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*****
***** MONTE CARLO EXPERIMENT # 3.000 *****
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*****
***** COMPUTING A MPE OF THE DYNAMIC GAME *****
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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) =      2.000
      Entry cost (theta_ec) =      1.000
      Discount factor =      0.9500
      Std. Dev. epsilons =      1.000
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BEST RESPONSE MAPPING ITERATIONS

Best response mapping iteration =      1.000
Convergence criterion =      1000.

Best response mapping iteration =      2.000
Convergence criterion =      0.9421

Best response mapping iteration =      3.000
Convergence criterion =      0.5868

Best response mapping iteration =      4.000
Convergence criterion =      0.4499

Best response mapping iteration =      5.000
Convergence criterion =      0.3934

Best response mapping iteration =      6.000
Convergence criterion =      0.3445

Best response mapping iteration =      7.000
Convergence criterion =      0.3061

Best response mapping iteration =      8.000
Convergence criterion =      0.2768

Best response mapping iteration =      9.000

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|-----------------------------------|---------|-------|
| Convergence criterion = | 0.2546 | |
| Best response mapping iteration = | | 10.00 |
| Convergence criterion = | 0.2391 | |
| Best response mapping iteration = | | 11.00 |
| Convergence criterion = | 0.2258 | |
| Best response mapping iteration = | | 12.00 |
| Convergence criterion = | 0.2132 | |
| Best response mapping iteration = | | 13.00 |
| Convergence criterion = | 0.2005 | |
| Best response mapping iteration = | | 14.00 |
| Convergence criterion = | 0.1885 | |
| Best response mapping iteration = | | 15.00 |
| Convergence criterion = | 0.1768 | |
| Best response mapping iteration = | | 16.00 |
| Convergence criterion = | 0.1657 | |
| Best response mapping iteration = | | 17.00 |
| Convergence criterion = | 0.1551 | |
| Best response mapping iteration = | | 18.00 |
| Convergence criterion = | 0.1451 | |
| Best response mapping iteration = | | 19.00 |
| Convergence criterion = | 0.1356 | |
| Best response mapping iteration = | | 20.00 |
| Convergence criterion = | 0.1266 | |
| Best response mapping iteration = | | 21.00 |
| Convergence criterion = | 0.1181 | |
| Best response mapping iteration = | | 22.00 |
| Convergence criterion = | 0.1101 | |
| Best response mapping iteration = | | 23.00 |
| Convergence criterion = | 0.1027 | |
| Best response mapping iteration = | | 24.00 |
| Convergence criterion = | 0.09559 | |
| Best response mapping iteration = | | 25.00 |
| Convergence criterion = | 0.08900 | |
| Best response mapping iteration = | | 26.00 |
| Convergence criterion = | 0.08278 | |

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|-----------------------------------|-------|
| Best response mapping iteration = | 27.00 |
| Convergence criterion = 0.07700 | |
| Best response mapping iteration = | 28.00 |
| Convergence criterion = 0.07155 | |
| Best response mapping iteration = | 29.00 |
| Convergence criterion = 0.06649 | |
| Best response mapping iteration = | 30.00 |
| Convergence criterion = 0.06182 | |
| Best response mapping iteration = | 31.00 |
| Convergence criterion = 0.05747 | |
| Best response mapping iteration = | 32.00 |
| Convergence criterion = 0.05344 | |
| Best response mapping iteration = | 33.00 |
| Convergence criterion = 0.04964 | |
| Best response mapping iteration = | 34.00 |
| Convergence criterion = 0.04611 | |
| Best response mapping iteration = | 35.00 |
| Convergence criterion = 0.04280 | |
| Best response mapping iteration = | 36.00 |
| Convergence criterion = 0.03972 | |
| Best response mapping iteration = | 37.00 |
| Convergence criterion = 0.03685 | |
| Best response mapping iteration = | 38.00 |
| Convergence criterion = 0.03417 | |
| Best response mapping iteration = | 39.00 |
| Convergence criterion = 0.03169 | |
| Best response mapping iteration = | 40.00 |
| Convergence criterion = 0.02936 | |
| Best response mapping iteration = | 41.00 |
| Convergence criterion = 0.02722 | |
| Best response mapping iteration = | 42.00 |
| Convergence criterion = 0.02521 | |
| Best response mapping iteration = | 43.00 |
| Convergence criterion = 0.02336 | |
| Best response mapping iteration = | 44.00 |
| Convergence criterion = 0.02163 | |

