Replication Package
There's More to Marriage than Love: The Effect of Legal Status and Cultural Distance on Intermarriages and Separations
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Step 1:

We obtained restricted access to administrative Italian data at the individual level from ISTAT through its ADELE Laboratory.[1] Access to the data for research purposes is regulated by ISTAT through an open application procedure. Authorized researchers can access and use the data from workstations located in secure rooms and isolated from the Internet as well as from any input or output devices within the ISTAT offices. The output of the analysis is made available upon inspection by ADELE officers in compliance with the laws on the protection of statistical confidentiality and of personal data. For further information, visit: https://www.istat.it/it/informazioni-e-servizi/per-i-ricercatori/laboratorio-adele

We report the list of our data sources and their specific reference in Italian:

1. Marriage data (1998-2012) - Matrimoni 1998-2012
2. Separation data (1998-2012) - Separazioni dei coniugi 1998-2012

3. Birth data (1996-1998, 1999-2012)
- Nascite: caratteristiche demografiche e sociali 1990-1998
- Iscritti in anagrafe per nascita 1999-2012

4. Census data of Italian population in 1991, 2001, and 2011:
- 13° Censimento generale della popolazione 1991
- 14° Censimento generale della popolazione e delle abitazioni 2001
- 15° Censimento generale della popolazione e delle abitazioni 2011.

5. Migration data (1990-2012)
- Movimento annuale della popolazione straniera residente 1993-2012
- Movimento e calcolo della popolazione residente annuale 1990-2012
- Multiscopo sulle famiglie: condizione e integrazione sociale dei cittadini stranieri 2011

We complement our analysis with additional data, we report the data sources below:

6. ISMU data (2001-2016) from ISMU.org, link: https://www.ismu.org/dati-sulle-migrazioni/ (data in csv format in replication package)

7. Amnesty data (2002) from Ministry of Interior, data request submitted at the following link: https://www.interno.gov.it/it

[1] The data used for our analysis and the selection of variables were released when we first submitted our data request in 2017.

8. EVS and WVS data (1981-2020), data available from https://search.gesis.org/research_data/ZA4804 and https://dbk.gesis.org/dbksearch/SDesc2.asp?ll=10&notabs=1&af=&nf=&search=&search2=&db=E&no=4804

Step 2:

Run the Stata file *Alldo_Marriage.do,* which contains the list of do files (in order) generating Tables 1-7 and Figures 1-8 in the paper.
The file shapes the data to be analyzed and provides descriptive evidence, displayed in Tables 1-7 and Figures 1-8 in the paper. It also provides descriptive evidence and results, displayed in Appendix Tables A2-A10 and Figures A1-A5 in Appendix. References to Tables and Figures are detailed in the codes.
In addition, it also constructs the empirical moments that are used by the Matlab file Init20191030.m (see below).
The file takes as input the files listed below:

File Name	**Description**	**Location**
STATA do files		
data_matrimoni.do	Import marriage data	In replication package
M_dataset.do	Create main marriage dataset (all years)	In replication package
data_popolazione.do	Import population data, import immigrant population data (1995-2012) by nationality and gender. Create final population vectors of immigrants (1995-2012)	In replication package
census1991.do	Import Census 1991 data. Create vector of single males and females in 1991	In replication package
census2001.do	Import Census 2001 data. Create vector of single males and females in 2001. Create data on cohabitations.	In replication package
census2011.do	Import Census 2011 data. Create vector of single males and females in 2011.	In replication package

	Create data on cohabitations.	
census_merge_1991-2001.do and census_merge_2001-2011.do	Create vector of single males and females over time (1995-2012)	In replication package
irregulars_amnesty2002.do	Import Amnesty 2002 data. Create vector of single males and females for irregular immigrants. Test assumptions to predict irregulars.	In replication package
summary_stats_amnesty.do	Summary stat for irregulars	In replication package
create_gains_marriage.do	Create gains from marriage	In replication package
create_gains_cohabitation.do	Create gains from cohabitation	In replication package
descriptive_evidence_gains.do	Descriptive evidence on marriages, gains and singles	In replication package
estimates_reducedform.do	Main estimates on the effect of admission to the EU on gains from marriage. Plus additional estimates including singles, fully flexible estimates, with announcement. Robustness	In replication package
preliminary_figures.do	Produce preliminary graphical evidence on foreign population, intermarriages and irregular trends.	In replication package
data_ismu.do	Import ISMU data (2001-2016)	In replication package
estimates_ismu.do	Estimates on the effect of admission to the EU on labor market outcomes. Summary statistics on ISMU data.	In replication package
robust_irregulars_measurementerror.do	Robustness estimates –	In replication package

