

Figure 1: Check plots.

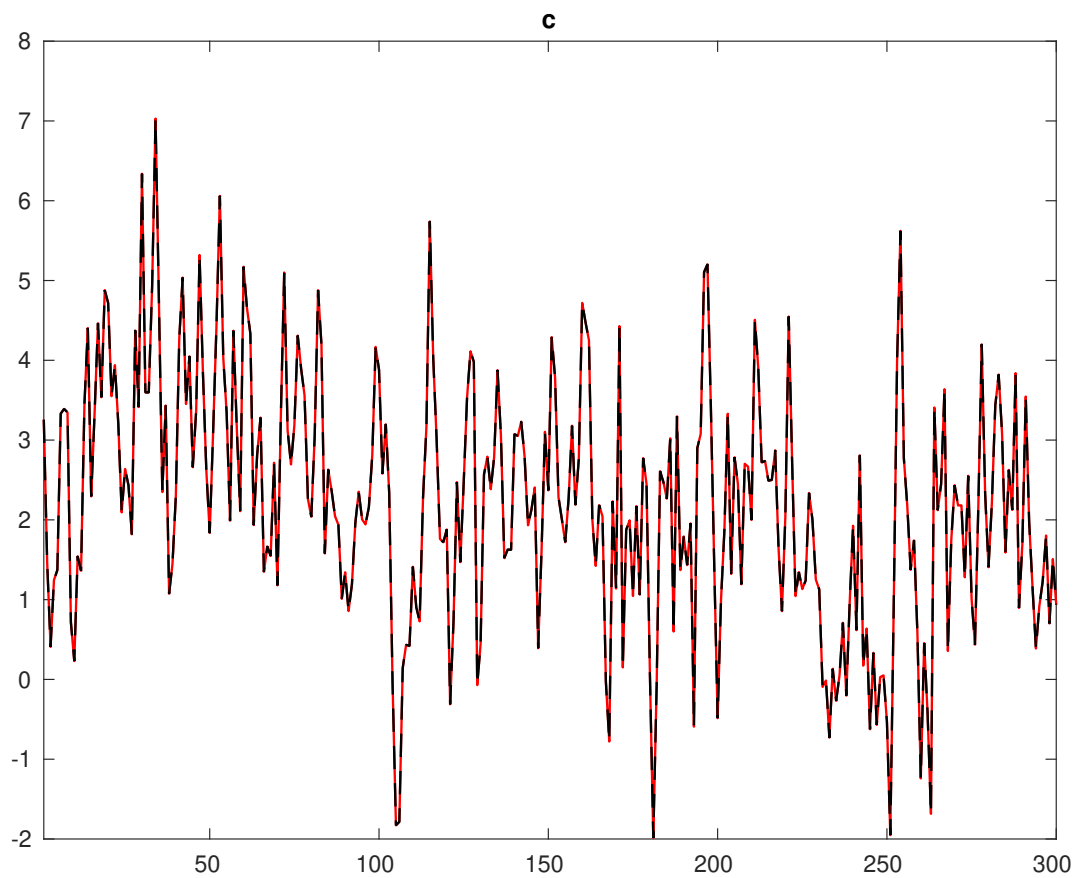


Figure 2: Historical and smoothed variables.