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|-----------------------------------|-------|
| Best response mapping iteration = | 45.00 |
| Convergence criterion = 0.02003 | |
| Best response mapping iteration = | 46.00 |
| Convergence criterion = 0.01854 | |
| Best response mapping iteration = | 47.00 |
| Convergence criterion = 0.01716 | |
| Best response mapping iteration = | 48.00 |
| Convergence criterion = 0.01588 | |
| Best response mapping iteration = | 49.00 |
| Convergence criterion = 0.01470 | |
| Best response mapping iteration = | 50.00 |
| Convergence criterion = 0.01359 | |
| Best response mapping iteration = | 51.00 |
| Convergence criterion = 0.01258 | |
| Best response mapping iteration = | 52.00 |
| Convergence criterion = 0.01163 | |
| Best response mapping iteration = | 53.00 |
| Convergence criterion = 0.01076 | |
| Best response mapping iteration = | 54.00 |
| Convergence criterion = 0.009949 | |
| Best response mapping iteration = | 55.00 |
| Convergence criterion = 0.009201 | |
| Best response mapping iteration = | 56.00 |
| Convergence criterion = 0.008506 | |
| Best response mapping iteration = | 57.00 |
| Convergence criterion = 0.007865 | |
| Best response mapping iteration = | 58.00 |
| Convergence criterion = 0.007270 | |
| Best response mapping iteration = | 59.00 |
| Convergence criterion = 0.006721 | |
| Best response mapping iteration = | 60.00 |
| Convergence criterion = 0.006212 | |
| Best response mapping iteration = | 61.00 |
| Convergence criterion = 0.005742 | |
| Best response mapping iteration = | 62.00 |

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|-----------------------------------|----------|-------|
| Convergence criterion = | 0.005306 | |
| Best response mapping iteration = | | 63.00 |
| Convergence criterion = | 0.004904 | |
| Best response mapping iteration = | | 64.00 |
| Convergence criterion = | 0.004532 | |
| Best response mapping iteration = | | 65.00 |
| Convergence criterion = | 0.004188 | |
| Best response mapping iteration = | | 66.00 |
| Convergence criterion = | 0.003870 | |
| Best response mapping iteration = | | 67.00 |
| Convergence criterion = | 0.003576 | |
| Best response mapping iteration = | | 68.00 |
| Convergence criterion = | 0.003304 | |
| Best response mapping iteration = | | 69.00 |
| Convergence criterion = | 0.003053 | |
| Best response mapping iteration = | | 70.00 |
| Convergence criterion = | 0.002821 | |
| Best response mapping iteration = | | 71.00 |
| Convergence criterion = | 0.002606 | |
| Best response mapping iteration = | | 72.00 |
| Convergence criterion = | 0.002408 | |
| Best response mapping iteration = | | 73.00 |
| Convergence criterion = | 0.002225 | |
| Best response mapping iteration = | | 74.00 |
| Convergence criterion = | 0.002055 | |
| Best response mapping iteration = | | 75.00 |
| Convergence criterion = | 0.001899 | |
| Best response mapping iteration = | | 76.00 |
| Convergence criterion = | 0.001754 | |
| Best response mapping iteration = | | 77.00 |
| Convergence criterion = | 0.001621 | |
| Best response mapping iteration = | | 78.00 |
| Convergence criterion = | 0.001497 | |
| Best response mapping iteration = | | 79.00 |
| Convergence criterion = | 0.001383 | |

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|-----------------------------------|-------|
| Best response mapping iteration = | 80.00 |
| Convergence criterion = 0.001278 | |
| Best response mapping iteration = | 81.00 |
| Convergence criterion = 0.001180 | |
| Best response mapping iteration = | 82.00 |
| Convergence criterion = 0.001090 | |
| Best response mapping iteration = | 83.00 |
| Convergence criterion = 0.001007 | |
| Best response mapping iteration = | 84.00 |
| Convergence criterion = 0.0009303 | |
| Best response mapping iteration = | 85.00 |
| Convergence criterion = 0.0008594 | |
| Best response mapping iteration = | 86.00 |
| Convergence criterion = 0.0007938 | |
| Best response mapping iteration = | 87.00 |
| Convergence criterion = 0.0007333 | |
| Best response mapping iteration = | 88.00 |
| Convergence criterion = 0.0006774 | |
| Best response mapping iteration = | 89.00 |
| Convergence criterion = 0.0006257 | |
| Best response mapping iteration = | 90.00 |
| Convergence criterion = 0.0005780 | |
| Best response mapping iteration = | 91.00 |
| Convergence criterion = 0.0005339 | |
| Best response mapping iteration = | 92.00 |
| Convergence criterion = 0.0004931 | |
| Best response mapping iteration = | 93.00 |
| Convergence criterion = 0.0004555 | |
| Best response mapping iteration = | 94.00 |
| Convergence criterion = 0.0004208 | |
| Best response mapping iteration = | 95.00 |
| Convergence criterion = 0.0003887 | |
| Best response mapping iteration = | 96.00 |
| Convergence criterion = 0.0003590 | |
| Best response mapping iteration = | 97.00 |
| Convergence criterion = 0.0003316 | |

