JMCB README

The code is written using MATLAB 7.12.0 (R2011a). Given the iterative searches required by the estimation strategy, there is a shell (JMCBchabotmoulshell.m) that calls on various routines, the suffixes of which correspond to the paper’s tables and panels. For example, JMCBchabotmoul6a.m is the subroutine associated with the first panel (Duopoly-Plus) of Table 6. In this README document, the m-file prefixes ‘JMCBchabotmoul’ are all henceforth suppressed.

There are seven distinct datasets provided as \*.txt files. The shell assumes that all have been converted to \*.mat format. A separate README document (READMEdata) describes the variables in each column.

* bankdata5 (1644 x 42): location-specific info
  + sorted by state code (NY first), then by town code
* Pops70 (1644 x 3): 1850 and 1860 population data from 1870 U.S. Census
  + replaces population data from 1860 Census
* banks1853 (1644 x 1): revised count of banks as of Dec. 31, 1853
* banks1856 (1644 x 2): revised count of banks as of Dec. 31, 1856
  + Indiana regulations had its state-charter banks in limbo on this date … the 1st column reflects the official data, the 2nd column reflects reality that previous state-charter banks would all return shortly
* After above additions and addition of SampleID column, bankdata5 is 1644 x 46

We use these data to construct distances among all towns (‘distmake.m’) and then identify the towns that satisfy our isolation criteria, thus qualifying as markets (‘sample 1850.m’ and ‘sample1860.m’). This smaller dataset is then supplemented with the following:

* bank\_counts\_and\_closures (449 x 5)
  + revised bank and closure counts for 1854 Panic Eve, 1854 Panic, 1857 Panic Eve, and 1857 Panic for every town that survives isolation criteria
* state\_banks\_and\_railroads (449 x 5)
  + indicators for 1854 state-charter bank presence, 1854 railroad presence, 1857 state-charter bank presence, and 1857 railroad presence
* asset\_level\_indicators (449 x 3)
  + indicators for 1854 high-asset bank presence and 1860 high-asset bank presence

These datasets are then combined into four data-matrices:

* D1 – 1854 data
  + used for Table 5’s 1854 cross-section estimation and Table 6’s pooled estimation
* D2 – 1860 data
  + used for Table 5’s 1860 cross-section estimation and Table 6’s pooled estimation
* D3 – 1860 data supplemented with counts and closures from Panic of 1857
  + Used for Table 7’s cross-section estimation
* D4 – 1860 data supplemented with state-wide failure rates over 1850s
  + Used for Table 8’s cross-section estimation

The iterative non-linear optimization routines used in the code are somewhat sensitive to the starting parameter values and convergence thresholds. This sensitivity manifests as the occasional slight deviations between the published results and the code’s output in point estimates, standard errors, and population thresholds. When deviations occur, they are almost always less than 1% of the relevant benchmark.