README-file for replication of the paper 'Gains From Trade: Demand, Supply, and Idiosyncratic Shocks'

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2024-02-29

Contents

Overview

The code in this replication package performs analysis using R. A Master file runs all of the code to generate the data for the figures and tables in the paper.

Data Availability and Provenance Statements

The data relied on in this paper can be found in the './input' folder of the repository and is described in the Table below:

nocite: Merlevede et al. (2015), RAMON (2021), Duncalfe (2022), OECD (2023a), OECD (2023b),

Data File	Source	Provided	Additional information

./input/augama.dta	(Merlevede et al., 2015)	no	Extended version of the proprietary firm-level database called Amadeus (now Orbis), containing financial information (balance sheet and profit and loss account) as well as information on firms' location, activity, ownership, etc. The Orbis-Amadeus firm-level dataset used in the paper is purchased from the commercial provider Bureau van Dijk (see https://www.bvdinfo.com) This is a Moody's Analytics company, meaning that we are not allowed to make the data public. Any interested researcher can purchase the data from the provider. Once acces to the data has been obtained, one can follow the procedures described in @merlevede2013 to obtaine the extended version of the dataset relied on in this paper.
./dataprep/input/NACE_REV2.csv	(RAMON, 2021)	Yes	Statistical Classification of Economic Activities in the European Community, Rev. 2 (2008) (NACE Rev. 2)
./input/country_codes.csv	(Duncalfe, 2022)	yes	ISO-3166 Country and Dependent Territories Lists with UN Regional Codes
./input/SBDS_ISICREV4.rds	(OECD 2023a)	yes	SDBS Structural Business Statistics (ISIC Rev. 4) for French manufacturing sectors in 2006.
./input/SBDS_ISICREV4_metadata.rds	(OECD 2023a)	yes	Metadata for SDBS Structural Business Statistics (ISIC Rev. 4).
./input/TEC_ISICREV4.rds	(OECD 2023b)	yes	Trade by Enterprise Characteristics (ISIC Rev. 4) for French manufacturing sectors in 2006.
./input/TEC_ISICREV4_metadata.rds	(OECD 2023b)	yes	Metadata for Trade by Enterprise Characteristics (ISIC Rev. 4).

Computing environment

This code was run on a x86_64-w64-mingw32 platform of a Windows 10 x64 (build 19045) computer.

The analysis is conducted in the R programming environment. R is free, open-source and available for download here. The code has been tested against R version R version 4.3.1 (2023-06-16 ucrt).

Once R is successfully set up on your system, you will need to install a number of external R libraries. I have

used renv to snapshot the project's R environment. To install all of the necessary R libraries, simply open R at the project root (e.g. by clicking on the .Rproj file) and run the following commands:

```r
## Run these commands in R

# install.packages("renv") ## Only necessary if the renv package is not yet installed on your computer
# renv::init()  ## Only necessary if you didn't open the repo as an RStudio project
renv::restore(confirm = FALSE)
```

Instructions to replicators

All code files in this repository are referred to through the package here(). This package finds the root as the place where the '.Rproj' file is located. For this repository, the .Rproj file is located in the root folder, referred to as './'.

The empirical data analysis takes place within the ./input, /code, and ./temp and ./output directories respectively holding the external files, the code that operates on the files in the ./input directory, and the temporary and final computational results. The structure of replication package is indicated in the './code/00_MASTER.R' file. Running this Master file will reproduce all the results of this analysis and assign these results to their respective output folders.

Further files and directories refer to:

- The ./paper directory contains a sketch of the paper with figures and tables.
- The ./renv directory, along with the file ./renv.lock, captures the computational environment (see previous section)
- The repository is dual-licensed (see ./LICENSE.txt). A Modified BSD License applies to all code, scripts, programs, and SOFTWARE while a Creative Commons Attribution 4.0 International Public License, applies to databases, images, tables, text, and any other objects.
- The Readme files ./Readme.md, ./Readme.html, and ./Readme.docx are generated by ./Readme.Rmd.
- The ./bibliography.bib and ./chicago-author-date-withnotes.csl files contain the bibliography in bibtex and the citation-style file.

References

Duncalfe, Luke. 2022. "ISO-3166 Country and Dependent Territories Lists with UN Regional Codes." https://github.com/lukes/ISO-3166-Countries-with-Regional-Codes, Accessed on 11-February-2022.

Merlevede, B, M De Zwaan, K Lenaerts, and V Purice. 2015. "Multinational Networks, Foreign, and Domestic Firms in Europe." Working Paper 900. Ghent University.

OECD. 2023a. "Information SDBS Structural Business Statistics (ISIC Rev. 4)." https://stats.oecd.org/Index.aspx?DataSetCode=SSIS_BSC_ISIC4#, Accessed on 20-March-2023.

———. 2023b. "Trade by Enterprise Characteristics (ISIC Rev. 4)." https://stats.oecd.org/Index.aspx?DataSetCode=SSIS_BSC_ISIC4#, Accessed on 20-March-2023.

RAMON. 2021. "Statistical Classification of Economic Activities in the European Community, Rev. 2 (2008) (NACE Rev. 2)." https://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST_CLS_DLD&StrNom=NACE_REV2&StrLanguageCode=EN&StrLayoutCode=HIERARCHIC, Accessed on 28-March-2022.