Replication Package for:

"The Refugee's Dilemma: Evidence from Jewish Migration out of Nazi Germany"

by Johannes Buggle, Thierry Mayer, Seyhun Orcan Sakalli, Mathias Thoenig

Date: December 14, 2022

Overview

This replication package accompanies the paper Buggle, J.C., Mayer, T., Sakalli, S.O., and Thoenig, M. (forthcoming). "The Refugee's Dilemma: Evidence from Jewish Migration out of Nazi Germany". *Quarterly Journal of Economics.*

The files from this folder allow replicating all tables and figures using Stata and ArcMap. The Stata code runs for about 8 hours.

The master do file 'MasterDoFile.do' runs all the Stata code necessary to produce all tables and figures in the paper (except maps). The folders 'Do' and 'Data/Final' contain do-files and final data files that are called from the 'MasterDoFile.do'. Please set your directory in line 28 of the 'MasterDoFile.do'. Figures are exported as .pdf-files to the folders 'Figures' and tables are exported as .tex-files to the folder 'Tables'.

Some figures are produced in ArcMap. The material necessary to produce these figures is contained in the folder 'Maps'.

Data Availability and Provenance Statements

Please note that the main individual data set used in this paper, the "Resident List" (Zimmermann, 2013a) contains sensitive individual-level data, and can only be shared publicly in an anonymized version, where the individual identifiers (name, first name, city of birth, city of residence) have been made unrecognizable. Few tables and figures report statistics derived from sensitive individual information. For their replication, only aggregate data obtained by collapsing the individual-level dataset can be shared.

Researchers can obtain the full dataset from the German Federal Archives:

Bundesarchiv
Sachgebiet Dokumentation der Judenverfolgung
Finckensteinallee 63
D-12205 Berlin.
E-Mail: t.fransecky[at]bundesarchiv.de

Statement about Rights

☑ I certify that the author(s) of the manuscript have legitimate access to and permission to use the data used in this manuscript.

Summary of Availability

☐ All data **are** publicly available.

☑ Some data **cannot be made** publicly available.

☐ **No data can be made** publicly available.

Details on each Data Source

- **Individual-level data on migration/deportation:** Individual-level information on the Jewish population of Germany in the 1930s comes from "the List of Jewish Residents in the German Reich 1933–1945" (the "Resident List") that was compiled by the German Federal Archives (Zimmermann, 2013a). In this paper, we use the version of the Resident List that was provided to us by the Federal Archives on March 25, 2019.

- **Supplementary Cards of the 1939 Census**: We add to the Resident List information on Jewish ancestors and the completion of higher education taken from the supplementary cards of the 1939 German Census, see Zimmermann (2013b).

- **City-level data:** Population in 1925, the size of the Jewish population in 1925, the share of Protestants in 1925, as well as the economic structure of towns in 1933 are based on the German Censuses of 1925 and 1933 and provided by Hänisch (1989). Coordinates for the cities in the Census of 1925 are based on Selb and Munzert (2018). Information on the Jewish population in 1933 is taken from "The Encyclopedia of Jewish Communities in the German Language" by Alicke (2014). City-level information on antisemitic attitudes (Medieval pogroms, NSDAP votes in 1928, and synagogue attacks in 1938) come from Voigtländer and Voth (2012). The strength of the radio signal in 1933 is taken from Adena et al. (2015).

- **Destination-level data**: Income per capita in destination *d* and year *t* is taken from the Maddison Project Database 2018 (Inklaar *et al.*, 2018). The distance between Germany and emigration destinations is taken from the CEPII GeoDist database (Mayer and Zignago, 2011). We use the variable dist which measures the simple distance based on the most populated cities, in km. German occupation takes on the value 1 in years in which a destination is occupied by Nazi Germany. This information is taken from Stiftung Jüdisches Museum Berlin (2006). We coded the extent of labor restrictions in destination countries using historical information from a multitude of sources, in particular country-wide and comparative studies of emigration in the 1930s (e.g., Lohfeld and Hochstadt, 2006; Meyer, 1998; Jackisch, 1994; Strauss, 1971; Stiftung Jüdisches Museum Berlin, 2006; Wegner, 2013). Ticket prices for maritime travel from European ports to harbors overseas, as well as the travel time in days, are taken from the "Philo-Atlas, a handbook for Jewish emigrants" (Löwenthal and Oppenheimer, 1938).

