

Figure 1: Check plots.

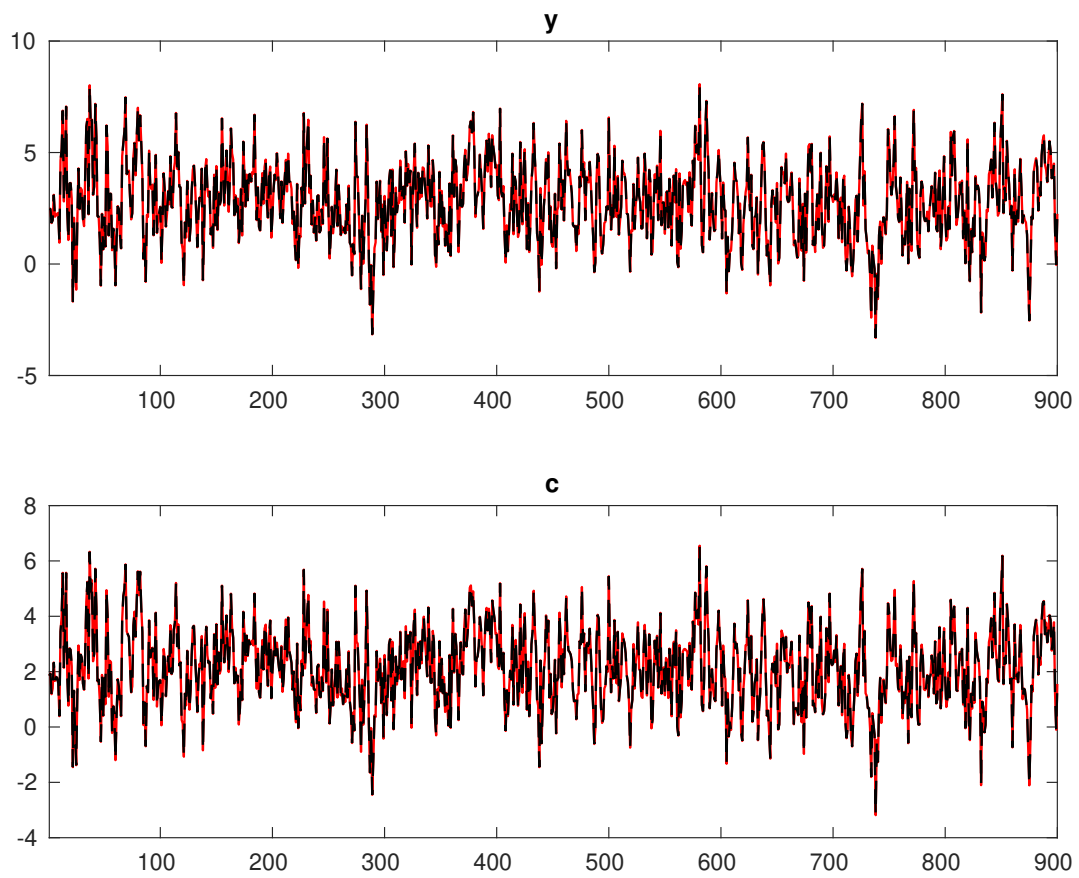


Figure 2: Historical and smoothed variables.

