(R)
Statistics/Data Analysis

User: Mark R. Beissinger
Project: The Revolutionary City

```
. * ================================================================================
      name:  <unnamed>
       log:  C:\Users\mbeissin\Desktop\Stata files for book\Logfiles\chapter3.log
  log type:  text
 opened on:  25 Jan 2022, 20:13:17

. * ================================================================================
. * STATISTICAL RESULTS APPEARING IN CHAPTER 3, THE REVOLUTIONARY CITY
. * Results reported in Chapter 3
. * Author: Mark R. Beissinger
. * Date:  January 2022
. * Princeton, NJ
. * ================================================================================
. * BEFORE RUNNING, YOU MUST SET THE DEFAULT PATH FOR WHERE THE DATA
. *   FILES RESIDE
. * ================================================================================
. * The following datafiles were used in this chapter:
. *   Panel data for revolutionary episodes--revspredictbycntryyr.dta
. *   Multiple imputation panel data--revspredictbycntryyrmi.data
. * ================================================================================
. * Output produced:  Logfiles\chapter3.log
. * ================================================================================
.
. use revspredictbycntryyr.dta

.
. * ================================================================================
. * BIVARIATE RELATIONS FOR URBAN CIVIC AND SOCIAL REVOLUTIONARY EPISODES
. *   (FIGURES 3.1 TO 3.5)
. * ================================================================================
. * Graphs of marginal effects--results were loaded in Excel spreadsheets
. * Only independent states included to keep samples analogous.
.
. * Figure 3.1
. xtcloglog urbancivicny  polityl c.polityl#c.polityl c.time1##c.time1##c.time1 if indstate==1, vce(robust) eform
> nolog

Calculating robust standard errors:

Random-effects complementary log-log model      Number of obs     =     11,328
Group variable: cowcode                         Number of groups  =        159

Random effects u_i ~ Gaussian                   Obs per group:
                                                              min =         10
                                                              avg =       71.2
                                                              max =        115

Integration method: mvaghermite                 Integration pts.  =         12

                                                Wald chi2(5)      =      45.58
Log pseudolikelihood  = -286.70449              Prob > chi2       =     0.0000

                                    (Std. Err. adjusted for 159 clusters in cowcode)
------------------------------------------------------------------------------------------
                         |               Robust
             urbancivicny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------------------+----------------------------------------------------------------
                 polityl |   .9097204   .0249435    -3.45   0.001     .8621224    .9599464
                         |
    c.polityl#c.polityl  |   .9836101   .0049711    -3.27   0.001     .9739151    .9934016
                         |
                   time1 |   .9544682   .0784993    -0.57   0.571     .8123725    1.121418
                         |
         c.time1#c.time1 |   1.001478    .001393     1.06   0.288     .9987515    1.004212
                         |
c.time1#c.time1#c.time1  |   .9999932   6.95e-06    -0.98   0.325     .9999795    1.000007
                         |
                   _cons |   .0005532   .0009291    -4.47   0.000     .0000206    .0148737
-------------------------+----------------------------------------------------------------
                /lnsig2u |  -.8144803   .8784393                     -2.53619    .9072291
-------------------------+----------------------------------------------------------------
                 sigma_u |   .6654844   .2922938                      .2813672    1.573991
                     rho |   .2121222   .1468104                      .0459181    .6009749
------------------------------------------------------------------------------------------

. margins, at(polityl=-10) at(polityl=-9) at(polityl=-8) at(polityl=-7) at(polityl=-6) at(polityl=-5) at(polityl=-
> 4) at(polityl=-3) at(polityl=-2) at(polityl=-1) at(polityl=0) at(polityl=1) at(polityl=2) at(polityl=3) at(polit
> yl=4) at(polityl=5) at(polityl=6) at(polityl=7) at(polityl=8) at(polityl=9) at(polityl=10) predict(pr)

Predictive margins                              Number of obs     =     11,328
Model VCE    : Robust

Expression   : Pr(urbancivicny=1), predict(pr)

1._at        : polityl         =         -10

2._at        : polityl         =          -9

3._at        : polityl         =          -8

4._at        : polityl         =          -7

5._at        : polityl         =          -6

6._at        : polityl         =          -5

7._at        : polityl         =          -4

8._at        : polityl         =          -3
```

```
9._at        : polityl         =          -2

10._at       : polityl         =          -1

11._at       : polityl         =           0

12._at       : polityl         =           1

13._at       : polityl         =           2

14._at       : polityl         =           3

15._at       : polityl         =           4

16._at       : polityl         =           5

17._at       : polityl         =           6

18._at       : polityl         =           7

19._at       : polityl         =           8

20._at       : polityl         =           9

21._at       : polityl         =          10
```

