Parameter	Prior			Posterior			
	Distribution	Mean	S.D.	Mode	Mean	90% HPD interval	
param							
σ_c	Normal	0.840	0.5	0.8360	0.8514	0.7317	0.9776
σ_l	Normal	1.820	0.5	1.8374	1.7180	0.8957	2.5315
η	Beta	0.560	0.2	0.1544	0.1836	0.0615	0.2977
ξ_p	Beta	0.720	0.1	0.3700	0.4056	0.2759	0.5355
ξ_w	Beta	0.790	0.1	0.7891	0.7840	0.6965	0.8806
ψ_f	Normal	-5.500	1.0	-4.8195	-4.8380	-6.5855	-3.0893
ψ_s	Normal	-5.500	1.0	-5.4679	-5.5056	-7.1343	-3.8966
θ_f	Normal	6.000	1.0	6.1215	6.1786	4.5482	7.7292
θ_s	Normal	6.000	1.0	6.0068	5.9342	4.2381	7.5375
α	Beta	0.333	0.1	0.2955	0.3030	0.2441	0.3650
γ_p	Beta	0.290	0.1	0.1878	0.2079	0.0830	0.3347
γ_w	Beta	0.300	0.1	0.2528	0.2757	0.1237	0.4251
ρ_R	Beta	0.830	0.1	0.5811	0.5807	0.4576	0.7055
r_π	Normal	1.640	0.5	1.3620	1.4290	0.8806	1.9603
r_y	Normal	0.140	0.5	1.6246	1.7418	1.2600	2.2245
g	Normal	0.003	0.001	0.0033	0.0031	0.0019	0.0043
ψ	Normal	0.200	0.05	0.2251	0.2361	0.1686	0.3031
$\bar{z}$	Normal	0.800	0.1	0.7995	0.8012	0.6384	0.9662
ρ_{A_T}	Beta	0.500	0.1	0.3828	0.3919	0.2586	0.5313
ρ_{A_C}	Beta	0.700	0.1	0.6114	0.6001	0.4234	0.7670
ρ_{ε_B}	Beta	0.700	0.1	0.9267	0.9090	0.8628	0.9556
ρ_{ε_L}	Beta	0.700	0.1	0.7232	0.7035	0.5453	0.8797
ρ_{p_I}	Beta	0.700	0.1	0.6394	0.6223	0.4523	0.8005
ρ_{ε_I}	Beta	0.700	0.1	0.6069	0.6289	0.4688	0.7918
ρ_{ε_y}	Beta	0.700	0.1	0.8295	0.8050	0.6906	0.9283
ρ_{ε_l}	Beta	0.700	0.1	0.7468	0.7400	0.5857	0.9113
ρ_{ε_R}	Beta	0.700	0.1	0.6464	0.6388	0.4873	0.8002
ρ_{ε_g}	Beta	0.700	0.1	0.7284	0.7135	0.5566	0.8891
SE_{A_T}	InvGam	0.008	0.002	0.0055	0.0058	0.0045	0.0070
SE_{A_C}	InvGam	0.008	∞	0.0154	0.0209	0.0071	0.0356
SE_{ε_B}	InvGam	0.010	∞	0.0044	0.0048	0.0037	0.0058
SE_{ε_L}	InvGam	0.010	∞	0.0046	0.0077	0.0024	0.0139
SE_{p_I}	InvGam	0.010	∞	0.0045	0.0055	0.0028	0.0080
ε_I	InvGam	0.010	∞	0.0062	0.0061	0.0034	0.0087
ε_y	InvGam	0.010	∞	0.0043	0.0042	0.0032	0.0053
ε_l	InvGam	0.010	∞	0.0035	0.0040	0.0024	0.0056
ε_R	InvGam	0.010	∞	0.0047	0.0049	0.0036	0.0061
ε_g	InvGam	0.010	∞	0.0042	0.0055	0.0025	0.0085

