

Results are obtained with  $h_0^P$  estimated

CALIBRATED PARAMETERS ON WEDNESDAYS USING OPTIONS LIKELIHOOD, $h_0^Q = h_t^P$									
$\theta$	2010	2011	2012	2013	2014	2015	2016	2017	2018
$\omega$	$2.9373e-07$	$8.3428e-06$	$2.0557e-09$	$1.4603e-06$	$1.9938e-06$	$4.7113e-07$	$6.9592e-07$	$3.5608e-07$	$2.8373e-07$
<b>std</b>	$(1.5899e-06)$	$(2.7177e-05)$	$(4.0487e-09)$	$(4.9823e-06)$	$(6.7867e-06)$	$(2.5578e-06)$	$(3.0411e-06)$	$(2.0030e-06)$	$(1.8910e-06)$
<b>ci</b>	$(\pm 4.3822e-07)$	$(\pm 7.4910e-06)$	$(\pm 1.1272e-09)$	$(\pm 1.4013e-06)$	$(\pm 1.8706e-06)$	$(\pm 7.0501e-07)$	$(\pm 8.3824e-07)$	$(\pm 5.5763e-07)$	$(\pm 5.2647e-07)$
<b>median</b>	$4.4080e-10$	$2.1679e-09$	$1.1257e-09$	$1.5347e-09$	$1.3127e-09$	$1.3856e-09$	$7.3148e-10$	$2.7972e-10$	$4.9914e-10$
$\alpha$	$2.6506e-05$	$2.2808e-05$	$2.0436e-05$	$1.5988e-05$	$1.4776e-05$	$1.3678e-05$	$1.3866e-05$	$9.2340e-06$	$1.6279e-05$
<b>std</b>	$(2.1430e-05)$	$(2.2449e-05)$	$(1.7810e-05)$	$(1.2247e-05)$	$(9.2665e-06)$	$(6.8892e-06)$	$(8.7406e-06)$	$(4.9557e-06)$	$(1.1036e-05)$
<b>ci</b>	$(\pm 5.9068e-06)$	$(\pm 6.1876e-06)$	$(\pm 4.9583e-06)$	$(\pm 3.4444e-06)$	$(\pm 2.5542e-06)$	$(\pm 1.8989e-06)$	$(\pm 2.4092e-06)$	$(\pm 1.3797e-06)$	$(\pm 3.0725e-06)$
<b>median</b>	$2.1958e-05$	$2.0325e-05$	$1.4954e-05$	$1.5884e-05$	$1.4270e-05$	$1.2722e-05$	$1.2912e-05$	$9.1517e-06$	$1.5918e-05$
$\beta$	0.4708	0.3164	0.4553	0.3331	0.1703	0.1908	0.2374	0.1474	0.2896
<b>std</b>	(0.3272)	(0.3221)	(0.3657)	(0.3768)	(0.2815)	(0.2349)	(0.3108)	(0.2931)	(0.3377)
<b>ci</b>	$(\pm 0.0902)$	$(\pm 0.0888)$	$(\pm 0.1018)$	$(\pm 0.1060)$	$(\pm 0.0776)$	$(\pm 0.0647)$	$(\pm 0.0857)$	$(\pm 0.0816)$	$(\pm 0.0940)$
<b>median</b>	0.5549	0.3131	0.6192	0.0023	0.0002	0.0090	0.0007	0.0001	0.0010
$\gamma^*$	155.5027	256.7574	176.9894	247.3834	225.9295	224.0573	257.7868	275.5854	191.7579
<b>std</b>	(149.9840)	(289.5641)	(121.4388)	(267.6261)	(201.9510)	(48.8853)	(247.1550)	(187.7364)	(108.0334)
<b>ci</b>	$(\pm 41.3407)$	$(\pm 79.8138)$	$(\pm 33.8088)$	$(\pm 75.2711)$	$(\pm 55.6646)$	$(\pm 13.4744)$	$(\pm 68.1243)$	$(\pm 52.2661)$	$(\pm 30.0767)$
<b>median</b>	115.7838	148.3374	137.7486	166.2098	189.4759	226.1581	205.5256	237.1314	159.7501
$h_0^Q = h_t^P$	$1.2843e-04$	$1.5885e-04$	$8.8858e-05$	$6.0313e-05$	$6.5265e-05$	$1.1085e-04$	$9.9075e-05$	$4.0828e-05$	$1.1258e-04$
<b>std</b>	$(8.7675e-05)$	$(1.0228e-04)$	$(4.2482e-05)$	$(3.1009e-05)$	$(3.7863e-05)$	$(6.5832e-05)$	$(7.2668e-05)$	$(2.3485e-05)$	$(8.8642e-05)$
<b>ci</b>	$(\pm 2.4166e-05)$	$(\pm 2.8191e-05)$	$(\pm 1.1827e-05)$	$(\pm 8.7213e-06)$	$(\pm 1.0436e-05)$	$(\pm 1.8145e-05)$	$(\pm 2.0030e-05)$	$(\pm 6.5382e-06)$	$(\pm 2.4678e-05)$
<b>median</b>	$1.1288e-04$	$1.3446e-04$	$8.4289e-05$	$4.8973e-05$	$5.5260e-05$	$9.2823e-05$	$7.8758e-05$	$3.3053e-05$	$9.1614e-05$
<b>MSE</b>	1.3115	4.7861	2.6162	4.2244	8.4450	6.3652	10.9788	23.0601	13.4936
<b>IVRMSE</b>	0.0639	0.0955	0.0867	0.0890	0.0933	0.0939	0.1111	0.1248	0.0897
<b>MAPE</b>	0.0741	0.0936	0.1184	0.1292	0.1568	0.1523	0.1709	0.2464	0.1414
<b>OptLL</b>	215.4291	208.3681	251.0076	333.0039	351.3072	436.8099	513.2066	555.4006	684.7143