```
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. clear
    Back to Fan's Stata4Econ or other repositories:
    - http://fanwangecon.github.io
    - http://fanwangecon.github.io/Stata4Econ
    http://fanwangecon.github.io/R4Econhttp://fanwangecon.github.io/M4Econ
    - http://fanwangecon.github.io/CodeDynaAsset/
    - http://fanwangecon.github.io/Math4Econ/
    - http://fanwangecon.github.io/Stat4Econ/
    - http://fanwangecon.github.io/Tex4Econ
            Regression with continous varible and discrete variables, discrete variables could interact with each other, and interact with continuous varible and discrete variables, discrete variables could interact with each other, and interact with continuous varible and discrete variables, discrete variables could interact with each other, and interact with continuous varible and discrete variables, discrete variables could interact with each other, and interact with continuous variables.
. ///--- File Names
> global st_file_root "~\Stata4Econ\table\multipanel\tab_6col_cts_inter\"
. global st_log_file "${st_file_root}gen_reg"
. global st_out_html "${st_file_root}tab_6col_cts_inter.html"
. global st_out_rtf "${st_file_root}tab_6col_cts_inter.rtf"
. global st_out_tex "${st_file_root}tab_6col_cts_inter_texbody.tex"
. ///--- Start log
> capture log close
. log using "${st_log_file}" , replace
(note: file C:\Users\fan\Stata4Econ\table\multipanel\tab_6col_cts_inter\gen_reg.smcl not found)
       name: <unnamed>
        log: C:\Users\fan\Stata4Econ\table\multipanel\tab_6col_cts_inter\gen_reg.smcl
  log type: smcl
 opened on: 17 Aug 2019, 22:15:35
. log on
(log already on)
. set trace off
. set tracedepth 1
> ///--- Load Data
> |||||||||
. set more off
. sysuse bplong, clear
(fictional blood-pressure data)
. tab sex
         Sex
                       Freq.
                                   Percent
                                                     Cum.
                         120
                                     50.00
                                                    50.00
        Male
      Female
                         120
                                     50.00
                                                   100.00
                         040
                                    100 00
```

	Total	240	100.00	
. tab	agegrp			
Age	Group	Freq.	Percent	Cum.
	30-45 46-59 60+	80 80 80	33.33 33.33 33.33	33.33 66.67 100.00
	Total	240	100.00	
. tab	when			
	Status	Freq.	Percent	Cum.
	Before After	120 120	50.00 50.00	50.00 100.00
	Total	240	100.00	

. tab sex when

	Sex	Status Before	s After	Total
	Male Female	60 60	60 60	120 120
•	Total	120	120	240

. tab sex agegrp

Sex	30-45	Age Group 46-59	60+	Total
Male Female	40 40	40 40	40 40	120 120
Total	80	80	80	240

```
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. egen sex_when = group(sex when), label
. egen sex_agegrp = group(sex agegrp), label
. egen when_agegrp = group(when agegrp), label
> ///--- A1. Define Regression Variables
* shared regression outcome lhs variable global svr_outcome "when"
         * for each panel, rhs variables differ
         global svr_rhs_panel_a "sex c.patient c.bp"
         global svr_rhs_panel_b "sex i.sex#c.patient i.sex#c.bp"
         * for each column, conditioning differs
         global it reg n = 6
         global sif col 1 "bp <= 185"
         global sif_col_2 "bp <= 180"</pre>
         global sif_col_3 "bp <= 175"</pre>
         global sif_col_4 "bp <= 170"</pre>
         global sif_col_5 "bp <= 165"</pre>
         global sif_col_6 "bp <= 160"</pre>
         * esttad strings for conditioning what were included
         scalar it_esttad_n = 4
         matrix mt_bl_estd = J(it_esttad_n, $it_reg_n, 0)
         matrix rownames mt_bl_estd = bpge185 bpge180 bpge170 bpge160
         matrix colnames mt bl estd = reg1 reg2 reg3 reg4 reg5 reg6
         matrix mt_bl_estd[1, 1] = (1 \ 1 \ 1)
         matrix mt bl estd[1, 2] = (0\1\1)
         matrix mt_bl_estd[1, 3] = (0 \setminus 0 \setminus 1 \setminus 1)
         matrix mt_bl_estd[1, 4] = (0 \ 0 \ 1 \ 1)
         matrix mt_bl_estd[1, 5] = (0 \ 0 \ 1)
         matrix mt_bl_estd[1, 6] = (0 \setminus 0 \setminus 1)
         global st_estd_rownames : rownames mt_bl_estd
         global slb_estd_1 "blood pressure >= 185"
         global slb_estd_2 "blood pressure >= 180"
         global slb estd 3 "blood pressure >= 170"
         global slb estd 4 "blood pressure >= 160"
. ///--- Technical Controls
         global stc_regc "regress"
         global stc_opts ", vce(robust)"
> ///--- B1. Define Regressions Panel A
di "$srg_panel_a_col_1"
                di "$srg_panel_a_col_2"
di "$srg_panel_a_col_6"
         foreach it_regre of numlist 1(1)$it_reg_n {
                   #delimit;
delimiter now ;
                global srg_panel_a_col_`it_regre' "
                  $stc_regc $svr_outcome $svr_rhs_panel_a if ${sif_col_`it_regre'} $stc_opts
 3.
                   #delimit cr
delimiter now cr
                 di "${srg_panel_a_col_`it_regre'}"
 4.
                 regress when sex c.patient c.bp if bp <= 185 , vce(robust)
                 regress when sex c.patient c.bp if bp <= 180 , vce(robust)
                 regress when sex c.patient c.bp if bp <= 175 , vce(robust)
                  regress when sex c.patient c.bp if bp <= 170 , vce(robust)
                 regress when sex c.patient c.bp if bp <= 165 , vce(robust)
                 regress when sex c.patient c.bp if bp <= 160 , vce(robust)
```

```
> ///--- B2. Define Regressions Panel B
di "$srg_panel_b_col_1"
                 di "$srg_panel_b_col_2"
                 di "$srg_panel_b_col_6"
         foreach it_regre of numlist 1(1)$it_reg n {
 2.