	Delta-method				
	Margin	Std. Err.	z	P>|z|	[95% Conf.	Interval]
_at						
1	.0044996	.0015949	2.82	0.005	.0013737	.0076255
2	.0055937	.0015931	3.51	0.000	.0024713	.0087161
3	.0067273	.0015741	4.27	0.000	.0036421	.0098125
4	.007828	.0016001	4.89	0.000	.0046919	.0109641
5	.0088142	.0017201	5.12	0.000	.005443	.0121855
6	.009605	.0019255	4.99	0.000	.005831	.0133789
7	.0101306	.0021558	4.70	0.000	.0059053	.0143559
8	.0103428	.0023397	4.42	0.000	.005757	.0149286
9	.0102215	.0024246	4.22	0.000	.0054694	.0149736
10	.0097782	.002386	4.10	0.000	.0051018	.0144546
11	.009054	.0022279	4.06	0.000	.0046873	.0134206
12	.0081136	.0019779	4.10	0.000	.0042371	.0119901
13	.0070361	.0016779	4.19	0.000	.0037473	.0103248
14	.0059037	.0013747	4.29	0.000	.0032094	.0085981
15	.0047924	.0011077	4.33	0.000	.0026213	.0069635
16	.0037633	.0008992	4.19	0.000	.002001	.0055256
17	.0028586	.0007478	3.82	0.000	.0013929	.0043243
18	.0021003	.0006348	3.31	0.001	.000856	.0033445
19	.0014926	.0005389	2.77	0.006	.0004363	.0025488
20	.001026	.0004479	2.29	0.022	.0001482	.0019038
21	.0006822	.0003595	1.90	0.058	-.0000223	.0013868

```
31 . xtcloglog leftistny polityl c.time1##c.time1##c.time1 if indstate==1, vce(robust) eform nolog

Calculating robust standard errors:

Random-effects complementary log-log model      Number of obs     =     11,328
Group variable: cowcode                         Number of groups  =        159

Random effects u_i ~ Gaussian                   Obs per group:
                                                              min =         10
                                                              avg =       71.2
                                                              max =        115

Integration method: mvaghermite                 Integration pts.  =         12

                                                Wald chi2(4)      =      32.63
Log pseudolikelihood  = -368.40781              Prob > chi2       =     0.0000

                                       (Std. Err. adjusted for 159 clusters in cowcode)
```