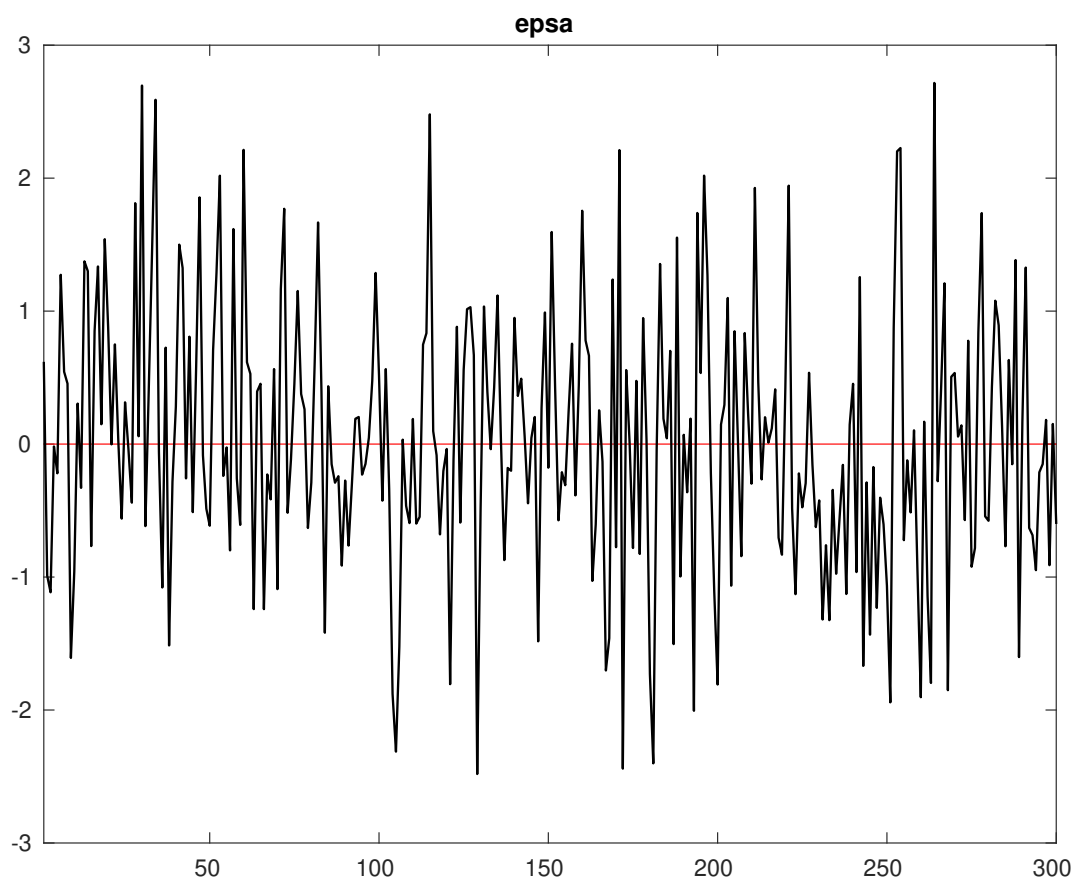


Figure 3: Smoothed shocks.

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	114.223	75.850	86.143	111.667
r_A	42.747	45.934	46.051	45.174
δ	191.257	128.233	142.664	185.259
ρ_A	42.212	48.428	41.804	51.245
σ_A	91.156	115.931	78.639	137.160
θ	72.709	79.098	63.109	59.319
κ	412.676	277.630	222.882	360.123

