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*****
* A Practical Guide to Using Panel Data
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* ISER, University of Essex
* Chapter 6
*****
```

```
-----
name: <unnamed>
log: C:\My Documents\\Example_Chapter6.log
log type: text
opened on: 1 Sep 2014, 15:17:37
```

```
.
.
. * Section 6.2.1
. *-----
.
. use "$mydir1/begoalt", clear
. describe
```

```
Contains data from S:\final/begoalt.dta
obs:      29,266
vars:      10
size:     556,054
```

variable name	storage type	display format	value label	variable label
bhid	long	%12.0g		household identification number
bpno	byte	%8.0g		ego's person number
bopno	byte	%8.0g	bopno	alter's person number
brl	byte	%8.0g	brl	relationship of bopno to bpno
bsex	byte	%8.0g	bsex	sex
bosex	byte	%8.0g	bosex	alter's sex
blwstat	byte	%8.0g	blwstat	alter's residence at last wave
bnwstat	byte	%8.0g	bnwstat	alter's residence at next wave
pid	long	%12.0g		cross-wave person identifier
bopid	long	%12.0g		alter's cross-wave person identifier

```
Sorted by:
```

```
. label list bsex bosex brl
bsex:
```

```
-9 missing or wild
-8 inapplicable
1 male
2 female
```

```
bosex:
```

```
-9 missing or wild
-8 inapplicable
1 male
2 female
```

```
brl:
```

```
-9 missing hh information
0 undefined
2 lawful spouse
3 live-in partner
4 natural child
5 adopted child
6 foster child
7 step/partner's-child
9 daughter/son-in-law
10 natural brother/sister
11 other brother/sister
12 brother/sister-in-law
13 natural parent
14 other parent
15 mother/father-in-law
16 any grand parent
17 any grand child
18 any cousin
```

```

19 any aunt/uncle
20 any nephew/niece
21 any other relative
22 employee
23 lodger/border
24 unrelated sharer
25 step parent
26 employer
27 landlady/lord
28 half-sibling
29 other child
30 other

```

```

.
. generate long daughter_pid = 0

. replace daughter_pid = bopid if (brel==4 & bosex==2)
(3478 real changes made)

.
. generate long brother_pid = 0

. replace brother_pid = bopid if (brel==10 & bosex==1)
(2678 real changes made)

.
. generate long grandmother_pid = 0

. replace grandmother_pid = bopid if (brel==16 & bosex==2)
(96 real changes made)

.
. generate long grandfather_pid = 0

. replace grandfather_pid = bopid if (brel==16 & bosex==1)
(42 real changes made)

.
. generate long spouse_partner_pid = 0

. replace spouse_partner_pid = bopid if (brel>=2 & brel<=3)
(6521 real changes made)

.
.
. keep if spouse_partner_pid>0
(22745 observations deleted)

. duplicates report pid

```

Duplicates in terms of pid

```

-----
copies | observations      surplus
-----+-----
      1 |           6521          0
-----

```

```

.
. merge 1:1 pid using "$mydir1/bindall"

```

```

Result                                     # of obs.
-----
not matched                               6,630
    from master                             0  (_merge==1)
    from using                             6,630  (_merge==2)

matched                                   6,521  (_merge==3)
-----

```

```

. keep if _merge==3
(6630 observations deleted)

```

```

.
. replace bsppid=. if bsppid==0
(0 real changes made)

. corr bsppid spouse_partner_pid
(obs=6521)

-----+-----
      |   bsppid spouse~d
bsppid |   1.0000
spouse_par~d |   1.0000   1.0000

.
.
.
. * Section 6.3
. *-----
.
. use "$mydir1/bindresp", clear

. keep bhid bpno bhgspn bage bsex bqfachi

. drop if bhgspn==0
(3580 observations deleted)

. sort bhid bpno

. save respondent, replace
file respondent.dta saved

.
. use "$mydir1/bindresp", clear

. keep bhid bpno bhgspn bage bsex bqfachi

. drop if bhgspn==0
(3580 observations deleted)

. drop bpno

. rename bhgspn bpno

. foreach var in bsex bage bqfachi {
2.     rename `var' `var'_partner
3. }

.
. label define bsex_partner 1 "male" 2 "female"

. label value bsex bsex_partner

. label var bsex_partner "sex of spouse or partner"

. label var bage_partner "sage of spouse or partner"

.
. sort bhid bpno

. merge 1:1 bhid bpno using respondent
(label bqfachi already defined)
(label bage already defined)
(label bhgspn already defined)
(label bsex already defined)

```

Result	# of obs.	
not matched	434	
from master	217	( _merge==1)
from using	217	( _merge==2)
matched	6,048	( _merge==3)

```
. keep if _merge==3
(434 observations deleted)

.
. egen bcoupleID=rowmin(bpno  bhgspn)

. generate bcoupleID_alt=cond(bpno < bhgspn, bpno, bhgspn)

.
. tabulate bcoupleID bcoupleID_alt, miss
```

bcoupleID	bcoupleID_alt					Total
	1	2	3	4	5	
1	5,912	0	0	0	0	5,912
2	0	84	0	0	0	84
3	0	0	38	0	0	38
4	0	0	0	12	0	12
5	0	0	0	0	2	2
Total	5,912	84	38	12	2	6,048

```
. bysort bhid bcoupleID: keep if _n==1
(3024 observations deleted)
```

```
. save "$dirresults\matched", replace
file C:\My Documents\matched.dta saved
```

