

Figure 1: Check plots.

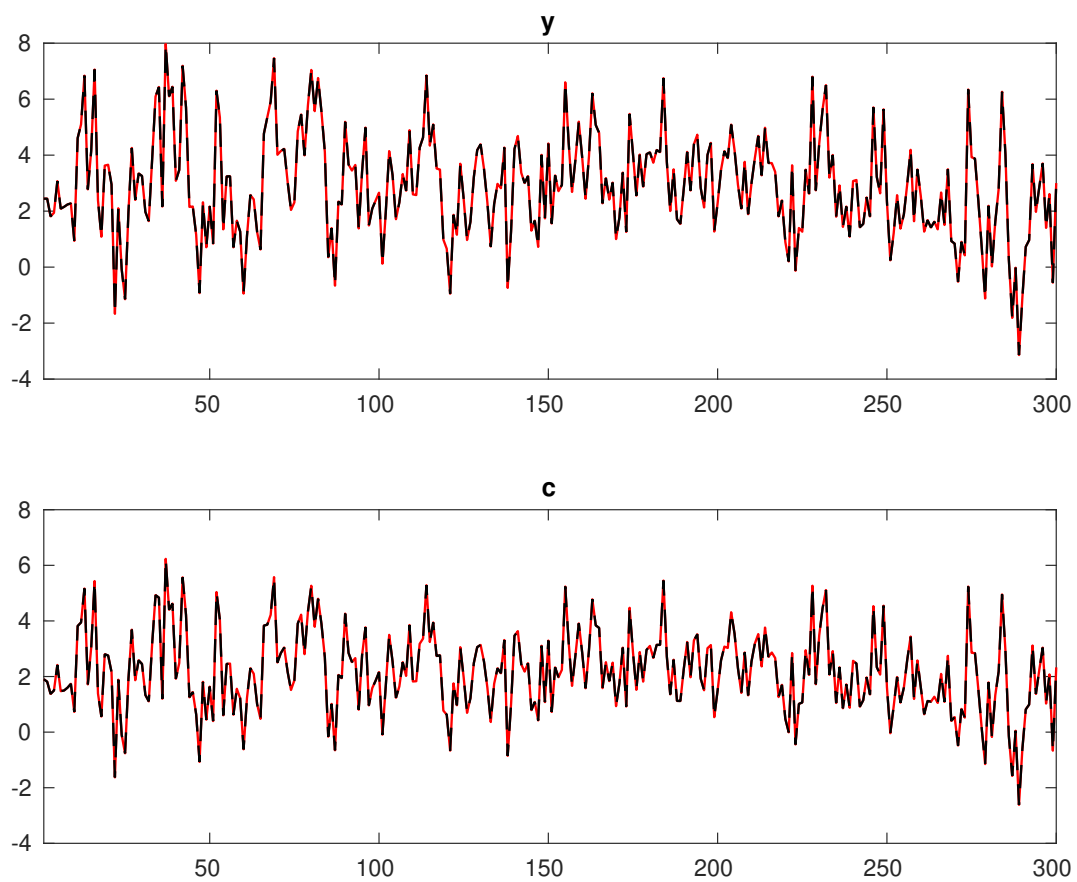


Figure 2: Historical and smoothed variables.

