```
*************************************************************************
*************************************************************************
              MONTE CARLO EXPERIMENT #           1.000
*************************************************************************
*************************************************************************

*************************************************************************
   COMPUTING A MPE OF THE DYNAMIC GAME
*************************************************************************

-------------------------------------------------------------------------
       Values of the structural parameters

                     Fixed cost firm 1   =          -1.900
                     Fixed cost firm 2   =          -1.800
                     Fixed cost firm 3   =          -1.700
                     Fixed cost firm 4   =          -1.600
                     Fixed cost firm 5   =          -1.500
       Parameter of market size (theta_rs) =           1.000
Parameter of competition effect (theta_rn) =          0.0000
                   Entry cost (theta_ec) =           1.000
                     Discount factor     =          0.9500
                  Std. Dev. epsilons     =           1.000

-------------------------------------------------------------------------

       BEST RESPONSE MAPPING ITERATIONS

         Best response mapping iteration  =           1.000
         Convergence criterion =           1000.

         Best response mapping iteration  =           2.000
         Convergence criterion =          0.9764

-------------------------------------------------------------------------
         CONVERGENCE ACHIEVED AFTER           3.000 BEST RESPONSE ITERATIONS
-------------------------------------------------------------------------
         EQUILIBRIUM PROBABILITIES

          0.1667           0.1846           0.2042           0.2254
          0.2482
          0.1667           0.1846           0.2042           0.2254
          0.4730
          0.1667           0.1846           0.2042           0.4416
          0.2482
          0.1667           0.1846           0.2042           0.4416
          0.4730
          0.1667           0.1846           0.4108           0.2254
          0.2482
          0.1667           0.1846           0.4108           0.2254
          0.4730
          0.1667           0.1846           0.4108           0.4416
          0.2482
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0.9822 0.9839 0.9855 0.9869
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DESCRIPTIVE STATISTICS FROM THE EQUILIBRIUM
BASED ON 5.000e+004 OBSERVATIONS

TABLE 2 OF THE PAPER AGUIRREGABIRIA AND MIRA (2007)

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(1) Average number of active firms = 3.680

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-------------------------------------------------------------------------------
       (2)    Std. Dev. number of firms        =           1.547
-------------------------------------------------------------------------------
       (3)    Regression N[t] on N[t-1]        =          0.7418
-------------------------------------------------------------------------------
       (4)    Average number of entrants       =          0.5249
-------------------------------------------------------------------------------
       (5)    Average number of exits          =          0.5226
-------------------------------------------------------------------------------
       (6)    Excess turnover (in # of firms)  =          0.3349
-------------------------------------------------------------------------------
       (7)    Correlation entries and exits    =        -0.01180
-------------------------------------------------------------------------------
       (8)    Frequencies of being active      =
          0.6996
          0.7199
          0.7371
          0.7513
          0.7719
-------------------------------------------------------------------------------


*******************************************************************************
       MONTE CARLO EXPERIMENT #           1.000
*******************************************************************************

     Replication =           1.000
         (a)     Simulations of x's and a's
         (b.1)   Estimation of initial CCPs (Non-Parametric)
         (b.2)   NPL algorithm using frequency estimates as initial CCPs
         (c.1)   Estimation of initial CCPs (Semi-Parametric: Logit)
         (c.2)   NPL algorithm using Logit estimates as initial CCPs
         (d.1)   Estimation of initial CCPs (Completely Random)
         (d.2)   NPL algorithm using U(0,1) random draws as initial CCPs
         (e)     NPL algorithm using true values as initial CCPs
     Replication =         2.00000
         (a)     Simulations of x's and a's
         (b.1)   Estimation of initial CCPs (Non-Parametric)
         (b.2)   NPL algorithm using frequency estimates as initial CCPs
         (c.1)   Estimation of initial CCPs (Semi-Parametric: Logit)
         (c.2)   NPL algorithm using Logit estimates as initial CCPs
         (d.1)   Estimation of initial CCPs (Completely Random)
         (d.2)   NPL algorithm using U(0,1) random draws as initial CCPs
         (e)     NPL algorithm using true values as initial CCPs

...

     Replication =         999.000
         (a)     Simulations of x's and a's
         (b.1)   Estimation of initial CCPs (Non-Parametric)
         (b.2)   NPL algorithm using frequency estimates as initial CCPs
         (c.1)   Estimation of initial CCPs (Semi-Parametric: Logit)
         (c.2)   NPL algorithm using Logit estimates as initial CCPs
```

```
        (d.1)   Estimation of initial CCPs (Completely Random)
        (d.2)   NPL algorithm using U(0,1) random draws as initial CCPs
        (e)     NPL algorithm using true values as initial CCPs
    Replication =         1000.00
        (a)     Simulations of x's and a's
        (b.1)   Estimation of initial CCPs (Non-Parametric)
        (b.2)   NPL algorithm using frequency estimates as initial CCPs
        (c.1)   Estimation of initial CCPs (Semi-Parametric: Logit)
        (c.2)   NPL algorithm using Logit estimates as initial CCPs
        (d.1)   Estimation of initial CCPs (Completely Random)
        (d.2)   NPL algorithm using U(0,1) random draws as initial CCPs
        (e)     NPL algorithm using true values as initial CCPs

          Number of Re-drawings due to Multicollinearity =        0.000000

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               MONTE CARLO EXPERIMENT #           1.000
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   MONTE CARLO EXPERIMENT #           1.000
   EMPIRICAL MEANS and STANDARD ERRORS

   TABLE 4 OF THE PAPER AGUIRREGABIRIA and MIRA (2007)
********************************************************************************
****

--------------------------------------------------------------------------------
---
                      theta_fc_1          theta_rs        theta_rn        theta_ec
--------------------------------------------------------------------------------
---
TRUE VALUES                -1.900             1.000          0.0000           1.000

--------------------------------------------------------------------------------
---
   MEAN 2step-True         -1.910             1.001        -0.01020           1.009

 MEDIAN 2step-True         -1.927            0.9948        -0.02389           1.010

   S.E. 2step-True         0.2713            0.1503          0.4031          0.1396
```