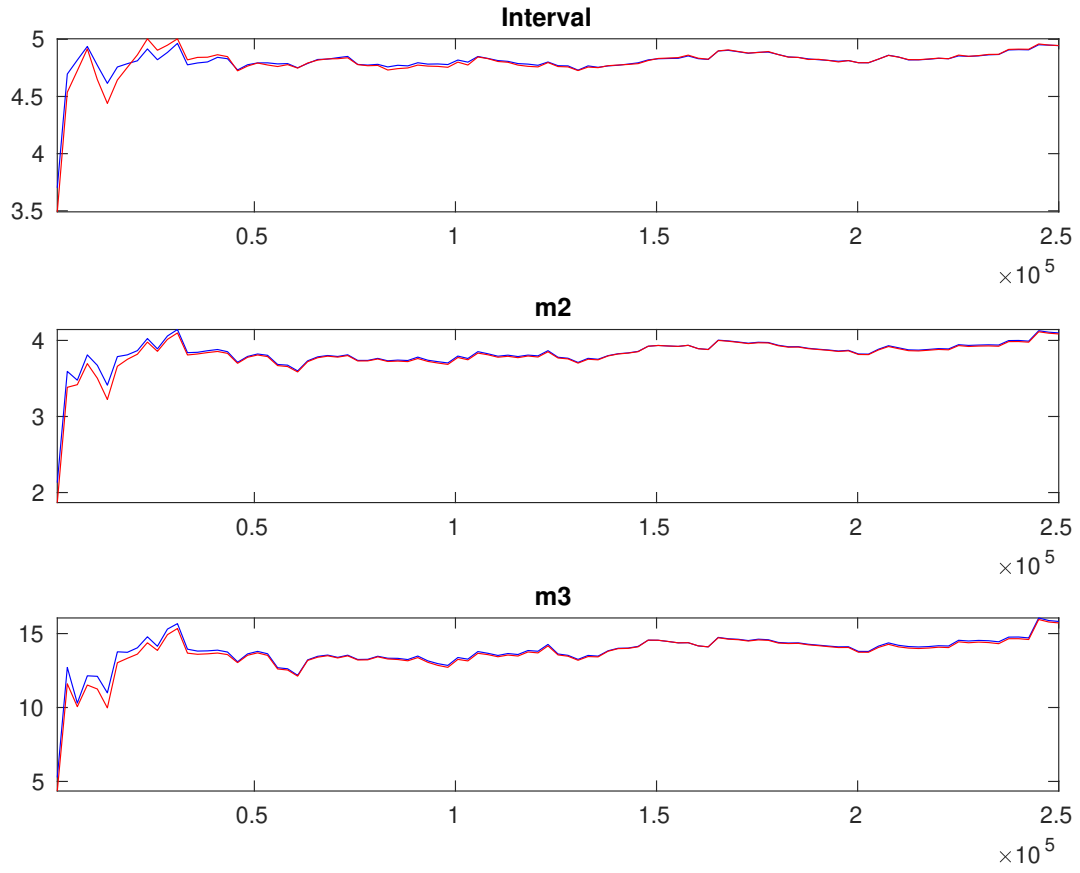


Figure 4: Multivariate convergence diagnostics for the Metropolis-Hastings. The first, second and third rows are respectively the criteria based on the eighty percent interval, the second and third moments. The different parameters are aggregated using the posterior kernel.

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	0.0411	0.2691 0.4036
r_A	gamm		2.000	0.2500	2.002	0.2511	1.5918 2.4142
δ	unif		0.500	0.2887	0.035	0.0159	0.0096 0.0587
ρ_A	beta		0.500	0.1000	0.594	0.0488	0.5165 0.6769
σ_A	invga		0.600	4.0000	0.557	0.0892	0.4196 0.6966
θ	gamm		1.500	0.7500	1.457	0.7622	0.3060 2.5645
κ	gamm		2.000	1.5000	2.046	1.6287	0.0119 4.2181

Table 3: Results from posterior maximization (parameters)

	Dist.	Prior		Posterior	
		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	0.5925	0.0645
σ_A	invlg	0.600	4.0000	0.5462	0.1117
θ	gamm	1.500	0.7500	1.1007	0.7461
κ	gamm	2.000	1.5000	0.9635	1.6179

