Read First

This replication archive contains data sets and R code to replicate all the analyses presented in the manuscript and appendix of "Extending the Use and Prediction Precision of Subnational Public Opinion Estimation" (Leemann and Wasserfallen).

There are three main parts to the analysis:

- A Monte Carlo Analysis
  aaa MrP and MrsP MC Analysis.R

- Illustrations with Swiss data
  aaa MrP and MrsP_CH.R
  *** aaa MrP and MrsP_CH_money.R ***

- Illustrations with US data
  aaa MrP and MrsP_US.R
  aaa MrP and MrsP_US_wUncert.R

Each of the above codes can be run whereby it is necessary to first set the replication folder as working directory. Note that the MC analysis takes on a Macbook Pro (2.8 GHz, 16 GB RAM) about 17 hours. We have used the R version 3.3.1 (2016-06-21) -- "Bug in Your Hair".

Each of the above codes directly refers and integrates model functions or data pre-processing or data simulation that is conducted with other R-code stored in the replication folder. The following lists the code files, which the three main parts of the analysis introduced above integrate in the analysis:

- Monte Carlo Analysis
  ***Create population samples: Draws rho 0 vers 1.R,
  Draws rho 0 vers B04.R, Draws rho 0 vers B085.R,
  Draws rho 0.2 vers 1.R, Draws rho 0.2 vers B04.R,
  Draws rho 0.2 vers B085.R, Draws rho 0.4 vers 1.R,
  Draws rho 0.4 vers B04.R, Draws rho 0.4 vers B085.R,
  Draws rho 0.6 vers 1.R, Draws rho 0.6 vers B04.R,
  Draws rho 0.6 vers B085.R
  ***Estimate predictions of the population samples with disaggregation and with MrP (based on joint and marginal distributions):
  MC A 0500 0.0 B00.R, MC A 0500 0.0 B04.R, MC A 0500 0.0 B085.R,
  MC A 0500 0.2 B00.R, MC A 0500 0.2 B04.R, MC A 0500 0.2 B085.R,
  MC A 0500 0.4 B00.R, MC A 0500 0.4 B04.R, MC A 0500 0.4 B085.R
  MC A 0500 0.6 B00.R, MC A 0500 0.6 B04.R, MC A 0500 0.6 B085.R,
  MC A 1000 0.0 B00.R, MC A 1000 0.0 B04.R, MC A 1000 0.0 B085.R
  MC A 1000 0.2 B00.R, MC A 1000 0.2 B04.R, MC A 1000 0.2 B085.R,
  MC A 1000 0.4 B00.R, MC A 1000 0.4 B04.R, MC A 1000 0.4 B085.R,
  MC A 1000 0.6 B00.R, MC A 1000 0.6 B04.R, MC A 1000 0.6 B085.R,

MC A 2000 0.0 B00.R, MC A 2000 0.0 B04.R, MC A 2000 0.0 B085.R,
MC A 2000 0.2 B00.R, MC A 2000 0.2 B04.R, MC A 2000 0.2 B085.R,
MC A 2000 0.4 B00.R, MC A 2000 0.4 B04.R, MC A 2000 0.4 B085.R,
MC A 2000 0.6 B00.R, MC A 2000 0.6 B04.R, MC A 2000 0.6 B085.R

- Swiss analysis:
  ***Extracting population data from the census:
  census_pull_out_command_CH_joint.R,
  census_pull_out_command_CH_marginal.R
  ***Functions for Swiss MrP: source_MrP_CH_money.R,
  source_MrP_CH.R, source_MrsP_CH_adjustedsynthetic.R,
  source_MrsP_CH_money.R

- US analysis
  ***Functions for US MrP: source_MRP_US.R

Here is a list with all data files (please also consult “aaa codebook_AJPS.rtf” for further information on the data):

AZ_GM_SSD.csv: Replication file from Warshaw and Rodden (2012). Data on gay marriage vote from Arizona.

BfS data.csv: Vote outcome of public votes in Switzerland.

CA_GM_SSD.csv: Replication file from Warshaw and Rodden (2012). Data on gay marriage vote from California.

census final BfS 11 2012 2.csv: Joint distribution for Swiss citizens. File was created by the Federal Statistics Office upon request.

Contextdata1.dta: Context level variables for Swiss cantons. Source: Leemann and Wasserfallen (2016).

DATA_v4_ageshares.dta: Census data on age groups for state senate districts in Arizona, California, Michigan, Ohio, and Wisconsin.

districts_ssd.csv: Replication file from Warshaw and Rodden (2012). Needed to get unique identifier for each state senate district across five states.

gay_marriage_senate.dta: Replication file from Warshaw and Rodden (2012). Survey data on gay marriage from Arizona, California, Michigan, Ohio, and Wisconsin.

MI_GM_SSD.csv: Replication file from Warshaw and Rodden (2012). Data on Gay marriage vote from Michigan.

OH_GM_SSD.csv: Replication file from Warshaw and Rodden (2012). Data on Gay marriage vote from Ohio.

parties in cantons.dta: Strength of political parties in most recent national election per canton.

Post-Stratification Data - RImport (SSD).csv: Replication file from Warshaw and Rodden (2012). Joint distribution for people in Arizona, California, Michigan, Ohio, and Wisconsin.

Voxit.dta: Post-election surveys on 186 Swiss direct democratic votes.

WI_GM_SSD.csv: Replication file from Warshaw and Rodden (2012). Data on gay marriage vote from Wisconsin.