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|------------------------------------|-------|
| Best response mapping iteration = | 98.00 |
| Convergence criterion = 0.0003063 | |
| Best response mapping iteration = | 99.00 |
| Convergence criterion = 0.0002829 | |
| Best response mapping iteration = | 100.0 |
| Convergence criterion = 0.0002613 | |
| Best response mapping iteration = | 101.0 |
| Convergence criterion = 0.0002414 | |
| Best response mapping iteration = | 102.0 |
| Convergence criterion = 0.0002230 | |
| Best response mapping iteration = | 103.0 |
| Convergence criterion = 0.0002060 | |
| Best response mapping iteration = | 104.0 |
| Convergence criterion = 0.0001902 | |
| Best response mapping iteration = | 105.0 |
| Convergence criterion = 0.0001757 | |
| Best response mapping iteration = | 106.0 |
| Convergence criterion = 0.0001623 | |
| Best response mapping iteration = | 107.0 |
| Convergence criterion = 0.0001499 | |
| Best response mapping iteration = | 108.0 |
| Convergence criterion = 0.0001385 | |
| Best response mapping iteration = | 109.0 |
| Convergence criterion = 0.0001279 | |
| Best response mapping iteration = | 110.0 |
| Convergence criterion = 0.0001181 | |
| Best response mapping iteration = | 111.0 |
| Convergence criterion = 0.0001091 | |
| Best response mapping iteration = | 112.0 |
| Convergence criterion = 0.0001008 | |
| Best response mapping iteration = | 113.0 |
| Convergence criterion = 9.311e-005 | |
| Best response mapping iteration = | 114.0 |
| Convergence criterion = 8.600e-005 | |
| Best response mapping iteration = | 115.0 |

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|-----------------------------------|------------|-------|
| Convergence criterion = | 7.944e-005 | |
| Best response mapping iteration = | | 116.0 |
| Convergence criterion = | 7.337e-005 | |
| Best response mapping iteration = | | 117.0 |
| Convergence criterion = | 6.777e-005 | |
| Best response mapping iteration = | | 118.0 |
| Convergence criterion = | 6.260e-005 | |
| Best response mapping iteration = | | 119.0 |
| Convergence criterion = | 5.782e-005 | |
| Best response mapping iteration = | | 120.0 |
| Convergence criterion = | 5.341e-005 | |
| Best response mapping iteration = | | 121.0 |
| Convergence criterion = | 4.933e-005 | |
| Best response mapping iteration = | | 122.0 |
| Convergence criterion = | 4.557e-005 | |
| Best response mapping iteration = | | 123.0 |
| Convergence criterion = | 4.209e-005 | |
| Best response mapping iteration = | | 124.0 |
| Convergence criterion = | 3.888e-005 | |
| Best response mapping iteration = | | 125.0 |
| Convergence criterion = | 3.591e-005 | |
| Best response mapping iteration = | | 126.0 |
| Convergence criterion = | 3.317e-005 | |
| Best response mapping iteration = | | 127.0 |
| Convergence criterion = | 3.064e-005 | |
| Best response mapping iteration = | | 128.0 |
| Convergence criterion = | 2.830e-005 | |
| Best response mapping iteration = | | 129.0 |
| Convergence criterion = | 2.614e-005 | |
| Best response mapping iteration = | | 130.0 |
| Convergence criterion = | 2.414e-005 | |
| Best response mapping iteration = | | 131.0 |
| Convergence criterion = | 2.230e-005 | |
| Best response mapping iteration = | | 132.0 |
| Convergence criterion = | 2.060e-005 | |

