Overview

This directory contains Stata data and code that replicates the tables and figures for the following paper:

Title: The Long-Run Effects of Sports Club Vouchers for Primary School Children. *American Economic Journal: Economic Policy*.

Author: Jan Marcus, Thomas Siedler, and Nicolas R. Ziebarth

Directory Structure

Existing folders

• Data: This is where the original data are stored in .dta format (Stata):

• **Do**: Contains all code

Ado: Contains relevant user-written programs in Stata (ado files)

Folders that will be created

- results: All results (LaTeX tables and PDF/PNG figures) are outputted into this folder
- out-data: This is where modified data are stored that are used for subsequent analysis
- log: Contains the log file

Data Availability and Provenance Statement

This paper relies mainly on a large register-based online survey, which we specifically designed and carried out to evaluate the effectiveness of the "Come to the Sports Club" (C2SC) initiative. This main data set is the Youth Leisure Online Survey (YOLO) and the replication package includes all relevant YOLO variables (openICPSR-138922). This data set is used for Figures 1 to 7 and Tables 1 to 6 in the main paper as well as Figures A.5, B.1 to B.3 and Tables A.2, A.3, B.1 to B.7. Additionally, the paper uses three additional data sets for some of the tables and figures in the appendix, which we are not allowed to directly share but for which we provide instructions on how to access them:

- 1. The German Socio-Economic Panel (SOEPv34; https://doi.org/10.5684/soep.v34). The SOEP data are provided by the German Institute for Economic Research (DIW Berlin). They can be ordered free of charge from researchers all around the world. See https://www.diw.de/en/diw_01.c.601584.en/data_access.html for further information (Table A.5).
- 2. School Health Examination Data (*Schulreihenuntersuchung*) from Public Health Service (*Öffentlicher Gesundheitsdienst*). We requested and obtained these administrative data from one county in Saxony (Figure 8, Tables C.1, C.2). We had to sign Data Use Agreements that require strict confidentiality and do not allow us to post the data, share them or publicly post more details. Interested researchers should reach out to Nicolas Ziebarth who will provide information on the county and the names of the contact person.
- 3. Information from selected Registry Offices. Information includes gender, date of birth, and nationality of all 155,527 individuals invited for survey participation. We do not have the right to share this information, but we can provide assistance to interested researchers how to obtain these data (Tables A.4, A.6).

Summary of Availability

 Data for the large majority of tables and figures (except of Figure 8, Tables C.1, C.2 and A.4-A.6) are publicly available. Some data cannot be made publicly available.

Dataset List

Data file	Source	Notes	Provided
Data/MSZ_main-data.dta	Stata	The main data set (YOLO)	Yes

Computational Requirements

- **Software**: Stata version 15 or higher (Add-on packages (.ado files) are included in the folder **Ado** and do not need to be installed by user)
- Memory and Runtime Requirements: This analysis requires some memory and processing resources. The analysis was last run on a Windows 10 Desktop with 8 gigabytes of RAM and an i7-5600 CPU 2.60 GHz processor. The runtime was about 90 minutes.

Descriptions of Scripts

- **00_master.do** is a master script that sets up the environment, creates output folders, and then calls other scripts.
- 01_maketables.do: creates the tables in the paper
- 02 makegraphs.do: creates the graphs in the paper
- 03_synthetic_control.do: performs the synthetic control methods
- **04_power.do**: performs power analyses
- **05_soep_comparison.do**: compares main data with SOEP data (requires access to SOEP data)
- 06_registrydata.do: performs the analysis for the registry data (requires access to the registry data)
- **07_schooldata.do**: performs the analysis for the school health examination data (requires access to the school health examination data)

Instructions for Replicators

Download all folders and files and leave the folder structure as it is. Executing the Stata script **00_master.do** will run the analysis and generate the tables and figures. Before running this script, you must make one edits to line **10** of **00_master.do**:

1. Line 20: Define a global macro, MY_PATH, that points to the directory containing this README file

Lists of Tables and Figures

The provided code reproduces selected tables and figures in the paper, as explained and justified below:

Figure/Table	Source script	Line	Output File	Notes
Figure 1	01_makegraphs.do	55 55 55	DiD_kommheard.png DiD_kommgotten.png DiD_kommused.png	

		67 78 90	DiD_sportsclub.png DiD_sport_hrs.png DiD_oweight.png	
Figure 2	01_makegraphs.do	110 110 110 110 118 110	hte_kommheard.png hte_kommgotten.png hte_kommused.png hte_sportsclub.png hte_sport_hrs.png hte_oweight.png	
Figure 3	01_makegraphs.do	130 130 130 136 142 136	event_kommheard.png event_kommgotten.png event_kommused.png event_sportsclub.png event_sport_hrs.png event_oweight.png	
Figure 4	01_makegraphs.do	171 179	DiD_alt1.png DiD_alt2.png	
Figure 5	01_makegraphs.do	189 194 199 204 212 219	bar_579_en.png bar_561_en.png bar_582_en.png bar_583_en.png transportation.png transportation2.png	
Figure 6	01_makegraphs.do	255 261	clubs.png divisions.png	
Figure 7	01_makegraphs.do	279 295	placebo.png further.png	
Figure 8	07_schooldata	27	TreatedControlObese2005_2008 TreatedControlOverweight2005_2008 TreatedControlmotordisorder2005_2008 TreatedControlEmotionalDisorderII2005_2008	
Table 1	01_maketables.do	36	summary.tex	
Table 2	01_maketables.do	64	main.tex	

Table 3	01_maketables.do	98	main_parents2.tex	
Table 4	01_maketables.do	154	robust_p1.tex	
Table 5	01_maketables.do	167	robust_p2.tex	
Table 6	01_maketables.do	206	main_parents.tex	
Table 7	03_synthetic_control.do	217	ebw_main.tex	
Figure A.1				Requires no data
Figure A.2	01_makegraphs.do	305- 321		See log file for numbers used in figure
Figure A.3				Requires no data
Figure A.4	01_makegraphs.do	327	hist_dur.png	
Table A.1				Does not include any empirical data
Table A.2	01_maketables.do	229	descr_further.tex	
Table A.3	01_maketables.do	241	reliability.tex	
Table A.4	06_registrydata.do	30	participants2_all.tex	Requires access to registry information
Table A.5	05_soep_comparison.do	242	comp_vars_all.tex	Requires access to SOEP information
Table A.6	06_registrydata.do	41	participation.tex	Requires access to registry information
Figure B.1	01_makegraphs.do	335		See log file for numbers used in figure
Figure B.2	03_synthetic_control.do	114 114 114 127	Synth2_kommheard.png Synth2_kommgotten.png Synth2_kommused.png Synth2_sportsclub.png	

		138 149	Synth2_sport_hrs.png Synth2_oweight.png	
Figure B.3	01_makegraphs.do 01_makegraphs.do 01_makegraphs.do 03_synthetic_control.do 03_synthetic_control.do 03_synthetic_control.do	367 376 367 181 190 181	diff_sportsclub.png diff_sport_hrs.png diff_oweight.png diffsynth_sportsclub.png diffsynth_sport_hrs.png diffsynth_oweight.png	
Table B.1	01_maketables.do	273	hte.tex	
Table B.2	01_maketables.do	317	event_alt1.tex	
Table B.3	01_maketables.do	333 354	descr_par.tex descr_par_plus.tex	
Table B.4	01_maketables.do	354 380	descr_redeemer.tex descr_redeemer_plus.tex	
Table B.5	01_maketables.do	455	se.tex	
Table B.6	04_power.do	45 56	power1a.tex power1b.tex	
Table B.7	04_power.do	203 322	power2a.csv power2b.csv	
Table C.1	07_schooldata	21	DesStatSchuluntersuchung.tex	Requires access to school health examination data
Table C.2	07_schooldata	55	Regs09_13Merged.tex	Requires access to school health examination data

Contact

jan.marcus@uni-hamburg.de (Jan Marcus)

Thomas.Siedler@uni-potsdam.de (Thomas Siedler)

nrz2@cornell.edu (Nicolas R. Ziebarth)