Data files

In the following, we describe the datasets contained in the folder 'Data/Final' of the replication package. All data sets are in Stata format (.dta).

Note that all variables in the main datasets have self-explanatory labels: Hence, for a data dictionary, type 'describe' in Stata after opening the dataset. For additional details on the data see Online Appendix A and D. For more information on the main variables see Online Appendix E.

- **algorithmic_match_distribution.dta:** Contains results of the algorithmic matching of the Core Resident List and the 1939 Census. Used in Figure A2.
- **cbirth_distance_topdestinations.dta:** Contains distance measures from cities of birth to migration destinations. Used in the counterfactual analysis**.**
- **census_1939_cross_section.dta:** Contains individual-level information from the supplementary cards of the 1939 German Census (see Zimmermann, 2013b). Used for Table G7.
- **city_of_birth_wo_coordinates_aggregate_population.dta:** Contains cities of birth and a count of the number of individuals originating from cities of birth without geo-coordinates. Used for Table A2.
- **city_of_residence_aggregate_population.dta:** Contains cities of residence and counts of the number of individuals without birth information. Used for Table B5.
- **city_of_residence_characteristics.dta:** Contains characteristics of cities of residence. Used for Tables B3 and B4; Figures B1-B8.
- **country_level_auxiliary_fpsample.dta:** Contains estimated fixed effects from the triadic gravity estimation (Full- and Partial-spell sample), as well as country information on gdp, distance, and policies. Used in the counterfactual analysis**.**
- **country_level_auxiliary_fsample.dta:** Contains estimated fixed effects from the triadic gravity estimation (Full-spell sample), as well as country information on gdp, distance, and policies. Used for Tables H4 and I1, and in the counterfactual analysis**.**
- **cres_distance_top_destinations.dta:** Contains distance measures from cities of residence to migration destinations. Used in the counterfactual analysis.
- **emigration_deportation_cross_section.dta:** Contains cross-sectional individual-level data from the Resident List (Zimmermann, 2013a), supplemented with individual information from the Census of 1939 and city-level data. Used for Tables 1, A1, A2, A3, B1, B2, B5, C1-C9, G1-G6, G12-G14, G29, and H3; Figures 1, A1, B9, C1-C4, G2-G4, G6, G7, G9, and G10.
- **emigration_deportation_panel.dta**: Contains panel of individuals from the Resident List (Zimmermann, 2013a), supplemented with individual information from the Census of 1939 and city-level data. Used for Tables 4, 5, A4, G8-G11, G15-G28, G30, and G31; Figures G1, G5, G8, G11, G12, and G14, and in the counterfactual analysis.
- **jni_firstnames_w_at_least_50_occurrence.dta:** Contains the first-names of individuals, a count of how many times they are observed in the Resident List, as well as their value of the Jewish Name Index. Contains only first names with at least 50 occurrences. Used in Table G6.
- **migration_detainment_rbdt_for_simulations_fpsample.dta:** Contains city-level measures of migration, detainment, and the population at risk for the Full- and Partial-spell sample. Used in the counterfactual analysis.

- **migration_detainment_rbdt_for_simulations_fsample.dta:** Contains city-level measures of migration, detainment, and the population at risk for the Full-spell sample. Used in the counterfactual analysis.

- **migration_triadic_connected_countries_lower_stage_fpsample.dta:** This dataset contains the triadic migration data for the Full- and Partial-spell sample, used in the estimation of the CoR-CoB-Destination gravity regressions and created from individual-data from the Resident List (Zimmermann, 2013a). Coefficients used in the counterfactual analysis.

- **migration_triadic_connected_countries_lower_stage_fsample.dta:** This dataset contains the triadic migration data for the Full-spell sample, used in the estimation of the CoR-CoB-Destination gravity regressions and created from individual-data from the Resident List (Zimmermann, 2013a). Used for Tables 3, H2, and H3; Figure H1, and in the counterfactual analysis.

- **philo_atlas_transport_prices.dta:** Contains port-level data of maritime transport prices and travel days. Used in Table I2 and in the counterfactual analysis.