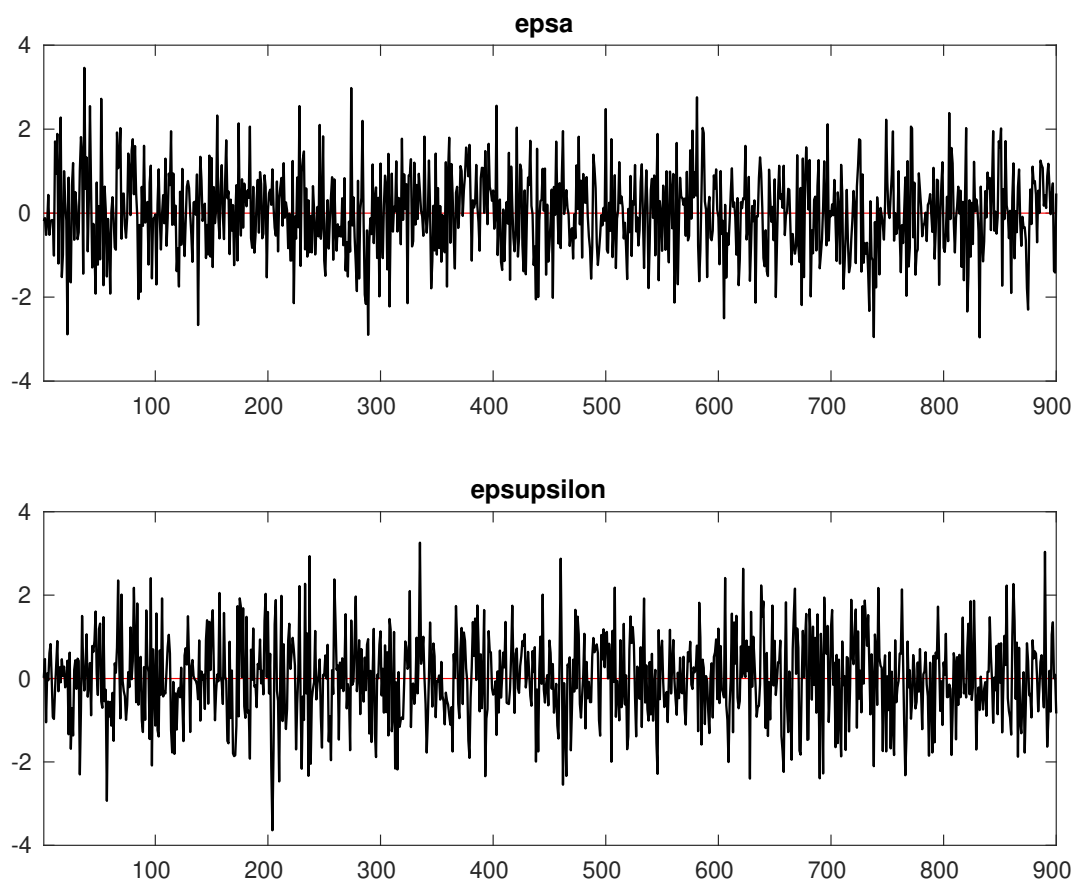


Figure 3: Smoothed shocks.

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>
$\alpha$	35.953	35.047	33.485	34.195
$r_A$	36.735	33.228	35.507	36.862
$\delta$	41.286	42.293	44.557	42.913
$\rho_A$	33.800	33.359	35.573	33.985
$\sigma_A$	42.550	41.832	42.577	38.603
$\theta$	311.339	235.153	273.752	255.158
$\kappa$	293.282	216.853	260.110	233.242
$\rho_v$	34.203	35.627	34.931	35.906
$\sigma_v$	179.428	142.928	161.819	153.483

