#### Readme

The code in this replication package produces 7 tables and 6 figures in the paper as well as 18 tables and 6 figures in the Online Appendix of Globalization, Gender, and the Family by W. Keller and H. Utar. The underlying data are from Statistics Denmark and the code uses Stata and Matlab.

## **Data Availability**

The information used in the analysis combines several Danish administrative registers (as described in the data appendix of the paper). The data use is subject to the European Union's General Data Protection Regulation (GDPR). The data are physically stored on computers at Statistics Denmark and, due to security and confidentiality reasons, the data are prohibited from being transferred to computers outside Statistics Denmark. More information about Statistics Denmark's information security and data confidentiality policy can be found here <a href="https://www.dst.dk/en/OmDS/strategi-og-kvalitet/datasikkerhed-i-danmarks-statistik">https://www.dst.dk/en/OmDS/strategi-og-kvalitet/datasikkerhed-i-danmarks-statistik</a>

Researchers interested in obtaining access to the register data employed in this paper can submit a written application to gain approval from Statistics Denmark. The application must include a detailed description of the proposed project, its purpose, and its social contribution, as well as a description of the required datasets, variables, and analysis population. A step-by-step guide on the application process is provided here <a href="https://www.dst.dk/en/TilSalg/Forskningsservice">https://www.dst.dk/en/TilSalg/Forskningsservice</a>. A pdf file providing a step-by-step guide in accessing the microdata from Statistics Denmark is provided in this folder. The guide is written by Statistics Denmark and updated as of August 31, 2018.

The codes that are used to reproduce all the tables and figures presented in the paper, "Globalization, Gender, and the Family" and its appendix are provided in this folder. Non-confidential data that are presented in the figures and tables are also provided in this folder. Supplementary files, all administrative data sets, and codes used to create the final data sets, as well as the codes to replicate the results, will be available and archived in the server hosted by Statistics Denmark and Aarhus University, called ECONAU. Researchers who are interested in replicating the results in this paper, can request access to the archived codes and data conditional on obtaining access to the register data from Statistics Denmark and Aarhus University as described above. Details of administrative data sets and variable definitions are provided in the online appendix of "Globalization, Gender, and the Family", by W. Keller and H. Utar.

# **Software Requirements**

The software needed to run the reproduction codes are Matlab and Stata.

The versions of Matlab and Stata that are used to run the codes are **Matlab 2019b** and **Stata 15**. No specific Matlab toolboxes are needed. You need to download a user-written Matlab function shadedErrorBar.m to run one of the scripts. You can download it from here <a href="https://www.mathworks.com/matlabcentral/fileexchange/26311-raacampbell-shadederrorbar">https://www.mathworks.com/matlabcentral/fileexchange/26311-raacampbell-shadederrorbar</a>

The replication codes use the following Stata functions: "ivreghdfe", "reghdfe", "estout", "outreg2". To install these functions, use "ssc install function\_name". However note that Stata and other software and programs in the Statistics Denmark servers are maintained by Statistics Denmark, and no user is allowed to install a function. These functions will be built-in in the Statistics Denmark servers.

To replicate the results in this paper, a researcher only needs to request access to the archived folder under the name of this publication. However, if the researcher wants to conduct his/her own analysis with the data used in this analysis for his/her own eventual publication, then the researcher should request the following registers for the dates between 1980-2009: Integrated Database for Labor Market Research (IDA), International trade data (UHDI), Business and accounting statistics (FIRE), Industriens salg af varer (VARS), Population Statistics (BEF, FAIN) Offentlig forsørgede (OF), Sammenhængende socialstatistik (SHSS), Fertility Database (FTDB, FTDK, MFR). For Statistics Denmark Registers, variable names and definitions, see https://www.dst.dk/extranet/forskningvariabellister/Oversigt%20over%20registre.html .

The IDA Database is the main source of information on workers. It provides a snapshot of the labor market for each year at the end of November. There is demographic and education information on every resident in Denmark between the age of 15 and 74 with a unique personal identification number. Compiled from separate establishment and job files, it provides the labor market status of each individual, as well as the annual salary and hourly wage, occupational position, and industry code of their primary employment. Employment status is based on the last week in November of each year. Demographic information on individuals includes their marital status (married, widow, same-sex partnership, and single). The final dataset used in this analysis was created by the LMDG/ECONAU database at Aarhus University, yearly longitudinal data sets constructed by administrative registers of Statistics Denmark (Bobbio and Bunzel, 2018).