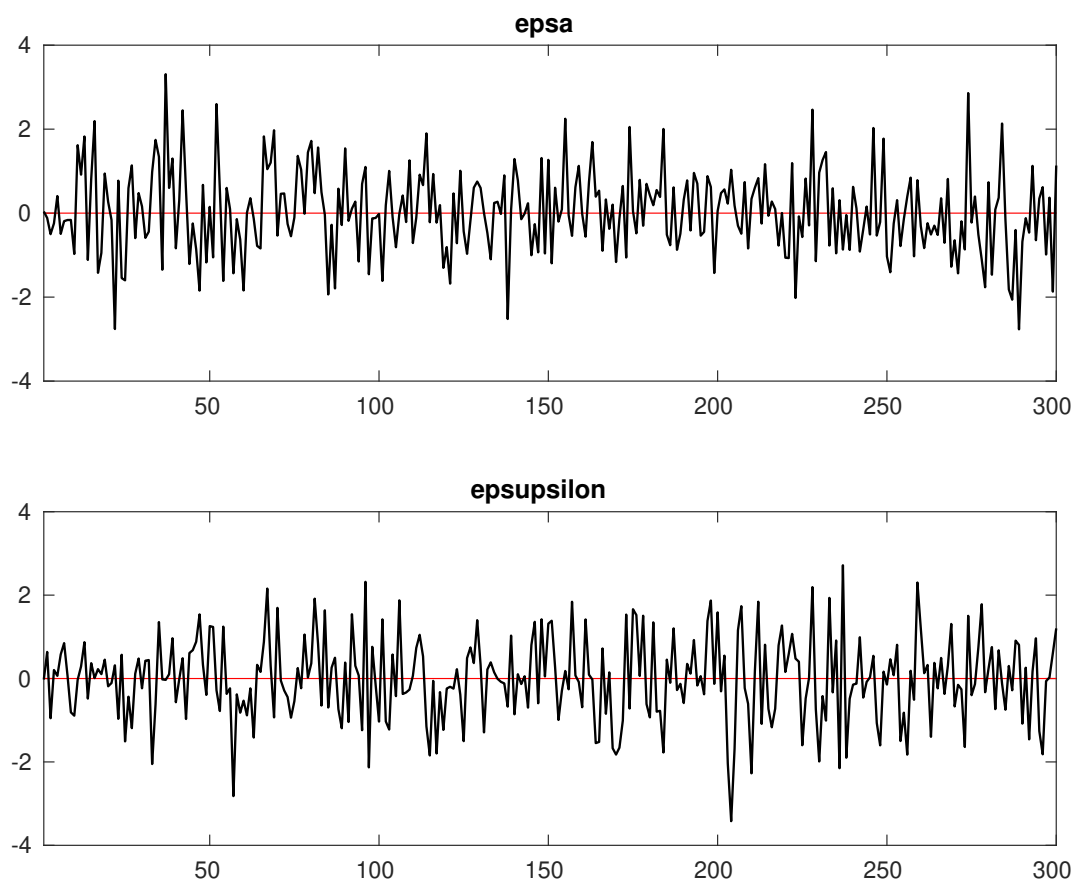


Figure 3: Smoothed shocks.

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>
$\alpha$	50.230	52.027	52.077	49.885
$r_A$	28.781	33.175	33.620	32.671
$\delta$	87.929	83.157	82.697	70.794
$\rho_A$	30.868	32.402	32.867	30.885
$\sigma_A$	70.635	71.341	69.678	62.991
$\theta$	45.558	49.697	48.221	50.871
$\kappa$	44.940	44.975	48.314	48.108
$\rho_v$	32.043	30.072	31.794	32.163
$\sigma_v$	60.333	60.640	68.012	63.009