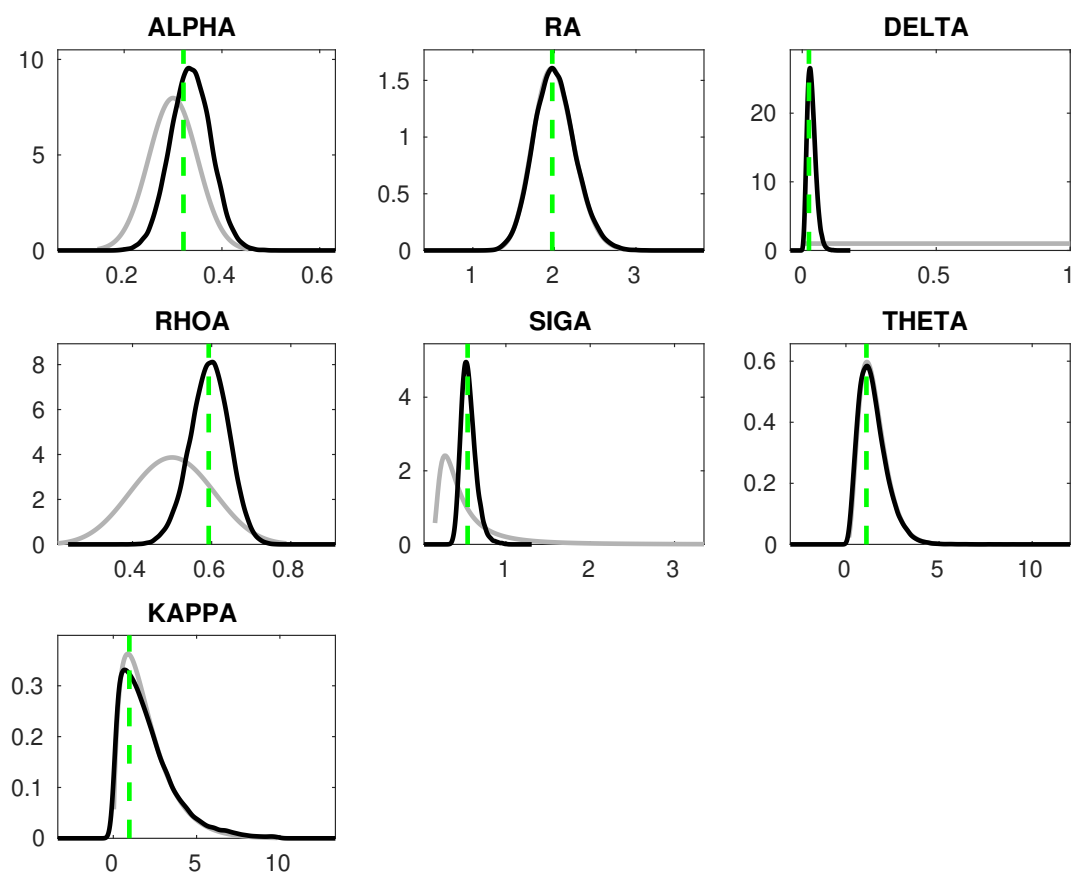


Figure 5: Priors and posteriors.

