AmericasBarometer Weights and Design Effects

Weights

Weighting of single country, single year datasets: Most of the AmericasBarometer samples are designed to be self-weighted, however there a number of exceptions over the years. Each country data set includes a variable called "WT" that contains the weight to be used in analyses. This variable is 1 for all observations if the dataset self-weighted. The sum of the weights is equal to the sample size.

Weighting of multi-country and/or multi-year datasets: AmericasBarometer analyses typically treat all country-year studies as equally weighted units. The variable WEIGHT1500 is included in all multi-country and/or multi-year datasets. It standardizes the WT variable to sum to an arbitrary size of 1500 for each country-year study. The formula for WEIGHT1500 for each individual *i*, in each country *c*, in each year *y*, is as follows (where c is country and y is year):

$$weight1500_{icy} = \frac{wt_i * 1500}{N_{cy}}$$

Design Effects

For the correct calculations of standard errors and confidence intervals, the sampling design should be taken into account. Specifically, the variance estimate needs to be adjusted for the stratification of the sample and the selection of primary sampling units (PSUs). In face-to-face surveys, the strata are given in the variable ESTRATOPRI and the PSUs are given with the variable UPM. In telephone and internet surveys, there is no stratification or selection of geographic PSUs. For the sake of consistency with the AmericasBarometer framework, we provide the variable STRATA as a single stratum (the country-year) and the variable UPM as the individual. (The variable ESTRATOPRI still exists in all datasets, but for telephone and internet surveys, these are just the regions in which the respondent lives and are not part of the sample design.)

In datasets that are merged across time and/or across countries, each strata is considered independent across time. In these merged datasets the variable STRATA contains an arbitrary, unique code for each strata, in each country, in each year.

In the Stata datasets, survey characteristics and weights are declared using one of the commands below (this is already done for you).

Single country face-to-face: **`svyset upm [pw=wt], strata(estratopri)`**

Single country web or phone: **`svyset upm [pw=wt], strata(strata)`**

Multi-country and/or multi-year: **`svyset upm [pw=weight1500], strata(strata)`**

Analyses using the **`svy:`** prefix will automatically adjust the estimates for weights and design effect. For more information on the use of Stata's survey commands, type **`help svy_estimation`** in the command line or see https://www.stata.com/manuals13/svysvyestimation.pdf