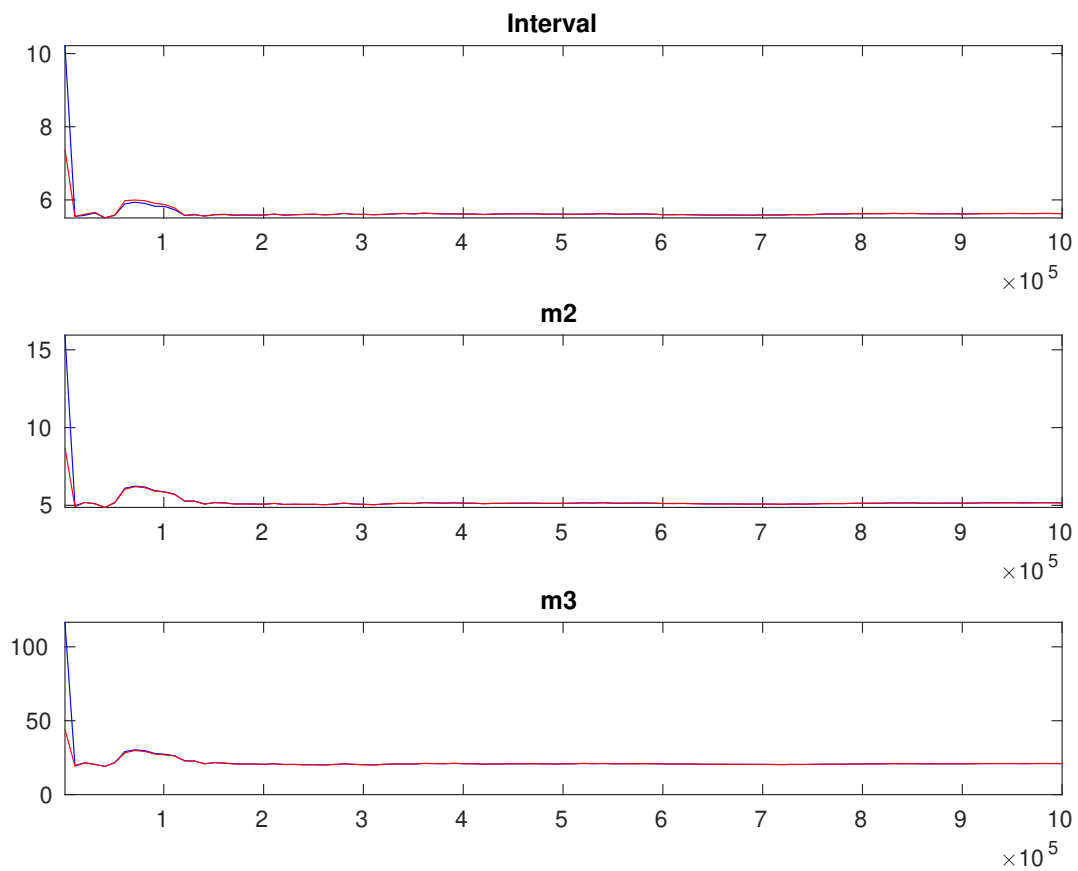


Figure 4: Multivariate convergence diagnostics for the Metropolis-Hastings. The first, second and third rows are respectively the criteria based on the eighty percent interval, the second and third moments. The different parameters are aggregated using the posterior kernel.

Table 2: Results from Metropolis-Hastings (parameters)

		Prior			Posterior		
		Dist.	Mean	Stdev.	Mean	Stdev.	HPD inf HPD sup
$\alpha$	norm		0.300	0.0500	0.304	0.0075	0.2922 0.3168
$r_A$	gamm		2.000	0.2500	2.028	0.2515	1.6151 2.4390
$\delta$	unif		0.500	0.2887	0.025	0.0038	0.0190 0.0307
$\rho_A$	beta		0.500	0.1000	0.447	0.0460	0.3708 0.5221
$\sigma_A$	invga		0.600	2.0000	0.601	0.0597	0.5042 0.6945
$\theta$	gamm		1.500	0.7500	1.170	0.2206	0.8152 1.5130
$\kappa$	gamm		2.000	1.5000	1.883	0.1667	1.6128 2.1462
$\rho_v$	beta		0.500	0.1000	0.465	0.0490	0.3842 0.5455
$\sigma_v$	invga		0.600	2.0000	0.533	0.0813	0.4025 0.6581

Table 3: Results from posterior maximization (parameters)

		Prior		Posterior		
		Dist.	Mean	Stdev	Mode	Stdev
$\alpha$	norm		0.300	0.0500	0.3067	0.0071
$r_A$	gamm		2.000	0.2500	1.9971	0.2494
$\delta$	unif		0.500	0.2887	0.0230	0.0030
$\rho_A$	beta		0.500	0.1000	0.4347	0.0455
$\sigma_A$	invg		0.600	2.0000	0.5710	0.0503
$\theta$	gamm		1.500	0.7500	1.0548	0.1843
$\kappa$	gamm		2.000	1.5000	1.7935	0.1432
$\rho_v$	beta		0.500	0.1000	0.4558	0.0484
$\sigma_v$	invg		0.600	2.0000	0.4745	0.0637

