Creating LaTeX and HTML documents from within Stata using texdoc and webdoc

Example 2

Ben Jann
University of Bern, ben.jann@soz.unibe.ch

Swiss Stata Users Group meeting
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1 The texdoc source file

— *crosswise09.texdoc* —

```
texdoc init crosswise09, replace logdir(log) logall

/***
\documentclass{article}
\usepackage{stata}
\usepackage{graphicx, hyperref}

\title{My Analysis of the Crosswise09 Data}
\author{Ben Jann}
\date{\today}

\begin{document}

\maketitle

\tableofcontents

\section{Settings}

***/

about
version 14.1
clear all
set linesize 100
set type double
set more off
// required user packages: fre, rrreg, rrlogit, estout, coefplot

/***

\section{Number of Observations}

***/

use crosswise09.dta
fre uni
fre version
fre f7
tab uni version, chi2 exact
gen byte touse = (f7!=1) | inlist(b1,1,2) | inlist(b2,1,2) ///
                         | inlist(f11,1,2) | inlist(f12,1,2)
fre touse
fre version if touse
tab uni version if touse, chi2 exact

/***
```

```
\section{Item-Nonresponse}

***/

gen byte partial    = b1==1  if inlist(b1,1,2)  & version==1 & touse
gen byte severe     = b2==1  if inlist(b2,1,2)  & version==1 & touse
replace  partial    = f11==1 if inlist(f11,1,2) & version==2 & touse
replace  severe     = f12==1 if inlist(f12,1,2) & version==2 & touse
gen byte missing = (partial>=.)
tab version missing if touse, missing row
drop missing
gen byte missing = (severe>=.)
tab version missing if touse, missing row
drop missing
gen byte missing = (partial>=.) | (severe>=.)
tab version missing if touse, missing row
drop missing
count if (partial<.) & (severe>=.) & touse
count if (partial>=.) & (severe<.) & touse

/***

\section{Table 1: Descriptives}

***/

su f2 if touse
egen byte agecat = cut(f2) if touse, at(18,23,28,`r(max)')
tab agecat version if touse, chi2 exact col
tab f1 version if touse, chi2 exact col
tab f3 version if touse, chi2 exact col

/***

\section{Table 2: Prevalence estimates}

***/

gen byte crosswise  = version==1 if touse
gen pyes            = cond(crosswise, 0.25, 1) if touse

// - direct questioning (DQ)

reg partial if crosswise==0
reg severe  if crosswise==0

// - crosswise model (CM)

rrreg partial if crosswise, pw(pyes)
rrreg severe  if crosswise, pw(pyes)
```

```
// - difference between DQ and CM

rrreg partial crosswise, pw(pyes) robust hc2
rrreg severe  crosswise, pw(pyes) robust hc2

/***

\section{Table 3: Regression estimates}

***/

gen byte female     = f1==2 if inlist(f1,1,2)
gen byte internet   = f8_4==1
gen byte students   = f8_5==1
gen byte papers3or4 = f7==3 if f7<.
gen byte papers5    = f7==4 if f7<.
gen byte zurich     = uni==1
gen byte munich     = uni==2

su partial crosswise zurich munich female  ///
    papers3or4 papers5 internet students if partial<.
su partial crosswise zurich munich female  ///
    papers3or4 papers5 internet students if partial<. & crosswise==1

eststo reg1: rrreg partial ///
    zurich munich ///
    female papers3or4 papers5 internet students  ///
    if crosswise, pw(pyes) robust
test zurich = munich

eststo logit1: rrlogit partial ///
    zurich munich ///
    female papers3or4 papers5 internet students ///
    if crosswise, pw(pyes) robust
test zurich = munich

eststo reg2: rrreg partial crosswise ///
    zurich munich ///
    female papers3or4 papers5 internet students ///
    , pw(pyes) robust
test zurich = munich

eststo logit2: rrlogit partial crosswise ///
    zurich munich ///
    female papers3or4 papers5 internet students ///
    , pw(pyes) nolog robust
test zurich = munich

esttab reg1 reg2 logit1 logit2, order(crosswise) ///
    compress mtitle nonumber star(+ 0.1 * 0.05 ** 0.01 *** 0.001)
```

```
/***

\section{Graph: Regression estimates}

***/

coefplot reg2 reg1 || logit2 logit1, drop(_cons) xline(0) ///
    bylabels(LPM Logit) byopts(xrescale legend(off))
texdoc graph

/***

\end{document}
```