	measurement errors in irregular singles	
create_culturaldistance.do	Import EVS and WVS data. Create pairwise cultural distance across pairs of countries	In replication package
estimates_culturaldistance.do	Robustness - Estimates cultural distance of European countries before and after the EU enlargements and event study analysis	In replication package
local_labor_markets.do	Create population and single vectors over time at the llm (local labor market) level	In replication package
estimates_local_markets.do	Robustness - Estimates on the effect of admission to the EU on gains from marriage (llm level)	In replication package
data_separazioni.do	Import separation data. Create main separation dataset.	In replication package
MS_merge.do	Merge marriage and separation data	In replication package
estimates_separationrate_policychange.do	Hazard rate of separations before and after the EU enlargements. Descriptive evidence on separations	In replication package
summary_stats.do	Number of observations in the dataset and summary statistics	In replication package
data_nati.do	Import birth data.	In replication package
N_dataset.do	Create main fertility dataset	In replication package
MSN_merge.do	Merge marriage and separation dataset with fertility	In replication package
estimates_fertilityrate.do	Estimates, Probability of having a child before	In replication package

	and after the EU enlargements	
census2001_maritaldistribution.do	Create pop vectors in 2001 for structural model	In replication package
census2011_maritaldistribution.do	Create pop vectors in 2011 for structural model	In replication package
maritaldistribution.do	Create marital distribution for structural model	In replication package
census2001_homeownership.do	Create homeownership estimates in 2001 for structural model	In replication package
census2011_homeownership.do	Create homeownership estimates in 2011 for structural model	In replication package
separation_moments_structuralmodel.do	Create separation estimates for structural model	In replication package
STATA Data Files		
Matrimoni.txt (1998-2012)	Main ISTAT data	To be requested at ISTAT
Popolazione.txt (1995-2012)	ISTAT data	To be requested at ISTAT
Migsc.txt (1995-2012)	ISTAT data	To be requested at ISTAT
Migb.txt (1995-2012)	ISTAT data	To be requested at ISTAT
Census1991.txt (by province)	ISTAT data	To be requested at ISTAT
Census2001.txt (national)	ISTAT data	To be requested at ISTAT
Census2011.txt (by province)	ISTAT data	To be requested at ISTAT
Irregulars_singles_prov-nat-gender_2002.dta	Ministry of Interior	To be requested at the Ministry of Interior

CodiciStatiEsteri.dta	ISTAT data	In replication package
Internet.dta	ISTAT data	In replication package
foreign_residents_by_continent_nationality_1993-2016.dta	ISTAT data	In replication package
trend_mrate_mig.dta	ISTAT data and authors calculations	In replication package
time_series_bylegalstatus_1991-2013.dta	ISTAT data and authors calculations	In replication package
Indagine_campionaria_immigrazione_in_Lombardia.csv (2001-2016)	ISMU data	In replication package
EVS.dta and WVS.dta	EVS data WVS data	Available from EVS and WVS
RACCORDO COMUNI2011_SLL2011.xlsx	ISTAT data	In replication package
Variazioni_amministrative_territoriali_dal_01011991.xls	ISTAT data	In replication package
Separazioni.dta (1998-2012)	ISTAT data	To be requested at ISTAT
Nati.txt (1990-2014)	ISTAT data	To be requested at ISTAT

Step 3:
Run the Matlab file ***Init20191030.m***. Main file that runs all the replications.
Prior to running the file you need to run the Stata do files described above to generate cvs or txt files that are used by the Matlab code. You also need to obtain the Gurobi solver and a license. This can be obtained for free with an academic accreditation at:
https://www.gurobi.com/academia/academic-program-and-licenses/

The file ***Init20191030.m*** calls other Matlab files detailed below. All results are displayed on the screen. You first need to put the variable stderr equal to 1 on line 18 to generate standard errors and then to zero to display all the tables and figures.
The file produces Tables 8, 9, and G1 and Figures 11 to 16 and G1.

Matlab files:

File name	**Description**	**Location**
MATLAB FILES		
Init20191030.m	Main file that runs all the replication. Calls the other matlab files detailed below. All results are displayed on screen.	In replication package

estimMarriage20191030.m	Calculate the distance between observed and predicted moments.	In replication package
solveMatch20191030.m	Prepare for the solution to the marriage allocations	In replication package
gurobSolve.m	Solves the marriage allocation. Calls the Gurobi solver.	In replication package
SurplusChangeMan.m; SurplusChangeWoman.m	Calculate the marriage surplus for both sexes.	In replication package
Olsmoment.m; olsmomentW.m	Matlab subroutines, OLS and weighted OLS	In replication package
Constrain.m; unconstrain.m; gradp_forward.m	Matlab subroutines	In replication package
MATLAB Data Files		
THETA20191030.mat	Vector of estimated parameters	In replication package
Sstore2.mat	Matrix with covariance matrix. Generated by the file Init20191030.m if stderr=1 is set in line 19	In replication package
MonteCarlo20191030.m; estimMonteCarlo20191030.m; solveMonteCarlo20191030.m	Files to perform the Monte Carlo replications presented in the appendix.	In replication package

NOTE:

1. Depending on the version of Matlab that is used and the random number generator, a given run of the program may generate slightly different results from another. Those differences are small, but rounding can make them occasionally more visible.
2. Depending on the version of Matlab and computer specification, the main program init20101030.m can run for several hours.