Table 1: Estimation results when variables observed in growth rate

Parameter	Prior			Posterior			
	Distribution	Mean	S.D.	Mode	Mean	90% HPD interval	
param							
σ_c	Normal	0.840	0.5	0.8416	0.8733	0.7490	0.9941
σ_l	Normal	1.820	0.5	1.8109	1.7364	0.9046	2.5482
η	Beta	0.560	0.2	0.1470	0.1703	0.0559	0.2828
ξ_p	Beta	0.720	0.1	0.3723	0.4238	0.2802	0.5639
ξ_w	Beta	0.790	0.1	0.7912	0.7937	0.7073	0.8852
ψ_f	Normal	-5.500	1.0	-4.8310	-4.9054	-6.7187	-3.1115
ψ_s	Normal	-5.500	1.0	-5.4719	-5.4792	-7.1547	-3.8521
θ_f	Normal	6.000	1.0	6.0785	6.1190	4.5867	7.6886
θ_s	Normal	6.000	1.0	6.0015	5.9678	4.3716	7.6729
α	Beta	0.333	0.1	0.2909	0.3008	0.2396	0.3635
γ_p	Beta	0.290	0.1	0.1869	0.2072	0.0762	0.3326
γ_w	Beta	0.300	0.1	0.2533	0.2738	0.1170	0.4187
ρ_R	Beta	0.830	0.1	0.5884	0.5848	0.4609	0.7074
r_π	Normal	1.640	0.5	1.3831	1.4258	0.8678	1.9658
r_y	Normal	0.140	0.5	1.6456	1.7311	1.2517	2.2057
g	Normal	0.003	0.001	0.0032	0.0031	0.0019	0.0042
ψ	Normal	0.200	0.05	0.2263	0.2375	0.1667	0.3055
$\bar{z}$	Normal	0.800	0.1	0.8002	0.7999	0.6377	0.9666
ρ_{A_T}	Beta	0.500	0.1	0.3821	0.3906	0.2566	0.5257
ρ_{A_C}	Beta	0.700	0.1	0.6152	0.5819	0.4041	0.7563
ρ_{ε_B}	Beta	0.700	0.1	0.9315	0.9155	0.8741	0.9572
ρ_{ε_L}	Beta	0.700	0.1	0.7232	0.7153	0.5518	0.8824
ρ_{p_I}	Beta	0.700	0.1	0.6452	0.6277	0.4603	0.7998
ρ_{ε_I}	Beta	0.700	0.1	0.6084	0.6331	0.4633	0.7970
ρ_{ε_y}	Beta	0.700	0.1	0.8497	0.8233	0.7142	0.9329
ρ_{ε_l}	Beta	0.700	0.1	0.7491	0.7469	0.5925	0.9135
ρ_{ε_R}	Beta	0.700	0.1	0.6483	0.6492	0.4989	0.7992
ρ_{ε_g}	Beta	0.700	0.1	0.7287	0.7188	0.5574	0.8878
SE_{A_T}	InvGam	0.008	0.002	0.0054	0.0057	0.0045	0.0070
SE_{A_C}	InvGam	0.008	∞	0.0153	0.0242	0.0068	0.0436
SE_{ε_B}	InvGam	0.010	∞	0.0043	0.0047	0.0037	0.0057
SE_{ε_L}	InvGam	0.010	∞	0.0046	0.0129	0.0021	0.0274
SE_{p_I}	InvGam	0.010	∞	0.0044	0.0056	0.0029	0.0082
ε_I	InvGam	0.010	∞	0.0063	0.0062	0.0034	0.0088
ε_y	InvGam	0.010	∞	0.0044	0.0043	0.0032	0.0053
ε_l	InvGam	0.010	∞	0.0034	0.0041	0.0024	0.0057
ε_R	InvGam	0.010	∞	0.0047	0.0048	0.0036	0.0061
ε_g	InvGam	0.010	∞	0.0042	0.0056	0.0025	0.0088