                    #delimit;
delimiter now ;
                 global srg panel b col `it regre' "
                   $stc_regc $svr_outcome $svr_rhs_panel_b if ${sif_col_`it_regre'} $stc_opts
 3.
                    #delimit cr
delimiter now cr
                 di "${srg_panel_b_col_`it_regre'}"
                  regress when sex i.sex#c.patient i.sex#c.bp if bp <= 185 , vce(robust)
                  regress when sex i.sex#c.patient i.sex#c.bp if bp <= 180 , vce(robust)
                  regress when sex i.sex#c.patient i.sex#c.bp if bp <= 175 , vce(robust)
                  regress when sex i.sex#c.patient i.sex#c.bp if bp <= 170 , vce(robust)
                  regress when sex i.sex#c.patient i.sex#c.bp if bp <= 165 , vce(robust)
                  regress when sex i.sex#c.patient i.sex#c.bp if bp <= 160 , vce(robust)
> ///--- C. Run Regressions
eststo clear
         local it_reg_ctr = 0
         foreach st_panel in panel_a panel_b {
 2.
           global st_cur_sm_stor "smd_`st_panel'_m"
global ${st_cur_sm_stor} ""
 3.
              global ${st cur sm stor}
  4.
           foreach it regre of numlist 1(1)$it reg n {
 5.
                   local it_reg_ctr = `it_reg_ctr' + 1
                      global st_cur_srg_name "srg_`st_panel'_col_`it_regre'"
  6.
  7.
                   di "st_panel:`st_panel', it_reg_ctr:`it_reg_ctr', st_cur_srg_name:${st_cur_srg_name}"
 8.
                   ///--- Regression
                   eststo m`it_reg_ctr', title("${sif_col_`it_regre'}") : ${$st_cur_srg name}
 9.
                   ///--- Estadd Controls
                         foreach st estd name in $st estd rownames {
                                   scalar bl_estad = el(mt_bl_estd, rownumb(mt_bl_estd, "`st_estd_name'"), `it regre')
10.
 11.
                                           estadd local `st_estd_name' "Yes"
 13.
14.
                                    else {
 15.
                                           estadd local `st estd name' "No"
 16.
                                    }
17.
18.
                   ///--- Track Regression Store
                   global $st_cur_sm_stor "${${st_cur_sm_stor}} m`it_reg_ctr'"
19.
 20.
           di "${${st_cur_sm_stor}}"
st_panel:panel_a, it_reg_ctr:1, st_cur_srg_name:srg_panel_a_col_1
                                                                        240
Linear regression
                                              Number of obs
                                              F(3, 236)
                                                                =
                                                                        4.46
                                              Prob > F
                                                                      0.0045
                                                                      0.0492
                                              R-squared
                                                                      .49165
                                              Root MSE
                            Robust
       when
                   Coef.
                           Std. Err.
                                         t
                                              P>|t|
                                                        [95% Conf. Interval]
                           .1416798
                                                       -.5195795
               -.2404608
                                       -1.70
                                              0.091
                                                                    .0386579
                .0028836
                           .0020142
                                       1.43
                                              0.154
                                                       -.0010846
                                                                    .0068517
    patient
                -.0096699
                           .0026499
                                              0.000
                                                       -.0148904
                                                                   -.0044494
         bp
                                       -3.65
                                              0.000
                                                                    3.707693
                2.934006
                           .3927211
                                       7.47
                                                        2.160319
       cons
added macro:
           e(bpge185) : "Yes"
added macro:
           e(bpge180) : "Yes"
added macro:
           e(bpge170) : "Yes"
added macro:
           e(bpge160) : "Yes"
st_panel:panel_a, it_reg_ctr:2, st_cur_srg_name:srg_panel_a_col_2
                                              Number of obs
Linear regression
                                                                        232
                                              F(3, 228)
                                                                =
                                                                       5.39
                                                                      0.0013
                                              Prob > F
                                                                =
                                              R-squared
                                                                      0.0597
                                              Root MSE
                                                                      .48907
                            Robust
                                                        [95% Conf. Interval]
       when
                   Coef.
                           Std. Err.
                                         t
                                              P>|t|
                                              0.093
                 -.239018
                            .141754
                                       -1.69
                                                       -.5183334
                                                                    .0402974
        sex
                                                                    .0070929
                 .0031009
                                              0.127
                                                       -.0008911
    patient
                             .002026
                                       1.53
                           .0028459
         bp
               -.0114352
                                       -4.02
                                              0.000
                                                       -.0170428
                                                                   -.0058275
                           .4214657
                                              0.000
                3.181703
                                       7.55
                                                        2.351237
                                                                    4.012169
       cons
```

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```
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            e(bpge185) : "No"
added macro:
            e(bpge180) : "Yes"
added macro:
            e(bpge170) : "Yes"
added macro:
            e(bpge160) : "Yes"
st_panel:panel_a, it_reg_ctr:3, st_cur_srg_name:srg_panel_a_col_3
Linear regression
                                                 Number of obs
                                                                             227
                                                                            6.75
                                                 F(3, 223)
                                                 Prob > F
                                                                    =
                                                                          0.0002
                                                 R-squared
                                                                          0.0704
                                                                           .48638
                                                 Root MSE
                              Robust
                                                            [95% Conf. Interval]
                                                 P>|t|
        when
                    Coef.
                             Std. Err.