Computational requirements

- Operating System: Windows 7 or later

Software Requirements

- ArcMap 10.8

- Stata (code was last run with version 15). Packages:
  - schemepack
  - listtex
  - gtools
  - fsum
  - center
  - ftools
  - ranktest
  - ivreg2
  - hdfe
  - reghdfe
  - ivreghdfe
  - distinct
  - psmatch2
  - estout
  - coefplot
  - ebalance
  - ppmlhdfe
  - poi2hdfe

The program 'MasterDoFile.do' will install all packages locally and should be run once.

Memory and Runtime Requirements

Summary

- Approximate time needed to reproduce the analyses on a standard (2022) desktop machine: 8 hours.

Details

- The code was last run on a computer with Intel® Xeon® W-10885M CPU @ 2.40 GHz (8 cores, 16 processors) and 64.0 GB of installed RAM @ 2,933 MHz using Windows 10 Enterprise operating system.
- Computation took 8 hours.

Description of programs/code

- The Stata do-files in the folder 'Do' generate all tables and most figures in the main text and the Online Appendix. Do-files that produce excerpts of the main paper are located in the subfolder 'Manuscript'. Do-files that produce excerpts of the main paper are located in the subfolder 'Online_Appendix'. Do-files that are required as prerequisite for the counterfactual analysis are located in the subfolder 'Subprograms_for_Counterfactuals'.

  The file 'MasterDoFile.do' will run them all. Each do-file called from 'MasterDoFile.do' identifies the table or figure it creates (e.g., Table1.do; FigureB1.do). All output files are given the name of the do-file the file was created from (Table1.tex, FigureB1.pdf) so that the source do-file and the output file can be easily linked.

- Please set your directory in line 28 of the 'MasterDoFile.do'. The directory refers to the location on your computer to which you have extracted the 'Replication' folder.

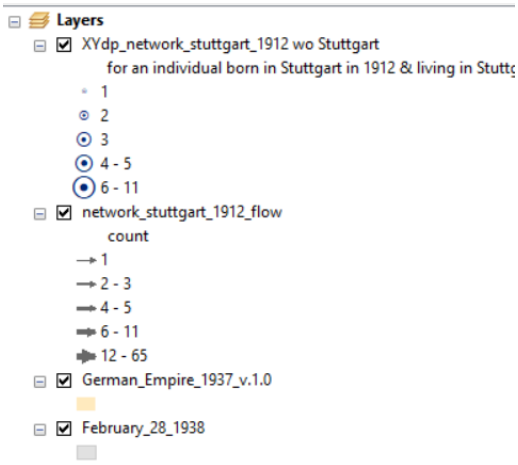
Instructions to Replicators

1. Download and unzip the replication files.
2. Open 'MasterDoFile.do'. Please set your directory in line 28 of the 'MasterDoFile.do'. The directory refers to the location on your computer to which you have extracted the 'Replication' folder.
3. Run 'MasterDoFile.do' to set the working directories, install all third-party packages and produce figures and tables.

Details

- Contents of the 'MasterDoFile.do':
  - Lines 28 to 44 set the working directories for the do-files, data, tables, and figures.
  - Lines 50 to 68 install all relevant third-party programs.
  - Lines 77 to 194 call all the do-files that generate tables and figures.
  - These programs were last run in December 2022.
  - Expected computation time is about 8 hours.

- Some do-files are building upon the results of others. Before running a do-file, please make sure to have executed the relevant prerequisite do-files, as indicated in the preamble of the relevant program.
- Figures 1, A1, G5, and G8 are created using ArcGIS. The figures can be reproduced using i) the ArcGIS map packages (.mpx) provided in the folder 'Maps/' and ii) ArcMap Desktop (Version 10.8). Please follow these instructions:
  - For each of the Figures 1, A1, G5, and G8, open the relevant map package located in 'Maps/Figure_*/ArcGIS map packages'.
  - Activate all layers by ticking the boxes, as shown in the following example:



  - The layers are in the correct order - to replicate the figures do not order them differently.
  - Before exporting the map, select "Layout view" by clicking on *View -> Layout view*.
  - Export the map as .pdf by clicking on *File -> Export Map…*. Select .pdf as type.