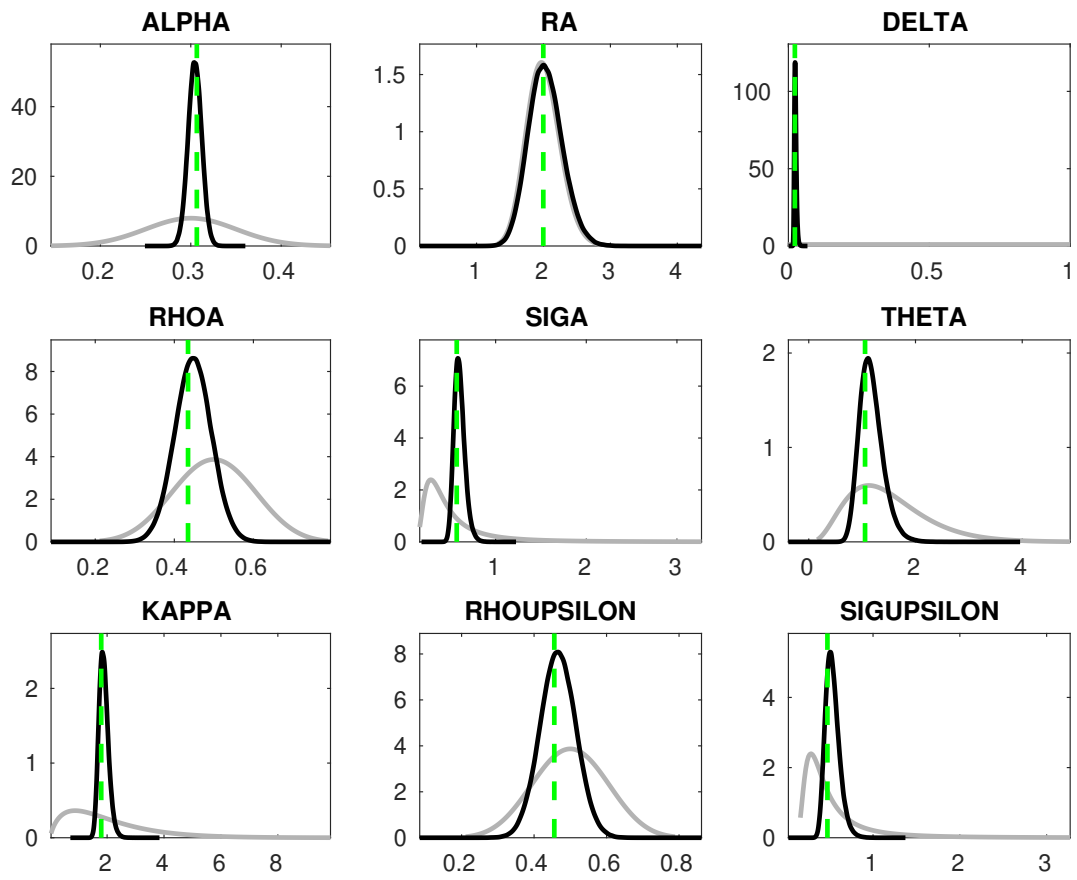


Figure 5: Priors and posteriors.