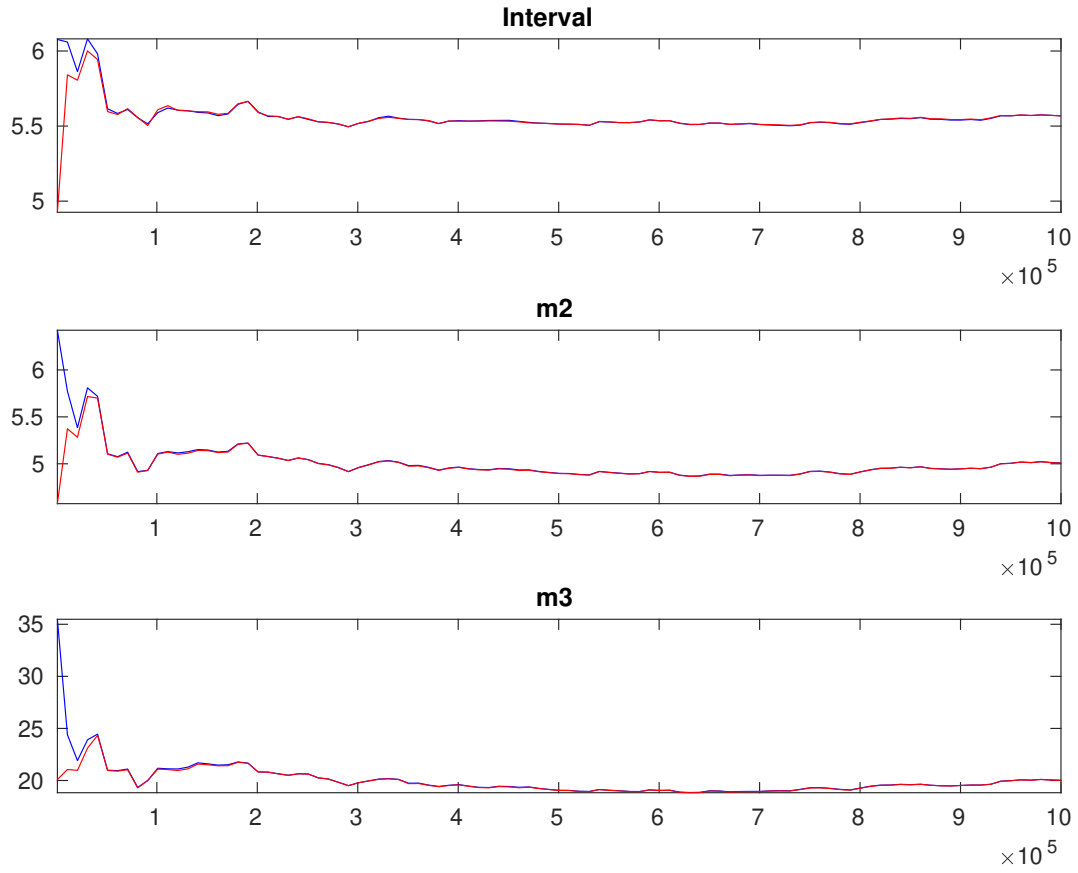


Figure 4: Multivariate convergence diagnostics for the Metropolis-Hastings. The first, second and third rows are respectively the criteria based on the eighty percent interval, the second and third moments. The different parameters are aggregated using the posterior kernel.

Table 2: Results from Metropolis-Hastings (parameters)

		Prior			Posterior		
		Dist.	Mean	Stdev.	Mean	Stdev.	HPD inf HPD sup
$\alpha$	norm		0.300	0.0500	0.299	0.0055	0.2903 0.3084
$r_A$	gamm		2.000	0.2500	2.007	0.2494	1.5985 2.4154
$\delta$	unif		0.500	0.2887	0.022	0.0024	0.0181 0.0258
$\rho_A$	beta		0.500	0.1000	0.462	0.0287	0.4152 0.5095
$\sigma_A$	invga		0.600	2.0000	0.567	0.0308	0.5179 0.6185
$\theta$	gamm		1.500	0.7500	1.476	0.7115	0.3877 2.5462
$\kappa$	gamm		2.000	1.5000	1.913	0.2870	1.4719 2.3378
$\rho_v$	beta		0.500	0.1000	0.483	0.0282	0.4364 0.5292
$\sigma_v$	invga		0.600	2.0000	0.589	0.0927	0.4351 0.7373

Table 3: Results from posterior maximization (parameters)

	Dist.	Prior		Posterior	
		Mean	Stdev	Mode	Stdev
$\alpha$	norm	0.300	0.0500	0.2997	0.0056
$r_A$	gamm	2.000	0.2500	1.9673	0.2467
$\delta$	unif	0.500	0.2887	0.0212	0.0022
$\rho_A$	beta	0.500	0.1000	0.4600	0.0285
$\sigma_A$	invlg	0.600	2.0000	0.5573	0.0291
$\theta$	gamm	1.500	0.7500	0.9142	0.5358
$\kappa$	gamm	2.000	1.5000	1.6956	0.2141
$\rho_v$	beta	0.500	0.1000	0.4807	0.0282
$\sigma_v$	invlg	0.600	2.0000	0.5116	0.0892