— *end of file* —

2 The resulting LaTeX source file

Applying

```
. texdoc do crosswise09.texdoc
```

generates to the following LaTeX file.

— *crosswise09.tex* —

```
\documentclass{article}
\usepackage{stata}
\usepackage{graphicx, hyperref}

\title{My Analysis of the Crosswise09 Data}
\author{Ben Jann}
\date{\today}

\begin{document}

\maketitle

\tableofcontents

\section{Settings}

\begin{stlog}\input{log/1.log.tex}\end{stlog}

\section{Number of Observations}

\begin{stlog}\input{log/2.log.tex}\end{stlog}

\section{Item-Nonresponse}

\begin{stlog}\input{log/3.log.tex}\end{stlog}

\section{Table 1: Descriptives}
```

```
\begin{stlog}\input{log/4.log.tex}\end{stlog}

\section{Table 2: Prevalence estimates}

\begin{stlog}\input{log/5.log.tex}\end{stlog}

\section{Table 3: Regression estimates}

\begin{stlog}\input{log/6.log.tex}\end{stlog}

\section{Graph: Regression estimates}

\begin{stlog}\input{log/7.log.tex}\end{stlog}
\begin{center}
    \includegraphics{log/7.pdf}
\end{center}

\end{document}
```

— end of file —

3 The resulting PDF

The following pages display the resulting PDF after compiling the LaTeX source file.

My Analysis of the Crosswise09 Data

Ben Jann

November 17, 2016

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1 Settings

```
. about
Stata/MP 14.2 for Mac (64-bit Intel)
Revision 29 Sep 2016
Copyright 1985-2015 StataCorp LP
Total physical memory:    8.01 GB
30-user 2-core Stata network perpetual license:
       Serial number:  501406208640
         Licensed to:  Ben Jann
                       University of Bern
. version 14.1
. clear all
. set linesize 100
. set type double
. set more off
. // required user packages: fre, rrreg, rrlogit, estout, coefplot
```

2 Number of Observations

```
. use crosswise09.dta
. fre uni
uni -- location of data collection
```

		Freq.	Percent	Valid	Cum.
Valid	1 ETH Zurich	111	23.42	23.42	23.42
	2 LMU Munich	90	18.99	18.99	42.41
	3 University Leipzig	273	57.59	57.59	100.00
	Total	474	100.00	100.00	

```
. fre version
version -- experimental condition
```

		Freq.	Percent	Valid	Cum.
Valid	1 crosswise	358	75.53	75.53	75.53
	2 direct	116	24.47	24.47	100.00
	Total	474	100.00	100.00	

```
. fre f7
f7 -- number of papers
```

		Freq.	Percent	Valid	Cum.
Valid	1 none	65	13.71	13.74	13.74
	2 one or two	178	37.55	37.63	51.37
	3 three or four	111	23.42	23.47	74.84
	4 five or more	119	25.11	25.16	100.00
	Total	473	99.79	100.00	
Missing	.	1	0.21		
Total		474	100.00		

```
. tab uni version, chi2 exact
Enumerating sample-space combinations:
stage 3:  enumerations = 1
stage 2:  enumerations = 2
stage 1:  enumerations = 0
```

location of data collection	experimental condition: crosswise	direct	Total
ETH Zurich	85	26	111
LMU Munich	68	22	90
University Leipzig	205	68	273
Total	358	116	474

```
          Pearson chi2(2) =   0.0942   Pr = 0.954
           Fisher´s exact =                 0.967
. gen byte touse = (f7!=1) | inlist(b1,1,2) | inlist(b2,1,2) ///
>                          | inlist(f11,1,2) | inlist(f12,1,2)
. fre touse
touse
```