```
.
.
. use "$mydir1/bindresp", clear

. keep bhid bpno bhgspn bage bsex bqfachi

. egen bcoupleID=rowmin(bpno  bhgspn) if bhgspn~=0
(3580 missing values generated)

. label var bcoupleID "couple identifier"

.
. drop if bcoupleID == .
(3580 observations deleted)

.
. bysort bhid bcoupleID: generate bage_partner = cond(_n==2, bage[1], bage[2], .)
(217 missing values generated)

. summarize bhid bpno if bage_partner == .
```

Variable	Obs	Mean	Std. Dev.	Min	Max
bhid	217	2496899	297189.4	2000628	2988828
bpno	217	1.612903	.5989337	1	5

```
.
. foreach var in bsex bqfachi {
. 2. bysort bhid bcoupleID: ///
> generate `var'_partner = cond(_n==2, `var'[1], `var'[2], .)
. 3. }
(217 missing values generated)
(217 missing values generated)

.
. label var bage_partner "age of spouse or partner"

. label value bage_partner bage

.
. label var bsex_partner "sex of spouse or partner"

. label value bsex_partner bsex
```

```

.
. label var bqfachi_partner "highest academic qualification of spouse or partner"
. label value bqfachi_partner bqfachi
.
.
. bysort bhid bcoupleID: keep if _n==1
(3024 observations deleted)
.
.
. * Section 6.4
. *-----
.
. label var bage "Age at date of interview"
.
. scatter bage bage_partner, scheme(slmanual) ///
> saving("$dirresults\age_matching", replace)
(file C:\My Documents\age_matching.gph saved)
.
. scatter bage bage_partner || lfit bage bage_partner, scheme(slmanual) ///
> saving("$dirresults\age_matchin2", replace)
(file C:\My Documents\age_matchin2.gph saved)
.
. correlate bage bage_partner
(obs=3024)

```

	bage	bage_p~r
bage	1.0000	
bage_partner	0.9370	1.0000

```

.
. tabulate bqfachi bqfachi_partner if bqfachi>0 & bqfachi_partner>0, cell nofreq

```

highest academic qualification	highest academic qualification of spouse or partner	Total
	higher de 1st degree hnd,hnc,t a level o level	
higher degree	0.36 0.29 0.25 0.18 0.29	1.43
1st degree	0.47 2.79 1.00 0.86 1.36	7.27
hnd,hnc,teaching	0.11 0.82 1.00 0.64 1.61	5.59
a level	0.18 1.18 1.00 3.33 4.23	13.94
o level	0.29 1.07 1.72 4.87 8.74	26.26
cse	0.04 0.04 0.18 0.93 1.93	4.94
none of these	0.18 0.36 1.29 3.37 7.85	40.56
Total	1.61 6.56 6.45 14.19 26.01	100.00

highest academic qualification	highest academic qualification of spouse or partner	Total
	cse none of t	
higher degree	0.04 0.04	1.43
1st degree	0.07 0.72	7.27
hnd,hnc,teaching	0.11 1.29	5.59
a level	0.72 3.30	13.94
o level	1.97 7.60	26.26
cse	0.68 1.15	4.94
none of these	1.07 26.44	40.56
Total	4.66 40.52	100.00

```

.
. tabulate bsex bsex_partner

```

sex	sex of spouse or partner		Total
	male	female	
male	4	1,514	1,518
female	1,505	1	1,506
Total	1,509	1,515	3,024

```
.
. recode bqfachi (1/3=2 high) (4/6 = 1 low) (7=0 none) (-9/-1=.), gen(edu)
(3021 differences between bqfachi and edu)
```

```
. fre edu
```

```
edu -- RECODE of bqfachi (highest academic qualification )
```

		Freq.	Percent	Valid	Cum.
Valid	0 none	1294	39.93	41.45	41.45
	1 low	1392	42.95	44.59	86.03
	2 high	436	13.45	13.97	100.00
	Total	3122	96.33	100.00	
Missing	.	119	3.67		
Total		3241	100.00		

```
.
. recode bqfachi_partner (1/3=2 high) (4/6 = 1 low) (7=0 none) (-9/-1=.), ///
> gen(edu_partner)
(2836 differences between bqfachi_partner and edu_partner)
```

```
. fre edu_partner
```

```
edu_partner -- RECODE of bqfachi_partner (highest academic qualification of spouse or partner)
```

		Freq.	Percent	Valid	Cum.
Valid	0 none	1182	36.47	40.83	40.83
	1 low	1291	39.83	44.59	85.42
	2 high	422	13.02	14.58	100.00
	Total	2895	89.32	100.00	
Missing	.	346	10.68		
Total		3241	100.00		

```
.
. tabulate edu edu_partner, cell nofreq
```

RECODE of bqfachi (highest academic qualification )		RECODE of bqfachi_partner (highest academic qualification of spouse or partner)			Total
		none	low	high	
none		26.44	12.29	1.83	40.56
low		12.04	27.41	5.70	45.15
high		2.04	5.16	7.09	14.30
Total		40.52	44.86	14.62	100.00

```
.
.
. save "$dirresults\matched2", replace
file C:\My Documents\matched2.dta saved
```

```
.
. erase respondent.dta
```

```
.  
. log close  
    name: <unnamed>  
    log: C:\My Documents\\Example_Chapter6.log  
    log type: text  
closed on: 1 Sep 2014, 15:17:45  
-----
```