                                            t
                -.2420362
                             .1417656
                                         -1.71
                                                 0.089
                                                           -.5214079
                                                                         .0373355
         sex
     patient
                             .0020453
                                                                         .0068472
                 .0028166
                                          1.38
                                                 0.170
                                                           -.0012141
                             .0028822
         bp
                -.0128604
                                         -4.46
                                                 0.000
                                                           -.0185402
                                                                        -.0071805
                 3.410141
                             .4226693
                                          8.07
                                                 0.000
                                                            2.577204
                                                                        4.243078
       cons
added macro:
            e(bpge185) : "No"
added macro:
            e(bpge180) : "No"
added macro:
            e(bpge170) : "Yes"
added macro:
            e(bpge160) : "Yes"
st_panel:panel_a, it_reg_ctr:4, st_cur_srg_name:srg_panel_a_col_4
Linear regression
                                                 Number of obs
                                                                             212
                                                 F(3, 208)
                                                                            6.53
                                                                    =
                                                                          0.0003
                                                 Prob > F
                                                 R-squared
                                                                          0.0709
                                                 Root MSE
                                                                           .48646
                              Robust
                                                            [95% Conf. Interval]
        when
                    Coef.
                             Std. Err.
                                            t
                                                 P>|t|
                -.2605732
                             .1465821
                                                           -.5495502
         sex
                                         -1.78
                                                 0.077
                                                                         .0284039
     patient
                  .003001
                             .0021082
                                          1.42
                                                 0.156
                                                           -.0011552
                                                                         .0071572
          bp
                 -.0136593
                             .0031405
                                         -4.35
                                                 0.000
                                                           -.0198505
                                                                        -.0074681
                 3.526874
                              .456005
       _cons
                                          7.73
                                                 0.000
                                                             2.62789
                                                                        4.425858
added macro:
            e(bpge185) : "No"
added macro:
            e(bpge180) : "No"
added macro:
            e(bpge170) : "Yes"
added macro:
            e(bpge160) : "Yes"
st_panel:panel_a, it_reg_ctr:5, st_cur_srg_name:srg_panel_a_col_5
                                                 Number of obs
                                                                             193
Linear regression
                                                                           10.62
                                                 F(3, 189)
                                                                    =
                                                 Prob > F
                                                                          0.0000
                                                                          0.1012
                                                 R-squared
                                                 Root MSE
                                                                           .47885
                              Robust
        when
                    Coef.
                             Std. Err.
                                            t
                                                 P>|t|
                                                            [95% Conf. Interval]
                             .1504561
         sex
                -.3473877
                                         -2.31
                                                 0.022
                                                           -.6441766
                                                                       -.0505988
                 .0044614
                             .0021227
                                          2.10
                                                 0.037
                                                           .0002741
                                                                        .0086486
     patient
                                                                         -.012107
                             .0033354
                                                 0.000
                                                           -.0252658
                 -.0186864
                                         -5.60
         bp
                                                                        5.162649
        cons
                 4.215642
                             .4800821
                                          8.78
                                                 0.000
                                                            3.268634
added macro:
            e(bpge185) : "No"
added macro:
            e(bpge180) : "No"
added macro:
            e(bpge170) : "No"
added macro:
            e(bpge160) : "Yes"
st_panel:panel_a, it_reg_ctr:6, st_cur_srg_name:srg_panel_a_col_6
Linear regression
                                                 Number of obs
                                                                             167
                                                 F(3, 163)
                                                                    =
                                                                            8.55
                                                                          0.0000
                                                 Prob > F
                                                                    =
                                                 R-squared
                                                                           0.0993
                                                 Root MSE
                                                                           .47927
                              Robust
                             Std. Err.
                                                 P>|t|
                                                            [95% Conf. Interval]
        when
                    Coef.
                                            t
                 -.2673843
                             .1636602
                                         -1.63
                                                 0.104
                                                           -.5905518
                                                                         .0557832
         sex
```

.0038716

-.020319

4.435791

patient

bp

cons

.0023375

.0040177

.5716269

-.0007441

-.0282525

3.307042

.0084873

5.56454

-.0123855

0.100

0.000

0.000

1.66

-5.06

7.76

```
e(bpge185) : "No"
added macro:
            e(bpge180) : "No"
added macro:
            e(bpge170) : "No"
added macro:
            e(bpge160) : "Yes"
m1 m2 m3 m4 m5 m6
st_panel:panel_b, it_reg_ctr:7, st_cur_srg_name:srg_panel_b_col_1
Linear regression
                                                 Number of obs
                                                                             240
                                                 F(5, 234)
                                                                    =
                                                                            3.26
                                                 Prob > F
                                                                          0.0073
                                                                    =
                                                                          0.0573
                                                 R-squared
                                                                           .49164
                                                 Root MSE
                               Robust
                              Std. Err.
         when
                     Coef.
                                             t
                                                  P>|t|
                                                             [95% Conf. Interval]
                   .8621649
                              .7620109
                                                                         2.363443
          sex
                                           1.13
                                                  0.259
                                                            -.6391137
sex#c.patient
                   .0020791
                                           0.71
       Male
                              .0029455
                                                  0.481
                                                             -.003724
                                                                          .0078822
      Female
                   .003764
                              .0027167
                                           1.39
                                                  0.167
                                                            -.0015883
                                                                         .0091163
     sex#c.bp
       Male
                 -.0062902
                              .0036324
                                          -1.73
                                                  0.085
                                                            -.0134467
                                                                         .0008662
                 -.0141569
                              .0038831
                                                  0.000
                                                            -.0218072
                                                                        -.0065065
     Female
                                          -3.65
        cons
                  2.426619
                              .5354844
                                           4.53
                                                  0.000
                                                             1.371633
                                                                         3.481606
added macro:
            e(bpge185) : "Yes"
added macro:
            e(bpge180) : "Yes"
added macro:
            e(bpge170) : "Yes"
added macro:
            e(bpge160) : "Yes"
st_panel:panel_b, it_reg_ctr:8, st_cur_srg_name:srg_panel_b_col_2
Linear regression
                                                 Number of obs
                                                                             232
                                                 F(5, 226)
                                                                    =
                                                                            3.28
                                                                          0.0071
                                                 Prob > F
                                                                          0.0617
                                                 R-squared
                                                 Root MSE
                                                                          .49073
                               Robust
         when
                     Coef.