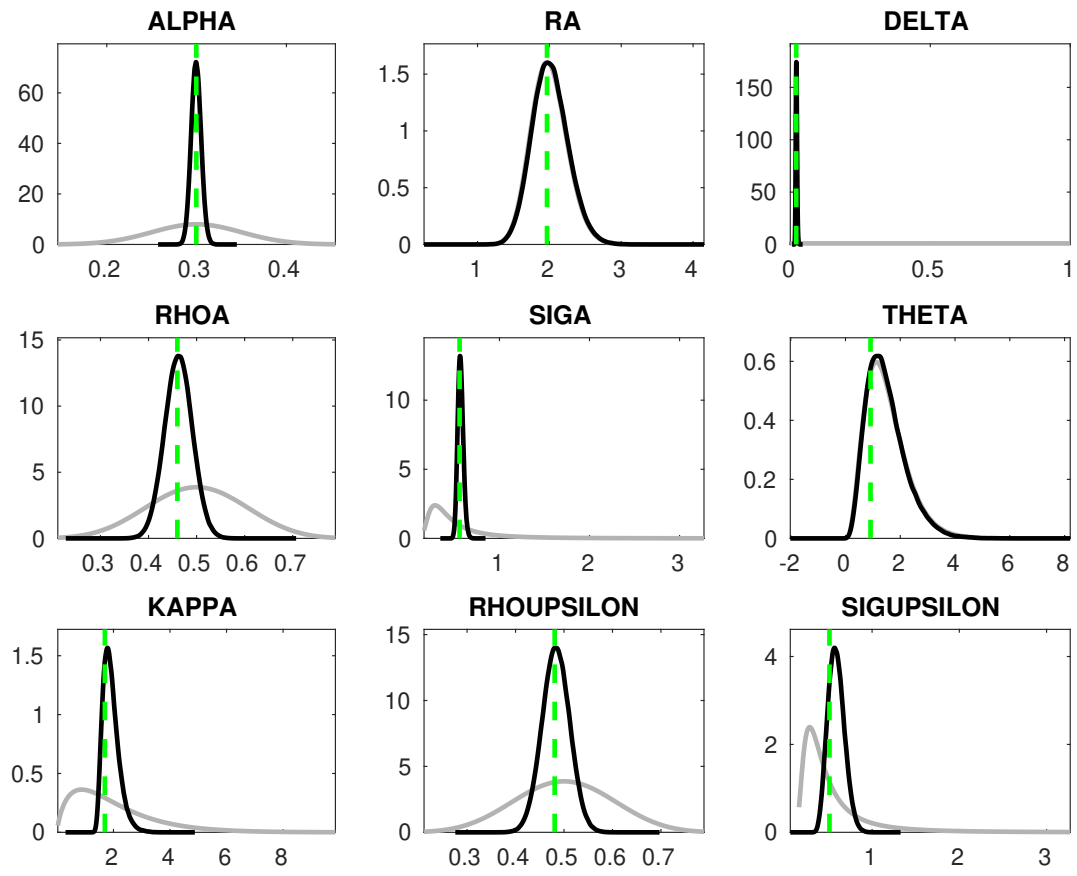


Figure 5: Priors and posteriors.