	Robust				
leftistny	exp(b)	Std. Err.	z	P>|z|	[95% Conf.	Interval]
polityl	1.010763	.0206784	0.52	0.601	.9710356	1.052115
time1	.9587571	.0313343	-1.29	0.198	.8992686	1.022181
c.time1#c.time1	1.001584	.0007652	2.07	0.038	1.000085	1.003085
c.time1#c.time1#c.time1	.999986	4.92e-06	-2.85	0.004	.9999763	.9999956
_cons	.007374	.0033865	-10.69	0.000	.0029977	.0181392
/lnsig2u	-.7080202	.6085355			-1.900728	.4846875
sigma u	.7018679	.2135558			.3866003	1.274232
rho	.2304591	.1079224			.0832926	.4967468

```
32 . margins, at(polityl=-10) at(polityl=-9) at(polityl=-8) at(polityl=-7) at(polityl=-6) at(polityl=-5) at(polityl=-
   > 4) at(polityl=-3) at(polityl=-2) at(polityl=-1) at(polityl=0) at(polityl=1) at(polityl=2) at(polityl=3) at(polit
   > yl=4) at(polityl=5) at(polityl=6) at(polityl=7) at(polityl=8) at(polityl=9) at(polityl=10) predict(pr)

   Predictive margins                              Number of obs     =     11,328
   Model VCE    : Robust

   Expression   : Pr(leftistny=1), predict(pr)

   1._at        : polityl         =         -10

   2._at        : polityl         =          -9

   3._at        : polityl         =          -8

   4._at        : polityl         =          -7

   5._at        : polityl         =          -6

   6._at        : polityl         =          -5

   7._at        : polityl         =          -4

   8._at        : polityl         =          -3

   9._at        : polityl         =          -2

   10._at       : polityl         =          -1

   11._at       : polityl         =           0

   12._at       : polityl         =           1

   13._at       : polityl         =           2

   14._at       : polityl         =           3

   15._at       : polityl         =           4

   16._at       : polityl         =           5

   17._at       : polityl         =           6

   18._at       : polityl         =           7

   19._at       : polityl         =           8

   20._at       : polityl         =           9

   21._at       : polityl         =          10

   ------------------------------------------------------------------------------
                |            Delta-method
                |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
   -------------+----------------------------------------------------------------
            _at |
             1  |   .0049575   .0010203     4.86   0.000     .0029577    .0069573
             2  |   .0050105   .0009587     5.23   0.000     .0031315    .0068896
             3  |   .0050641   .0009015     5.62   0.000     .0032972     .006831
             4  |   .0051183   .0008503     6.02   0.000     .0034518    .0067848
             5  |    .005173   .0008069     6.41   0.000     .0035915    .0067546
             6  |   .0052284   .0007736     6.76   0.000     .0037122    .0067446
             7  |   .0052843   .0007525     7.02   0.000     .0038094    .0067592
             8  |   .0053408   .0007457     7.16   0.000     .0038793    .0068023
             9  |   .0053979   .0007544     7.16   0.000     .0039193    .0068765
            10  |   .0054556   .0007791     7.00   0.000     .0039285    .0069827
            11  |   .0055139   .0008194     6.73   0.000     .0039079      .00712
            12  |   .0055729   .0008741     6.38   0.000     .0038597     .007286
            13  |   .0056324   .0009414     5.98   0.000     .0037873    .0074776
            14  |   .0056927   .0010199     5.58   0.000     .0036937    .0076916
            15  |   .0057535    .001108     5.19   0.000     .0035819    .0079251
            16  |    .005815   .0012043     4.83   0.000     .0034546    .0081754
            17  |   .0058771   .0013079     4.49   0.000     .0033137    .0084406
            18  |   .0059399   .0014179     4.19   0.000      .003161    .0087189
            19  |   .0060034   .0015335     3.91   0.000     .0029977    .0090091
            20  |   .0060675   .0016544     3.67   0.000     .0028249    .0093102
            21  |   .0061323   .0017801     3.44   0.001     .0026434    .0096213
   ------------------------------------------------------------------------------

33 .
34 . * On relationship of non-democratic regime-types to probability of onset for urban civic and social revolutionar
   > y episodes (Geddes data)
35 . xtcloglog urbancivicny  gedpartyautoc gedmilautoc gedmonautoc gedpersautoc c.time1##c.time1##c.time1 if indstate
   > ==1, vce(robust) eform nolog

   Calculating robust standard errors:

   Random-effects complementary log-log model      Number of obs     =      7,699
   Group variable: cowcode                         Number of groups  =        148

   Random effects u_i ~ Gaussian                   Obs per group:
                                                                 min =         17
                                                                 avg =       52.0
                                                                 max =         65

   Integration method: mvaghermite                 Integration pts.  =         12

                                                   Wald chi2(7)      =     101.45
   Log pseudolikelihood  = -226.49849              Prob > chi2       =     0.0000
```

```
                                    (Std. Err. adjusted for 148 clusters in cowcode)
------------------------------------------------------------------------------------------
                        |               Robust
            urbancivicny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
------------------------+-----------------------------------------------------------------
          gedpartyautoc |   4.185325   2.137913     2.80   0.005     1.537891    11.39024
            gedmilautoc |   16.82953   8.762122     5.42   0.000     6.066006    46.69188
            gedmonautoc |   3.093933   3.643171     0.96   0.337     .3077538    31.10416
           gedpersautoc |   6.316402    2.95918     3.93   0.000     2.521675     15.8216
                  time1 |   .5916528   .3517203    -0.88   0.377     .1845238    1.897061
                        |
        c.time1#c.time1 |   1.007509   .0076581     0.98   0.325     .9926108    1.022631
                        |
c.time1#c.time1#c.time1 |   .9999689   .0000316    -0.98   0.325     .9999069    1.000031
                        |
                  _cons |   16.45375   248.4718     0.19   0.853     2.30e-12    1.18e+14
------------------------+-----------------------------------------------------------------
               /lnsig2u |  -1.057451     1.3848                     -3.77161    1.656708
------------------------+-----------------------------------------------------------------
                sigma_u |   .5893556   .4080699                      .1517069    2.289547
                    rho |   .1743435    .199339                      .0137984    .7611523
------------------------------------------------------------------------------------------
```

```
36 . xtcloglog leftistny  gedpartyautoc gedmilautoc gedmonautoc gedpersautoc c.time1##c.time1##c.time1 if indstate==1
   > , vce(robust) eform nolog

   Calculating robust standard errors:

   Random-effects complementary log-log model      Number of obs     =      7,699
   Group variable: cowcode                         Number of groups  =        148

   Random effects u_i ~ Gaussian                   Obs per group:
                                                                 min =         17
                                                                 avg =       52.0
                                                                 max =         65