Table 2: Estimation results when variables observed in level

Parameter	Prior			Posterior			
	Distribution	Mean	S.D.	Mode	Mean	90% HPD interval	
param							
σ_c	Normal	0.840	0.5	0.8363	0.8666	0.7484	0.9841
σ_l	Normal	1.820	0.5	1.8375	1.6822	0.8894	2.5228
η	Beta	0.560	0.2	0.1543	0.1816	0.0633	0.3008
ξ_p	Beta	0.720	0.1	0.3700	0.4159	0.2712	0.5629
ξ_w	Beta	0.790	0.1	0.7890	0.7883	0.6947	0.8752
ψ_f	Normal	-5.500	1.0	-4.8115	-4.8997	-6.6244	-3.1827
ψ_s	Normal	-5.500	1.0	-5.4605	-5.5124	-7.1231	-3.8352
θ_f	Normal	6.000	1.0	6.1878	6.1482	4.6174	7.7365
θ_s	Normal	6.000	1.0	6.0094	5.9689	4.3131	7.6758
α	Beta	0.333	0.1	0.2952	0.3057	0.2453	0.3672
γ_p	Beta	0.290	0.1	0.1882	0.2080	0.0793	0.3357
γ_w	Beta	0.300	0.1	0.2531	0.2727	0.1200	0.4172
ρ_R	Beta	0.830	0.1	0.5819	0.5836	0.4506	0.7044
r_π	Normal	1.640	0.5	1.3667	1.4289	0.8599	1.9573
r_y	Normal	0.140	0.5	1.6321	1.7370	1.2569	2.2119
g	Normal	0.003	0.001	0.0033	0.0031	0.0019	0.0042
ψ	Normal	0.200	0.05	0.2249	0.2357	0.1667	0.3021
$\bar{z}$	Normal	0.800	0.1	0.8000	0.8011	0.6386	0.9618
ρ_{A_T}	Beta	0.500	0.1	0.3824	0.3925	0.2594	0.5273
ρ_{A_C}	Beta	0.700	0.1	0.6115	0.5884	0.4122	0.7677
ρ_{ε_B}	Beta	0.700	0.1	0.9267	0.9110	0.8660	0.9549
ρ_{ε_L}	Beta	0.700	0.1	0.7232	0.7051	0.5433	0.8786
ρ_{p_I}	Beta	0.700	0.1	0.6396	0.6228	0.4554	0.7973
ρ_{ε_I}	Beta	0.700	0.1	0.6075	0.6292	0.4673	0.7934
ρ_{ε_y}	Beta	0.700	0.1	0.8293	0.7993	0.6844	0.9286
ρ_{ε_l}	Beta	0.700	0.1	0.7478	0.7420	0.5832	0.9042
ρ_{ε_R}	Beta	0.700	0.1	0.6472	0.6400	0.4849	0.7960
ρ_{ε_g}	Beta	0.700	0.1	0.7285	0.7175	0.5523	0.8736
SE_{A_T}	InvGam	0.008	0.002	0.0055	0.0057	0.0045	0.0070
SE_{A_C}	InvGam	0.008	∞	0.0154	0.0234	0.0066	0.0429
SE_{ε_B}	InvGam	0.010	∞	0.0044	0.0048	0.0038	0.0057
SE_{ε_L}	InvGam	0.010	∞	0.0046	0.0138	0.0023	0.0387
SE_{p_I}	InvGam	0.010	∞	0.0045	0.0056	0.0029	0.0081
ε_I	InvGam	0.010	∞	0.0062	0.0061	0.0034	0.0088
ε_y	InvGam	0.010	∞	0.0043	0.0042	0.0031	0.0053
ε_l	InvGam	0.010	∞	0.0035	0.0041	0.0024	0.0058
ε_R	InvGam	0.010	∞	0.0047	0.0048	0.0036	0.0060
ε_g	InvGam	0.010	∞	0.0042	0.0054	0.0025	0.0083

