

## Replication Package for "Beliefs About Maternal Labor Supply"

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### **Overview**

This replication package contains the code necessary to construct the analysis dataset from the primary data collected by the authors. All data processing and analysis are conducted using Stata. Please note that Figures A.1 through A.4 in the Online Appendix are based on secondary data sources, which are not included in this package (see details below). Users should anticipate that the complete replication process will take approximately seven hours to run.

### **A. Data**

#### **A.1. Data availability statements**

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

We certify that the author(s) of the manuscript have documented permission to redistribute/publish the data contained within this replication package.

#### **A.2. Dataset list**

<b>Dataset</b>	<b>Description</b>	<b>Source</b>
dataset_analysis.dta	Clean dataset used to produce the main descriptive analysis of the paper	Provided by the authors as is
dataset_cm.dta	Processed dataset used to produce the choice model results (Section 6)	Produced by running the do-file choicemodel_replication.do, and also provided in the folder "Data"
experiment_data_clean.dta	Clean dataset, starting point for producing the dataset analysis_treatment.dta	Provided by the authors as is
analysis_treatment.dta	Clean and processed dataset used to produce the results of the supplementary study (Section 7 and Appendix C of the paper)	Produced by running the do-file experiment.do and also provided in the folder "Data"
LMF_1_2_Maternal_Employment.xlsx	OECD raw data used to produce motivating evidence on maternal labour supply in OECD countries.	Provided by the authors as is. Information on data download can be found below.
OECD_childcare.csv	OECD raw data used to produce motivating evidence on childcare costs as a	Provided by the authors as is. Information on data download can be found below.

	proportion of disposable income in OECD countries.	
ZA5900_v4-0-0.dta	Raw dataset of ISSP 2012 - "Family and Changing Gender Roles IV"	Provided by the authors as is. Downloadable from GESIS website here: <a href="https://www.gesis.org/en/issp/data-and-documentation/family-and-changing-gender-roles/2012">https://www.gesis.org/en/issp/data-and-documentation/family-and-changing-gender-roles/2012</a>
covsa.dta, covsb.dta; tempa.dta, tempb.dta	Temporary datasets used to generate Figure A.10. They contain the coefficients standard errors, and C.I. to produce the graph of the marginal effects of the alternative-specific variables from multinomial probit choice models where the dependent variables are maternal labor supply intentions in the baseline scenario (panel a) and intentions in scenarios where childcare is available full-time (panel b)	Produced by running the do-file choicemodel_replication, and also provided in the folder "Data"
quotas_mainstudy_full.xlsx	Final, aggregated dataset used to produce Table A.1 from GSOEP data.	Provided by the authors as is
quotas_experiment.xlsx	Final, aggregated dataset used to produce Table C.1 from GSOEP data.	Provided by the authors as is

In the Data folder, you will also find a folder named "temporary data". This folder contains intermediate datasets generated automatically by the main do-files during various stages of the analysis. These temporary files are created as part of the data processing workflows in the four primary do-files described below.

### **A.3. Extra Information on Download of Publicly Available Data**

Appendix Figures A.1 to A.4 in the paper were produced using publicly available data from the OECD and the International Social Survey Programme (ISSP). Specifically:

- **Figure A.1** is constructed using maternal employment data from the 2019 OECD Family Database<sup>1</sup>. The specific version of the dataset used in the paper is no longer publicly available and can only be found in the replication package under the filename `LMF_1_2_Maternal_Employment.xlsx`. However, a more recent

<sup>1</sup> OECD. 2019b. "OECD Family Database: LMF1.2 Maternal employment." <https://www.oecd.org/en/data/datasets/oecd-family-database.html>. Accessed on 9 August 2022.

version of the same dataset, updated with data through 2021, is available for download at the following link:  
[https://www.oecd.org/els/soc/lmf\\_1\\_2\\_maternal\\_employment.xlsx](https://www.oecd.org/els/soc/lmf_1_2_maternal_employment.xlsx).

- **Figures A.2 and A.3** are based on the 2012 wave of the ISSP dataset<sup>2</sup>
- **Figure A.4** relies on updated OECD estimates of childcare costs for 2019, downloaded from the OECD Data Explorer<sup>3</sup>.

