Subject: Weights and Strata for Pooled Samples
Posted by Yawo on Mon, 10 Aug 2020 16:27:14 GMT
View Forum Message <> Reply to Message

Hello,

I've used IPUMS to create a combined dataset for men and women for 23 African countries.

As the listing below shows, the weights are not constant within each PSU as they should be. In fact we have two different weights within each PSU, one for males and one for females.

list sample sex weight weight2 psupool stratapool in 115431/115435

	sample	sex	weight	weight2	psupool	strata~l
115431.	Lesotho 2014	male	.515554	1	4753	336
115432.	Lesotho 2014	female	.48581	1	4753	350
115433.	Lesotho 2014	female	.48581	1	4753	350
115434.	Lesotho 2014	male	.515554	1	4753	336
115435.	Lesotho 2014	female	.48581	1	4753	350

This issue has been the source of "weights not constant within PSU" error I have been receiving when running svy: melogit models.

However, I thought I can adjust the strata and the psu by taking gender into account. Doing so results in constant weights within each psu, as the code and listing below shows.

```
egen psupool= group(idhspsu sex)
egen stratapool= group(strata sex)
```

list sample sex idhspid idhspsu idhsstrata psupool stratapool weight in 10/15

	sample	sex	idhspid	idhspsu	idhsstrata	psupool	strata~l	weight
10.	Angola 2015	male	2401	00010001	3	2401000001	2401000018	1	321 .979475
11.	Angola 2015	male	2401	00010012	3	2401000001	2401000018	1	321 .979475

```
 12. | Angola 2015     male       2401    00010026  1   2401000001   2401000018        1        321
.979475 |
 13. | Angola 2015   female       2401    00010001 02   2401000001    240100018        2         18
1.001989 |
 14. | Angola 2015   female       2401    00010002 03   2401000001    240100018        2         18
1.001989 |
     |-------------------------------------------------------------------------------------------------|
 15. | Angola 2015   female       2401    00010002 02   2401000001    240100018        2         18
1.001989 |
     +-------------------------------------------------------------------------------------------------
```

My question:

1. Is this necessary to adjust the strata, psu and even the weights when we append male and female data into one file.

2. And if so, is my <egen> code the right way to readjust the strata. If not, is there any other way?

3. I was able to run my melogit models successfully after applying the adjustment to the strata and the psu, but again, I want to be sure the adjustment is ok, else I would have to revert to running separate models for men and women.

thanks - cY