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|-----------------------------------|------------|
| Best response mapping iteration = | 133.0 |
| Convergence criterion = | 1.903e-005 |
| Best response mapping iteration = | 134.0 |
| Convergence criterion = | 1.757e-005 |
| Best response mapping iteration = | 135.0 |
| Convergence criterion = | 1.623e-005 |
| Best response mapping iteration = | 136.0 |
| Convergence criterion = | 1.499e-005 |
| Best response mapping iteration = | 137.0 |
| Convergence criterion = | 1.385e-005 |
| Best response mapping iteration = | 138.0 |
| Convergence criterion = | 1.279e-005 |
| Best response mapping iteration = | 139.0 |
| Convergence criterion = | 1.182e-005 |
| Best response mapping iteration = | 140.0 |
| Convergence criterion = | 1.091e-005 |
| Best response mapping iteration = | 141.0 |
| Convergence criterion = | 1.008e-005 |
| Best response mapping iteration = | 142.0 |
| Convergence criterion = | 9.311e-006 |
| Best response mapping iteration = | 143.0 |
| Convergence criterion = | 8.600e-006 |
| Best response mapping iteration = | 144.0 |
| Convergence criterion = | 7.944e-006 |
| Best response mapping iteration = | 145.0 |
| Convergence criterion = | 7.337e-006 |
| Best response mapping iteration = | 146.0 |
| Convergence criterion = | 6.777e-006 |
| Best response mapping iteration = | 147.0 |
| Convergence criterion = | 6.260e-006 |

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|----------------------------|-------|--------------------------|
| CONVERGENCE ACHIEVED AFTER | 148.0 | BEST RESPONSE ITERATIONS |
|----------------------------|-------|--------------------------|

EQUILIBRIUM PROBABILITIES

| | | | |
|---------|---------|---------|--------|
| 0.08636 | 0.09753 | 0.1105 | 0.1258 |
| 0.1437 | | | |
| 0.07362 | 0.08305 | 0.09398 | 0.1068 |

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|---------|---------|---------|---------|
| 0.3305 | | | |
| 0.07498 | 0.08459 | 0.09575 | 0.2961 |
| 0.1241 | | | |
| 0.06632 | 0.07477 | 0.08455 | 0.2593 |
| 0.2949 | | | |
| 0.07619 | 0.08597 | 0.2654 | 0.1106 |
| 0.1262 | | | |
| 0.06712 | 0.07568 | 0.2317 | 0.09716 |
| 0.2989 | | | |
| 0.06812 | 0.07682 | 0.2354 | 0.2670 |
| 0.1125 | | | |
| 0.06142 | 0.06922 | 0.2111 | 0.2390 |
| 0.2717 | | | |
| 0.07726 | 0.2381 | 0.09873 | 0.1122 |
| 0.1281 | | | |
| 0.06783 | 0.2074 | 0.08651 | 0.09821 |
| 0.3023 | | | |
| 0.06886 | 0.2107 | 0.08786 | 0.2701 |
| 0.1138 | | | |
| 0.06195 | 0.1887 | 0.07894 | 0.2413 |
| 0.2742 | | | |
| 0.06978 | 0.2137 | 0.2416 | 0.1011 |
| 0.1153 | | | |
| 0.06260 | 0.1907 | 0.2154 | 0.09053 |
| 0.2774 | | | |
| 0.06341 | 0.1933 | 0.2183 | 0.2474 |
| 0.1045 | | | |
| 0.05786 | 0.1758 | 0.1983 | 0.2245 |
| 0.2551 | | | |
| 0.2137 | 0.08828 | 0.09997 | 0.1136 |
| 0.1297 | | | |
| 0.1858 | 0.07718 | 0.08731 | 0.09913 |
| 0.3053 | | | |
| 0.1888 | 0.07840 | 0.08870 | 0.2729 |
| 0.1149 | | | |
| 0.1689 | 0.07036 | 0.07955 | 0.2432 |
| 0.2765 | | | |
| 0.1915 | 0.07948 | 0.2441 | 0.1021 |
| 0.1165 | | | |
| 0.1707 | 0.07112 | 0.2171 | 0.09125 |
| 0.2797 | | | |
| 0.1730 | 0.07205 | 0.2201 | 0.2495 |
| 0.1054 | | | |
| 0.1572 | 0.06563 | 0.1997 | 0.2261 |
| 0.2569 | | | |
| 0.1939 | 0.2186 | 0.09102 | 0.1034 |
| 0.1179 | | | |
| 0.1724 | 0.1941 | 0.08117 | 0.09211 |
| 0.2825 | | | |
| 0.1748 | 0.1969 | 0.08227 | 0.2520 |
| 0.1064 | | | |
| 0.1585 | 0.1784 | 0.07476 | 0.2280 |
| 0.2590 | | | |

