

REPLICATION PACKAGE FOR Global Supply Chains in the Pandemic *

Barthélemy Bonadio
University of Michigan

Zhen Huo
Yale University

Andrei A. Levchenko
University of Michigan
NBER and CEPR

Nitya Pandalai-Nayar
University of Texas at Austin
and NBER

July 2021

This file describes the code used to produce all Tables and Figures in the main text and in the online Appendix. All results were derived using Stata and Matlab.

1 Structure of the folder

This replication package contains two folders:

1. “rawData”: contains all the original data used in the analysis. The *readme.txt* file inside the folder contains the details of all sources for each item
2. “code”: contains all the code used in the analysis

In addition, as the programs are executed, two additional folders are created:

1. “Output”: folder with all the output (figures or tables) presented in the paper
2. “temp_files”: placeholder folder for temporary files used at various stages in the code

2 Structure of the code

All the results in the paper can be replicating by running 4 master files located in the “code” folder, which call separate scripts in the “stata” and “matlab” subfolders:

*Email: bbonadio@umich.edu, zhen.huo@yale.edu, alev@umich.edu and npnayar@utexas.edu.

1. *master1_run.do*: this Stata do-file calls other do files in the “stata” sub-folder, to import all the raw data and prepare it for use in Matlab. It creates several files in the “temp_files” folder, that are used in the next files. Before running it, set the working directory to the root of the replication folder.
2. *master2_matlabcode.m*: this Matlab script calls other scripts in the “matlab” sub-folder, to computes all the counterfactual steady states described in the paper, and compute all the influence vectors corresponding to the different counterfactuals. It save the influence vectors as *csv* files, and also performs the log-normal fit of the stringency index described in the paper.
3. *master3_run.do*: this Stata do-file imports the influence vectors and the calibrated stringency shock, simulates the Covid shock, and performs the decompositions. It saves some results in *csv* format, and exports some Figures and Tables in the "Output" folder.
4. *master4_figures.m*: this Matlab script uses the *csv* output from above to build several figures in the paper, which are saved in the "Output" folder.