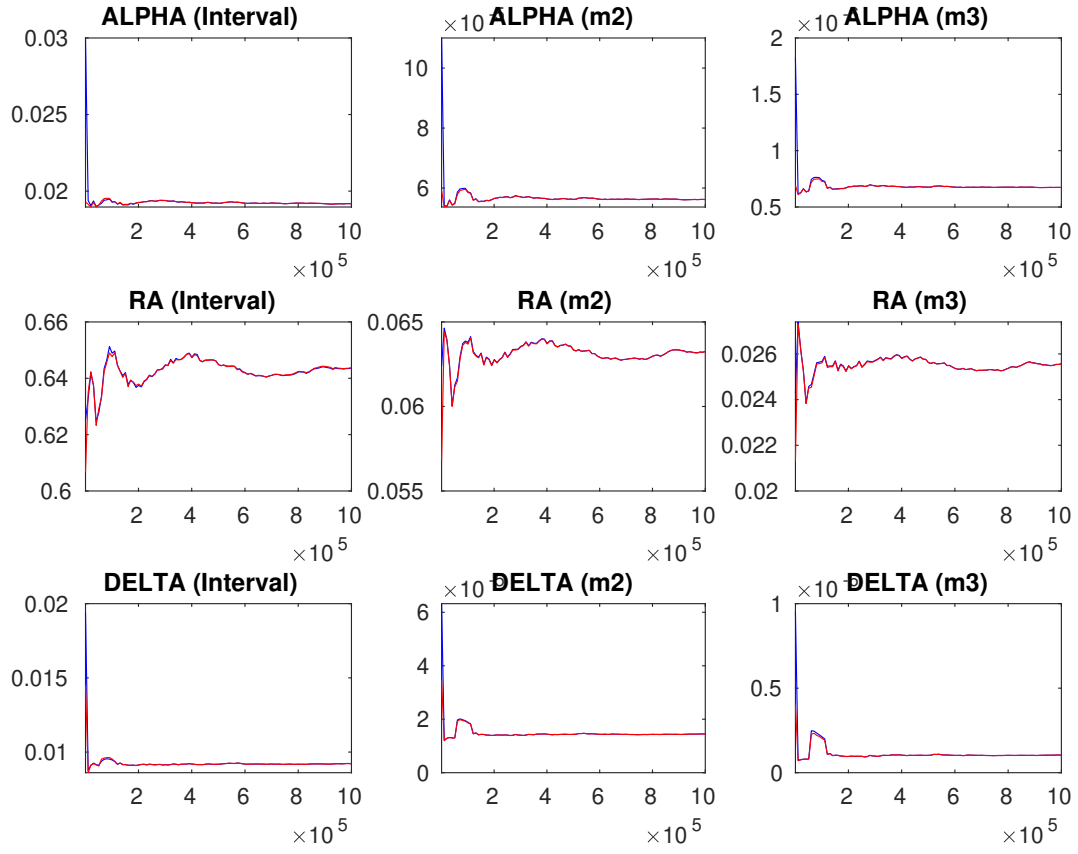


Figure 6: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

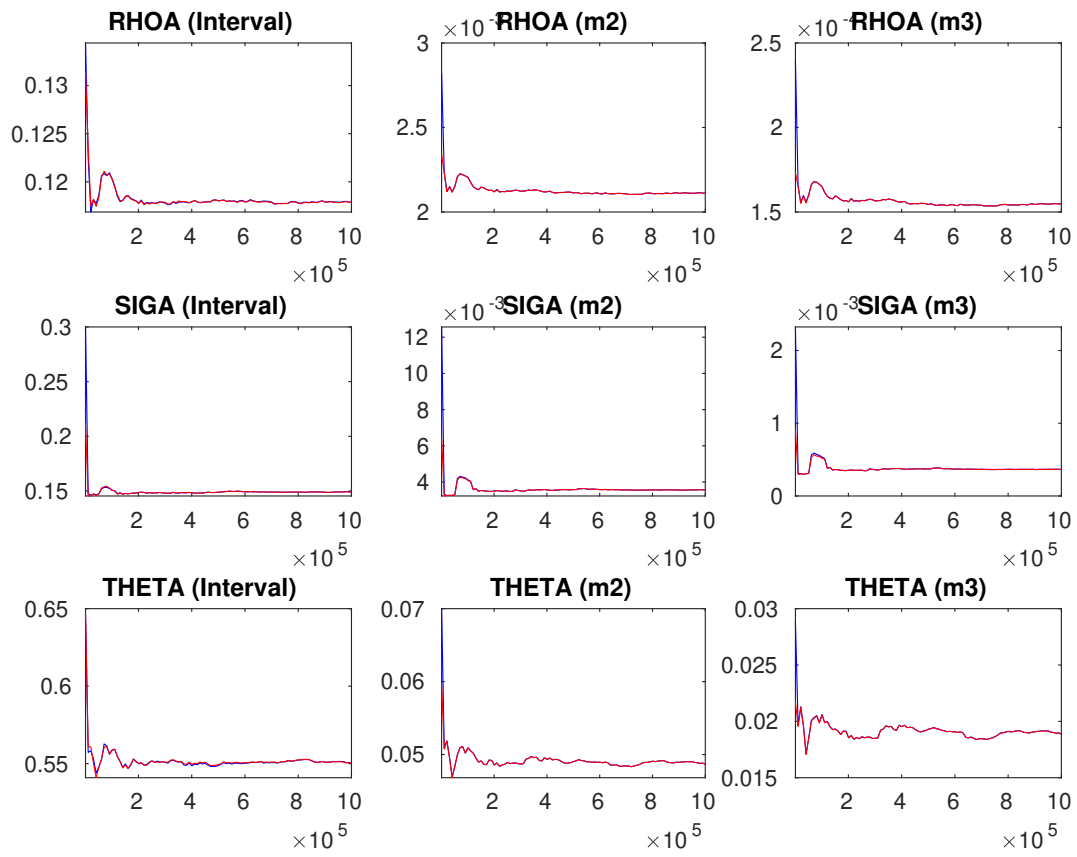