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|---------|--------|--------|---------|
| 0.1769 | 0.1992 | 0.2251 | 0.09450 |
| 0.1077 | | | |
| 0.1601 | 0.1802 | 0.2034 | 0.08562 |
| 0.2617 | | | |
| 0.1619 | 0.1823 | 0.2058 | 0.2331 |
| 0.09869 | | | |
| 0.1487 | 0.1673 | 0.1887 | 0.2136 |
| 0.2425 | | | |
| 0.1529 | 0.1739 | 0.1984 | 0.2274 |
| 0.2614 | | | |
| 0.1288 | 0.1462 | 0.1666 | 0.1906 |
| 0.5252 | | | |
| 0.1309 | 0.1486 | 0.1694 | 0.4772 |
| 0.2226 | | | |
| 0.1142 | 0.1296 | 0.1476 | 0.4187 |
| 0.4702 | | | |
| 0.1329 | 0.1510 | 0.4321 | 0.1970 |
| 0.2263 | | | |
| 0.1157 | 0.1313 | 0.3770 | 0.1709 |
| 0.4759 | | | |
| 0.1173 | 0.1331 | 0.3823 | 0.4299 |
| 0.1990 | | | |
| 0.1045 | 0.1186 | 0.3415 | 0.3846 |
| 0.4329 | | | |
| 0.1349 | 0.3904 | 0.1747 | 0.2000 |
| 0.2297 | | | |
| 0.1170 | 0.3390 | 0.1512 | 0.1729 |
| 0.4812 | | | |
| 0.1187 | 0.3440 | 0.1535 | 0.4348 |
| 0.2015 | | | |
| 0.1055 | 0.3064 | 0.1363 | 0.3882 |
| 0.4369 | | | |
| 0.1202 | 0.3486 | 0.3920 | 0.1780 |
| 0.2043 | | | |
| 0.1067 | 0.3097 | 0.3486 | 0.1575 |
| 0.4416 | | | |
| 0.1080 | 0.3136 | 0.3530 | 0.3974 |
| 0.1831 | | | |
| 0.09758 | 0.2837 | 0.3195 | 0.3601 |
| 0.4059 | | | |
| 0.3523 | 0.1553 | 0.1771 | 0.2027 |
| 0.2329 | | | |
| 0.3048 | 0.1341 | 0.1528 | 0.1747 |
| 0.4859 | | | |
| 0.3093 | 0.1361 | 0.1551 | 0.4393 |
| 0.2036 | | | |
| 0.2749 | 0.1208 | 0.1375 | 0.3915 |
| 0.4405 | | | |
| 0.3135 | 0.1380 | 0.3962 | 0.1799 |
| 0.2066 | | | |
| 0.2779 | 0.1221 | 0.3516 | 0.1589 |
| 0.4453 | | | |
| 0.2814 | 0.1237 | 0.3561 | 0.4009 |

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|--------|--------|--------|--------|
| 0.1848 | | | |
| 0.2542 | 0.1115 | 0.3218 | 0.3627 |
| 0.4088 | | | |
| 0.3175 | 0.3567 | 0.1593 | 0.1823 |
| 0.2093 | | | |
| 0.2807 | 0.3155 | 0.1405 | 0.1606 |
| 0.4497 | | | |
| 0.2843 | 0.3196 | 0.1424 | 0.4050 |
| 0.1868 | | | |
| 0.2563 | 0.2882 | 0.1280 | 0.3658 |
| 0.4123 | | | |
| 0.2877 | 0.3235 | 0.3640 | 0.1648 |
| 0.1891 | | | |
| 0.2589 | 0.2911 | 0.3278 | 0.1478 |
| 0.4163 | | | |
| 0.2618 | 0.2945 | 0.3316 | 0.3737 |
| 0.1716 | | | |
| 0.2390 | 0.2688 | 0.3029 | 0.3416 |
| 0.3855 | | | |
| 0.2490 | 0.2824 | 0.3203 | 0.3629 |
| 0.4098 | | | |
| 0.2185 | 0.2479 | 0.2814 | 0.3192 |
| 0.6869 | | | |
| 0.2195 | 0.2490 | 0.2827 | 0.6422 |
| 0.3631 | | | |
| 0.1948 | 0.2210 | 0.2511 | 0.5907 |
| 0.6389 | | | |
| 0.2208 | 0.2506 | 0.5964 | 0.3228 |
| 0.3655 | | | |
| 0.1961 | 0.2226 | 0.5450 | 0.2872 |
| 0.6421 | | | |
| 0.1971 | 0.2238 | 0.5475 | 0.5965 |
| 0.3277 | | | |
| 0.1770 | 0.2010 | 0.5030 | 0.5512 |
| 0.5997 | | | |
| 0.2225 | 0.5506 | 0.2867 | 0.3253 |
| 0.3683 | | | |
| 0.1976 | 0.5002 | 0.2548 | 0.2894 |
| 0.6456 | | | |
| 0.1986 | 0.5026 | 0.2562 | 0.5999 |
| 0.3302 | | | |
| 0.1783 | 0.4595 | 0.2301 | 0.5543 |
| 0.6029 | | | |
| 0.2000 | 0.5055 | 0.5539 | 0.2931 |
| 0.3324 | | | |
| 0.1795 | 0.4623 | 0.5090 | 0.2635 |
| 0.6061 | | | |
| 0.1806 | 0.4647 | 0.5116 | 0.5601 |
| 0.3012 | | | |
| 0.1638 | 0.4278 | 0.4728 | 0.5200 |
| 0.5684 | | | |
| 0.5059 | 0.2546 | 0.2890 | 0.3280 |
| 0.3713 | | | |