## Description of programs/code and data

- 1) Figure 1.m: This is a Matlab script that reproduces "Figure 1: Evolution of Chinese Imports in Response to Quota Removal" and outputs Figure 1.pdf.
- 2) Figure 1 data.mat: This is the dataset underlying Figure 1 and Figure B1. It is loaded by Figure 1.m and Figure B1.m. It is not confidential and based on Statistics Denmark's UHDI.
- 3) Figure 2: This is a Matlab script that reproduces "Figure 2: Gender Differences in Labor Adjustment to Import Competition" and outputs Figure 2.pdf
- 4) Figure2data.mat: This is the dataset underlying Figure 2. It is loaded by Figure2.m. It is generated by Analysis1.do.
- 5) Figure 3a.m and Figure 3b.m: These are Matlab scripts that reproduce "Figure 3: Short-run Impact by Gender". They output Figure 3a.pdf and Figure 3b.pdf.

- 6) Figure3data.mat: The dataset underlying Figure 3. It is loaded by Figure3a and Figure3b. It is generated by Analysis1.do.
- 7) Figure 4a.m & Figure 4b.m : These are Matlab scripts that reproduce "Figure 4: Import Competition, Fertility, and Parental Leave". They output Figure 4a.pdf and Figure 4b.pdf.
- 8) Figure4data.mat: This is the dataset underlying Figure 4. It is loaded by Figure4.m. It is generated by Analysis1.do.
- 9) Figure 5. This is a Matlab script that reproduces "Figure 5: Import Competition and Marriage". It outputs Figure 5. pdf. It is generated by Analysis 1.do.
- 10) Figure 5 data.mat: This is the dataset underlying Figure 5. It is loaded by Figure 5.m. It is generated by Analysis 1.do.
- 11) Figure 6.m: This is a Matlab script that reproduces "Figure 6: Women's Fertility Response and the Biological Clock". It outputs Figure 6.pdf.

You need to download a user-written Matlab function shadedErrorBar.m to run this script. You can download it from here <a href="https://www.mathworks.com/matlabcentral/fileexchange/26311-raacampbell-shadederrorbar">https://www.mathworks.com/matlabcentral/fileexchange/26311-raacampbell-shadederrorbar</a>

- 12) Figure6data.mat: This is the dataset underlying Figure 6. It is loaded by Figure6.m. It is generated by Analysis1.do.
- 13) Figure A1: Occupational Distribution of Female Textile Workers in 1999" in the Online Appendix. It outputs Figure A1: pdf.
- 14) Figure A2.m: This Matlab script reproduces "Figure A2: Sectoral Distribution and Labor Market Status of Workers in 2009". It outputs Figure A2.pdf.
- 15) FigureA2data.mat: This is the dataset underlying Figure A2. It is loaded by FigureA2.m. It is generated by Analysis1.do.
- 16) Figure A3.m: This Matlab script reproduces "Figure A3: Exposure to Import Competition and Likelihood of Divorce". It outputs Figure A3.pdf.
- 17) FigureA3data.mat: This is the dataset underlying Figure A3. It is loaded by FigureA3.m. It is generated by Analysis1.do.

- 18) FigureA4.m: This Matlab script reproduces "Figure A4: Missing Earnings of Young Women". It outputs FigureA4.pdf.
- 19) FigureA4data.mat: This is the dataset underlying Figure A4. It is loaded by FigureA4.m. It is generated by Analysis1.do.
- 20) Figure A5. do: This is a Stata script that reproduces Figure A5. It outputs Figure A5.pdf.
- 21) Figure A5data.dta: This is the dataset underlying Figure A5. It is loaded by Figure A5.do.
- 22) Figure B1.m: This Matlab script reproduces "Figure B1: Import Share of China in Quota versus Non-quota textile Goods". It outputs Figure B1.pdf.
- 23) Analysis1.do: This is a Stata script that reproduces the tables in the text and in the online appendix based on the quota removal experiment sample. It produces QNResults.xlsx and QNResultsApp.xlsx that contain these tables. The script also produces the tables in the online appendix.
- 24) Analysis2.do: This is a Stata script that reproduces the tables in the text and in the online appendix based on the economy-wide sample. It produces EWResults.xlsx that contains these tables.

### References

Bobbio, Emmanuele and Henning Bunzel (2018). "The Danish Matched Employer-Employee Data", Economics Working Papers 2018-3, Department of Economics and Business Economics, Aarhus University.