                              Std. Err.
                                             t
                                                  P>|t|
                                                             [95% Conf. Interval]
                              .8400879
          sex
                   .2920941
                                           0.35
                                                  0.728
                                                            -1.363313
                                                                         1.947501
sex#c.patient
                                           0.78
        Male
                   .0023233
                              .0029951
                                                  0.439
                                                            -.0035786
                                                                         .0082252
      Female
                  .0038127
                               .002732
                                           1.40
                                                  0.164
                                                            -.0015708
                                                                         .0091961
     sex#c.bp
       Male
                 -.0095492
                              .0038502
                                          -2.48
                                                  0.014
                                                             -.017136
                                                                        -.0019623
                 -.0136001
                              .0043714
                                                  0.002
                                                            -.0222139
                                                                        -.0049862
     Female
                                          -3.11
                  2.910885
                              .5600407
                                           5.20
                                                  0.000
                                                             1.807315
                                                                         4.014454
         cons
added macro:
            e(bpge185) : "No"
added macro:
            e(bpge180) : "Yes"
added macro:
            e(bpge170) : "Yes"
added macro:
            e(bpge160) : "Yes"
st_panel:panel_b, it_reg_ctr:9, st_cur_srg_name:srg_panel_b_col_3
Linear regression
                                                 Number of obs
                                                                             227
                                                 F(5, 221)
                                                                             4.58
                                                  Prob > F
                                                                          0.0005
                                                                    =
                                                                          0.0771
                                                 R-squared
                                                                          .48681
                                                 Root MSE
                               Robust
         when
                     Coef.
                              Std. Err.
                                             t
                                                  P>|t|
                                                             [95% Conf. Interval]
                              .8371369
                                                                         2.510726
          sex
                   .8609337
                                           1.03
                                                  0.305
                                                             -.788859
sex#c.patient
                   .0017541
                              .0030481
                                           0.58
                                                  0.566
                                                            -.0042529
                                                                           .007761
       Male
                  .0037192
                                                            -.0016406
      Female
                              .0027196
                                           1.37
                                                  0.173
                                                                          .009079
     sex#c.bp
                                                            -.0172586
                                                                        -.0011738
       Male
                 -.0092162
                              .0040809
                                          -2.26
                                                  0.025
                              .0041272
                                                            -.0253411
                 -.0172075
                                                  0.000
                                                                        -.0090738
```

-4.17

4.87

0.000

1.710656

4.040269

.5910456

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added macro:

Female

cons

e(bpge185) : "No"

added macro:

e(bpge180) : "No"

2.875463

adaed macro: 17 22:15:36 2019 Page 6 e(bpge170) : "Yes"

added macro:

e(bpge160) : "Yes"

st\_panel:panel\_b, it\_reg\_ctr:10, st\_cur\_srg\_name:srg\_panel\_b\_col\_4

212 4.65 Linear regression Number of obs =

F(5, 206) = 4.65 Prob > F = 0.0005 R-squared = 0.0803 Root MSE = .48634

when	Coef.	Robust Std. Err.	t	P> t	[95% Conf	. Interval]
sex	1.17611	.9093919	1.29	0.197	6167985	2.969019
sex#c.patient Male Female	.0025878 .0033171	.0032226 .0027186	0.80 1.22	0.423 0.224	0037657 0020427	.0089412 .0086769
sex#c.bp Male Female	0087235 0185012	.0047486 .0041621	-1.84 -4.45	0.068	0180856 0267071	.0006385 0102953
_cons	2.78312	. 6880095	4.05	0.000	1.426677	4.139563

added macro:

e(bpge185) : "No"

added macro:

e(bpge180) : "No"

added macro:

e(bpge170) : "Yes"

added macro:

e(bpge160) : "Yes"

st\_panel:panel\_b, it\_reg\_ctr:11, st\_cur\_srg\_name:srg\_panel\_b\_col\_5

Number of obs = Linear regression 193 7.63

F(5, 187) = 7.63 Prob > F = 0.0000 R-squared = 0.1099 Root MSE = .47908

when	Coef.	Robust Std. Err.	t	P> t	[95% Conf.	Interval]
sex	1.104909	.9431351	1.17	0.243	7556425	2.965461
sex#c.patient Male Female	.00516 .0041048	.0032845 .0027399	1.57 1.50	0.118 0.136	0013195 0013003	.0116395 .0095099
sex#c.bp Male Female	0142973 023693	.0049807 .0043542	-2.87 -5.44	0.005 0.000	0241228 0322827	0044717 0151032
_cons	3.532761	.716229	4.93	0.000	2.119834	4.945688

added macro:

e(bpge185) : "No"

added macro:

e(bpge180) : "No"

added macro:

e(bpge170) : "No"

added macro:

e(bpge160) : "Yes"

st\_panel:panel\_b, it\_reg\_ctr:12, st\_cur\_srg\_name:srg\_panel\_b\_col\_6

Number of obs = Linear regression

5.31 F(5, 161) = 5.31 Prob > F = 0.0002 R-squared = 0.1008 Root MSE = .48183 Root MSE .48183

when	Coef.	Robust Std. Err.	t	P> t	[95% Conf	. Interval]
sex	.3856803	1.149591	0.34	0.738	-1.884541	2.655902
sex#c.patient Male Female	.0043715 .003565	.0038306 .0029592	1.14 1.20	0.255 0.230	0031932 0022789	.0119362 .0094089
sex#c.bp Male Female	0184108 0225825	.0059057 .0055593	-3.12 -4.06	0.002 0.000	0300734 0335612	0067482 0116039
_cons	4.139463	.8301041	4.99	0.000	2.500167	5.77876

added macro:

e(bpge185) : "No"

added macro:

e(bpge180) : "No"

added macro:

e(bpge170) : "**No**"

added macro:

e(bpge160) : "Yes"

m7 m8 m9 m10 m11 m12

```
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          di "$smd_panel_a_m"
m1 m2 m3 m4 m5 m6
          di "$smd panel b m"
m7 m8 m9 m10 m11 \overline{m}12
. ///--- Title overall
          global slb_title "Outcome: Before or After"
          global slb_title_inner "\textbf{Continuous}: BP and patient are continuous"
          global slb_label_tex "tab:sccts"
 ///--- Several RHS Continuous Variables
          global slb_panel_a "Panel A: Continuous Vars and Discretes"
. ///--- Continuous Variables + Several Discrete Variables
          global slb_panel_b "Panel B: Interact Cts Vars with Discrete"
          global slb_panel_b_ga "Interact with Male:"
          global slb_panel_b_gb "Interact with Female:"
. ///--- Notes
          global slb_bottom "Controls for each panel:"
          global slb_note "${slb_starLvl}. Robust standard errors. Each column is a spearate regression."