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|--------|--------|--------|--------|
| 0.4572 | 0.2261 | 0.2568 | 0.2917 |
| 0.6491 | | | |
| 0.4594 | 0.2273 | 0.2582 | 0.6035 |
| 0.3327 | | | |
| 0.4183 | 0.2040 | 0.2318 | 0.5575 |
| 0.6061 | | | |
| 0.4621 | 0.2288 | 0.5574 | 0.2954 |
| 0.3350 | | | |
| 0.4208 | 0.2054 | 0.5121 | 0.2655 |
| 0.6092 | | | |
| 0.4231 | 0.2066 | 0.5147 | 0.5633 |
| 0.3034 | | | |
| 0.3882 | 0.1873 | 0.4755 | 0.5228 |
| 0.5712 | | | |
| 0.4652 | 0.5120 | 0.2620 | 0.2976 |
| 0.3376 | | | |
| 0.4236 | 0.4681 | 0.2352 | 0.2675 |
| 0.6125 | | | |
| 0.4258 | 0.4705 | 0.2366 | 0.5665 |
| 0.3057 | | | |
| 0.3906 | 0.4329 | 0.2145 | 0.5257 |
| 0.5742 | | | |
| 0.4284 | 0.4733 | 0.5207 | 0.2710 |
| 0.3078 | | | |
| 0.3929 | 0.4355 | 0.4810 | 0.2458 |
| 0.5772 | | | |
| 0.3951 | 0.4378 | 0.4835 | 0.5313 |
| 0.2813 | | | |
| 0.3649 | 0.4054 | 0.4491 | 0.4954 |
| 0.5433 | | | |
| 0.3852 | 0.4271 | 0.4708 | 0.5154 |
| 0.5598 | | | |
| 0.3570 | 0.3969 | 0.4389 | 0.4823 |
| 0.7933 | | | |
| 0.3560 | 0.3958 | 0.4378 | 0.7630 |
| 0.5248 | | | |
| 0.3290 | 0.3667 | 0.4068 | 0.7352 |
| 0.7669 | | | |
| 0.3554 | 0.3952 | 0.7296 | 0.4805 |
| 0.5242 | | | |
| 0.3287 | 0.3664 | 0.7000 | 0.4483 |
| 0.7668 | | | |
| 0.3280 | 0.3657 | 0.6994 | 0.7345 |
| 0.4903 | | | |
| 0.3031 | 0.3386 | 0.6692 | 0.7061 |
| 0.7399 | | | |
| 0.3553 | 0.6933 | 0.4371 | 0.4804 |
| 0.5241 | | | |
| 0.3289 | 0.6624 | 0.4067 | 0.4486 |
| 0.7672 | | | |
| 0.3282 | 0.6617 | 0.4060 | 0.7349 |
| 0.4906 | | | |
| 0.3035 | 0.6305 | 0.3772 | 0.7067 |

