# README for “Stalled Racial Progress and Japanese Trade in the 1970s and 1980s”

## Overview

This replication package provides all code and data necessary to replicate the analyses of “Stalled Racial Progress and Japanese Trade in the 1970s and 1980s”. The do-file **RUN\_ALL.do** in the main folder runs all code in the required order using Stata within approximately 3 minutes. It uses the do-files scripts in folder **do** and the data in the folders **data** and **rawdata**. It creates tables and figures in the folder **output**.

## Data Availability and Provenance Statements

**Summary of Availability**

All datasets required for the analysis are provided in the folder **data** in this replication package. The datasets industry\_analysis.dta, cz\_analysis.dta, cz\_stacked\_analysis.dta, and st\_analysis.dta are used for our analyses at the industry, commuting zone, and state levels, respectively, and are created by combining datasets in the folder **rawdata** described in the next section.

**Details on each Data Source**

Main data sources:

* US Census microdata from IPUMS USA. We draw from the 1960 5% sample, the 1970 1% metro samples, and 1980 5% state sample, and the 1990 5% state sample. We accessed the version of the data from August 5, 2021.
* UN Comtrade Data available at <https://comtrade.un.org/data/>. We accessed this data for our main analysis years on May 25, 2021.
* County Business Patterns for 1970 available from the National Archives Catalog at <https://catalog.archives.gov/id/613576>. We accessed this data on May 23, 2021.
* County Business Patterns for 1962 available from Eckert et al. 2022 at <https://fpeckert.me/elmmss/>. We accessed this data on June 3, 2021.

Additional data sources:

* US Census tabular data and GIS boundary files from IPUMS NHGIS at the county, place (central city), and tract levels. We use place data accessed April 12, 2021; county data accessed May 27, 2021; and tract data accessed July 29, 2021.
* US Current Population Survey from IPUMS CPS, including samples from the basic monthly CPS and the Annual Social and Economic Supplement of the CPS (ASEC). We accessed our version of the ASEC data on February 28, 2022, and the April-only version of the CPS data on April 25, 2022.
* US Census of Manufactures from 1972 and 1987 for quantities of jobs at the place, county and state level. We transcribed PDFs of the original tables published by the Bureau of the Census and available from Hathi Trust: <https://www.hathitrust.org/>. We accessed these PDFs on April 11, 2018.
* Domestic Output data from the US Bureau of Economic Analysis (BEA). We use the Gross Output tables available at <https://www.bea.gov/data/economic-accounts/industry>. We accessed these data on June 14, 2018
* Abstract, routine and manual task content of occ1990dd occupations and offshorability of occ1990dd occupations for our routine-intensity and offshorability controls from Autor and Dorn (2013). The data we use were accessed from David Dorn’s data page (<https://www.ddorn.net/data.htm>) and is dated December 17, 2012.
* NBER-CES Manufacturing Industry Database from 1958-2011 in 4-digit SIC codes and 1972 SIC-1987 SIC concordance, available at <https://www.nber.org/research/data/nber-ces-manufacturing-industry-database>. We accessed these data on August 6, 2018.
* 1968 Presidential Election – Election Results by County from U.S. Election Atlas available at <https://uselectionatlas.org/RESULTS/countymap.php?year=1968&f=0&off=0&elect=0>. We accessed these data on May 20, 2018.
* State-level unionization data computed from Gallup Polls conducted over 1968-1972 (#756, 757, 758 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 774S, 775, 776, 777, 778, 779, 780, 781, 783, 784, 785, 787, 788, 789, 791, 792, 793, 796, 797, 798, 802, 807, 808, 815, 824, 825, 833, 834, 835, 836, 838, 839, 840, 842, 844, 846, 847, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, and 861), available to subscribers at <https://ropercenter.cornell.edu/>. We accessed these data on June 5, 2018.
* Industry-level unionization data from unionstats.com available at <https://unionstats.com/>. We accessed these data on May 28, 2021.
* Robert C. Feenstra’s World Trade Flows Data, available from the Center for International Data at <https://cid.econ.ucdavis.edu/index.html>. We accessed these data on May 21, 2021.
* BEA Input-Output Accounts Data to isolate final goods imports as opposed to intermediates. We use the 496-industry level I-O make and use tables for 1972 available at <https://www.bea.gov/industry/historical-benchmark-input-output-tables>. We use the version of the data we accessed on August 8, 2018.