   Integration method: mvaghermite                 Integration pts.  =         12

                                                   Wald chi2(7)      =      15.57
   Log pseudolikelihood  = -236.49565              Prob > chi2       =     0.0293

                                       (Std. Err. adjusted for 148 clusters in cowcode)
   ------------------------------------------------------------------------------------------
                           |               Robust
               leftistny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
   ------------------------+-----------------------------------------------------------------
             gedpartyautoc |   .5607227   .2773734    -1.17   0.242     .2126587    1.478472
               gedmilautoc |   1.244463   .6393433     0.43   0.670       .45465    3.406333
               gedmonautoc |   .9610481    .562433    -0.07   0.946     .3052091    3.026166
              gedpersautoc |   1.606716   .7111051     1.07   0.284     .6748569    3.825308
                     time1 |   .5108565   .5117237    -0.67   0.503      .071722    3.638693
                           |
           c.time1#c.time1 |   1.011495   .0140998     0.82   0.412      .984234    1.039511
                           |
   c.time1#c.time1#c.time1 |    .999937   .0000634    -0.99   0.321     .9998127    1.000061
                           |
                     _cons |   2540.501   59795.73     0.33   0.739     2.35e-17    2.75e+23
   ------------------------+-----------------------------------------------------------------
                  /lnsig2u |  -.7267684     .83941                     -2.371982     .918445
   ------------------------+-----------------------------------------------------------------
                   sigma_u |   .6953192    .291829                      .3054434    1.582843
                       rho |    .227151   .1473613                      .0536728    .6036614
   ------------------------------------------------------------------------------------------

37 .
38 . * Figure 3.2
39 . * No statistically significant relationship between yrsincleaderinpower and social revolutionary episodes (vario
   > us polynomial forms tested)
40 . xtcloglog urbancivicny yrsincleaderinpower c.time1##c.time1##c.time1 if indstate==1, vce(robust) eform nolog

   Calculating robust standard errors:

   Random-effects complementary log-log model      Number of obs     =     11,661
   Group variable: cowcode                         Number of groups  =        164

   Random effects u_i ~ Gaussian                   Obs per group:
                                                                 min =         10
                                                                 avg =       71.1
                                                                 max =        115

   Integration method: mvaghermite                 Integration pts.  =         12

                                                   Wald chi2(4)      =      32.16
   Log pseudolikelihood  = -298.85435              Prob > chi2       =     0.0000

                                       (Std. Err. adjusted for 164 clusters in cowcode)
   ------------------------------------------------------------------------------------------
                           |               Robust
               urbancivicny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
   ------------------------+-----------------------------------------------------------------
       yrsincleaderinpower |   1.059296     .01397     4.37   0.000     1.032266    1.087034
                     time1 |   .9782771   .0773353    -0.28   0.781     .8378615    1.142225
                           |
           c.time1#c.time1 |    1.00111   .0013404     0.83   0.407     .9984868    1.003741
                           |
   c.time1#c.time1#c.time1 |   .9999944   6.73e-06    -0.83   0.408     .9999812    1.000008
                           |
                     _cons |   .0001371   .0002396    -5.09   0.000     4.46e-06    .0042146
   ------------------------+-----------------------------------------------------------------
                  /lnsig2u |  -.5252071   .6315522                     -1.763027    .7126124
   ------------------------------------------------------------------------------------------
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```
                sigma_u |   .7690467   .2428466                      .4141557    1.428045
                    rho |   .2644615   .1228505                      .0944282    .5535222
------------------------------------------------------------------------------------------

41 . margins, at(yrsincleaderinpower=(0(1)35)) predict(pr)

Predictive margins                              Number of obs     =     11,661
Model VCE    : Robust

Expression   : Pr(urbancivicny=1), predict(pr)

1._at        : yrsinclead~r    =           0

2._at        : yrsinclead~r    =           1

3._at        : yrsinclead~r    =           2

4._at        : yrsinclead~r    =           3

5._at        : yrsinclead~r    =           4

6._at        : yrsinclead~r    =           5

7._at        : yrsinclead~r    =           6

8._at        : yrsinclead~r    =           7

9._at        : yrsinclead~r    =           8

10._at       : yrsinclead~r    =           9

11._at       : yrsinclead~r    =          10

12._at       : yrsinclead~r    =          11

13._at       : yrsinclead~r    =          12

14._at       : yrsinclead~r    =          13

15._at       : yrsinclead~r    =          14

16._at       : yrsinclead~r    =          15

17._at       : yrsinclead~r    =          16

18._at       : yrsinclead~r    =          17

19._at       : yrsinclead~r    =          18

20._at       : yrsinclead~r    =          19

21._at       : yrsinclead~r    =          20

22._at       : yrsinclead~r    =          21

23._at       : yrsinclead~r    =          22

24._at       : yrsinclead~r    =          23

25._at       : yrsinclead~r    =          24

26._at       : yrsinclead~r    =          25

27._at       : yrsinclead~r    =          26

28._at       : yrsinclead~r    =          27

29._at       : yrsinclead~r    =          28

30._at       : yrsinclead~r    =          29

31._at       : yrsinclead~r    =          30

32._at       : yrsinclead~r    =          31

33._at       : yrsinclead~r    =          32

34._at       : yrsinclead~r    =          33

35._at       : yrsinclead~r    =          34

36._at       : yrsinclead~r    =          35

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          at |
           1  |   .0026626    .000528     5.04   0.000     .0016279    .0036974
           2  |   .0028198   .0005362     5.26   0.000     .0017688    .0038708
           3  |   .0029862   .0005454     5.48   0.000     .0019173    .0040552
           4  |   .0031624   .0005558     5.69   0.000      .002073    .0042518
           5  |   .0033489    .000568     5.90   0.000     .0022356    .0044623
           6  |   .0035464   .0005827     6.09   0.000     .0024044    .0046884
           7  |   .0037554   .0006004     6.26   0.000     .0025787    .0049321
           8  |   .0039767    .000622     6.39   0.000     .0027577    .0051957
           9  |   .0042109   .0006484     6.49   0.000     .0029402    .0054817
          10  |   .0044589   .0006805     6.55   0.000     .0031251    .0057926
          11  |   .0047213   .0007193     6.56   0.000     .0033114    .0061311
          12  |    .004999   .0007659     6.53   0.000     .0034979    .0065001
          13  |   .0052929   .0008211     6.45   0.000     .0036836    .0069023
```

