Readme for code and data for Phillip W. Magness and Michael Makovi, "The Mainstreaming of Marx: Measuring the Effect of theRussian Revolution on Karl Marx's Influence"

Contents of ZIP file:

(1) Folder named "do files" – containing Stata do files

(2) Folder named "data files" – containing Excel spreadsheets

(3) Folder named "backup stata & R libraries for reproducibility" – containing Stata and R libraries in case future updates and revisions ever render our results non-reproducible.

Instructions:

(1) Install Stata and R.

(2) Unzip this ZIP file to any arbitrary disk location. Executing the do files will create a "results" folder in the same relative location as the "do files" folder.

(3) Install the following libraries in Stata, if necessary:

    * synth by Hainmueller, Abadie, and Diamond
    ssc install synth, replace all

    * synth_runner by Quistorff and Galiani
    net install synth_runner, from(https://raw.github.com/bquistorff/synth_runner/master/) replace

    * parallel by Vega Yon and Quistorff
    net install parallel, from(https://raw.github.com/gvegayon/parallel/master/) replace
    mata mata mlib index

    * github and rcall by Haghish (github is needed to install rcall)
    net install github, from("https://haghish.github.io/github/")
    github install haghish/rcall, stable
    rcall: install.packages("readstata13", repos="http://cran.uk.r-project.org")
    rcall_check
    rcall describe
    * if  rcall cannot detect your R installation, then un-comment the following line

* rcall setpath "set the path here to R.exe"

* Wilson's harmonic mean p-value, implemented in R.
rcall: install.packages("harmonicmeanp", repos="http://cran.uk.r-project.org")

* estout by Ben Jann, in order to use estadd, to add results to e() matrices.
ssc install estout, replace

(4) In the "do files" folder, run "1 – marx_synthetic_control_generate_dataset.do". This will input the Excel spreadsheets and create "all_authors_with_citations_and_indicators.dta" in the "data files" folder.

(5) In the "do files" folder, run "2 – marx_synthetic_control_perform_synth.do". This will create a "results" folder and generate all results.

Note that our SCM regressions require 512 GB of RAM. If your system does not have this much RAM, you will only be able to obtain approximately similar results. To do this, open "2 – marx_synthetic_control_perform_synth.do" and change the following lines:

Line 97: global convergence = "nested allopt technique(dfp) maxiter(20)"
becomes: global convergence = "technique(dfp)"

Line 105: global convergence_normalization = "nested allopt technique(dfp) maxiter(15)"
becomes: global convergence_normalization = "technique(dfp)"

This will cause synth to use the default, non-nested procedure, in which the V-matrix is estimated by a regression and then held fixed. The W-matrix is optimized with respect to this fixed V-matrix. The results will not be identical to those reported in the paper, but they will be very similar.

Using nested allopt and a 16 core CPU, the do file will take approximately 5 days to run. Without nested allopt but with the same 16 core CPU, the do file takes approximately 3 hours. Execution time is inversely proportional to the number of CPU cores. The do file uses all the CPU cores for parallel processing, so the computer will be mostly unusable while the do file is executing.

For more details, see Appendix A.1, "Technical Details on Synthetic Control."

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