		Freq.	Percent	Valid	Cum.
Valid	0	64	13.50	13.50	13.50
	1	410	86.50	86.50	100.00
	Total	474	100.00	100.00	

```
. fre version if touse
version ── experimental condition
```

		Freq.	Percent	Valid	Cum.
Valid	1 crosswise	313	76.34	76.34	76.34
	2 direct	97	23.66	23.66	100.00
	Total	410	100.00	100.00	

```
. tab uni version if touse, chi2 exact
Enumerating sample-space combinations:
stage 3:  enumerations = 1
stage 2:  enumerations = 1
stage 1:  enumerations = 0
```

location of data collection	experimental condition: crosswise	direct	Total
ETH Zurich	55	16	71
LMU Munich	66	21	87
University Leipzig	192	60	252
Total	313	97	410

```
          Pearson chi2(2) =   0.0639   Pr = 0.969
           Fisher´s exact =                 0.972
```

3 Item-Nonresponse

```
. gen byte partial    = b1==1  if inlist(b1,1,2)  & version==1 & touse
(164 missing values generated)
. gen byte severe     = b2==1  if inlist(b2,1,2)  & version==1 & touse
(164 missing values generated)
. replace  partial    = f11==1 if inlist(f11,1,2) & version==2 & touse
(96 real changes made)
. replace  severe     = f12==1 if inlist(f12,1,2) & version==2 & touse
(96 real changes made)
. gen byte missing = (partial>=.)
. tab version missing if touse, missing row
```

Key
frequency *row percentage*

experiment al	missing

condition	0	1	Total
crosswise	310	3	313
	99.04	0.96	100.00
direct	96	1	97
	98.97	1.03	100.00
Total	406	4	410
	99.02	0.98	100.00

```
. drop missing
. gen byte missing = (severe>=.)
. tab version missing if touse, missing row
```

Key
frequency *row percentage*

experiment al condition	missing 0	1	Total
crosswise	310	3	313
	99.04	0.96	100.00
direct	96	1	97
	98.97	1.03	100.00
Total	406	4	410
	99.02	0.98	100.00

```
. drop missing
. gen byte missing = (partial>=.) | (severe>=.)
. tab version missing if touse, missing row
```

Key
frequency *row percentage*

experiment al condition	missing 0	1	Total
crosswise	309	4	313
	98.72	1.28	100.00
direct	96	1	97
	98.97	1.03	100.00
Total	405	5	410
	98.78	1.22	100.00

```
. drop missing
. count if (partial<.) & (severe>=.) & touse
  1
```

```
. count if (partial>=.) & (severe<.) & touse
  1
```

4 Table 1: Descriptives

```
. su f2 if touse
```

Variable	Obs	Mean	Std. Dev.	Min	Max
f2	407	23.24324	3.799442	18	60

```
. egen byte agecat = cut(f2) if touse, at(18,23,28,`r(max)´)
(68 missing values generated)
. tab agecat version if touse, chi2 exact col
```

Key
frequency *column percentage*

```
Enumerating sample-space combinations:
stage 3:  enumerations = 1
stage 2:  enumerations = 6
stage 1:  enumerations = 0
```

	experimental condition	
agecat	crosswise	direct	Total
18	154	47	201
	49.52	49.47	49.51
23	126	42	168
	40.51	44.21	41.38
28	31	6	37
	9.97	6.32	9.11
Total	311	95	406
	100.00	100.00	100.00

```
          Pearson chi2(2) =   1.3053   Pr = 0.521
           Fisher´s exact =                 0.557
. tab f1 version if touse, chi2 exact col
```