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          14  |    .005604    .000886     6.33   0.000     .0038675    .0073405
          15  |   .0059332   .0009614     6.17   0.000     .0040489    .0078174
          16  |   .0062815   .0010482     5.99   0.000     .0042271    .0083359
          17  |   .0066501   .0011473     5.80   0.000     .0044015    .0088987
          18  |     .00704   .0012595     5.59   0.000     .0045714    .0095086
          19  |   .0074526   .0013858     5.38   0.000     .0047365    .0101686
          20  |    .007889    .001527     5.17   0.000     .0048961    .0108818
          21  |   .0083506   .0016841     4.96   0.000     .0050498    .0116514
          22  |   .0088389   .0018581     4.76   0.000      .005197    .0124808
          23  |   .0093552   .0020502     4.56   0.000     .0053368    .0133736
          24  |   .0099013   .0022616     4.38   0.000     .0054688    .0143339
          25  |   .0104788   .0024933     4.20   0.000     .0055919    .0153656
          26  |   .0110893    .002747     4.04   0.000     .0057053    .0164733
          27  |   .0117347   .0030239     3.88   0.000      .005808    .0176615
          28  |    .012417   .0033257     3.73   0.000     .0058988    .0189353
          29  |   .0131381    .003654     3.60   0.000     .0059765    .0202998
          30  |   .0139002   .0040105     3.47   0.001     .0060397    .0217607
          31  |   .0147055   .0043972     3.34   0.001     .0060871    .0233239
          32  |   .0155563   .0048161     3.23   0.001     .0061169    .0249957
          33  |    .016455   .0052692     3.12   0.002     .0061276    .0267824
          34  |   .0174043   .0057588     3.02   0.003     .0061173    .0286912
          35  |   .0184067   .0062872     2.93   0.003     .0060841    .0307293
          36  |   .0194651   .0068569     2.84   0.005     .0060259    .0329043
--------------------------------------------------------------------------------

