

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	2401000018	2	18
	1.001989								
14.	Angola 2015	female	2401	00010002	03	2401000001	2401000018	2	18
	1.001989								

15.	Angola 2015	female	2401	00010002	02	2401000001	2401000018	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