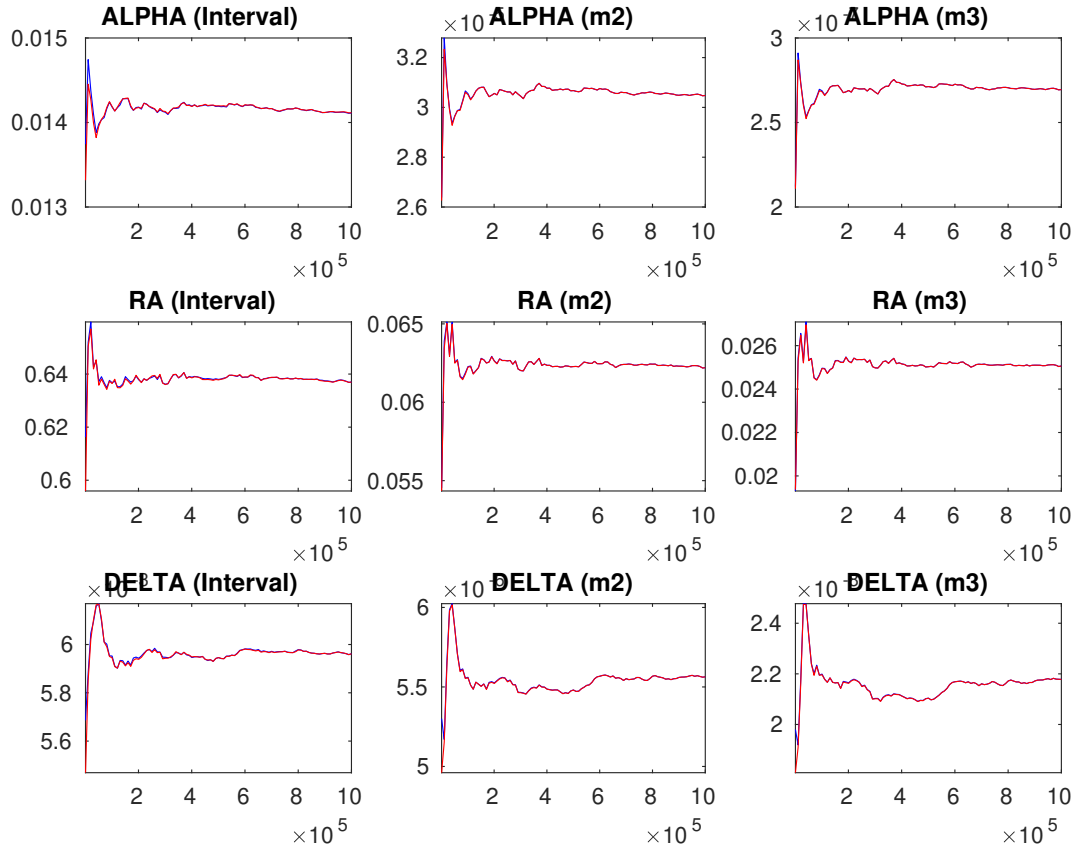


Figure 6: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

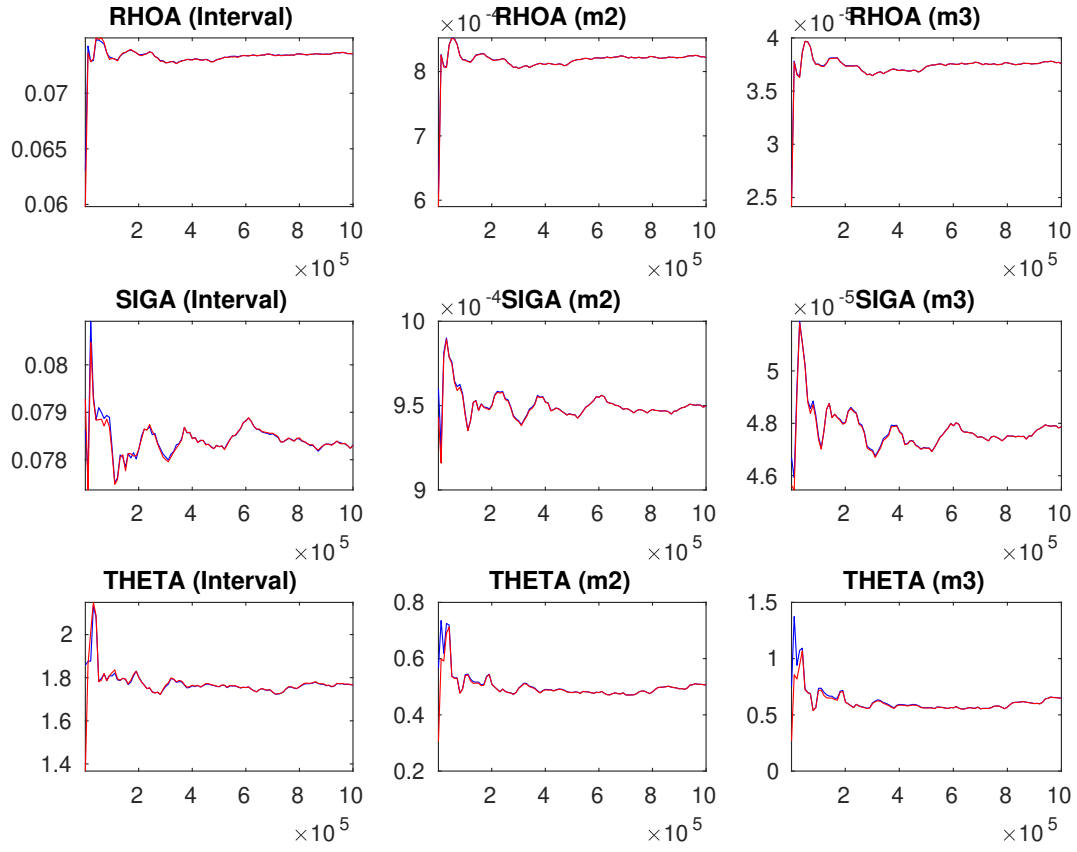