List of tables/figures and programs

Table/Figure	***Program***	***Output file***	***Note***
Table 1	Manuscript/Table_1.do	Table_1.tex	
Table 2	Manuscript/Table_2.do	Table_2.tex	
Table 3 *Table 4*	Manuscript/Table_3.do Manuscript/Table_4.do	Table_3.tex Table_4_panelA.tex, Table_4_panelB.tex	
Table 5	Manuscript/Table_5.do	Table_5.tex	
Table 6	Manuscript/Table_6.do	Table_6_panelA.tex, Table_6_panelB.tex	
Table A1	Online_Appendix/Table_A1.do	Table_A1.tex	

Table A2	Online_Appendix/Table_A2.do	Table_A2.tex	
Table A3	Online_Appendix/Table_A3.do	Table_A3.tex	
Table A4	Online_Appendix/Table_A4.do	Table_A4.tex	
Table B1	Online_Appendix/Table_B1.do	Table_B1.tex	
Table B2	Online_Appendix/Table_B2.do	Table_B2.tex	
Table B3	Online_Appendix/Table_B3.do	Table_B3.tex	
Table B4	Online_Appendix/Table_B4.do	Table_B4.tex	
Table B5	Online_Appendix/Table_B5.do	Table_B5.tex	
Table B7	Online_Appendix/TableB7.do	TableB7.tex	
Table C1	Online_Appendix/Table_C1.do	Table_C1.tex	
Table C2	Online_Appendix/Table_C2.do	Table_C2.tex	
Table C3	Online_Appendix/Table_C3.do	Table_C3.tex	
Table C4	Online_Appendix/Table_C4.do	Table_C4.tex	
Table C5	Online_Appendix/Table_C5.do	Table_C5.tex	
Table C6	Online_Appendix/Table_C6.do	Table_C6.tex	
Table C7	Online_Appendix/Table_C7.do	Table_C7.tex	
Table C8	Online_Appendix/Table_C8.do	Table_C8.tex	
Table C9	Online_Appendix/Table_C9.do	Table_C9.tex	
Table G1	Online_Appendix/Table_G1.do	Table_G1_panelA.tex,	
		Table_G1_panelB.tex, Table_G1_panelC.tex	
Table G2	Online_Appendix/Table_G2.do	Table_G2_panelA.tex, Table_G2_panelB.tex	
Table G3	Online_Appendix/Table_G3.do	Table_G3.tex	
Table G4	Online_Appendix/Table_G4.do	Table_G4.tex	
Table G5	Online_Appendix/Table_G5.do	Table_G5.tex	
Table G6	Online_Appendix/Table_G6.do	Table_G6.tex	
Table G7	Online_Appendix/Table_G7.do	Table_G7.tex	
Table G8	Online_Appendix/Table_G8.do	Table_G8.tex	
Table G9	Online_Appendix/Table_G9.do	Table_G9.tex	
Table G10	Online_Appendix/Table_G10.do	Table_G10.tex	
Table G11	Online_Appendix/Table_G11.do	Table_G11.tex	
Table G12	Online_Appendix/Table_G12.do	Table_G12.tex	
Table G13	Online_Appendix/Table_G13.do	Table_G13.tex	
Table G14	Online_Appendix/Table_G14.do	Table_G14.tex	
Table G15	Online_Appendix/Table_G15.do	Table_G15.tex	
Table G16	Online_Appendix/Table_G16.do	Table_G16.tex	