These datasets are now included in the replication package and can be found in the “Data” folder under the filenames: `LMF_1_2_Maternal_Employment.xlsx`, `ZA5900_v4-0-0.dta`, and `OECD_childcare.csv`. The do-file used to replicate these figures—`other_data_replication.do`—is included and documented accordingly.

For Tables A.1 and C.1, we use data from the 2019 wave of the German Socio-Economic Panel (GSOEP) to present the characteristics of a nationally representative sample. As the GSOEP is a restricted-access dataset, it is not included in this replication package. Instead, we provide the final aggregated datasets derived from the GSOEP, which contain the summary statistics used in the paper’s main analysis and additional experiment.

## **B. Software requirements**

The code was last executed using **Stata/SE 17.0** on a machine running **Windows 11 Pro** (64-bit, x86-64 architecture) with 16 GB RAM and an Intel Core i5-1145G7 CPU @ 2.60GHz. The replication materials require **Stata 17 or later** to run successfully. All output tables are generated in `.tex` format, although some have been manually refined for formatting or presentation purposes.

The following user-written Stata packages must be installed:

- **Available on SSC:**
  - `balancetable`
  - `estout`
  - `vioplot`
  - `cleanplots` (graphic scheme)

Install them by using the following commands:

```
ssc install balancetable
```

```
ssc install estout
```

```
ssc install vioplot
```

```
ssc install cleanplots
```

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<sup>2</sup> ISSP Research Group. 2012. “ISSP 2012 - Family and Changing Gender Roles IV.” *Data set version: ZA5900 (v4.0.0)*, doi: <https://doi.org/10.4232/1.12661>

<sup>3</sup> OECD (2019a). ‘Childcare cost estimates based on 2019 data’, <http://data-explorer.oecd.org/s/2cw>, retrieved from the OECD Data Explorer. Accessed on 1 July 2025.

- **Available via other repositories:**
  - `grc1leg` (used for combining graphs with a single legend)

Install it by using the following command:

```
net install grc1leg, from(http://www.stata.com/users/vwiggins/)
```

### **Summary of the Stata Library**

Package	Version	Date	Author	Source	Description
balancetable	5.0	19.11.2018	Mattia Chiapello	<a href="http://fmwww.bc.edu/repec/bocode/b">http://fmwww.bc.edu/repec/bocode/b</a>	Build a balance table and print it in LaTeX or Excel
estout	3.31	26.04.2022	Ben Jann	<a href="http://fmwww.bc.edu/RePEc/bocode/e">http://fmwww.bc.edu/RePEc/bocode/e</a>	Make regression tables
vioplot	1.1.5	24.05.2012	<a href="mailto:austinnichols@gmail.com">austinnichols@gmail.com</a> and <a href="mailto:nwinter@virginia.edu">nwinter@virginia.edu</a>	<a href="http://fmwww.bc.edu/repec/bocode/v">http://fmwww.bc.edu/repec/bocode/v</a>	Produce violin plots with current graphics
grc1leg	1.0.5	02.06.2010	Vince Wiggins (StataCorp)	Run in Stata the following command to get more information: <code>net describe grc1leg, from(<a href="http://www.stata.com/users/vwiggins/">http://www.stata.com/users/vwiggins/</a>)</code>	Combine graphs into one graph with a common legend
cleanplots	/	2017	Trenton D. Mize	<a href="https://tdmize.github.io/data/cleanplots.html">https://tdmize.github.io/data/cleanplots.html</a>  More information on the package here: <a href="https://www.trentonmize.com/software/cleanplots">https://www.trentonmize.com/software/cleanplots</a>	Graphics scheme for easy and effective data visualizations

## **C. Code and programs**

To reproduce all the results of all tables and figures in the paper, the user needs to run the dofile “master.do” in the code folder. The user needs to change the working directory at the beginning of the dofile before running the code.

### **C.1. Description of code**

The replication package contains the following do-files, whose content is explained more in detail in the table below:

- `analysis_replication.do`: contains the code necessary to produce all the descriptive results

- other\_data\_replication.do: contains the code to produce Figures A.1, A.2, A.3, A.4. (the data necessary to generate these figures is not provided by the authors)
- choicemodel\_replication.do: contains the results relative to the section “6.2 Choice Model Estimation”
- experiment\_replication.do: contains the code that produces exhibits for Section 7 “Supplementary Evidence: The Experimental Survey” and Appendix C.