Key
frequency *column percentage*

	experimental condition	
sex	crosswise	direct	Total
male	154	42	196
	49.68	43.30	48.16
female	156	55	211

```
             |      50.32       56.70 |      51.84
-------------+---------------------------------+-----------
       Total |         310          97 |         407
             |      100.00      100.00 |      100.00

          Pearson chi2(1) =   1.2040   Pr = 0.273
           Fisher´s exact =                 0.296
   1-sided Fisher´s exact =                 0.163
```

```
. tab f3 version if touse, chi2 exact col
```

Key
frequency *column percentage*

```
                |      experimental
                |        condition
   nationality  | crosswise     direct |     Total
----------------+----------------------+----------
german or swiss |      288         93 |       381
                |    92.90      95.88 |     93.61
----------------+----------------------+----------
          other |       22          4 |        26
                |     7.10       4.12 |      6.39
----------------+----------------------+----------
          Total |      310         97 |       407
                |   100.00     100.00 |    100.00

          Pearson chi2(1) =   1.0920   Pr = 0.296
           Fisher´s exact =                 0.351
   1-sided Fisher´s exact =                 0.214
```

5 Table 2: Prevalence estimates

```
. gen byte crosswise  = version==1 if touse
(64 missing values generated)
. gen pyes            = cond(crosswise, 0.25, 1) if touse
(64 missing values generated)

. // - direct questioning (DQ)
.
. reg partial if crosswise==0
      Source |       SS           df       MS      Number of obs   =        96
-------------+----------------------------------   F(0, 95)        =      0.00
       Model |           0         0           .   Prob > F        =         .
    Residual |  6.48958333        95  .068311404   R-squared       =    0.0000
-------------+----------------------------------   Adj R-squared   =    0.0000
       Total |  6.48958333        95  .068311404   Root MSE        =    .26136

------------------------------------------------------------------------------
     partial |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .0729167   .0266754     2.73   0.007     .0199593     .125874
------------------------------------------------------------------------------

. reg severe  if crosswise==0
      Source |       SS           df       MS      Number of obs   =        96
-------------+----------------------------------   F(0, 95)        =      0.00
```

```
      Model |          0         0          .   Prob > F        =         .
   Residual |  .989583333        95  .010416667   R-squared       =    0.0000
-------------+------------------------------   Adj R-squared   =    0.0000
      Total |  .989583333        95  .010416667   Root MSE        =    .10206

------------------------------------------------------------------------------
      severe |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .0104167   .0104167     1.00   0.320     -.010263    .0310964
------------------------------------------------------------------------------

.
. // - crosswise model (CM)
.
. rrreg partial if crosswise, pw(pyes)
Randomized response regression                  Number of obs     =        310
                                                F(   0,    309)   =       0.00
                                                Prob > F          =          .
                                                R-squared         =     0.0000
                                                Adj R-squared     =     0.0000
                                                Root MSE          =     0.9623

------------------------------------------------------------------------------
     partial |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .2225806   .0546551     4.07   0.000     .1150374    .3301239
------------------------------------------------------------------------------

Pr(non-negated question) = pyes
Pr(surrogate "yes")      = 0
Pr(surrogate "no")       = 0
. rrreg severe  if crosswise, pw(pyes)
Randomized response regression                  Number of obs     =        310
                                                F(   0,    309)   =       0.00
                                                Prob > F          =          .
                                                R-squared         =     0.0000
                                                Adj R-squared     =     0.0000
                                                Root MSE          =     0.8766

------------------------------------------------------------------------------
      severe |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |    .016129   .0497849     0.32   0.746    -.0818313    .1140894
------------------------------------------------------------------------------

Pr(non-negated question) = pyes
Pr(surrogate "yes")      = 0
Pr(surrogate "no")       = 0

.
. // - difference between DQ and CM
.
. rrreg partial crosswise, pw(pyes) robust hc2
Randomized response regression                  Number of obs     =        406
                                                F(   1,    404)   =       6.05
                                                Prob > F          =     0.0143
                                                R-squared         =     0.0056
                                                Adj R-squared     =     0.0031
                                                Root MSE          =     0.8511

------------------------------------------------------------------------------
             |               Robust
     partial |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   crosswise |    .149664   .0608271     2.46   0.014     .0300868    .2692411
------------------------------------------------------------------------------
```

```
       _cons |   .0729167   .0266017     2.74   0.006     .0206216    .1252117
------------------------------------------------------------------------------

Pr(non-negated question) = pyes
Pr(surrogate "yes")      = 0
Pr(surrogate "no")       = 0

. rrreg severe  crosswise, pw(pyes) robust hc2

Randomized response regression                  Number of obs     =        406
                                                F(   1,    404)   =       0.01
                                                Prob > F          =     0.9107
                                                R-squared         =     0.0000
                                                Adj R-squared     =    -0.0025
                                                Root MSE          =     0.7682

------------------------------------------------------------------------------
             |               Robust
      severe |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   crosswise |   .0057124   .0508988     0.11   0.911    -.0943471    .1057719
       _cons |   .0104167   .0103879     1.00   0.317    -.0100044    .0308377
------------------------------------------------------------------------------

Pr(non-negated question) = pyes
Pr(surrogate "yes")      = 0
Pr(surrogate "no")       = 0
```