Table 3: Estimation results for approximation around the log of interest rate

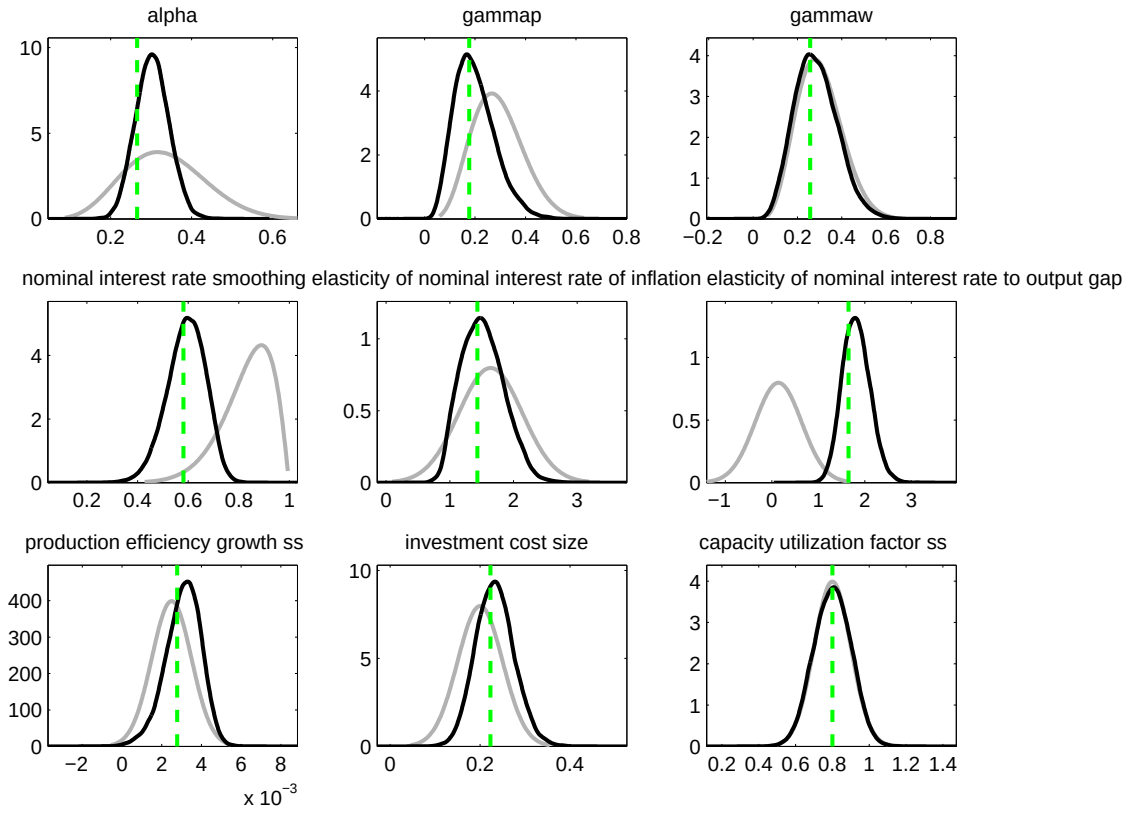

Figure 2: Estimation in growth rate: Prior and posterior distributions (II)

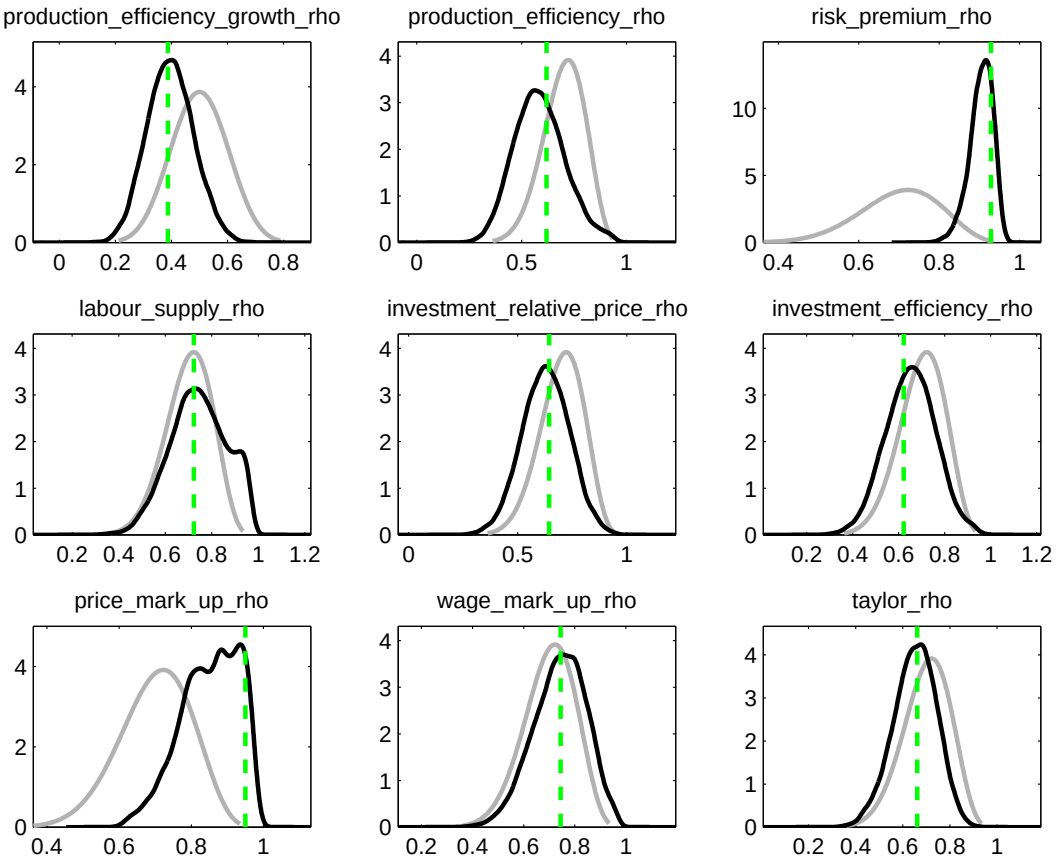

Figure 3: Estimation in growth rate: Prior and posterior distributions (III)