## 

## Dataset list

|  |  |  |  |
| --- | --- | --- | --- |
| Data file | Source | Notes | Provid-ed |
| rawdata/altipw\_cz.dta | UN Comtrade, IPUMS USA | N/A | Yes |
| rawdata/cbp\_sic72\_employment\_1962.dta | CBP | N/A | Yes |
| rawdata/cbp\_sic72\_employment\_1970.dta | CBP | N/A | Yes |
| rawdata/cbp\_sic72\_manshare\_1962.dta | CBP | N/A | Yes |
| rawdata/cbp\_sic72shares\_1962.dta | CBP | N/A | Yes |
| rawdata/cbp\_sic72shares\_1970.dta | CBP | N/A | Yes |
| rawdata/census\_cz.dta | IPUMS USA | N/A | Yes |
| rawdata/census\_cz\_stacked.dta | IPUMS USA | N/A | Yes |
| rawdata/census\_cz\_yr.dta | IPUMS USA | N/A | Yes |
| rawdata/census\_nat.dta | IPUMS USA | N/A | Yes |
| rawdata/census\_sb\_nb.dta | IPUMS USA | N/A | Yes |
| rawdata/census\_st.dta | IPUMS USA | N/A | Yes |
| rawdata/ces\_cz.dta | NBER-CES Manufacturing Database | N/A | Yes |
| rawdata/ces\_sic87dd.dta | NBER-CES Manufacturing Database | N/A | Yes |
| rawdata/comtrade\_sic87dd.dta | UN Comtrade | N/A | Yes |
| rawdata/comtrade\_totals.dta | UN Comtrade | N/A | Yes |
| rawdata/cps\_micro.dta | IPUMS CPS | N/A | Yes |
| rawdata/cps\_state.dta | IPUMS CPS | N/A | Yes |
| rawdata/cz1990\_coords.dta | <https://michaelstepner.com/maptile/geographies/> | N/A | Yes |
| rawdata/cz1990\_database.dta | <https://michaelstepner.com/maptile/geographies/> | N/A | Yes |
| rawdata/feenstra\_sic72.dta | Feenstra et al., 2005 | N/A | Yes |
| rawdata/ipr\_by\_yr.dta | UN Comtrade, BEA | N/A | Yes |
| rawdata/ipw\_others\_cz.dta | UN Comtrade, IPUMS USA | N/A | Yes |
| rawdata/ipw\_sic87dd.dta | UN Comtrade, IPUMS USA | N/A | Yes |
| rawdata/ipw\_st.dta | UN Comtrade, IPUMS USA | N/A | Yes |
| rawdata/ipw\_stacked\_cz.dta | UN Comtrade, IPUMS USA | N/A | Yes |
| rawdata/japan\_imports1990\_1970.dta | UN Comtrade | N/A | Yes |
| rawdata/lma\_to\_czone.dta | US Dept. of Agriculture | N/A | Yes |

## Computational requirements

### Software Requirements

The following programs and packages are required to run the replication code. The program “do/0\_setup.do” will install all Stata dependencies. It should be run once.

* Stata 17
  + spmap
  + texsave
  + ivreg2
  + ssaggregate
  + estout
  + ranktest version 01.3.02 or greater

### Memory and Runtime Requirements

The code was last run on a **4-core Intel-based desktop PC with Windows 11 21H2** using **STATA/MP 17.0**. This desktop had **64 GB** **of RAM**, and the data were stored locally on a **SATA III SSD**.

## Description of programs

The program RUN\_ALLdo creates all datasets from the raw data and generates all tables and figures by running all code in do (except for 0\_setup.do, which only has to be run manually once).