| | | | |
|--------|--------|--------|--------|
| 0.7405 | | | |
| 0.3280 | 0.6615 | 0.6996 | 0.4476 |
| 0.4904 | | | |
| 0.3035 | 0.6306 | 0.6700 | 0.4175 |
| 0.7407 | | | |
| 0.3032 | 0.6303 | 0.6697 | 0.7066 |
| 0.4586 | | | |
| 0.2806 | 0.5998 | 0.6401 | 0.6784 |
| 0.7140 | | | |
| 0.6549 | 0.3955 | 0.4375 | 0.4809 |
| 0.5247 | | | |
| 0.6230 | 0.3673 | 0.4074 | 0.4494 |
| 0.7679 | | | |
| 0.6223 | 0.3665 | 0.4067 | 0.7356 |
| 0.4914 | | | |
| 0.5905 | 0.3399 | 0.3781 | 0.7076 |
| 0.7414 | | | |
| 0.6221 | 0.3663 | 0.7004 | 0.4484 |
| 0.4912 | | | |
| 0.5906 | 0.3399 | 0.6710 | 0.4185 |
| 0.7416 | | | |
| 0.5902 | 0.3395 | 0.6707 | 0.7075 |
| 0.4596 | | | |
| 0.5594 | 0.3151 | 0.6413 | 0.6795 |
| 0.7151 | | | |
| 0.6224 | 0.6627 | 0.4067 | 0.4487 |
| 0.4915 | | | |
| 0.5912 | 0.6323 | 0.3787 | 0.4190 |
| 0.7421 | | | |
| 0.5908 | 0.6319 | 0.3783 | 0.7081 |
| 0.4602 | | | |
| 0.5602 | 0.6018 | 0.3520 | 0.6803 |
| 0.7158 | | | |
| 0.5909 | 0.6320 | 0.6714 | 0.4187 |
| 0.4603 | | | |
| 0.5606 | 0.6022 | 0.6425 | 0.3910 |
| 0.7162 | | | |
| 0.5605 | 0.6021 | 0.6424 | 0.6807 |
| 0.4312 | | | |
| 0.5314 | 0.5731 | 0.6141 | 0.6534 |
| 0.6904 | | | |
| 0.5538 | 0.5935 | 0.6314 | 0.6670 |
| 0.6999 | | | |
| 0.5343 | 0.5741 | 0.6124 | 0.6486 |
| 0.8699 | | | |
| 0.5327 | 0.5725 | 0.6108 | 0.8520 |
| 0.6809 | | | |
| 0.5123 | 0.5521 | 0.5907 | 0.8406 |
| 0.8588 | | | |
| 0.5311 | 0.5709 | 0.8316 | 0.6457 |
| 0.6796 | | | |
| 0.5108 | 0.5506 | 0.8191 | 0.6261 |
| 0.8581 | | | |

| | | | |
|--------|--------|--------|--------|
| 0.5092 | 0.5490 | 0.8181 | 0.8390 |
| 0.6594 | | | |
| 0.4882 | 0.5278 | 0.8043 | 0.8265 |
| 0.8460 | | | |
| 0.5297 | 0.8085 | 0.6079 | 0.6443 |
| 0.6783 | | | |
| 0.5094 | 0.7947 | 0.5879 | 0.6249 |
| 0.8575 | | | |
| 0.5079 | 0.7936 | 0.5864 | 0.8383 |
| 0.6582 | | | |
| 0.4870 | 0.7786 | 0.5655 | 0.8258 |
| 0.8454 | | | |
| 0.5064 | 0.7927 | 0.8164 | 0.6220 |
| 0.6569 | | | |
| 0.4856 | 0.7777 | 0.8027 | 0.6016 |
| 0.8447 | | | |
| 0.4842 | 0.7766 | 0.8018 | 0.8241 |
| 0.6357 | | | |
| 0.4629 | 0.7604 | 0.7869 | 0.8105 |
| 0.8316 | | | |
| 0.7825 | 0.5683 | 0.6068 | 0.6432 |
| 0.6773 | | | |
| 0.7675 | 0.5482 | 0.5869 | 0.6239 |
| 0.8569 | | | |
| 0.7663 | 0.5466 | 0.5854 | 0.8377 |
| 0.6572 | | | |
| 0.7501 | 0.5257 | 0.5646 | 0.8252 |
| 0.8449 | | | |
| 0.7653 | 0.5452 | 0.8158 | 0.6210 |
| 0.6559 | | | |
| 0.7491 | 0.5243 | 0.8021 | 0.6007 |
| 0.8442 | | | |
| 0.7479 | 0.5229 | 0.8012 | 0.8236 |
| 0.6349 | | | |
| 0.7305 | 0.5015 | 0.7864 | 0.8101 |
| 0.8312 | | | |
| 0.7643 | 0.7911 | 0.5827 | 0.6198 |
| 0.6548 | | | |
| 0.7482 | 0.7762 | 0.5621 | 0.5996 |
| 0.8436 | | | |
| 0.7470 | 0.7752 | 0.5607 | 0.8230 |
| 0.6338 | | | |
| 0.7297 | 0.7591 | 0.5393 | 0.8095 |
| 0.8306 | | | |
| 0.7460 | 0.7742 | 0.7996 | 0.5969 |
| 0.6326 | | | |
| 0.7288 | 0.7582 | 0.7849 | 0.5760 |
| 0.8299 | | | |
| 0.7277 | 0.7572 | 0.7840 | 0.8079 |
| 0.6109 | | | |
| 0.7094 | 0.7402 | 0.7682 | 0.7934 |
| 0.8160 | | | |

