Statistics/Data Analysis

```
      name:  <unnamed>
       log:  C:\Users\Billy\Dropbox\SHR Research\Data - 4th submission\Revised Data\Re
> ady to merge\negative.smcl
  log type:  smcl
 opened on:  20 Sep 2019, 11:03:19

1 .
2 . nbreg homicide DiffFam_Eco DiffEdu_Eco DiffRel_Eco DiffPol_Eco, offset(lnpop) vce(ro
> bust) irr
note: you are responsible for interpretation of non-count dep. variable

Fitting Poisson model:

Iteration 0:   log pseudolikelihood = -279.69125
Iteration 1:   log pseudolikelihood = -278.99042
Iteration 2:   log pseudolikelihood =  -278.9886
Iteration 3:   log pseudolikelihood =  -278.9886

Fitting constant-only model:

Iteration 0:   log pseudolikelihood = -170.89608
Iteration 1:   log pseudolikelihood = -132.18525
Iteration 2:   log pseudolikelihood = -127.56619
Iteration 3:   log pseudolikelihood = -126.75972
Iteration 4:   log pseudolikelihood = -126.75883
Iteration 5:   log pseudolikelihood = -126.75883

Fitting full model:

Iteration 0:   log pseudolikelihood = -123.29702
Iteration 1:   log pseudolikelihood = -122.18651
Iteration 2:   log pseudolikelihood = -120.09814
Iteration 3:   log pseudolikelihood = -120.07312
Iteration 4:   log pseudolikelihood = -120.07308
Iteration 5:   log pseudolikelihood = -120.07308

Negative binomial regression                    Number of obs     =         39
                                                Wald chi2(4)      =       7.69
Dispersion           = mean                     Prob > chi2       =     0.1035
Log pseudolikelihood = -120.07308               Pseudo R2         =     0.0527

------------------------------------------------------------------------------
             |               Robust
    homicide |        IRR   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
 DiffFam_Eco |   .8841866   .0478336    -2.28   0.023     .7952336    .9830896
 DiffEdu_Eco |   .9742142   .0360421    -0.71   0.480     .9060733     1.04748
 DiffRel_Eco |   1.131139   .0618721     2.25   0.024     1.016146    1.259146
 DiffPol_Eco |   .9993107   .0293618    -0.02   0.981     .9433883    1.058548
       _cons |   4.33e-07   1.87e-07   -33.99   0.000     1.86e-07    1.01e-06
       lnpop |          1  (offset)
-------------+----------------------------------------------------------------
    /lnalpha |   .7750555   .2071175                      .3691128    1.180998
-------------+----------------------------------------------------------------
       alpha |   2.170713   .4495925                      1.446451    3.257625
------------------------------------------------------------------------------

3 . outreg2 using H_S.doc, replace ctitle(Model 1)
H_S.doc
dir : seeout
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4 .
5 . nbreg homicide DiffFam_Eco DiffEdu_Eco DiffRel_Eco DiffPol_Eco GDP sexratio pcunemp
  > pcurban, offset(lnpop) vce(robust) irr
  note: you are responsible for interpretation of non-count dep. variable

  Fitting Poisson model:

  Iteration 0:   log pseudolikelihood = -268.06937
  Iteration 1:   log pseudolikelihood = -266.68171
  Iteration 2:   log pseudolikelihood = -266.67754
  Iteration 3:   log pseudolikelihood = -266.67754

  Fitting constant-only model:

  Iteration 0:   log pseudolikelihood = -170.89608
  Iteration 1:   log pseudolikelihood = -132.18525
  Iteration 2:   log pseudolikelihood = -127.56619
  Iteration 3:   log pseudolikelihood = -126.75972
  Iteration 4:   log pseudolikelihood = -126.75883
  Iteration 5:   log pseudolikelihood = -126.75883

  Fitting full model:

  Iteration 0:   log pseudolikelihood = -119.66408
  Iteration 1:   log pseudolikelihood = -112.44234
  Iteration 2:   log pseudolikelihood = -111.14363
  Iteration 3:   log pseudolikelihood = -111.11754
  Iteration 4:   log pseudolikelihood = -111.11753

  Negative binomial regression                    Number of obs     =         39
                                                  Wald chi2(8)      =      40.28
  Dispersion           = mean                     Prob > chi2       =     0.0000
  Log pseudolikelihood = -111.11753               Pseudo R2         =     0.1234

------------------------------------------------------------------------------
             |               Robust
    homicide |        IRR   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
 DiffFam_Eco |   .9181947   .0321863    -2.43   0.015      .857229    .9834962
 DiffEdu_Eco |   .9635382   .0244241    -1.47   0.143     .9168375    1.012618
 DiffRel_Eco |    1.05736   .0330389     1.78   0.074     .9945475    1.124139
 DiffPol_Eco |   1.042053      .0271     1.58   0.113     .9902691    1.096545
         GDP |   1.022165   .1847779     0.12   0.903     .7172135    1.456779
    sexratio |   5.165999   13.10681     0.65   0.517     .0357722    746.0406
     pcunemp |   .9685932   .0444822    -0.69   0.487     .8852183    1.059821
     pcurban |   .9560539   .0093706    -4.59   0.000     .9378631    .9745975
       _cons |   1.50e-06   3.91e-06    -5.14   0.000     8.98e-09    .0002495
       lnpop |          1  (offset)
-------------+----------------------------------------------------------------
    /lnalpha |   .3867187   .1977366                     -.0008378    .7742752
-------------+----------------------------------------------------------------
       alpha |   1.472142   .2910963                      .9991625    2.169019
------------------------------------------------------------------------------

6 . outreg2 using H_S.doc, append ctitle(Model 2)
  H_S.doc
  dir : seeout

7 .
8 . nbreg suicide DiffFam_Eco DiffEdu_Eco DiffRel_Eco DiffPol_Eco, offset(lnpop) vce(rob
  > ust) irr
  note: you are responsible for interpretation of non-count dep. variable

  Fitting Poisson model:

  Iteration 0:   log pseudolikelihood = -394.47988
  Iteration 1:   log pseudolikelihood = -389.48735
  Iteration 2:   log pseudolikelihood = -389.48146
  Iteration 3:   log pseudolikelihood = -389.48146

  Fitting constant-only model:
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```
Iteration 0:   log pseudolikelihood = -219.58513
Iteration 1:   log pseudolikelihood =  -156.2061
Iteration 2:   log pseudolikelihood = -154.89733
Iteration 3:   log pseudolikelihood = -154.89196
Iteration 4:   log pseudolikelihood = -154.89196

Fitting full model:

Iteration 0:   log pseudolikelihood = -154.89196
Iteration 1:   log pseudolikelihood =  -151.7952
Iteration 2:   log pseudolikelihood = -151.44622
Iteration 3:   log pseudolikelihood = -151.44525
Iteration 4:   log pseudolikelihood = -151.44525

Negative binomial regression                    Number of obs     =         39
                                                Wald chi2(4)      =       7.49
Dispersion           = mean                     Prob > chi2       =     0.1120
Log pseudolikelihood = -151.44525               Pseudo R2         =     0.0223
```