42 . xtcloglog leftistny yrsincleaderinpower c.time1##c.time1##c.time1 if indstate==1, vce(robust) eform nolog

   Calculating robust standard errors:

   Random-effects complementary log-log model      Number of obs     =     11,661
   Group variable: cowcode                         Number of groups  =        164

   Random effects u_i ~ Gaussian                   Obs per group:
                                                                 min =         10
                                                                 avg =       71.1
                                                                 max =        115

   Integration method: mvaghermite                 Integration pts.  =         12

                                                   Wald chi2(4)      =      29.89
   Log pseudolikelihood  = -379.30202              Prob > chi2       =     0.0000

                                          (Std. Err. adjusted for 164 clusters in cowcode)
------------------------------------------------------------------------------------------
                         |               Robust
              leftistny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------------------+----------------------------------------------------------------
    yrsincleaderinpower |    1.00156   .0155939     0.10   0.920     .9714583    1.032595
                  time1 |      .9657    .030468    -1.11   0.269     .9077926    1.027301
                        |
        c.time1#c.time1 |   1.001435   .0007522     1.91   0.056      .999962    1.002911
                        |
c.time1#c.time1#c.time1 |   .9999868   4.89e-06    -2.71   0.007     .9999772    .9999964
                        |
                   cons |   .0068245   .0028516   -11.94   0.000     .0030088    .0154789
-------------------------+----------------------------------------------------------------
                /lnsig2u |  -.7040494   .6019727                     -1.883894    .4757955
-------------------------+----------------------------------------------------------------
                sigma_u |   .7032627   .2116725                      .389868    1.268579
                    rho |   .2311641    .106987                      .084587     .494524
------------------------------------------------------------------------------------------

43 . margins, at(yrsincleaderinpower=(0(1)35)) predict(pr)

   Predictive margins                              Number of obs     =     11,661
   Model VCE    : Robust

   Expression   : Pr(leftistny=1), predict(pr)