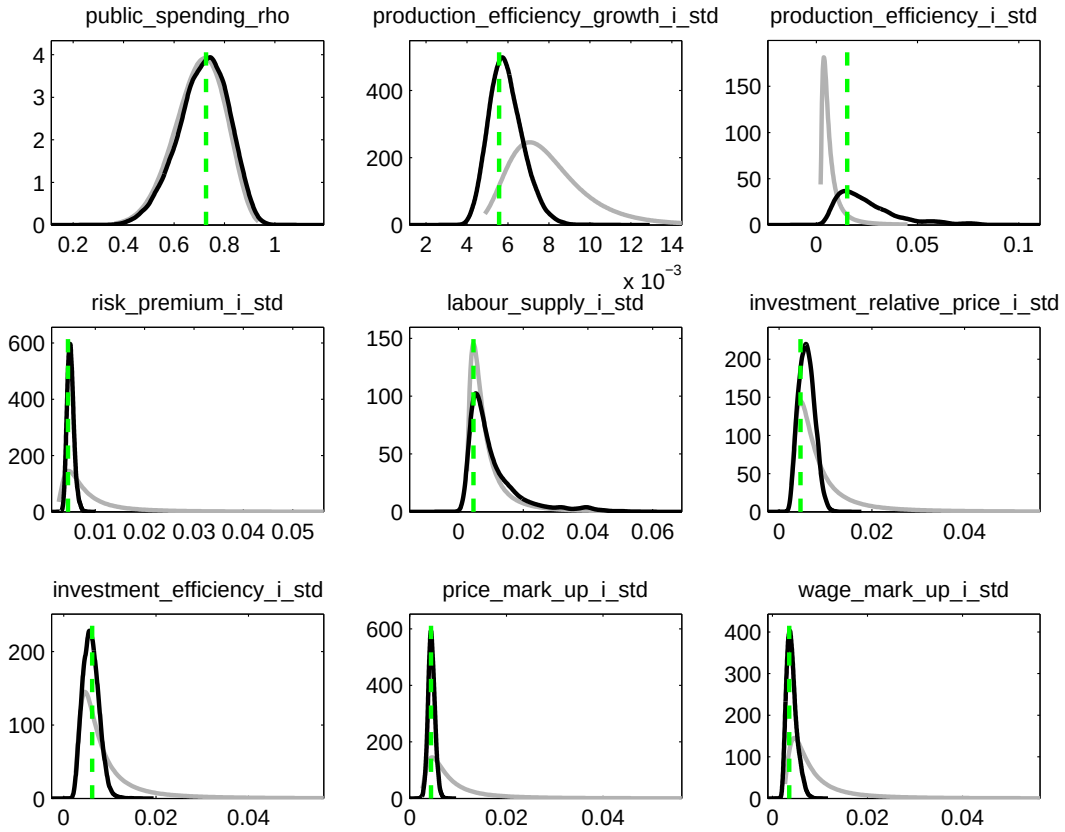

Figure 4: Estimation in growth rate: Prior and posterior distributions (IV)

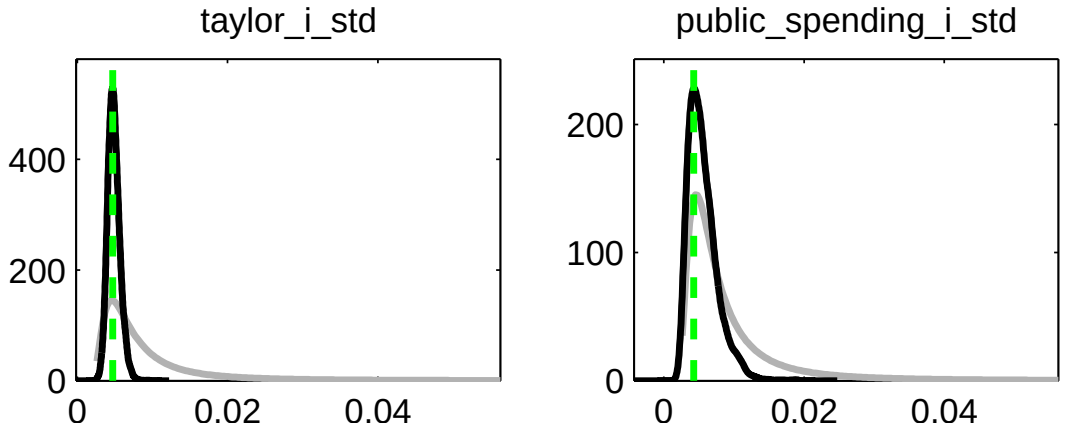

Figure 5: Estimation in growth rate: Prior and posterior distributions (V)