Figure 7: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

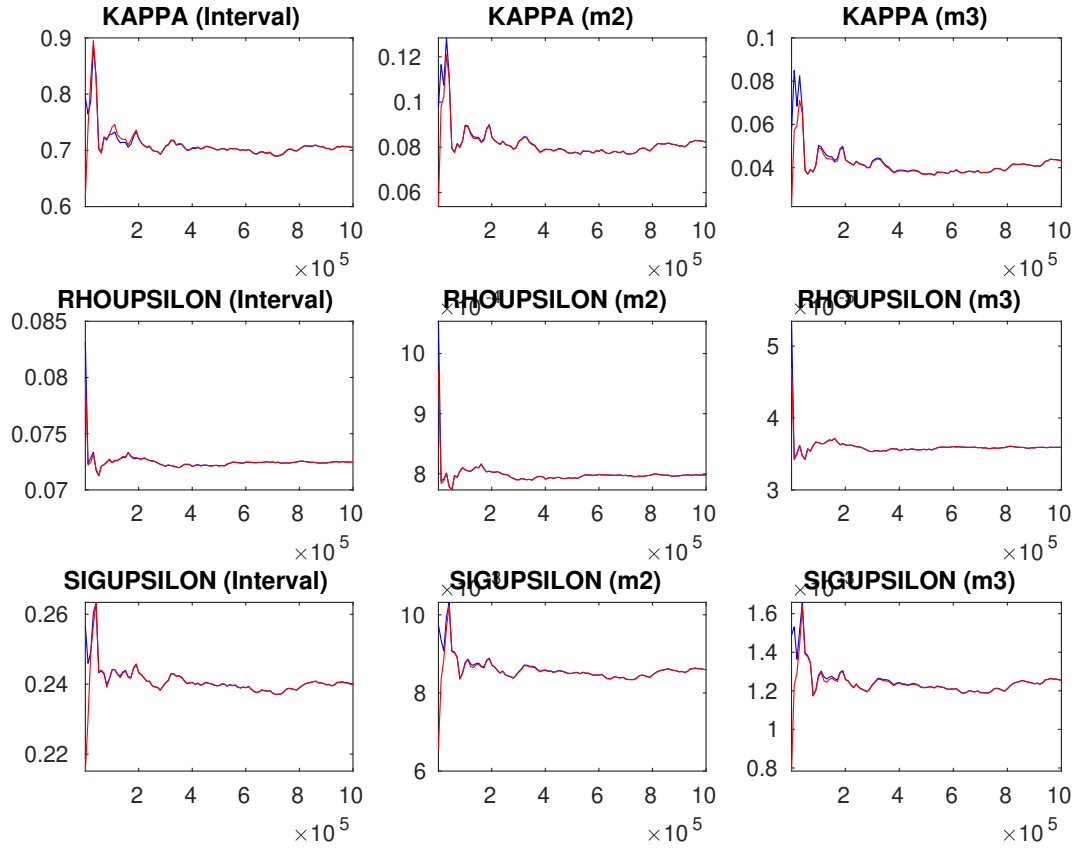


Figure 8: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.