myRandom.seed:

 $[4\dot{3}21,4322,4323,4324,4325,4326,4327,4328,4329,4330,4331,4332,4333,4334,4335,4336]$  #

increase the number of items if more than 16 ranks

howManyCycles: 10 WinnerLoser.count: 12000 log\_file\_root: 'wallets' rank\_interaction: True counterpartRatio: 0.6

maxNumberOfExchangeAttempts: 10

onlyRicherAgents: True

howManyTimesRicher: 2 # <=1 means multiply by 1

movAvElementNum: 5 show.timeBySteps: True tickNumber.betweenChecks: 5 howManyCycles: 10

WinnerLoser.count: 1200

| ranks (one of, if > 1)               | 1      | 2      | 4      | 8      |
|--------------------------------------|--------|--------|--------|--------|
| transaction                          | 5815   | 3161   | 1819   | 992    |
| CPU time                             | 54.909 | 26.599 | 21.136 | 23.292 |
| init                                 | 0.006  | 0.003  | 0.003  | 0.001  |
| initGhostsIfAny                      | 0.000  | 0.009  | 0.022  | 0.045  |
| counter                              | 0.000  | 0.000  | 0.000  | 0.000  |
| agentsCreatingCounterpartSubset      | 42.176 | 19.947 | 14.339 | 6.411  |
| agentsSelectingExchangingAndUpdating | 12.674 | 5.828  | 4.017  | 1.778  |
| sync1                                | 0.000  | 0.461  | 1.401  | 7.287  |
| sync2                                | 0.000  | 0.288  | 1.193  | 7.090  |
| Sum of each specie time              | 54.856 | 26.536 | 20.975 | 22.612 |
|                                      |        |        |        |        |
| with rank_interaction False          |        |        |        |        |
| transaction                          |        |        |        | 716    |
| CPU time                             |        |        |        | 2.370  |
| init                                 |        |        |        | 0.001  |
| initGhostsIfAny                      |        |        |        | 0.000  |
| counter                              |        |        |        | 0.000  |
| agentsCreatingCounterpartSubset      |        |        |        | 1.269  |
| agentsSelectingExchangingAndUpdating |        |        |        | 0.479  |
| sync1                                |        |        |        | 0.000  |
| sync2                                |        |        |        | 0.000  |
| Sum of each specie time              |        |        |        | 1.749  |

howManyCycles: 10
WinnerLoser.count: 12000

| ranks (one of, if > 1)               | ſ        | 2        | 4        | 8        |
|--------------------------------------|----------|----------|----------|----------|
| transaction                          | 60270    | 31906    | 18232    | 10100    |
| CPU time                             | 6804.350 | 4025.979 | 2240.356 | 1098.364 |
| init                                 | 0.150    | 0.043    | 0.036    | 0.015    |
| initGhostsIfAny                      | 0.000    | 0.201    | 0.484    | 0.354    |
| counter                              | 0.003    | 0.001    | 0.001    | 0.002    |
| agentsCreatingCounterpartSubset      | 4824.377 | 2834.251 | 1631.852 | 779.709  |
| agentsSelectingExchangingAndUpdating | 1979.577 | 1142.658 | 572.958  | 259.678  |
| sync1                                | 0.001    | 36.677   | 23.213   | 31.535   |
| sync2                                | 0.000    | 5.718    | 10.247   | 18.118   |
| Sum of each specie time              | 6804.108 | 4019.549 | 2238.791 | 1089.411 |

howManyCycles: 100 WinnerLoser.count: 1200

| ranks (one of, if > 1)               | 1       | 2       | 4       | 8   |
|--------------------------------------|---------|---------|---------|---|
| transaction                          | 62193   | 31659   | 18183   | 10091   |
| CPU time                             | 704.267 | 329.024 | 194.407 | 221.724   |
| init                                 | 0.007   | 0.004   | 0.003   | 0.001   |
| initGhostsIfAny                      | 0.000   | 0.012   | 0.031   | 0.084   |
| counter                              | 0.001   | 0.001   | 0.002   | 0.002   |
| agentsCreatingCounterpartSubset      | 518.900 | 242.703 | 132.147 | 61.631  |
| agentsSelectingExchangingAndUpdating | 185.246 | 77.078  | 37.209  | 16.611  |
| sync1                                | 0.003   | 5.145   | 11.964  | 69.677  |
| sync2                                | 0.002   | 3.725   | 10.121  | 16.967  |
| Sum of each specie time              | 704.159 | 328.668 | 191.477 | 164.973   |
|                                      |         |         |         | In this case is relevant to know that the elapsed time is 629.195. The i5 processor ha 2 cpu and 4 threads. |