Table G17	Online_Appendix/Table_G17.do	Table_G17.tex	
Table G18	Online_Appendix/Table_G18.do	Table_G18.tex	
Table G19	Online_Appendix/Table_G19.do	Table_G19.tex	
Table G20	Online_Appendix/Table_G20.do	Table_G20.tex	
Table G21	Online_Appendix/Table_G21.do	Table_G21.tex	
Table G22	Online_Appendix/Table_G22.do	Table_G22.tex	
Table G23	Online_Appendix/Table_G23.do	Table_G23.tex	
Table G24	Online_Appendix/Table_G24.do	Table_G24.tex	
Table G25	Online_Appendix/Table_G25.do	Table_G25.tex	
Table G26	Online_Appendix/Table_G26.do	Table_G26.tex	
Table G27	Online_Appendix/Table_G27.do	Table_G27.tex	
Table G28	Online_Appendix/Table_G28.do	Table_G28.tex	
Table G29	Online_Appendix/Table_G29.do	Table_G29.tex	
Table G30	Online_Appendix/Table_G30.do	Table_G30.tex	
Table G31	Online_Appendix/Table_G31.do	Table_G31.tex	
Table H1	Online_Appendix/Table_H1.do	Table_H1.tex	
Table H2	Online_Appendix/Table_H2.do	Table_H2.tex	
Table H3	Online_Appendix/Table_H3.do	Table_H3_panelA.tex, Table_H3_panelB.tex, Table_H3_panelC.tex	
Table H4	Online_Appendix/Table_H4.do	Table_H4.tex	
Table I1	Online_Appendix/Table_I1.do	Table_I1.tex	
Table I2	Online_Appendix/Table_I2.do	Table_I2.tex	
Table I3	Online_Appendix/Table_I3.do	Table_I3.tex	
Table I4	Online_Appendix/Table_I4.do	Table_I4_panelA.tex Table_I4_panelB.tex	
Figure 1	Manuscript/Figure_1.do and Maps/Figure_1	Figure_1a.dbf, Figure_1b.dbf; Figure_1a_*.pdf, Figure_1b_*.pdf	Input for figures generated in Stata, final figures are created in ArcMap. *color and bw
Figure 2	Manuscript/Figure_2.do	Figure_2_*.pdf	*color and bw
Figure A1	Online_Appendix/Figure_A1.do and Maps/Figure_A1	Figure_A1a.dbf, Figure_A1b.dbf;	Input for figures generated in

		Figure_A1a_*.pdf, Figure_A1b_*.pdf	Stata, final figures are created in ArcMap. *color and bw
Figure A2	Online_Appendix/Figure_A2.do	Figure_A2a.pdf, Figure_A2b.pdf	
Figure B1	Online_Appendix/Figure_B1.do	Figure_B1a.pdf, Figure_B1b.pdf, Figure_B1c.pdf, Figure_B1d.pdf	
Figure B2	Online_Appendix/Figure_B2.do	Figure_B2.pdf	
Figure B3	Online_Appendix/Figure_B3.do	Figure_B3a.pdf, Figure_B3b.pdf	
Figure B4	Online_Appendix/Figure_B4.do	Figure_B4a.pdf, Figure_B4b.pdf, Figure_B4c.pdf, Figure_B4d.pdf	
Figure B5	Online_Appendix/Figure_B5.do	Figure_B5.pdf	
Figure B6	Online_Appendix/Figure_B6.do	Figure_B6a.pdf, Figure_B6b.pdf	
Figure B7	Online_Appendix/Figure_B7.do	Figure_B7a.pdf, Figure_B7b.pdf	
Figure B8	Online_Appendix/Figure_B8.do	Figure_B8a.pdf, Figure_B8b.pdf	
Figure B9	Online_Appendix/Figure_B9.do	Figure_B9.pdf	
Figure C1	Online_Appendix/Figure_C1.do	Figure_C1a.pdf, Figure_C1b.pdf, Figure_C1c.pdf, Figure_ C1d.pdf	
Figure C2	Online_Appendix/Figure_C2.do	Figure_C2.pdf	
Figure C3	Online_Appendix/Figure_C3.do	Figure_C3.pdf	
Figure C4	Online_Appendix/Figure_C4.do	Figure_C4.pdf	
Figure G1	Online_Appendix/Figure_G1.do	Figure_G1a.pdf, Figure_G1b.pdf	
Figure G2	Online_Appendix/Figure_G2.do	Figure_G2.pdf	
Figure G3	Online_Appendix/Figure_G3.do	Figure_G3.pdf	
Figure G4	Online_Appendix/Figure_G4.do	Figure_G4.pdf	
Figure G5	Online_Appendix/Figure_G5_G8.do and Maps/Figure_G5	Figure_G5_G8.dbf, Figure_G5.pdf	
Figure G6	Online_Appendix/Figure_G6.do	Figure_G6.pdf	

