Subject: Re: Melogit and Weights
Posted by BillC on Tue, 12 Jan 2021 23:26:24 GMT
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Hi Tom,

Another quick clarification on weight for multilevel analyses. To recap, I am combining the mens and womens datsets for a multilevel analyses. (Code is from DHS Report #27 (Multilevel Modeling Using DHS Surveys: A Framework to Approximate Level-Weights)

Two questions:
Q1: Do I need to adjust v005 BEFORE I run this code below?

```
gen wt=v005/1000000
gen DHSwt = v005/1000000
* Steps to approximate Level-1 and Level-2 weights from Household or Individual Weights
* Step 1. De-normalize the final weight, using approximated normalization factor
gen d_HH = DHSwt * (M/m_c)
*Step 2. Approximate the Level-2 weight
* f the variation factor
gen f = d_HH / ((A_h/a_c_h) * (M_h/S_h))
scalar alpha=0.5
gen wt2 = (A_h/a_c_h)*(f^alpha)
gen wt1 =  d_HH/wt2
* Svyset
svyset v001, strata(v022) weight(wt2) singleunit(centered) || _n, weight(wt1)
.....
```

Q2:if yes, then the adjustment factor for women = (population of 15-49yr women in country)/number of 15-49 yr women sampled; and for men = (population of men 15-49 yrs in country)/number of men 15-49 yrs sampled - as per the code below?

```
*adjusting weights of men and women in combined dataset
gen wtfactor=.
replace wtfactor=(xxxxxxxx/29461) if sex==2   //dividing population of women 15-49 yrs in country by number interviewed in 15-49 yrs
replace wtfactor=(yyyyyyy/10760) if sex==1//dividing population of men 15-49 yrs in country by number of men interviewed
label variable wtfactor "Multiplication factor for wt(v005)"

gen wt=v005/1000000
gen newwt=wt*wtfactor
label variable newwt "Population adjusted sample weight"
gen DHSwt = newwt/1000000
```

(then run code above...)

Many thanks!

Bill