MEAN 2step-Freq	-0.4719	0.3662	0.1681	1.133
MEDIAN 2step-Freq	-0.4687	0.3553	0.1728	1.131
S.E. 2step-Freq	0.2880	0.1449	0.3559	0.1942
MEAN NPL-Freq	-1.899	1.011	0.01989	1.005
MEDIAN NPL-Freq	-1.923	0.9937	-0.02883	1.004
S.E. NPL-Freq	0.2748	0.1519	0.4092	0.1392
MEAN 2step-Logit	-1.924	1.000	-0.02194	1.002
MEDIAN 2step-Logit	-1.934	0.9875	-0.04265	1.004
S.E. 2step-Logit	0.2784	0.1492	0.4080	0.1404
MEAN NPL-Logit	-1.899	1.011	0.02003	1.005
MEDIAN NPL-Logit	-1.923	0.9937	-0.02883	1.004
S.E. NPL-Logit	0.2748	0.1519	0.4092	0.1392
MEAN 2step-Random	-1.924	1.000	-0.02194	1.002

MEDIAN 2step-Rando	-1.934	0.9875	-0.04265	1.004
S.E. 2step-Random	0.2784	0.1492	0.4080	0.1404
MEAN NPL-Random	-1.899	1.011	0.02003	1.005
MEDIAN NPL-Random	-1.923	0.9937	-0.02883	1.004
S.E. NPL-Random	0.2748	0.1519	0.4092	0.1392

****
MONTE CARLO EXPERIMENT # 1.000
SQUARE-ROOT MEAN SQUARE ERRORS
RATIOS OVER THE SQUARE-ROOT MSE OF THE 2-STEP PML USING THE TRUE CCPs

TABLE 5 OF THE PAPER AGUIRREGABIRIA and MIRA (2007)
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	theta_fc_1	theta_rs	theta_rn	theta_ec
SQRT-MSE 2-step-TRUE	0.2715	0.1503	0.4032	0.1399
RATIO: 2step-Freq	5.365	4.327	0.9762	1.682
RATIO: NPL-Freq	1.012	1.014	1.016	0.9963
RATIO: 2step-Logit	1.029	0.9931	1.013	1.004

RATIO: NPL-Logit	1.012	1.014	1.016	0.9963
RATIO: 2step-Rando	1.894	1.295	0.8062	0.9974
RATIO: NPL-Random	1.012	1.014	1.016	0.9963