Figure G7	Online_Appendix/Figure_G7.do	Figure_G7.pdf	
Figure G8	Figure_G5_G8.do and Maps/Figure_G8	Figure_G5_G8.dbf, Figure_G8.pdf	
Figure G9	Online_Appendix/Figure_G9.do	Figure_G9.pdf	
Figure G10	Online_Appendix/Figure_G10.do	Figure_G10.pdf	
Figure G11	Online_Appendix/Figure_G11.do	Figure_G11a.pdf, Figure_G11b.pdf	
Figure G12	Online_Appendix/Figure_G12.do	Figure_G12a.pdf, Figure_G12b.pdf	
Figure G13	Online_Appendix/Figure_G13.do	Figure_G13a.pdf, Figure_G13b.pdf	
Figure G14	Online_Appendix/Figure_G14.do	Figure_G14a.pdf, Figure_G14b.pdf	
Figure H1	Online_Appendix/Figure_H1.do	Figure_H1.pdf	
Figure H2	Online_Appendix/Figure_H2.do	Figure_H2a.pdf, Figure_H2b.pdf	
Figure I1	Online_Appendix/Figure_I1.do	Figure_I1.pdf	

References

ADENA, M., ENIKOLOPOV, R., PETROVA, M., SANTAROSA, V. and ZHURAVSKAYA, E. (2015). Radio and the Rise of the Nazis in Prewar Germany. *The Quarterly Journal of Economics, 130 (4), 1885-1939.*

ALICKE, K.-D. (2014). Encyclopedia of Jewish Communities in the German Language. https://www.jüdische-gemeinden.de/index.php/home.

HÄNISCH, D. (1989). Inhalt und Struktur der Datenbank »Wahl-und Sozialdaten der Kreise und Gemeinden des Deutschen Reiches von 1920 bis 1933«. *Historical Social Research/Historische Sozialforschung*, pp. 39–67.

INKLAAR, R., DE JONG, H., BOLT, J. and VAN ZANDEN, J. (2018). Rebasing 'Maddison': New Income Comparisons and the Shape of Long-Run Economic Development. *Maddison Project Working paper 10.*

JACKISCH, C. (1994). Einwanderungspolitik und öffentliche Meinung in Argentinien 1933-1945. In *Alternative Lateinamerika. Das deutsche Exil in der Zeit des Nationalsozialismus: Internationales Symposium Exil in Spanien, Portugal und Lateinamerika; 1933-1945 vom 30. Sept. bis 2. Okt. 1991 am Ibero-Amerikanische Institut in Berlin*, pp. 43–53.

LÖWENTHAL, E. G. and OPPENHEIMER, H. (1938). *Philo-Atlas: Handbuch für die Jüdische Auswanderung*, vol. 3. Philo, Jüdischer Buchverlag.

MAYER, T. and ZIGNAGO, S. (2011). Notes on CEPII's Distances Measures: The GeoDist Database. *CEPII Working Paper.*

MEYER, K. (1998). *Keiner will sie haben: Die Exilpolitik in England, Frankreich und den USA zwischen 1933 und 1945*. Peter Lang.

SELB, P. and MUNZERT, S. (2018). Examining a Most Likely Case for Strong Campaign Effects: Hitler's Speeches and the Rise of the Nazi Party, 1927–1933. *American Political Science Review*, 112 (4), 1050–1066.

STIFTUNG JÜDISCHES MUSEUM BERLIN (ed.) (2006). *Heimat und Exil: Emigration der Deutschen Juden nach 1933*. Jüdischer Verlag im Suhrkamp Verlag.

STRAUSS, H. A. (1971). The Immigration and Acculturation of thes

VOIGTLÄNDER, N. and VOTH, H.-J. (2012). Persecution Perpetuated: the Medieval Origins of Anti-Semitic Violence in Nazi Germany. *The Quarterly Journal of Economics*, **127** (3), 1339–1392.

WEGNER, S. (2013). *Zuflucht in einem fremden Land: Exil in Uruguay 1933-1945*. Assoziation A Verlag, Berlin - Hamburg.

ZIMMERMANN, N. M. (2013a). The List of Jewish Residents in the German Reich 1933- 1945, Federal Archives Germany.

— (2013b). The Supplementary Cards Stating Information about Origin and Educational Background of the Population Census of 17 May 1939, Federal Archives Germany.