## **C.2. List of Tables and Figures and location in the code**

The output of all do-files can be found either in the folder “Tables” or in the folder “Figures” of the replication package.

<b>Figure/Table</b>	<b>Program</b>	<b>Output file</b>	<b>Note</b>
Table 3	analysis_replication.do	Tables\Table3.tex	
Table A.1	analysis_replication.do	Tables\Appendix_TableA1.tex	
Table A.2	analysis_replication.do	Tables\Appendix_TableA2.tex	
Table A.3	analysis_replication.do	Tables\Appendix_TableA3.tex	
Table A.4	analysis_replication.do	Tables\Appendix_TableA4.tex	
Table A.5	analysis_replication.do	Tables\Appendix_TableA5.tex	
Table A.6	analysis_replication.do	Tables\Appendix_TableA6.tex	
Table A.7	analysis_replication.do	Tables\Appendix_TableA7.tex	
Table A.8	analysis_replication.do	Tables\Appendix_TableA8.tex	
Table A.9	analysis_replication.do	Tables\Appendix_TableA9.tex	
Figure 1	analysis_replication.do	Figures\Figure1_PanelA.eps Figures\Figure1_PanelB.eps	
Figure 2	analysis_replication.do	Figures\Figure2.eps	
Figure 3	analysis_replication.do	Figures\Figure3.eps	
Figure 4	analysis_replication.do	Figures\Figure4.eps	
Figure A.5	analysis_replication.do	Figures\Appendix_FigureA5_PanelA.eps Figures\Appendix_FigureA5_PanelB.eps	
Figure A.6	analysis_replication.do	Figures\Appendix_FigureA6_PanelA.eps Figures\Appendix_FigureA6_PanelB.eps	
Figure A.7	analysis_replication.do	Figures\Appendix_FigureA7_PanelA.eps Figures\Appendix_FigureA7_PanelB.eps	
Figure A.8	analysis_replication.do	Figures\Appendix_FigureA8.eps	
Table 4	choicemodel_replication.do	Tables\Table4	
Table A.10	choicemodel_replication.do	Tables\Appendix_TableA10.tex	
Figure A.9	choicemodel_replication.do	Figures\Appendix_FigureA9.eps	
Figure A.10	choicemodel_replication.do	Figures\Appendix_FigureA10_PanelA.eps Figures\Appendix_FigureA10_PanelB.eps	
Figure A.1	other_data.do	Figures\Appendix_FigureA1.eps	
Figure A.2	other_data.do	Figures\Appendix_FigureA2.eps	
Figure A.3	other_data.do	Figures\Appendix_FigureA3.eps	
Figure A.4	other_data.do	Figures\Appendix_FigureA4.eps	
Table C.1	experiment_replication.do	Tables\Appendix_TableC1.tex	
Table C.2	experiment_replication.do	Tables\Appendix_TableC2.tex	
Table C.3	experiment_replication.do	Tables\Appendix_TableC3.tex	
Table C.4	experiment_replication.do	Tables\Appendix_TableC4_PanelA.tex Tables\Appendix_TableC4_PanelB.tex	The two panels have

			been subsequently manually merged together in a unique table.
Figure C.2	experiment_replication.do	Figures\Appendix_FigureC2.eps	

## References

**OECD** 2019a. 'Childcare cost estimates based on 2019 data', <http://data-explorer.oecd.org/s/2cw>, retrieved from the OECD Data Explorer. Accessed on 1 July 2025.

**OECD**. 2019b. "OECD Family Database: LMF1.2 Maternal employment." <https://www.oecd.org/en/data/datasets/oecd-family-database.html>, Accessed on 9 August 2022.

**ISSP Research Group**. 2012. "ISSP 2012 - Family and Changing Gender Roles IV." Dataset version: ZA5900 (v4.0.0), doi: [10. 4232/ 1. 12661](https://doi.org/10.4232/1.12661).

**Goebel, Jan, Markus M Grabka, Stefan Liebig, Martin Kroh, David Richter, Carsten Schröder, and Jürgen Schupp**. 2019. "The German Socio-Economic Panel (SOEP)." *Jahrbücher für Nationalökonomie und Statistik*, 239(2): 345–360.