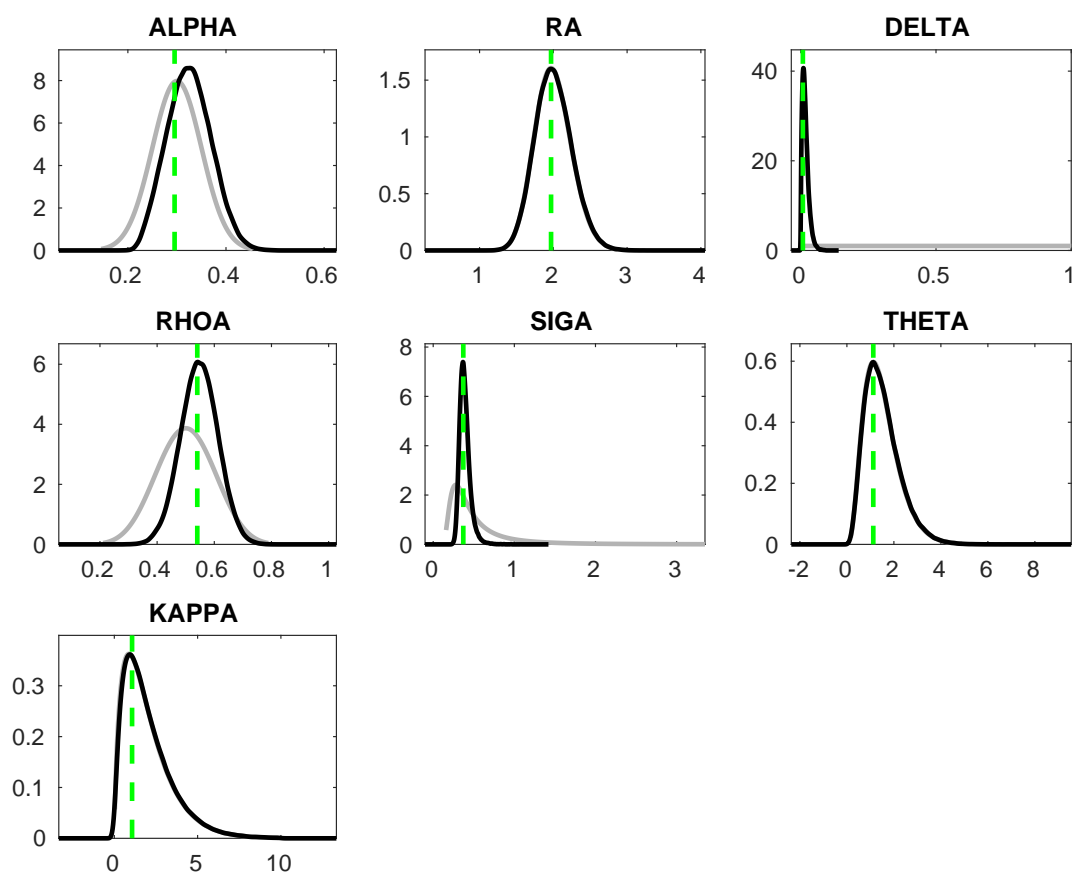


Figure 5: Priors and posteriors.