 DESCRIPTIVE STATISTICS FROM THE EQUILIBRIUM
 BASED ON 5.000e+004 OBSERVATIONS

TABLE 2 OF THE PAPER AGUIRREGABIRIA AND MIRA (2007)

| | | | |
|-----|---------------------------------|---|---------|
| (1) | Average number of active firms | = | 2.001 |
| (2) | Std. Dev. number of firms | = | 1.428 |
| (3) | Regression N[t] on N[t-1] | = | 0.5722 |
| (4) | Average number of entrants | = | 0.7528 |
| (5) | Average number of exits | = | 0.7494 |
| (6) | Excess turnover (in # of firms) | = | 0.5136 |
| (7) | Correlation entries and exits | = | -0.2253 |
| (8) | Frequencies of being active | = | |
| | 0.3230 | | |
| | 0.3581 | | |
| | 0.3992 | | |
| | 0.4374 | | |
| | 0.4835 | | |

 MONTE CARLO EXPERIMENT # 3.000

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

MONTE CARLO EXPERIMENT # 3.00000
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 | -1.90000 | 1.00000 | 2.00000 | 1.00000 |
| MEAN 2step-True | -1.90420 | 1.00194 | 2.00006 | 1.00162 |
| MEDIAN 2step-True | -1.90073 | 1.00938 | 2.02326 | 1.00023 |
| S.E. 2step-True | 0.172329 | 0.212591 | 0.802048 | 0.110256 |
| MEAN 2step-Freq | -1.11739 | 0.284398 | 0.0281433 | 0.785680 |

| | | | | |
|--------------------|----------|-----------|-----------|----------|
| MEDIAN 2step-Freq | -1.12397 | 0.281309 | 0.0192966 | 0.782510 |
| S.E. 2step-Freq | 0.193093 | 0.0920262 | 0.305693 | 0.104100 |
| ----- | | | | |
| MEAN NPL-Freq | -1.91396 | 0.942323 | 1.77339 | 1.01123 |
| MEDIAN NPL-Freq | -1.91421 | 0.983787 | 1.96556 | 1.00939 |
| S.E. NPL-Freq | 0.210284 | 0.191631 | 0.690019 | 0.114303 |
| ----- | | | | |
| MEAN 2step-Logit | -1.91299 | 1.02185 | 2.07860 | 0.983872 |
| MEDIAN 2step-Logit | -1.91085 | 0.979917 | 1.91218 | 0.999691 |
| S.E. 2step-Logit | 0.223727 | 0.318509 | 1.17973 | 0.150075 |
| ----- | | | | |
| MEAN NPL-Logit | -1.91318 | 0.944229 | 1.77998 | 1.00928 |
| MEDIAN NPL-Logit | -1.91198 | 0.985037 | 1.95813 | 1.00661 |
| S.E. NPL-Logit | 0.209820 | 0.191571 | 0.688234 | 0.114236 |
| ----- | | | | |
| MEAN 2step-Random | -1.91299 | 1.02185 | 2.07860 | 0.983872 |
| MEDIAN 2step-Rando | -1.91085 | 0.979917 | 1.91218 | 0.999691 |
| S.E. 2step-Random | 0.223727 | 0.318509 | 1.17973 | 0.150075 |
| ----- | | | | |

| | | | | |
|-------------------|----------|----------|----------|----------|
| MEAN NPL-Random | -1.91345 | 0.948730 | 1.79673 | 1.00881 |
| MEDIAN NPL-Random | -1.91198 | 0.994774 | 2.00266 | 1.00606 |
| S.E. NPL-Random | 0.211684 | 0.193546 | 0.695381 | 0.115046 |

MONTE CARLO EXPERIMENT # 3.00000
 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)

| | theta_fc_1 | theta_rs | theta_rn | theta_ec |
|--------------------|------------|----------|----------|----------|
| SQ-MSE 2-step-TRUE | 0.172380 | 0.212599 | 0.802048 | 0.110268 |
| RATIO: 2step-Freq | 4.67617 | 3.39368 | 2.48789 | 2.16078 |
| RATIO: NPL-Freq | 1.22257 | 0.941313 | 0.905527 | 1.04159 |
| RATIO: 2step-Logit | 1.30006 | 1.50168 | 1.47416 | 1.36884 |
| RATIO: NPL-Logit | 1.21959 | 0.938497 | 0.900879 | 1.03940 |
| RATIO: 2step-Rando | 4.02148 | 1.91975 | 2.49955 | 1.18346 |
| RATIO: NPL-Random | 1.23048 | 0.941780 | 0.903288 | 1.04639 |