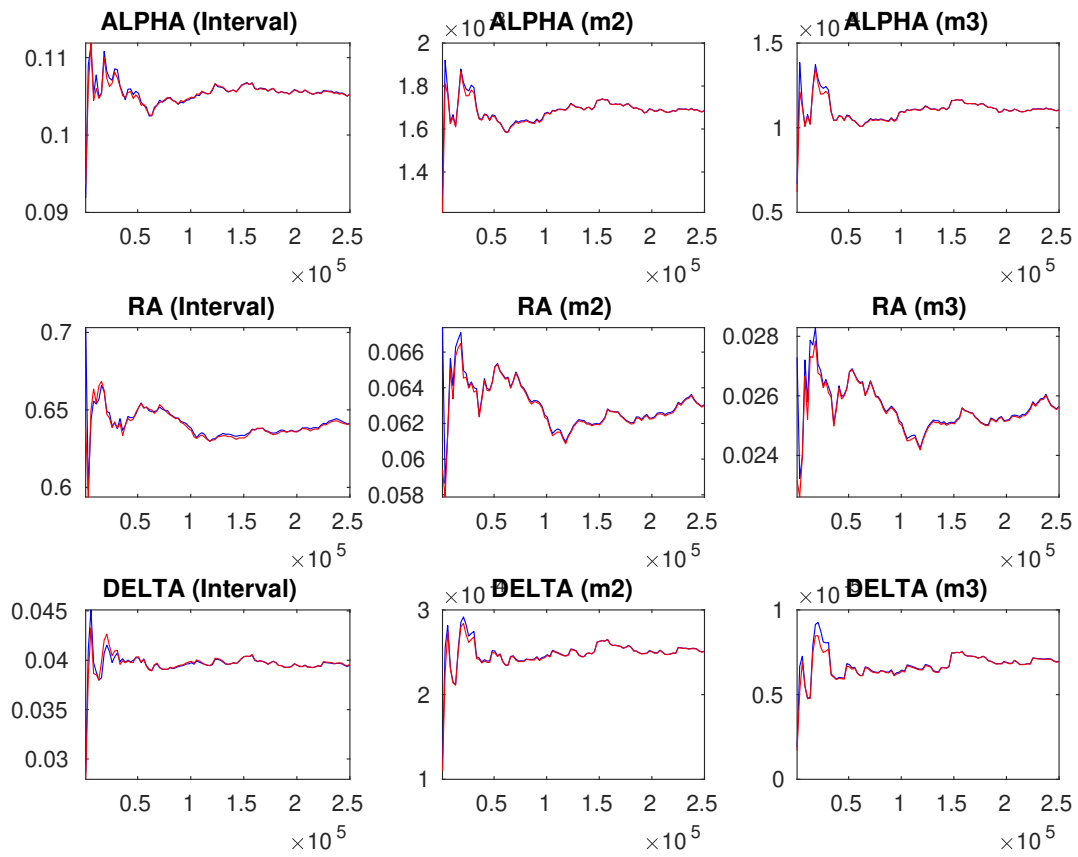


Figure 6: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

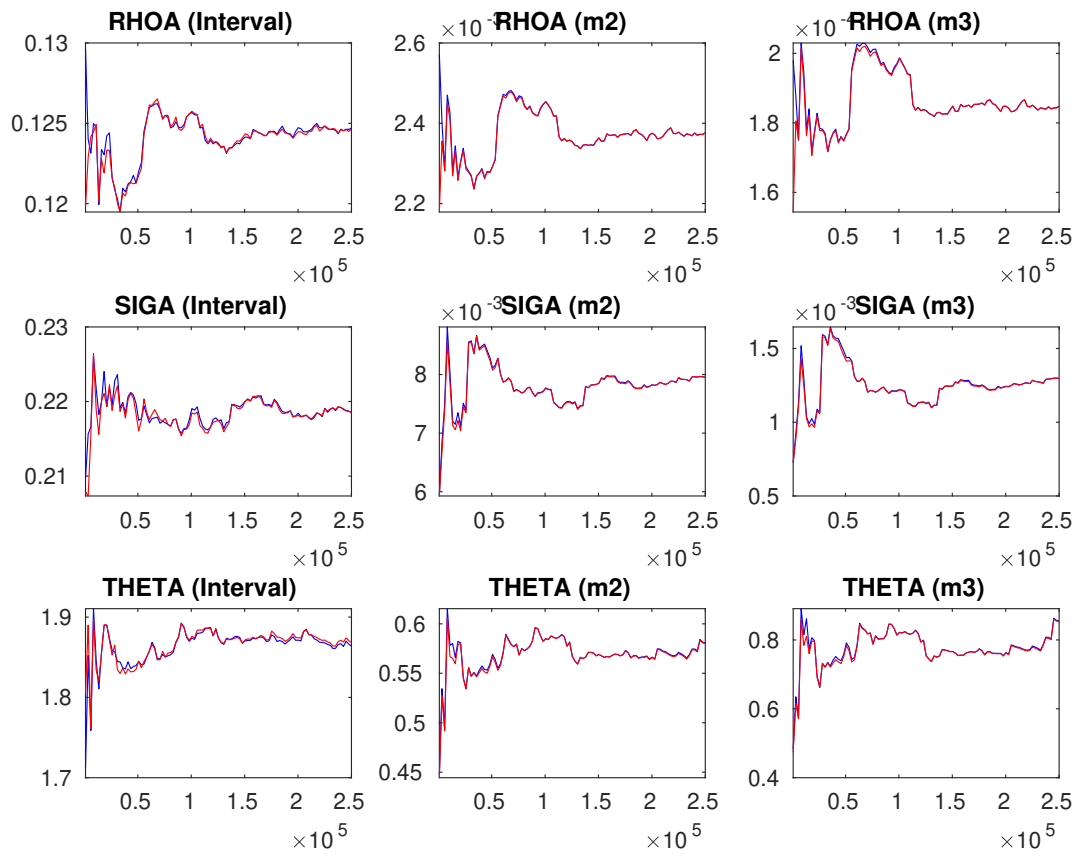


Figure 7: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