6 Table 3: Regression estimates

```
. gen byte female     = f1==2 if inlist(f1,1,2)
(3 missing values generated)

. gen byte internet   = f8_4==1

. gen byte students   = f8_5==1

. gen byte papers3or4 = f7==3 if f7<.
(1 missing value generated)

. gen byte papers5    = f7==4 if f7<.
(1 missing value generated)

. gen byte zurich     = uni==1

. gen byte munich     = uni==2

.
. su partial crosswise zurich munich female  ///
>     papers3or4 papers5 internet students if partial<.

    Variable |        Obs        Mean    Std. Dev.       Min        Max
-------------+---------------------------------------------------------
     partial |        406    .5049261    .5005926         0          1
   crosswise |        406    .7635468    .4254279         0          1
      zurich |        406    .1724138    .3782058         0          1
      munich |        406    .2093596    .4073535         0          1
      female |        403    .5186104    .5002746         0          1
-------------+---------------------------------------------------------
  papers3or4 |        405    .2691358    .4440592         0          1
     papers5 |        405    .2888889    .4538068         0          1
    internet |        406    .8940887    .3081038         0          1
    students |        406    .2413793    .4284478         0          1

. su partial crosswise zurich munich female  ///
>     papers3or4 papers5 internet students if partial<. & crosswise==1
```

```
    Variable |        Obs        Mean    Std. Dev.       Min        Max
-------------+---------------------------------------------------------
     partial |        310    .6387097    .4811511          0          1
   crosswise |        310           1           0          1          1
      zurich |        310    .1741935    .3798891          0          1
      munich |        310    .2096774    .4077365          0          1
      female |        307     .504886    .5007924          0          1
-------------+---------------------------------------------------------
  papers3or4 |        309    .2944984    .4565563          0          1
     papers5 |        309    .2912621     .455081          0          1
    internet |        310     .883871    .3208976          0          1
    students |        310    .2290323    .4208894          0          1

.
. eststo reg1: rrreg partial ///
>     zurich munich ///
>     female papers3or4 papers5 internet students  ///
>     if crosswise, pw(pyes) robust
Randomized response regression                  Number of obs     =       306
                                                F(   7,    298)   =      1.23
                                                Prob > F          =    0.2841
                                                R-squared         =    0.0258
                                                Adj R-squared     =    0.0029
                                                Root MSE          =    0.9599

------------------------------------------------------------------------------
             |               Robust
     partial |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      zurich |   .1297747   .1679073     0.77   0.440    -.2006596    .4602089
      munich |  -.2022313   .1352413    -1.50   0.136    -.4683803    .0639178
      female |   .0313942   .1168534     0.27   0.788    -.1985681    .2613565
  papers3or4 |  -.1129604   .1359154    -0.83   0.407     -.380436    .1545152
     papers5 |   .0879665   .1432817     0.61   0.540    -.1940055    .3699386
    internet |   .1726924   .1687123     1.02   0.307    -.1593261    .5047109
    students |   .1897438   .1378786     1.38   0.170    -.0815952    .4610829
       _cons |   .0344005   .1662536     0.21   0.836    -.2927793    .3615803
------------------------------------------------------------------------------

Pr(non-negated question) = pyes
Pr(surrogate "yes")      = 0
Pr(surrogate "no")       = 0

. test zurich = munich

 ( 1)  zurich - munich = 0

       F(  1,   298) =    2.97
            Prob > F =    0.0860

.
. eststo logit1: rrlogit partial ///
>     zurich munich ///
>     female papers3or4 papers5 internet students ///
>     if crosswise, pw(pyes) robust

Fitting constant-only model:

Iteration 0:   log pseudolikelihood = -212.10304
Iteration 1:   log pseudolikelihood = -199.85397
Iteration 2:   log pseudolikelihood = -199.85373
Iteration 3:   log pseudolikelihood = -199.85373

Fitting full model:

Iteration 0:   log pseudolikelihood = -199.85373
Iteration 1:   log pseudolikelihood = -198.77043
Iteration 2:   log pseudolikelihood = -197.73043
```

```
Iteration 3:   log pseudolikelihood = -196.81341
Iteration 4:   log pseudolikelihood = -196.68131
Iteration 5:   log pseudolikelihood = -196.68051
Iteration 6:   log pseudolikelihood = -196.68051
Randomized response logistic regression         Number of obs     =        306
                                                Nonzero outcomes  =        196
P(non-negated question) =  pyes                 Zero outcomes     =        110
P(surrogate "yes")      =  0                    Wald chi2(7)      =       6.36
P(surrogate "no")       =  0                    Prob > chi2       =     0.4987
Log pseudolikelihood = -196.68051               Pseudo R2         =     0.0159
```

