

Understanding Society User Support - Support #153

weighting BHPS sample correctly in longitudinal analysis

05/28/2013 04:23 PM - Robert de Vries

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| Status: | Closed | Start date: | 05/28/2013 |
| Priority: | High | % Done: | 100% |
| Assignee: | | | |
| Category: | | | |
| Description | | | |
| <p>Hi, I want to make sure I am using the BHPS longitudinal weights correctly in my analysis. I am analysing respondents to the self-completion interview in 4 waves of data: BHPS waves N, O, & R, and USOC Wave B, using both random effects models (using xtmixed in Stata) and fixed effects models (using xtreg, fe). My analyses are restricted to English 18+ respondents only.</p> <p>As there is no BHPS longitudinal self-completion weight, I have been using the BHPS 2001 longitudinal main interview weight (b_indin01_lw) as the best substitute. For example:</p> <pre>xtset pid xtreg y x1 x2 [pweight=b_indin01_lw], fe</pre> <p>Am I OK with this, or would another approach give me less biased estimates?</p> <p>Best, Rob</p> | | | |

History

#1 - 06/07/2013 03:15 PM - Redmine Admin

- % Done changed from 0 to 50

Dear Robert,

If you are interested in descriptive statistics and your analysis sample is UKHLS Wave 2 BHPS sample, then using the weights b_indin01_lw, produces unbiased estimates for the 2001 UK (and England) population that has survived until 2010. These weights correct for unequal selection probability (particularly because of the regional boost samples) and attrition from 2001 to 2010. As you are using only the England sample, unequal selection probabilities is not a problem, but attrition is. As you rightly pointed out these weights do not correct for the additional self-completion non-response. One option is to estimate a self-completion non-response model yourself and then multiply the existing weight with the inverse of the response probability.

But in case of multivariate analysis, there is another problem. The answer to the question, whether using weights in multivariate analysis produces consistent estimates of the coefficients is not quite straight-forward. Here is a good reference. "What are we weighting for?" Solon, Haider and Wooldridge, NBER working paper 18859.

Best wishes,
Alita

#2 - 06/27/2013 03:08 PM - Redmine Admin

- Status changed from New to Closed

- % Done changed from 50 to 100