

Results are obtained with  $h_0^P$  estimated

CALIBRATED PARAMETERS ON WEDNESDAYS, $h_0^Q = \frac{\omega_0 + \alpha_0}{1 - \beta_0 - \alpha_0 \gamma_0^2}$ , WITH $\omega_0, \alpha_0, \beta_0, \gamma_0^{*2}$ FROM MLE UNDER P AND UPDATED UNDER Q									
$\theta$	2010	2011	2012	2013	2014	2015	2016	2017	2018
$\omega$	$8.5029e-08$	$9.2714e-06$	$1.9246e-07$	$2.2129e-06$	$1.9389e-06$	$4.1610e-07$	$5.9987e-07$	$3.5299e-07$	$5.5812e-07$
std	$(4.4877e-07)$	$(2.7968e-05)$	$(1.0856e-06)$	$(6.4184e-06)$	$(6.6239e-06)$	$(2.4952e-06)$	$(2.9189e-06)$	$(2.0142e-06)$	$(2.7146e-06)$
median	$4.8556e-10$	$1.1932e-09$	$9.6775e-10$	$1.6296e-09$	$1.4218e-09$	$1.6699e-09$	$8.8906e-10$	$3.4979e-10$	$6.2288e-10$
$\alpha$	$2.5394e-05$	$2.1003e-05$	$1.8778e-05$	$1.3908e-05$	$1.3646e-05$	$1.3883e-05$	$1.3858e-05$	$8.2692e-06$	$1.5954e-05$
std	$(2.2029e-05)$	$(2.0947e-05)$	$(1.6410e-05)$	$(1.1489e-05)$	$(8.5375e-06)$	$(5.9109e-06)$	$(8.0356e-06)$	$(4.8704e-06)$	$(9.4418e-06)$
median	$1.7658e-05$	$1.9181e-05$	$1.2068e-05$	$1.2723e-05$	$1.3239e-05$	$1.3217e-05$	$1.3228e-05$	$8.3302e-06$	$1.4242e-05$
$\beta$	0.5032	0.3363	0.4882	0.3724	0.1836	0.1643	0.2466	0.1768	0.2450
std	(0.3188)	(0.3212)	(0.3411)	(0.3801)	(0.2898)	(0.2274)	(0.3159)	(0.3270)	(0.3193)
median	0.5759	0.3823	0.5857	0.3025	0.0003	0.0007	0.0018	0.0001	0.0023
$\gamma^*$	152.7405	213.9027	178.3425	268.5595	254.9716	221.9130	209.9787	301.8938	202.9867
std	(136.5742)	(168.6915)	(140.6359)	(295.7190)	(239.7515)	(41.5011)	(73.9368)	(189.9283)	(132.2615)
median	112.0207	155.9251	147.8898	169.4020	202.0041	228.8470	208.6253	261.8796	167.7543
$h_0^Q = h_t^P$	$1.2504e-04$	$1.6094e-04$	$8.8020e-05$	$6.3516e-05$	$6.4968e-05$	$1.0677e-04$	$9.4593e-05$	$4.2065e-05$	$1.2042e-04$
std	$(8.4350e-05)$	$(1.0127e-04)$	$(3.9993e-05)$	$(3.0169e-05)$	$(3.7802e-05)$	$(5.3934e-05)$	$(6.6163e-05)$	$(2.5624e-05)$	$(9.2499e-05)$
median	$1.0398e-04$	$1.3887e-04$	$7.9893e-05$	$5.2671e-05$	$5.4472e-05$	$8.9209e-05$	$6.9330e-05$	$3.6036e-05$	$1.0226e-04$
persistence	0.8400	0.8357	0.8048	0.7215	0.6850	0.7899	0.7567	0.6880	0.6960
std	(0.1471)	(0.1267)	(0.2039)	(0.2405)	(0.2211)	(0.0938)	(0.1574)	(0.2170)	(0.1905)
median	0.8873	0.8444	0.8985	0.7596	0.7232	0.7879	0.7342	0.7017	0.7484
MSE	1.1660	4.6442	2.4437	4.3159	7.5939	6.1701	10.7231	20.7106	13.3130
IVRMSE	0.0633	0.0921	0.0863	0.0894	0.0927	0.0927	0.1089	0.1237	0.0887
MAPE	0.0734	0.0906	0.1179	0.1315	0.1531	0.1484	0.1669	0.2416	0.1395
OptLL	216.3430	211.5388	252.2146	334.4711	356.0208	438.7128	515.4908	559.3221	688.0683