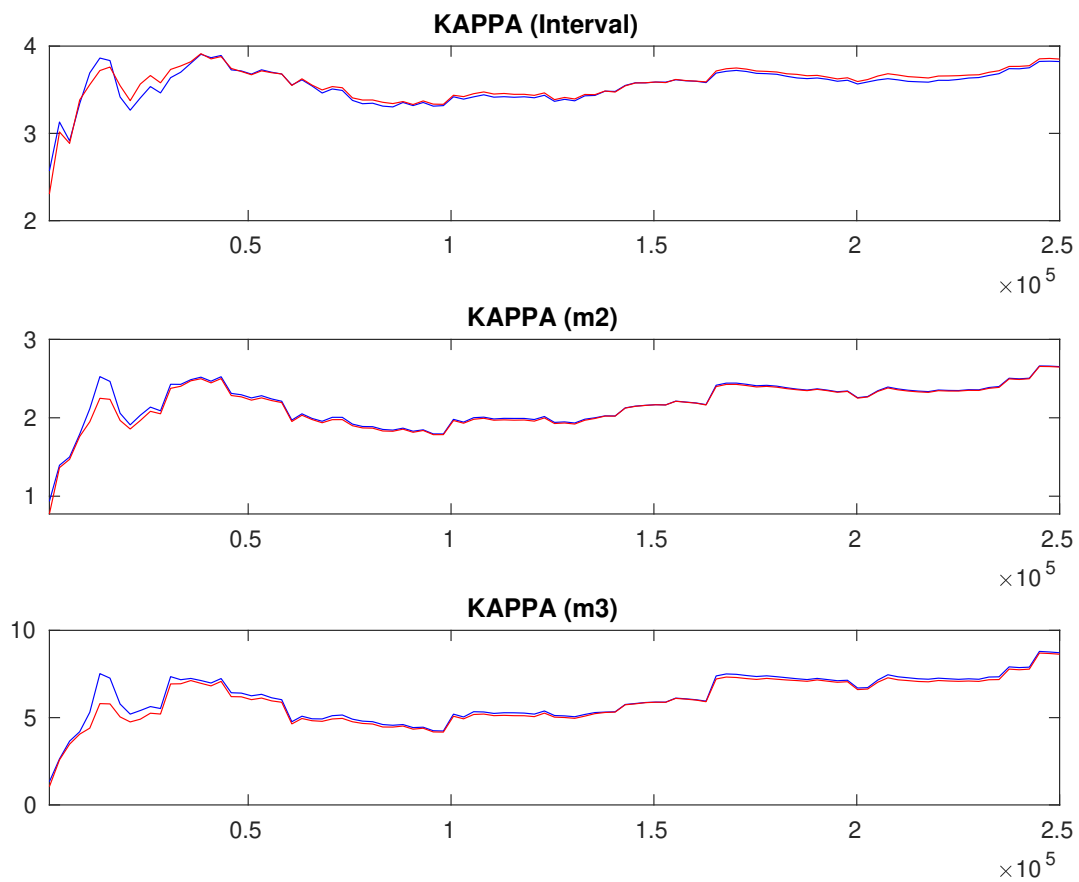


Figure 8: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third rows are respectively the criteria based on the eighty percent interval, the second and third moments.