

```
*****
* A Practical Guide to Using Panel Data
* Simonetta Longhi and Alita Nandi
* ISER, University of Essex
* Chapter 7
*****
```

```
-----
name: <unnamed>
log: C:\My Documents\\Example_Chapter7.log
log type: text
opened on: 29 Jul 2014, 17:16:49
```

```
.
.
. * Secion 7.2.6
. *-----
.
. use pid rhid rpno rxrwtkl rsex rpaygu rage rregion2 rmemorig raidxhh ///
> using "$datadir/rindresp", clear
```

```
. renpfix r
```

```
.
. recode paygu -9/-1=.
(paygu: 7351 changes made)
```

```
. recode sex -9/-1=.
(sex: 734 changes made)
```

```
.
. mean paygu
```

```
Mean estimation          Number of obs   =      7068
```

```
-----
          |          Mean   Std. Err.   [95% Conf. Interval]
-----+-----
paygu |   1745.931   15.73465   1715.086   1776.775
-----
```

```
. mean paygu [pweight = xrwtkl]
```

```
Mean estimation          Number of obs   =      6896
```

```
-----
          |          Mean   Std. Err.   [95% Conf. Interval]
-----+-----
paygu |   1812.284   23.03723   1767.124   1857.444
-----
```

```
.
. save temp, replace
(note: file temp.dta not found)
file temp.dta saved
```

```
.
.
. * Secion 7.3.2
. *-----
.
. use rhid rpsu rstrata using "$datadir/rhhsamp", clear

. renpfix r

. merge 1:m hid using temp
```

```
Result          # of obs.
-----
not matched          3,293
  from master          3,293  (_merge==1)
  from using           0  (_merge==2)
```

```

matched                                14,419  (_merge==3)
-----

. drop if _merge==1
(3293 observations deleted)

.
. svyset psu [pweight = xrwtuk1], strata(strata)

      pweight: xrwtuk1
        VCE: linearized
Single unit: missing
  Strata 1: strata
    SU 1: psu
    FPC 1: <zero>

. svy: mean paygu
(running mean on estimation sample)

Survey: Mean estimation

Number of strata =      121      Number of obs   =      7576
Number of PSUs   =      399      Population size = 7826.64
                                   Design df       =      278

-----+-----
               |               Linearized
               |               Mean   Std. Err.   [95% Conf. Interval]
-----+-----
      paygu |      1812.284           .           .           .
-----+-----

Note: Missing standard error because of stratum with single
      sampling unit.

.
. replace psu = hid if memorig == 7
psu was int now long
(2247 real changes made)

.
. svyset psu [pweight = xrwtuk1], strata(strata)

      pweight: xrwtuk1
        VCE: linearized
Single unit: missing
  Strata 1: strata
    SU 1: psu
    FPC 1: <zero>

. svy: mean paygu
(running mean on estimation sample)

Survey: Mean estimation

Number of strata =      121      Number of obs   =      7576
Number of PSUs   =     1069      Population size = 7826.64
                                   Design df       =      948

-----+-----
               |               Linearized
               |               Mean   Std. Err.   [95% Conf. Interval]
-----+-----
      paygu |      1812.284    24.75189    1763.709    1860.859
-----+-----

.
. svy: mean paygu, over(sex)
(running mean on estimation sample)

Survey: Mean estimation

Number of strata =      121      Number of obs   =      7351

```

Number of PSUs = 1069      Population size = 7826.64  
 Design df = 948

male: sex = male  
 female: sex = female

	Over	Mean	Linearized Std. Err.	[95% Conf. Interval]	
paygu					
male		2260.484	39.13203	2183.689	2337.28
female		1379.633	25.00279	1330.566	1428.7

. test [paygu]female = [paygu]male

Adjusted Wald test

( 1) - [paygu]male + [paygu]female = 0

F( 1, 948) = 405.97  
 Prob > F = 0.0000

.  
 . svy, subpop(if sex == 1): mean paygu  
 (running mean on estimation sample)

Survey: Mean estimation

Number of strata = 121      Number of obs = 11662  
 Number of PSUs = 1517      Population size = 12342.6  
                          Subpop. no. obs = 3226  
                          Subpop. size = 3844.24  
                          Design df = 1396

	Mean	Linearized Std. Err.	[95% Conf. Interval]	
paygu	2260.484	39.13297	2183.718	2337.25

. svy, subpop(if sex == 2): mean paygu  
 (running mean on estimation sample)

Survey: Mean estimation

Number of strata = 121      Number of obs = 10842  
 Number of PSUs = 1393      Population size = 11516.7  
                          Subpop. no. obs = 3670  
                          Subpop. size = 3982.4  
                          Design df = 1272

	Mean	Linearized Std. Err.	[95% Conf. Interval]	
paygu	1379.633	25.00273	1330.582	1428.684

.  
 .  
 . erase temp.dta

.  
 . log close  
     name: <unnamed>  
     log: C:\My Documents\\Example\_Chapter7.log  
     log type: text  
     closed on: 29 Jul 2014, 17:16:53