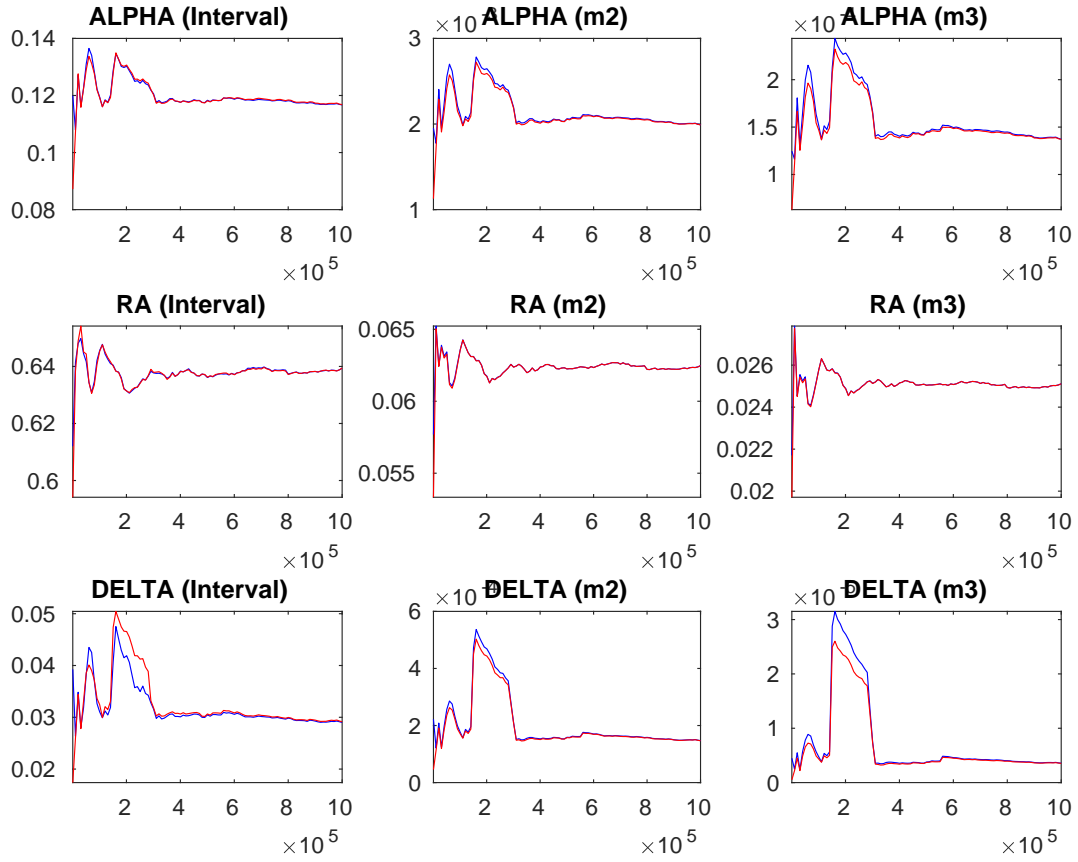


Figure 6: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

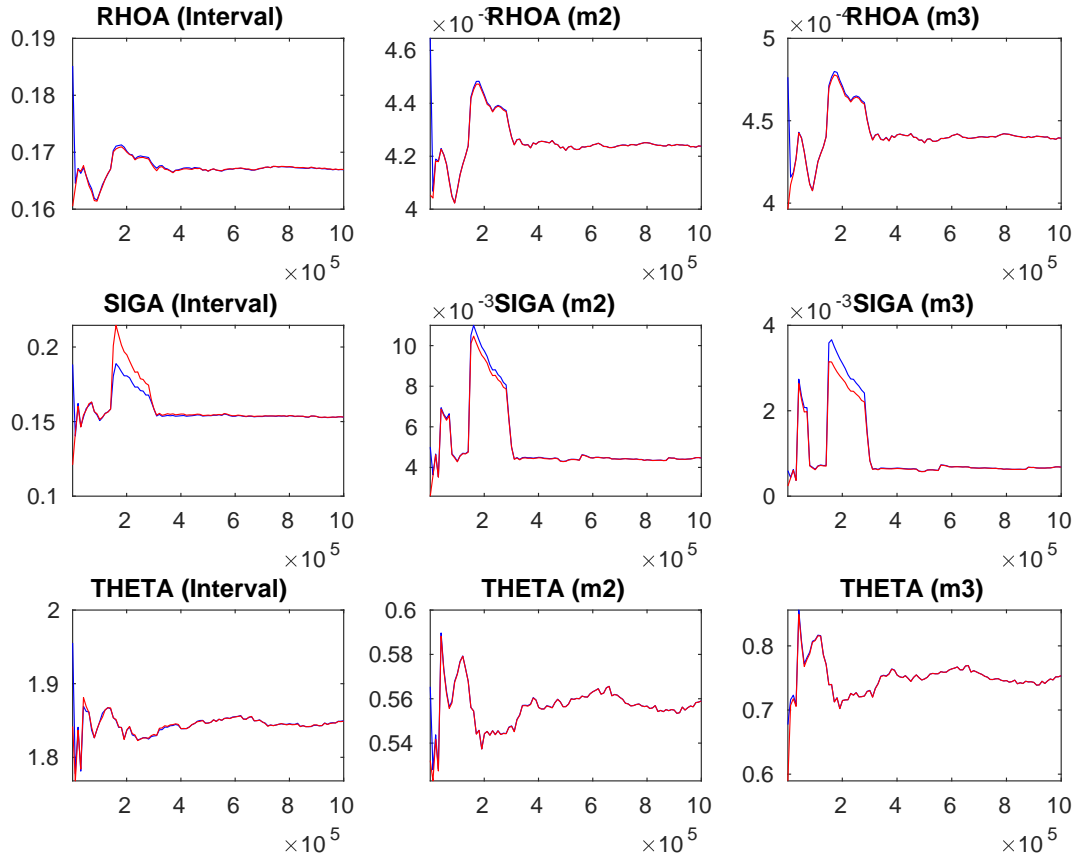


Figure 7: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