partial	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
zurich	.5216706	.9830921	0.53	0.596	-1.405155	2.448496
munich	-1.001754	.9174338	-1.09	0.275	-2.799891	.7963832
female	.2318339	.8098296	0.29	0.775	-1.355403	1.819071
papers3or4	-.6753206	.8620195	-0.78	0.433	-2.364848	1.014207
papers5	.2226108	.8264936	0.27	0.788	-1.397287	1.842509
internet	1.011847	1.588698	0.64	0.524	-2.101945	4.125639
students	.9554459	.7934316	1.20	0.229	-.5996515	2.510543
_cons	-2.303029	1.297016	-1.78	0.076	-4.845134	.2390766

```
. test zurich = munich
 ( 1)  [partial]zurich - [partial]munich = 0
           chi2(  1) =    1.64
         Prob > chi2 =    0.2001
.
. eststo reg2: rrreg partial crosswise ///
>     zurich munich ///
>     female papers3or4 papers5 internet students ///
>     , pw(pyes) robust
Randomized response regression                  Number of obs     =        402
                                                F(   8,    393)   =       1.70
                                                Prob > F          =     0.0976
                                                R-squared         =     0.0268
                                                Adj R-squared     =     0.0070
                                                Root MSE          =     0.8472
```

partial	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
crosswise	.1722132	.0640163	2.69	0.007	.046356	.2980703
zurich	.122656	.1280605	0.96	0.339	-.1291133	.3744253
munich	-.1326625	.1057303	-1.25	0.210	-.3405302	.0752052
female	.0409437	.0889149	0.46	0.645	-.1338647	.2157522
papers3or4	-.097614	.1074576	-0.91	0.364	-.3088777	.1136497
papers5	.0471034	.109144	0.43	0.666	-.1674756	.2616825
internet	.1475172	.1376815	1.07	0.285	-.1231672	.4182016
students	.1606791	.1024078	1.57	0.117	-.0406565	.3620148
_cons	-.1198158	.1376898	-0.87	0.385	-.3905164	.1508849

```
Pr(non-negated question) = pyes
Pr(surrogate "yes")      = 0
Pr(surrogate "no")       = 0
. test zurich = munich
 ( 1)  zurich - munich = 0
```

```
       F(  1,   393) =    2.83
            Prob > F =    0.0935

.
. eststo logit2: rrlogit partial crosswise ///
>     zurich munich ///
>     female papers3or4 papers5 internet students ///
>     , pw(pyes) nolog robust
Randomized response logistic regression         Number of obs     =        402
                                                Nonzero outcomes  =        203
P(non-negated question) =  pyes                 Zero outcomes     =        199
P(surrogate "yes")      =  0                    Wald chi2(8)      =      15.36