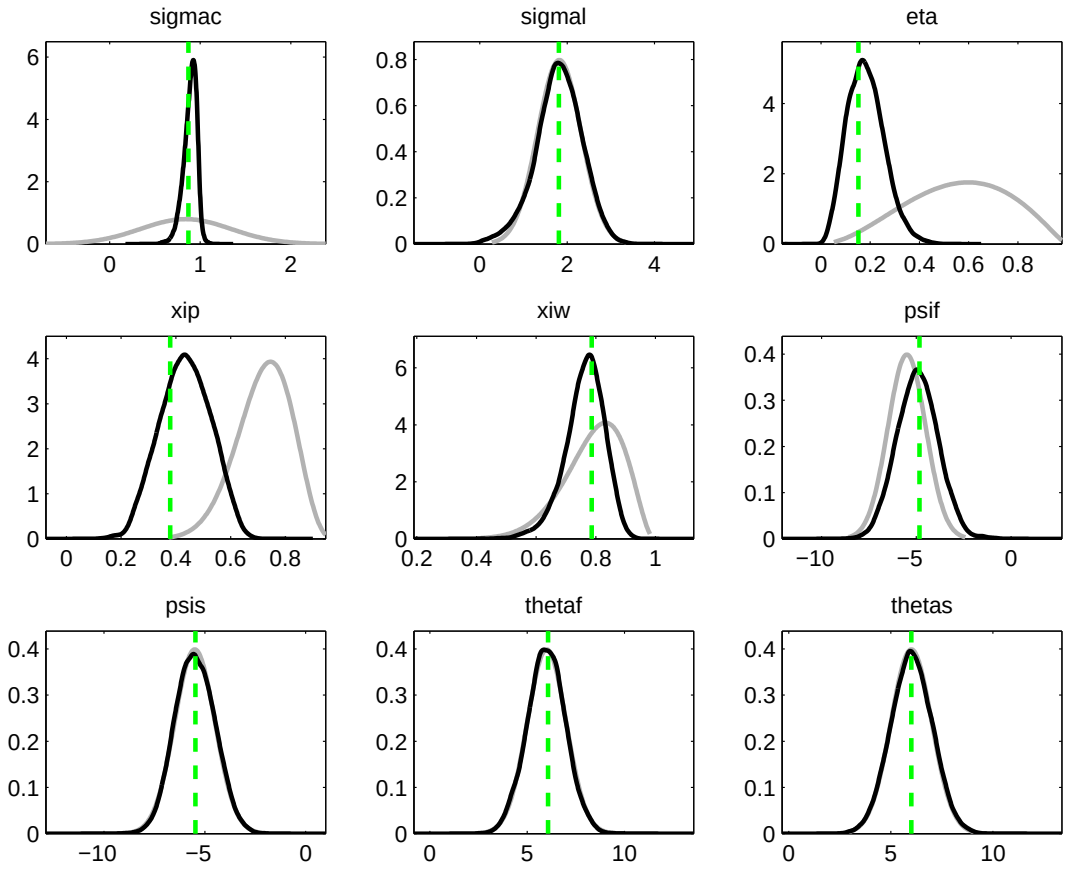

Figure 6: Estimation in level: Prior and posterior distributions (I)