Figure 7: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

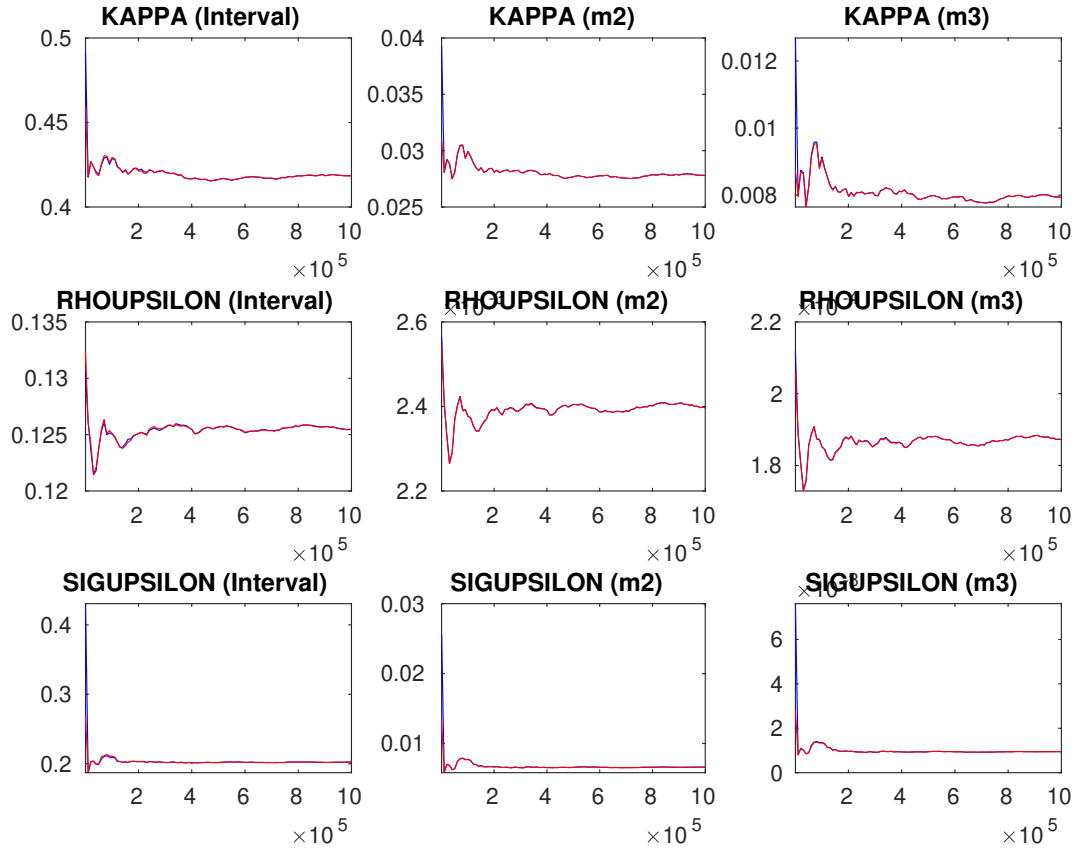


Figure 8: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.