

Solving Value Functions

Flag 1: Number of evaluations: 1. Time: 0.4 sec.
Flag 2: Number of evaluations: 1. Time: 0.41 sec.
Flag 3: Number of evaluations: 1. Time: 0.4 sec.
Flag 4: Number of evaluations: 1. Time: 0.53 sec.
Flag 5: Number of evaluations: 1. Time: 0.38 sec.
Flag 6: Number of evaluations: 1. Time: 0.51 sec.

Total time in minutes: 0.0445
pi1 = 0.000588, pi2 = 1.0418

Median assets on grid: 74596.4678
VoL old, med. assets, mill = 0.7254, VoL young, med. assets, mill = 0.90173
cro, med. assets = 319.8722, cry, med. assets = 368.7534
savings_rate_ro, med. assets = 0.15748, savings_rate_ry, med. assets = 0.028728
avg_savings_rate, med. assets = 0.067353, cry_cro_ratio, med. assets = 1.1528
min cro = 23.6736, min cry = 46.504

par =

struct with fields:

i_ini: 9.0000e-04
betta: 0.9994
deltao: 0.0015
deltay: 3.7707e-04
nu: 6.8681e-04
days: 14
pidy: 5.0000e-04
piry: 0.4995
pido: 0.0175
piro: 0.4825
pi1: 5.8800e-04
pi2: 1.0418
Rnottarget: 2.5000
muvec_scale: 0.1284
gyoung: 0.0742
gold: 0.1320
pidy_ini: 0.0599
pido_ini: 0.3343
w: 365.3846
sy_ss: 0.7000
alf: 2
rho: 0.6667
kap: -0.3333
gam: 3.0000
r: 1.9137e-04
theta: 4
xi: 120
z: 2
median_assets: 75000
grid_b_median_assets_idx: 137
cro_ss: 319.8722

```
cry_ss: 368.7534
pil_shr_ini: 0.1666
```

```
Starting Estimation
-----
```

```
Simulating with estimated parameters
-----
```

```
Laplace =
```

```
-495.2623
```

```
Estimated Parameter(s)
-----
```

```
{'mu_scale   ' }      {[0.1284]}
```

```
{'pid0_young'}      {[0.0584]}
```

```
{'pid0_old   ' }      {[0.3146]}
```

```
{'g_young    ' }      {[0.0725]}
```

```
{'g_old      ' }      {[0.1325]}
```

```
para_standard_deviations =
```

```
0.0022
```

```
0.0021
```

```
0.0105
```

```
0.0018
```

```
0.0042
```

```
Correlations of Parameters (at Posterior Mode) > abs(0.15)
```

```
{'pid0_young' }      {'mu_scale   ' }      {[0.4693]}
```

```
{'pid0_old   ' }      {'mu_scale   ' }      {[0.2745]}
```

```
{'g_young    ' }      {'mu_scale   ' }      {[0.6050]}
```

```
{'g_old      ' }      {'mu_scale   ' }      {[0.5832]}
```

```
{'pid0_old   ' }      {'pid0_young' }      {[0.6349]}
```

```
{'g_young    ' }      {'pid0_young' }      {[0.8101]}
```

```
{'g_old      ' }      {'pid0_young' }      {[0.7337]}
```

```
{'g_young    ' }      {'pid0_old   ' }      {[0.5129]}
```

```
{'g_old      ' }      {'pid0_old   ' }      {[0.7433]}
```

```
{'g_old      ' }      {'g_young    ' }      {[0.6886]}
```

```
Time in hrs: 0.0043888
```

```
Starting MCMC. This may take a while....
```

```
n_chains: 11
```

```
n_draws per chain: 10000
```

```
burn_in_draws per chain: 1000
```

```
acceptance_rate =
```

```
Columns 1 through 7
```

```
    0.1631    0.1628    0.1665    0.1629    0.1680    0.1616    0.1668
```

```
Columns 8 through 11
```

```
    0.1556    0.1616    0.1692    0.1626
```

```
ans =
```

```
1x1 cell array
```

```
    {'mu_scale' }
```

```
post_mean =
```

```
    0.1284
```

```
post_median =
```

```
    0.1284
```

```
post_var =
```

```
    4.9451e-06
```

```
hpd_interval =
```

```
    0.1239    0.1325
```

```
ans =
```

```
1x1 cell array
```

```
    {'pid0_young' }
```

```
post_mean =
```

```
    0.0586
```

```
post_median =
```

```
    0.0586
```

```
post_var =
```

```
6.1241e-06
```

```
hpd_interval =
```

```
0.0538    0.0635
```

```
ans =
```

```
1x1 cell array
```

```
{'pid0_old  '}
```

```
post_mean =
```

```
0.3152
```

```
post_median =
```

```
0.3151
```

```
post_var =
```

```
1.0470e-04
```

```
hpd_interval =
```

```
0.2957    0.3358
```

```
ans =
```

```
1x1 cell array
```

```
{'g_young   '}
```

```
post_mean =
```

```
0.0727
```

```
post_median =
```

```
0.0727
```

```
post_var =
```

```
2.2863e-06
```

```
hpd_interval =
```

```
0.0697    0.0757
```

```
ans =
```

```
1x1 cell array
```

```
{'g_old    '}
```

```
post_mean =
```

```
0.1329
```

```
post_median =
```

```
0.1328
```

```
post_var =
```

```
1.1902e-05
```

```
hpd_interval =
```

```
0.1260    0.1395
```

```
Max. Log Posterior (Optimization)  
-530.201610
```

```
Max. Log Posterior (MCMC)  
-530.248311
```

mu_scale	0.1284	0.1286
pid0_young	0.0584	0.0586
pid0_old	0.3146	0.3117
g_young	0.0725	0.0726
g_old	0.1325	0.1325

```
post_mode_mcmc =
```

```
0.1286  
0.0586  
0.3117  
0.0726  
0.1325
```