. ///--- Show which coefficients to keep
          #delimit;
delimiter now ;
          global svr_coef_keep_panel_a "
                  sex patient bp
          global svr coef keep panel b "
                  sex
                   0.sex#patient
                  0.sex#bp
                   1.sex#patient
                  1.sex#bp
          #delimit cr
delimiter now cr
. ///--- Labeling for for Coefficients to Show
          global slb_title_spc "\vspace*{-5mm}\hspace*{-8mm}"
          global slb_dis_tlt_spc "\vspace*{-5mm}\hspace*{-8mm}"
          global slb_dis_ele_spc "\vspace*{0mm}\hspace*{5mm}"
          global slb_1st_ele_spc "\vspace*{0mm}\hspace*{5mm}"
          global slb_fot_lst_spc "\vspace*{0mm}\hspace*{2mm}"
          #delimit;
delimiter now ;
          global svr_starts_var_panel_a "sex";
          global slb_coef_label_panel_a "
                  sex "${slb_1st_ele_spc}sex variable (discrete)"
patient "${slb_1st_ele_spc}patient ID (cts)"
                   bp "${slb 1st ele spc}blood pressure (cts)"
          #delimit cr
delimiter now cr
          #delimit;
delimiter now ;
          global svr_starts_var_panel_b "sex";
          global svr_starts_var_panel_b_ga "0.sex#c.patient";
          global svr_starts_var_panel_b_gb "1.sex#c.patient";
          global slb coef label panel b "
                   sex "${\overline{s}\text{lb_1st_ele_spc}\sex variable (discrete)"
                   0.sex#c.patient "${slb_1st_ele_spc} $\times$ patient ID"
0.sex#c.bp "${slb_1st_ele_spc} $\times$ blood pressure"
                   1.sex#c.patient "${slb_1st_ele_spc} $\times$ patient ID"
1.sex#c.bp "${slb_1st_ele_spc} $\times$ blood pressure"
          #delimit cr
delimiter now cr
```

```
$aturday /August /17 /22;15;36 /2019 / / Page /8 / / / / / /
> ///--- D2. Regression Display Controls
global slb reg stats "N ${st estd rownames}"
         global slb starLvl "* 0.10 ** 0.05 *** 0.01"
         global slb starComm "nostar"
         global slb_sd_tex `"se(fmt(a2) par("\vspace*{-2mm}{\footnotesize (" ") }"))""
         global slb_cells_tex `"cells(b(star fmt(a2)) $slb_sd_tex)"'
         global slb_esttab_opt_tex "booktabs label collabels(none) nomtitles nonumbers star(${slb_starLvl})"
         global slb_sd_txt `"se(fmt(a2) par("(" ")"))"'
         global slb cells txt `"cells(b(star fmt(a2)) $slb sd txt)"'
         global slb_esttab_opt_txt "stats(${slb_reg_stats}) collabels(none) mtitle nonumbers varwidth(30) modelwidth(15) star(${slb_starI})
         #delimit ;
delimiter now ;
         global slb panel a main "
                 title("${slb_panel_a}")
                 keep(${svr_coef_keep_panel_a}) order(${svr_coef_keep_panel_a})
coeflabels($slb_coef_label_panel_a)
         global slb panel b main "
                 title("${slb_panel_b}")
                 keep(${svr_coef_keep_panel_b}) order(${svr_coef_keep_panel_b})
coeflabels($slb_coef_label_panel_b)
                        #delimit cr
delimiter now cr
esttab ${smd panel a m}, ${slb panel a main} ${slb esttab opt txt}
```

Panel A: Continuous Vars and Discretes

	bp <= 185	bp <= 180	bp <= 175	bp <= 170	bp <= 165	bp <=
\vspace*{0mm}\hspace*{5mm}se~a	-0.240*	-0.239*	-0.242*	-0.261*	-0.347**	-0.
	(-1.70)	(-1.69)	(-1.71)	(-1.78)	(-2.31)	(-1.
\vspace*{0mm}\hspace*{5mm}pa~n	0.00288	0.00310	0.00282	0.00300	0.00446**	0.00
	(1.43)	(1.53)	(1.38)	(1.42)	(2.10)	(1.
\vspace*{0mm}\hspace*{5mm}bl~	-0.00967***	-0.0114***	-0.0129***	-0.0137***	-0.0187***	-0.0
	(-3.65)	(-4.02)	(-4.46)	(-4.35)	(-5.60)	(-5.