suicide	IRR	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
DiffFam_Eco	.9420262	.0422455	-1.33	0.183	.862761	1.028574
DiffEdu_Eco	1.023607	.0204693	1.17	0.243	.9842639	1.064523
DiffRel_Eco	1.025631	.0467153	0.56	0.578	.9380382	1.121402
DiffPol_Eco	1.01277	.0178784	0.72	0.472	.9783284	1.048425
_cons	9.82e-07	2.93e-07	-46.33	0.000	5.47e-07	1.76e-06
lnpop	1	(offset)				
/lnalpha	.5547329	.1706744			.2202171	.8892487
alpha	1.741476	.2972254			1.246347	2.433301

```
9 . outreg2 using H_S.doc, append ctitle(Model 3)
  H_S.doc
  dir : seeout

10.
11. nbreg suicide DiffFam_Eco DiffEdu_Eco DiffRel_Eco DiffPol_Eco GDP sexratio pcunemp p
  > curban, offset(lnpop) vce(robust) irr
  note: you are responsible for interpretation of non-count dep. variable

  Fitting Poisson model:

  Iteration 0:   log pseudolikelihood = -370.39814
  Iteration 1:   log pseudolikelihood = -357.30146
  Iteration 2:   log pseudolikelihood =  -357.1894
  Iteration 3:   log pseudolikelihood = -357.18931
  Iteration 4:   log pseudolikelihood = -357.18931

  Fitting constant-only model:

  Iteration 0:   log pseudolikelihood = -219.58513
  Iteration 1:   log pseudolikelihood =  -156.2061
  Iteration 2:   log pseudolikelihood = -154.89733
  Iteration 3:   log pseudolikelihood = -154.89196
  Iteration 4:   log pseudolikelihood = -154.89196

  Fitting full model:

  Iteration 0:   log pseudolikelihood = -154.89196
  Iteration 1:   log pseudolikelihood =   -146.665
  Iteration 2:   log pseudolikelihood = -145.14838
  Iteration 3:   log pseudolikelihood = -145.12154
  Iteration 4:   log pseudolikelihood =  -145.1215
  Iteration 5:   log pseudolikelihood =  -145.1215
```

Negative binomial regression — Number of obs = **39**
Wald chi2(**8**) = **33.73**
Dispersion = **mean** — Prob > chi2 = **0.0000**
Log pseudolikelihood = **-145.1215** — Pseudo R2 = **0.0631**

suicide	IRR	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
DiffFam_Eco	**.9365966**	**.0326237**	**-1.88**	**0.060**	**.8747891**	**1.002771**
DiffEdu_Eco	**1.013939**	**.0208957**	**0.67**	**0.502**	**.9737999**	**1.055732**
DiffRel_Eco	**.9917966**	**.0311013**	**-0.26**	**0.793**	**.9326747**	**1.054666**
DiffPol_Eco	**1.05329**	**.0230291**	**2.37**	**0.018**	**1.009107**	**1.099407**
GDP	**1.046044**	**.1227959**	**0.38**	**0.701**	**.8310488**	**1.316658**
sexratio	**.2740782**	**.4757216**	**-0.75**	**0.456**	**.0091292**	**8.228439**
pcunemp	**.9468164**	**.0582406**	**-0.89**	**0.374**	**.8392795**	**1.068132**
pcurban	**.9595787**	**.0091962**	**-4.31**	**0.000**	**.9417227**	**.9777733**
_cons	**.0000702**	**.000139**	**-4.83**	**0.000**	**1.45e-06**	**.0033974**
lnpop	**1**	(offset)				
/lnalpha	**.2983057**	**.1781369**			**-.0508363**	**.6474476**
alpha	**1.347574**	**.2400526**			**.9504343**	**1.910658**

12. outreg2 using H_S.doc, append ctitle(Model 4)
H_S.doc
dir : seeout

13. log close
name: **<unnamed>**
log: **C:\Users\Billy\Dropbox\SHR Research\Data - 4th submission\Revised Data\Re**
> ady to merge\negative.smcl
log type: **smcl**
closed on: **20 Sep 2019, 11:03:21**