   1._at        : yrsinclead~r    =           0

   2._at        : yrsinclead~r    =           1

   3._at        : yrsinclead~r    =           2

   4._at        : yrsinclead~r    =           3

   5._at        : yrsinclead~r    =           4

   6._at        : yrsinclead~r    =           5

   7._at        : yrsinclead~r    =           6

   8._at        : yrsinclead~r    =           7

   9._at        : yrsinclead~r    =           8

   10._at       : yrsinclead~r    =           9

   11._at       : yrsinclead~r    =          10

   12._at       : yrsinclead~r    =          11

   13._at       : yrsinclead~r    =          12

   14._at       : yrsinclead~r    =          13

   15._at       : yrsinclead~r    =          14

   16._at       : yrsinclead~r    =          15
```

```
17._at       : yrsinclead~r    =          16

18._at       : yrsinclead~r    =          17

19._at       : yrsinclead~r    =          18

20._at       : yrsinclead~r    =          19

21._at       : yrsinclead~r    =          20

22._at       : yrsinclead~r    =          21

23._at       : yrsinclead~r    =          22

24._at       : yrsinclead~r    =          23

25._at       : yrsinclead~r    =          24

26._at       : yrsinclead~r    =          25

27._at       : yrsinclead~r    =          26

28._at       : yrsinclead~r    =          27

29._at       : yrsinclead~r    =          28

30._at       : yrsinclead~r    =          29

31._at       : yrsinclead~r    =          30

32._at       : yrsinclead~r    =          31

33._at       : yrsinclead~r    =          32

34._at       : yrsinclead~r    =          33

35._at       : yrsinclead~r    =          34

36._at       : yrsinclead~r    =          35
```

	Delta-method					
	Margin	Std. Err.	z	P>|z|	[95% Conf.	Interval]
_at						
1	.0054374	.0008945	6.08	0.000	.0036842	.0071907
2	.0054459	.0008571	6.35	0.000	.0037659	.0071258
3	.0054543	.0008264	6.60	0.000	.0038345	.0070741
4	.0054627	.0008033	6.80	0.000	.0038884	.0070371
5	.0054712	.0007884	6.94	0.000	.003926	.0070165
6	.0054797	.0007824	7.00	0.000	.0039462	.0070132
7	.0054882	.0007855	6.99	0.000	.0039486	.0070278
8	.0054967	.0007978	6.89	0.000	.0039331	.0070603
9	.0055052	.0008188	6.72	0.000	.0039004	.00711
10	.0055137	.000848	6.50	0.000	.0038516	.0071759
11	.0055223	.0008847	6.24	0.000	.0037882	.0072564
12	.0055308	.0009281	5.96	0.000	.0037118	.0073499
13	.0055394	.0009773	5.67	0.000	.0036239	.007455
14	.005548	.0010316	5.38	0.000	.003526	.00757
15	.0055566	.0010903	5.10	0.000	.0034196	.0076935
16	.0055652	.0011527	4.83	0.000	.0033059	.0078246
17	.0055738	.0012184	4.57	0.000	.0031857	.0079619
18	.0055825	.001287	4.34	0.000	.0030601	.0081048
19	.0055911	.0013579	4.12	0.000	.0029297	.0082525
20	.0055998	.001431	3.91	0.000	.0027952	.0084044
21	.0056085	.0015059	3.72	0.000	.002657	.0085599
22	.0056171	.0015824	3.55	0.000	.0025156	.0087187
23	.0056258	.0016605	3.39	0.001	.0023714	.0088803
24	.0056346	.0017398	3.24	0.001	.0022246	.0090445
25	.0056433	.0018203	3.10	0.002	.0020756	.009211
26	.005652	.0019019	2.97	0.003	.0019244	.0093797
27	.0056608	.0019844	2.85	0.004	.0017714	.0095502
28	.0056696	.0020679	2.74	0.006	.0016166	.0097225
29	.0056784	.0021521	2.64	0.008	.0014603	.0098964
30	.0056871	.0022371	2.54	0.011	.0013025	.0100718
31	.005696	.0023229	2.45	0.014	.0011432	.0102487
32	.0057048	.0024093	2.37	0.018	.0009827	.0104269
33	.0057136	.0024963	2.29	0.022	.000821	.0106063
34	.0057225	.0025839	2.21	0.027	.0006581	.0107869
35	.0057313	.0026721	2.14	0.032	.0004941	.0109686
36	.0057402	.0027608	2.08	0.038	.0003291	.0111514

```
44 .
45 . * V-Dem executive corruption measure
46 . xtcloglog urbancivicny v2x_execorr c.time1##c.time1##c.time1 if indstate==1,  eform nolog vce(robust)

Calculating robust standard errors:

Random-effects complementary log-log model      Number of obs     =     11,580
Group variable: cowcode                         Number of groups  =        161

Random effects u_i ~ Gaussian                   Obs per group:
                                                              min =         21
                                                              avg =       71.9
                                                              max =        114

Integration method: mvaghermite                 Integration pts.  =         12
```

```
                                              Wald chi2(4)      =      29.38
Log pseudolikelihood  = -297.91275            Prob > chi2       =     0.0000

                                        (Std. Err. adjusted for 161 clusters in cowcode)
------------------------------------------------------------------------------------------
                         |               Robust
              urbancivicny |      exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------------------+----------------------------------------------------------------
               v2x_execorr |   8.632152   5.003908     3.72   0.000     2.771356    26.88721
                     time1 |   .9615505   .0831322    -0.45   0.650     .8116714    1.139106
                           |
             c.time1#c.time1 |   1.001318   .0013954     0.95   0.344     .9985872    1.004057
                           |
c.time1#c.time1#c.time1 |   .9999936   6.88e-06    -0.93   0.351     .9999801    1.000007
                           |
                     _cons |   .0001329     .00027    -4.39   0.000     2.47e-06    .0071319
-------------------------+----------------------------------------------------------------
                   /lnsig2u |  -2.532605    2.80237                      -8.025149     2.95994
-------------------------+----------------------------------------------------------------
                    sigma_u |   .2818719   .3949547                      .0180868    4.392813
                        rho |   .0460754   .1231711                      .0001988    .9214519
------------------------------------------------------------------------------------------
```

```
47 . margins, atmeans at(v2x_execorr=(0 .1 .2 .3 .4 .5 .6 .7 .8 .9 1.0)) predict(pr)

Adjusted predictions                            Number of obs     =     11,580
Model VCE    : Robust

Expression   : Pr(urbancivicny=1), predict(pr)

1._at        : v2x_execorr     =           0
               time1           =    71.57055 (mean)

2._at        : v2x_execorr     =          .1
               time1           =    71.57055 (mean)

3._at        : v2x_execorr     =          .2
               time1           =    71.57055 (mean)

4._at        : v2x_execorr     =          .3
               time1           =    71.57055 (mean)

5._at        : v2x_execorr     =          .4
               time1           =    71.57055 (mean)

6. at        : v2x execorr     =          .5
               time1           =    71.57055 (mean)