N	240	232	227	212	193	
bpge185	Yes	No	No	No	No	
bpge180	Yes	Yes	No	No	No	
bpge170	Yes	Yes	Yes	Yes	No	
bpge160	Yes	Yes	Yes	Yes	Yes	

t statistics in parentheses  $\star$  0.10  $\star\star$  0.05  $\star\star\star$  0.01. Robust standard errors. Each column is a spearate regression.

\* p<0.10, \*\* p<0.05, \*\*\* p<0.01

esttab \${smd\_panel\_b\_m}, \${slb\_panel\_b\_main} \${slb\_esttab\_opt\_txt}

Panel B: Interact Cts Vars with Discrete

	bp <= 185	bp <= 180	bp <= 175	bp <= 170	bp <= 165	bp <=
\vspace*{0mm}\hspace*{5mm}se~a	0.862 (1.13)	0.292 (0.35)	0.861 (1.03)	1.176 (1.29)	1.105 (1.17)	0.
<pre>\vspace*{0mm}\hspace*{5mm} \$~m</pre>	0.00208 (0.71)	0.00232 (0.78)	0.00175 (0.58)	0.00259 (0.80)	0.00516 (1.57)	0.00
<pre>\vspace*{0mm}\hspace*{5mm} \$~m</pre>	-0.00629* (-1.73)	-0.00955** (-2.48)	-0.00922** (-2.26)	-0.00872* (-1.84)	-0.0143*** (-2.87)	-0.0 (-3.
<pre>\vspace*{0mm}\hspace*{5mm} \$~m</pre>	0.00376 (1.39)	0.00381 (1.40)	0.00372 (1.37)	0.00332 (1.22)	0.00410 (1.50)	0.00
<pre>\vspace*{0mm}\hspace*{5mm} \$~m</pre>	-0.0142*** (-3.65)	-0.0136*** (-3.11)	-0.0172*** (-4.17)	-0.0185*** (-4.45)	-0.0237*** (-5.44)	-0.0 (-4.
N bpge185 bpge180 bpge170 bpge160	240 Yes Yes Yes Yes	232 No Yes Yes Yes	227 No No Yes Yes	212 No No Yes Yes	193 No No No Yes	

t statistics in parentheses

\* p<0.10, \*\* p<0.05, \*\*\* p<0.01

<sup>\* 0.10 \*\* 0.05 \*\*\* 0.01.</sup> Robust standard errors. Each column is a spearate regression.

```
$aturday/August/17/22;15;36/2019///Page/9//////
> ///--- F1. Define Latex Column Groups and Column Sub-Groups
///--- Column Groups
         global it_max_col = 8
         global it_min_col = 2
         global it_col_cnt = 6
         global colSeq "2 4 6 8"
         global st cmidrule (lr) \{2-3\} \cmidrule (lr) \{4-5\} \cmidrule (lr) \{6-7\}"
         global st_cmidrule "\cmidrule(lr){2-7}"
         ///--- Group 1, columns 1 and 2
         global labG1 "All Age 5 to 12"
         global labC1 "{\small All Villages}"
         global labC2 "{\small No Teaching Points}"
         ///--- Group 2, columns 3 and 4
         global labG2 "Girls Age 5 to 12"
         global labC3 "{\small All Villages}"
         global labC4 "{\small No Teaching Points}"
         ///--- Group 3, columns 5 and 6
         global labG3 "Boys Age 5 to 12"
         global labC5 "{\small All Villages}"
         global labC6 "{\small No Teaching Points}"
         ///--- Column Widths
         global perCoefColWid = 2
         global labColWid = 5
         ///--- Column Fractional Adjustment, 1 = 100%
         global tableAdjustBoxWidth = 1.0
> ///--- F2. Tabling Calculations
///--- Width Calculation
         global totCoefColWid = ${perCoefColWid}*${it_col_cnt}
         global totColCnt = ${it_col_cnt} + 1
         global totColWid = ${labColWid} + ${totCoefColWid} + ${perCoefColWid}
         global totColWidFootnote = ${labColWid} + ${totCoefColWid} + ${perCoefColWid} + ${perCoefColWid}/2
         global totColWidLegend = ${labColWid} + ${totCoefColWid} + ${perCoefColWid}
         global totColWidLegendthin = ${totCoefColWid} + ${perCoefColWid}
         di "it_col_cnt:$it_col_cnt"
it_col_cnt:6
         di "totCoefColWid:$totCoefColWid"
totCoefColWid:12
         global ampersand
                         11 11
         foreach curLoop of numlist 1(1)$it col cnt {
 2.
              global ampersand "$ampersand \overline{\&}"
 3.
         di "ampersand: $ampersand"
ampersand: & & & & & &
         global alignCenter "m{${labColWid}cm}"
         local eB1 ">{\centering\arraybackslash}m{${perCoefColWid}cm}"
         foreach curLoop of numlist 1(1)$it col cnt {
              global alignCenter "$alignCenter \[ eB1'"
 3.