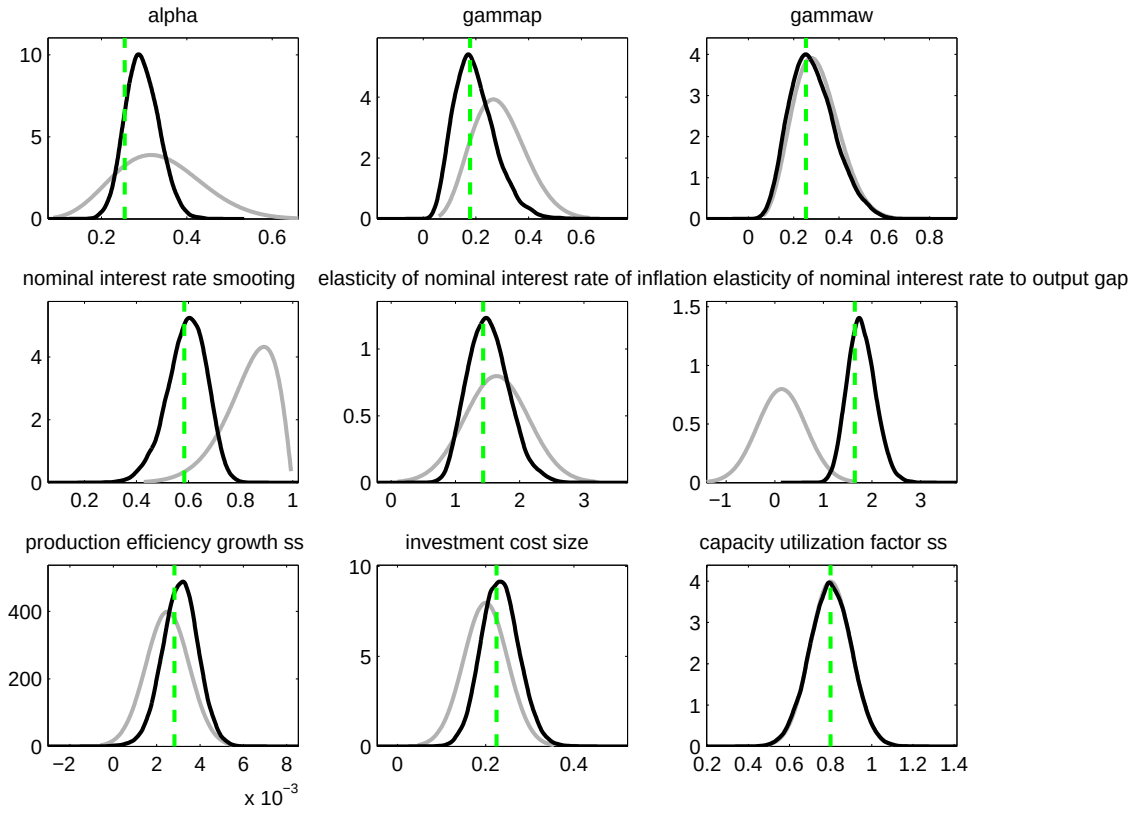

Figure 7: Estimation in level: Prior and posterior distributions (II)

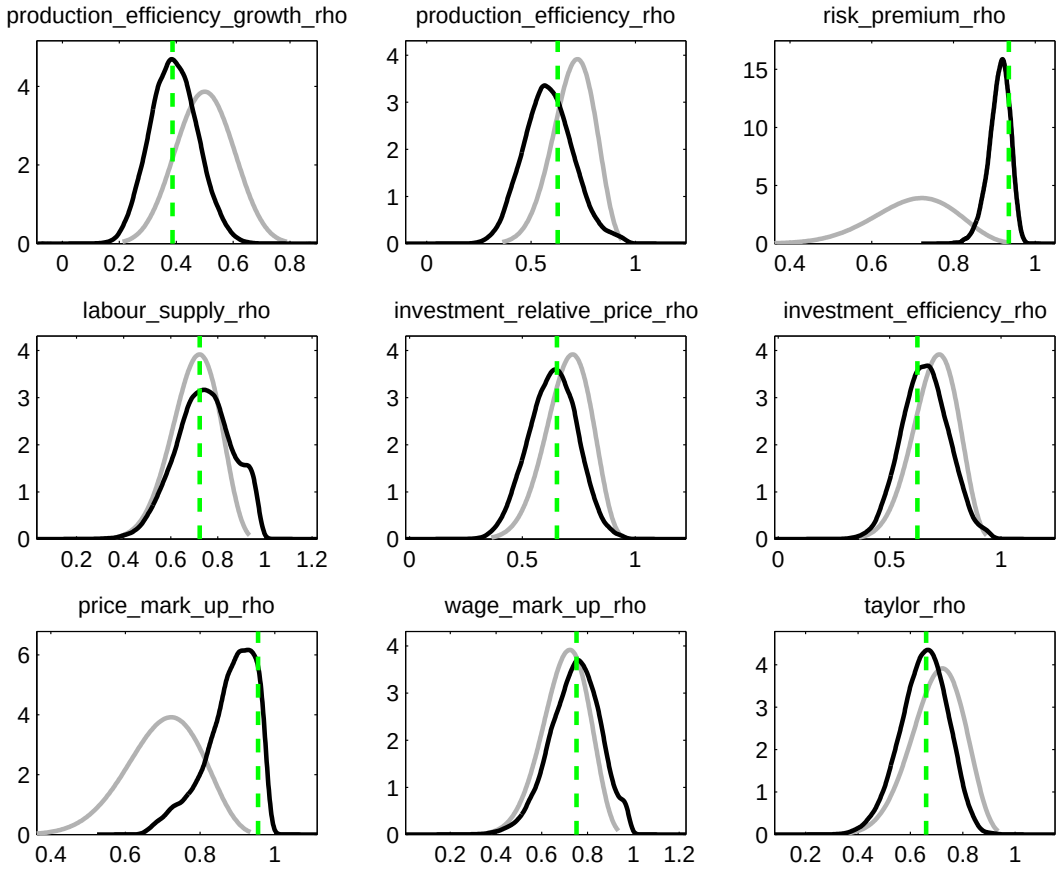

Figure 8: Estimation in level: Prior and posterior distributions (III)