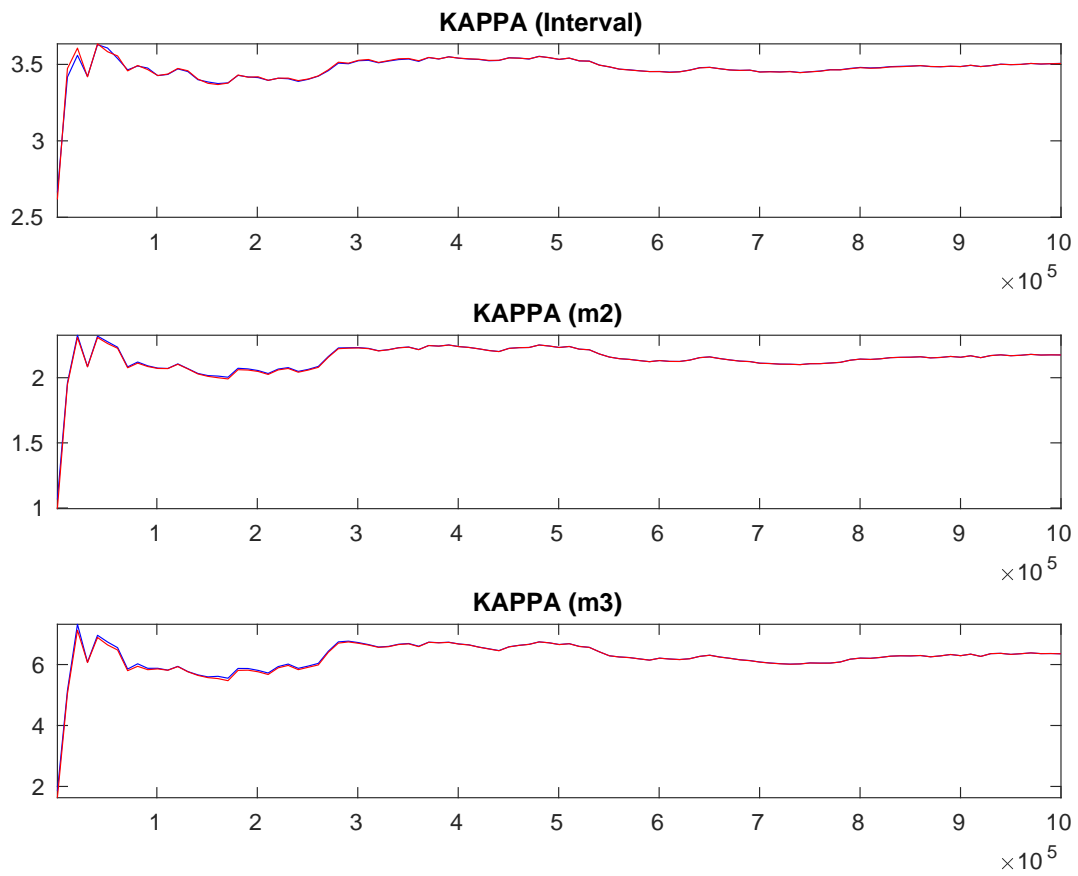


Figure 8: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third rows are respectively the criteria based on the eighty percent interval, the second and third moments.