```

```
Saturday August 17 22:15:36 2019 Page 10
alignCenter:m{5cm} >{\centering\arraybackslash}m{2cm} >{\centering\arraybackslash}m{2cm} >{\centering\arraybackslash}m{2cm} >{\centering\arraybackslash}m{2cm} > {\centering\arraybackslash}m{2cm} > {\centering\a
> ///--- Gla. Tex Sectioning panel A
#delimit ;
delimiter now ;
                               global slb titling panel a "
                                                        global slb refcat panel a `"refcat(${slb_titling_panel_a}, nolabel)"';
delimiter now cr
if ("${svr_starts_var_panel_b}" == "${svr_starts_var_panel_b_ga}") {
                                                         #delimit;
delimiter now ;
                                                        global svr_starts_pb_andga "
                                                                                 ${svr_starts_var_panel_b}
                                                                                                           "\mu\overline{1}tic\overline{0}lumn\overline{5}totColCnt\{L\{\$\{totColWidLegend\}cm\}\}\{\$\{slb\ title\ spc\}\textbf<math>\{\$\{slb\ panel\ b\}\}\}\ \\
                                                                                                              \label{localine} $$\operatorname{L}{\starter}_{L}(s) = \frac{starter}{L(s)(s)} (s) - \frac{starter}{L(s)(s)} (s) -
                                                         #delimit cr
delimiter now cr
                               else {
                                                         #delimit ;
delimiter now ;
                                                        global svr_starts_pb_andga "
                                                                                 ${svr_starts_var_panel_b}
                                                                                                           "\m^{\frac{1}{5}} totColCnt} \{L\{\$\{totColWidLegend\}cm\}\} \{\$\{slb\_title\_spc\}\textbf\{\$\{slb\_panel\_b\}\}\} \ \ \ "\m^{\frac{1}{5}} totColCnt} \} \{L\{\$\{totColWidLegend\}cm\}\} \{L\{\$\{totColWidLegend\}cm\}\}\} \} 
                                                                                 ${svr starts var panel b ga}
                                                                                                           \label{locality} $$ \mbox{$\colCnt}_{L_{s,totColWidLegend}cm}_{s,totColUmn_{s,totColCnt}_{L_{s,totColWidLegend}cm}_{s,totColUmn_{s,totColCnt}_{L_{s,totColWidLegend}cm}_{s,totColUmn_{s,totColCnt}_{t,totColUmn_{s,totColCnt}_{t,totColUmn_{s,totColCnt}_{t,totColUmn_{s,totColCnt}_{t,totColUmn_{s,totColCnt}_{t,totColUmn_{s,totColCnt}_{t,totColUmn_{s,totColCnt}_{t,totColUmn_{s,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColUmn_{s,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totColCnt}_{t,totCol
                                                        #delimit cr
delimiter now cr
                              }
                               #delimit ;
delimiter now ;
                               global slb titling panel b "
                                                        ${svr starts pb andga}
                                                        ${svr_starts_var_panel_b_gb}
                                                                                 "\multicolumn{$totColCnt}{L{${totColWidLegend}cm}}{${slb_dis_tlt_spc}\textit{${slb_panel_b_gb}}} \\"
                               global slb_refcat_panel_b `"refcat(${slb_titling_panel_b}, nolabel)"';
                               #delimit cr
delimiter now cr
     > ///--- G1d. Bottom
    #delimit ;
delimiter now;
                               global slb_titling_bottom `"
                               stats(N $st_estd_rownames,
                                                                                  Tabels (Observations
                                                                                  "\midrule \multicolumn{${totColCnt}}{L{${totColWid}cm}}{${slb_title_spc}\textbf{\textit{\normalsize ${slb_bottom}}}
                                                                                 "${slb_fot_lst_spc}${slb_estd_2}"
                                                                                 "${slb fot lst spc}${slb estd 3}"
                                                                                  "${slb_fot_lst_spc}${slb_estd_4}"))"';
                               #delimit cr
delimiter now cr
> ///--- G2. Tex Headline
> |||||||||
                                ///--- C.3.A. Initialize
                               global row1 "&"
                               global row1MidLine ""
                               global row2 ""
                               global row2MidLine ""
                               global row3 ""
                               ///--- B. Row 2 and row 2 midline
                              * global colseq "2 3 6" global cmidrule ""
                               global colCtr = -1
                               foreach curCol of numlist $colSeq {
     2.
                                                        global colCtr = $colCtr + 1
                                                                  global curCol1Min = `curCol' - 1
     3.
                                                                  if ($colCtr == 0 ) {
                                                                                          global minCoefCol = "`curCol'"
      6.
      7.
                                                                  if ($colCtr != 0 ) {
                                                                                          global gapCnt = (`curCol' - `lastCol')
                                                                                          global gapWidth = (`curCol' - `lastCol')*$perCoefColWid
di "curCollMin:$curCollMin, lastCol:`lastCol'"
     9.
   10.
                                                                                           di "$gapCnt"
   11.
```

12.

```
Saturday August 17 22:15;36,2019 Page 11 (C{${gapWidth}cm}}{\text{control}}"
 13.
                                                  di "\cmidrule(1{5pt}r{5pt}){`lastCol'-$curCol1Min}"
 14.
                                             global curRow2MidLine "\cmidrule(l{5pt}r{5pt}){`lastCol'-$curCollMin}"
                                                  global row2MidLine "$row2MidLine $curRow2MidLine"
 15.
 16.
                                             17.
                                                  global row2 "$row2 & $curRow2"
 18.
                                    local lastCol = `curCol'
 19.
 20.