* + **0\_setup.do** installs all required Stata packages.
  + **iv\_cz.do** creates the imports per worker regressors and instrumental variables at the commuting zone level.
  + **data\_combine.do** combines the raw data in to several analysis files at different units of observation (e.g., commuting zone, commuting zone-by-year, state, industry) for all analyses.
  + **master.do** creates all figures and tables in the main text and in Appendix B.

## Instructions to Replicators

* Run **do/0\_setup.do** to install all required Stata packages.
* Edit line 2 of **RUN\_ALL.do** to set up appropriate pathline.
* Run **RUN\_ALL.do** to run all do-files that create the datasets and generate the figures and tables in sequence. The datasets will be stored in the folder **data**, and the figures and tables will be stored in the folder **output**.

## List of tables and programs

|  |  |  |
| --- | --- | --- |
| Figure/Table # | Program | Output file |
| Figure 1 | figure01.do | figure01.gph |
| Figure 2 | figure02.do | figure02.gph |
| Figure 3 | figure03.do | figure03.gph |
| Figure 4 | figure04.do | figure04.gph |
| Table 1 | table01.do | table01.txt |
| Table 2 | table02.do | table02.txt |
| Table 3 | table03.do | table03.txt |
| Table 4 | table04.do | table04.txt |
| Table 5 | table05.do | table05.txt |
| Table 6 | table06.do | table06.txt |
| Table 7 | table07.do | table07.txt |
| Table 8 | table08.do | table08.txt |
| Table 9 | table09.do | table09.txt |
| Table 10 | table10.do | table10.txt |
| Table 11 | table11.do | table11.txt |
| Table 12 | table12.do | table12.txt |
| Figure B.1 | figureb01.do | figureb01.gph |
| Figure B.2 | figureb02.do | figureb02.gph |
| Figure B.3 | figureb03.do | figureb03.gph |
| Figure B.4 | figureb04.do | figureb04.gph |
| Figure B.5 | figureb05.do | figureb05.gph |
| Figure B.6 | figureb06.do | figureb06.gph |
| Table B.1 | tableb01.do | tableb01.txt |
| Table B.2 | tableb02.do | tableb02.txt |
| Table B.3 | tableb03.do | tableb03.txt |
| Table B.4 | tableb04.do | tableb04.txt |
| Table B.5 | tableb05.do | tableb05.txt |
| Table B.6 | tableb06.do | tableb06.txt |
| Table B.7 | tableb07.do | tableb07.txt |
| Table B.8 | tableb08.do | tableb08.txt |
| Table B.9 | tableb09.do | tableb09.txt |
| Table B.10 | tableb10.do | tableb10.txt |
| Table B.11 | tableb11.do | tableb11.txt |
| Table B.12 | tableb12.do | tableb12.txt |
| Table B.13 | tableb13.do | tableb13.txt |
| Table B.14 | tableb14.do | tableb14.txt |
| Table B.15 | tableb15.do | tableb15.txt |
| Table B.16 | tableb16.do | tableb16.txt |
| Table B.17 | tableb17.do | tableb17.txt |
| Table B.18 | tableb18.do | tableb18.txt |
| Table B.19 | tableb19.do | tableb19.txt |
| Table B.20 | tableb20.do | tableb20.txt |
| Table B.21 | tableb21.do | tableb21.txt |
| Table B.22 | tableb22.do | tableb22.txt |
| Table B.23 | tableb23.do | tableb23.txt |
| Table B.24 | tableb24.do | tableb24.txt |
| Table B.25 | tableb25.do | tableb25.txt |
| Table B.26 | tableb26.do | tableb26.txt |
| Table B.27 | tableb27.do | tableb27.txt |
| Table B.28 | tableb28.do | tableb28.txt |
| Table B.29 | tableb29.do | tableb29.txt |
| Table B.30 | tableb30.do | tableb30.txt |
| Table B.31 | tableb31.do | tableb31.txt |
| Table B.32 | tableb32.do | tableb32.txt |
| Table B.33 | tableb33.do | tableb33.txt |
| Table B.34 | tableb34.do | tableb34.txt |
| Table B.35 | tableb35.do | tableb35.txt |
| Table B.36 | tableb36.do | tableb36.txt |

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