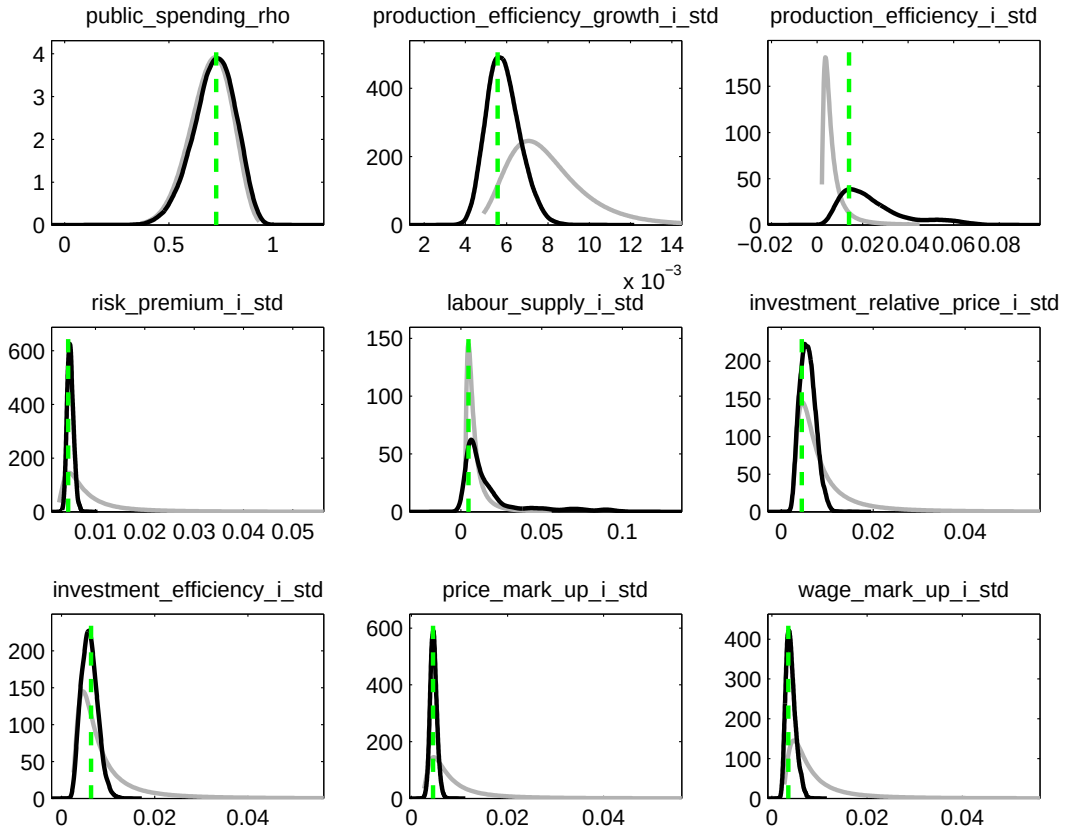

Figure 9: Estimation in level: Prior and posterior distributions (IV)

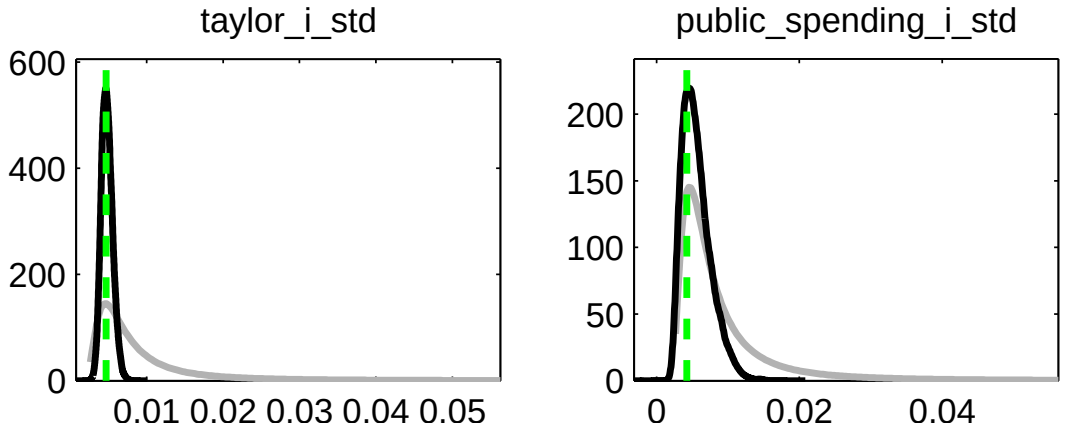

Figure 10: Estimation in level: Prior and posterior distributions (V)