curCol1Min:3, lastCol:2
\multicolumn{2}{C{4cm}}{\small no Control}
\c (1{5pt}r{5pt}){2-3}
curCol1Min:5, lastCol:4
\multicolumn{2}{C{4cm}}{\small no Control}
\cmidrule(1{5pt}r{5pt}){4-5}
curCol1Min:7, lastCol:6
\multicolumn{2}{C{4cm}}{\small no Control}
\c (1{5pt}r{5pt}){6-7}
                 ///--- C. Row 3
                  * Initial & for label column
                 foreach curLoop of numlist 1(1)$it_col_cnt {
          global curText "${labC`curLoop'}"
                                    global textUse "(`curLoop')"
                                    if ("$curText" != "") {
                                                  global textUse "$curText"
                                    global curRow3 "\multicolumn{1}{C{${perCoefColWid}cm}}{$textUse}"
                                    global row3 "$row3 & $curRow3"
                 ///--- D. Row 1 and midline:
                 \label{lem:col_cnt} $$\{t_{col\_cnt}\}_{L_{s_{col}}}(s_{cm})_{s_{cm}}. $$
                 qlobal row1MidLine "\cmidrule(1{5pt}r{5pt}) {${minCoefCol}-${curCol1Min}}"
                 ///--- C.3.E Print lines
                 di "$row1 \\"
& \multicolumn{6}{L{12cm}}{\textbf{Continuous}: BP and patient are continuous} \\
                 di "$row1MidLine "
\cmidrule(1{5pt}r{5pt}){2-7}
                 di "$row2 \\"
 & \multicolumn{2}{L{4cm}}{\small All Age 5 to 12} & \multicolumn{2}{L{4cm}}{\small Girls Age 5 to 12} & \multicolumn{2}{L{4cm}}{\small Box Age 5} to 12} & \multicolumn{2}{L{4cm}}{\small Box Age 5} to 12} & \multicolumn{2}{L{4cm}}{\small Box Age 5} to 12}
                 di "$row2MidLine"
  \c (1{5pt}r{5pt}){2-3} \c (1{5pt}r{5pt}){4-5} \c (1{5pt}r{5pt}){6-7}
                 di "$row3 \\"
 & \multicolumn{1}{C{2cm}}{{\small All Villages}} & \multicolumn{1}{C{2cm}}{{\small No Teaching Points}} & \multicolumn{1}{C{2cm}}{{\small No Teaching Points}}} & \multicolumn{1}{C{2cm}}{{\small No Teaching Points}}} & \multicolumn{1}{C{2cm}}{{\small No Teaching Points}}} & \multicolumn{1}{C{2cm}}{C{2cm}}{{\small No Teaching Points}}} & \multicolumn{1}{C{2cm}}{C{2cm}}{{\small No Teaching Points}}} & \multicolumn{1}{C{2cm}}{C{2cm}}{{\small No Teaching Points}}} & \multicolumn{1}{C{2cm}}{{\small No Teaching Points}} & \multicolumn{1}{C{2cm}}{{\
> s}} & \multicolumn{1}{C{2cm}}{{\small No Teaching Points}} \\
                  ///--- C.4 Together
                 #delimit ;
delimiter now ;
                 ///--- 1. Section
                   local section "
                               * \section{`fileTitle'}\vspace*{-6mm}
                              * ";
                 ///--- 2. Align and Column Define
local centering "$alignCenter";
                 global headline "
                                             $row1 \\
                                             $row1MidLine
                                             $row2 \\
                                             $row2MidLine
                                             $row3 \\
                 #delimit cr
delimiter now cr
> ///--- G4. Head
#delimit ;
delimiter now ;
                 global adjustBoxStart "\begin{adjustbox}{max width=${tableAdjustBoxWidth}\textwidth}";
                 global adjustBoxEnd "\end{adjustbox}";
                 global notewrap "
                                             \addlinespace[-0.5em]
                                             \multicolumn{$\{totColCnt\}}{L{\{\{totColWidFootnote\}cm\}}\{\{totColCnt\}}}\
                               ";
                 global startTable "\begin{table}[htbp]
                                             \centering
                                             \caption{${slb_title}\label{${slb_label_tex}}}${adjustBoxStart}\begin{tabular}{`centering'}
```

```
Saturday August 17 22:15:36 2019 Page 12 Page 19; {headline})";
                        global headlineAllNoHead "prehead(${startTable})";
                         global postAll "postfoot(\bottomrule ${notewrap} \end{tabular}${adjustBoxEnd}\end{table})";
                         #delimit cr
delimiter now cr
> ///--- H1. Output Results to HTML
esttab ${smd_panel_a_m} using "${st_out_html}", ${slb_panel_a_main} ${slb_esttab_opt_txt} replace
(output written to ~\Stata4Econ\table\multipanel\tab_6col_cts_inter\tab_6col_cts_inter.html)
. esttab {\text{gmd}_panel}_b_m} using "{\text{st}_out\_html}", {\text{slb}_panel}_b_main} {\text{slb}_esttab\_opt\_txt} append (output written to {\text{col}_cts\_inter}_html)
> ///--- H2. Output Results to RTF
esttab ${smd_panel_a_m} using "${st_out_rtf}", ${slb_panel_a_main} ${slb_esttab_opt_txt} replace
(output written to ~\Stata4Econ\table\multipanel\tab 6col cts inter\tab 6col cts inter.rtf)
                         esttab ${smd_panel_b_m} using "${st_out_rtf}", ${slb_panel_b_main} ${slb_esttab_opt_txt} append
(output written to \sim \sqrt{\overline{aba}} = \sqrt{\overline{aba
${slb_refcat_panel_a} ///
                                            ${slb_esttab_opt_tex} ///
                                             fragment $headlineAll postfoot("") replace
(output written to ~\Stata4Econ\table\multipanel\tab 6col cts inter\tab 6col cts inter texbody.tex)
                         esttab $smd panel b m using "${st out tex}", ///
                                             ${slb_panel_b_main} ///
                                             ${slb_refcat_panel_b} ///
                                             ${slb_esttab_opt tex} ///
                                             ${slb_titling_bottom} ///
                                             fragment prehead("") $postAll append
(output written to ~\Stata4Econ\table\multipanel\tab 6col cts inter\tab 6col cts inter texbody.tex)
. ///--- End Log and to HTML
> log close
              name:
                log: C:\Users\fan\Stata4Econ\table\multipanel\tab_6col_cts_inter\gen_reg.smcl
    log type:
                               smcl
  closed on: 17 Aug 2019, 22:15:36
 . ///--- to PDF
> capture noisily {
                        translator set Results2pdf logo off
                        translator set Results2pdf fontsize 10
                        translator set Results2pdf pagesize custom
                        translator set Results2pdf pagewidth 11.69
                        translator set Results2pdf pageheight 16.53
                         translator set Results2pdf lmargin 0.2
                        translator set Results2pdf rmargin 0.2
                        translator set Results2pdf tmargin 0.2
```

translator set Results2pdf bmargin 0.2

translate @Results "\${st log file}.pdf", replace translator(Results2pdf)