P(surrogate "no")       =  0                    Prob > chi2       =     0.0526
Log pseudolikelihood = -220.02124               Pseudo R2         =     0.0339

------------------------------------------------------------------------------
             |               Robust
     partial |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   crosswise |    1.640846   .5820506     2.82   0.005      .5000476    2.781644
      zurich |    .7572907   .7581485     1.00   0.318     -.7286531    2.243234
      munich |   -.2324246   .7642652    -0.30   0.761     -1.730357    1.265508
      female |    .5202687   .5969944     0.87   0.383     -.6498187    1.690356
  papers3or4 |   -.7994094   .7180947    -1.11   0.266     -2.206849    .6080304
     papers5 |   -.3420689   .7012229    -0.49   0.626      -1.71644    1.032303
    internet |    1.392363   1.848611     0.75   0.451     -2.230848    5.015574
    students |    1.072526    .558806     1.92   0.055      -.022714    2.167765
       _cons |   -4.524949   1.658885    -2.73   0.006     -7.776303   -1.273595
------------------------------------------------------------------------------

. test zurich = munich
 ( 1)  [partial]zurich - [partial]munich = 0

           chi2(  1) =    1.03
         Prob > chi2 =    0.3110

.
. esttab reg1 reg2 logit1 logit2, order(crosswise) ///
>     compress mtitle nonumber star(+ 0.1 * 0.05 ** 0.01 *** 0.001)
```

	reg1	reg2	logit1	logit2
main				
crosswise		0.172**		1.641**
		(2.69)		(2.82)
zurich	0.130	0.123	0.522	0.757
	(0.77)	(0.96)	(0.53)	(1.00)
munich	-0.202	-0.133	-1.002	-0.232
	(-1.50)	(-1.25)	(-1.09)	(-0.30)
female	0.0314	0.0409	0.232	0.520
	(0.27)	(0.46)	(0.29)	(0.87)
papers3or4	-0.113	-0.0976	-0.675	-0.799
	(-0.83)	(-0.91)	(-0.78)	(-1.11)
papers5	0.0880	0.0471	0.223	-0.342
	(0.61)	(0.43)	(0.27)	(-0.49)
internet	0.173	0.148	1.012	1.392
	(1.02)	(1.07)	(0.64)	(0.75)
students	0.190	0.161	0.955	1.073+
	(1.38)	(1.57)	(1.20)	(1.92)
_cons	0.0344	-0.120	-2.303+	-4.525**

```
                (0.21)        (-0.87)       (-1.78)       (-2.73)
------------------------------------------------------------------
N                  306           402           306           402
------------------------------------------------------------------
t statistics in parentheses
+ p<0.1, * p<0.05, ** p<0.01, *** p<0.001
```

7 Graph: Regression estimates

```
. coefplot reg2 reg1 || logit2 logit1, drop(_cons) xline(0) ///
>     bylabels(LPM Logit) byopts(xrescale legend(off))
```