7._at        : v2x_execorr     =          .6
               time1           =    71.57055 (mean)

8._at        : v2x_execorr     =          .7
               time1           =    71.57055 (mean)

9. at        : v2x execorr     =          .8
               time1           =    71.57055 (mean)

10._at       : v2x_execorr     =          .9
               time1           =    71.57055 (mean)

11._at       : v2x_execorr     =           1
               time1           =    71.57055 (mean)

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         _at |
          1  |   .0006766   .0003347     2.02   0.043     .0000206    .0013325
          2  |   .0008392   .0003757     2.23   0.025     .0001029    .0015756
          3  |    .001041   .0004201     2.48   0.013     .0002176    .0018644
          4  |   .0012912   .0004691     2.75   0.006     .0003717    .0022107
          5  |   .0016015    .000526     3.04   0.002     .0005705    .0026326
          6  |   .0019864   .0005975     3.32   0.001     .0008153    .0031574
          7  |   .0024635   .0006958     3.54   0.000     .0010998    .0038273
          8  |   .0030552    .000841     3.63   0.000     .0014069    .0047034
          9  |   .0037885   .0010611     3.57   0.000     .0017088    .0058683
         10  |   .0046975   .0013918     3.38   0.001     .0019696    .0074254
         11  |   .0058239   .0018759     3.10   0.002     .0021472    .0095006
------------------------------------------------------------------------------

48 . * Comparing bottom 10 percent, the mean, the top 90-99 percent
49 . sum v2x_execorr, detail

          V-Dem measure of executive corruption, t-1
-------------------------------------------------------------
      Percentiles      Smallest
 1%      .010446        .009338
 5%      .030093        .009338
10%      .061457        .009338       Obs              15,611
25%      .192158        .009338       Sum of Wgt.      15,611

50%      .457809                      Mean           .4701649
                        Largest       Std. Dev.      .2991762
75%       .74321        .973844
90%      .877365        .973844       Variance       .0895064
95%      .918347        .973844       Skewness       .0295046
99%      .962508        .977558       Kurtosis       1.657601
```

```
50 . margins, at(v2x_execorr=(.060949 .4693745 .877365 .962508)) predict(pr)

Predictive margins                              Number of obs     =     11,580
Model VCE    : Robust

Expression   : Pr(urbancivicny=1), predict(pr)

1._at        : v2x_execorr     =     .060949

2._at        : v2x_execorr     =    .4693745

3._at        : v2x_execorr     =     .877365

4._at        : v2x_execorr     =     .962508

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         _at |
          1  |   .0013936   .0005088     2.74   0.006     .0003964    .0023907
          2  |   .0033548   .0005772     5.81   0.000     .0022236     .004486
          3  |   .0080476   .0015519     5.19   0.000      .005006    .0110893
          4  |   .0096541   .0022118     4.36   0.000      .005319    .0139891
------------------------------------------------------------------------------

51 . xtcloglog leftistny v2x_execorr c.time1##c.time1##c.time1 if indstate==1,  eform nolog vce(robust)

Calculating robust standard errors:

Random-effects complementary log-log model      Number of obs     =     11,580
Group variable: cowcode                         Number of groups  =        161

Random effects u_i ~ Gaussian                   Obs per group:
                                                              min =         21
                                                              avg =       71.9
                                                              max =        114

Integration method: mvaghermite                 Integration pts.  =         12

                                                Wald chi2(4)      =      30.42
Log pseudolikelihood  = -378.06417              Prob > chi2       =     0.0000

                                          (Std. Err. adjusted for 161 clusters in cowcode)
------------------------------------------------------------------------------------------
                         |               Robust
               leftistny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------------------+----------------------------------------------------------------
            v2x_execorr |   1.786318   .7119443     1.46   0.145     .8179168    3.901294
                  time1 |   .9557295   .0327221    -1.32   0.186     .8936998    1.022064
                        |
        c.time1#c.time1 |   1.001647   .0007747     2.13   0.033      1.00013    1.003166
                        |
c.time1#c.time1#c.time1 |   .9999855   4.95e-06    -2.93   0.003     .9999758    .9999952
                        |
                  _cons |   .0060524   .0035095    -8.81   0.000     .0019425     .018858
-------------------------+----------------------------------------------------------------
               /lnsig2u |  -.7424384    .670923                     -2.057423    .5725464
-------------------------+----------------------------------------------------------------
                sigma_u |   .6898927   .2314324                      .3574672    1.331456
                    rho |   .2244118   .1167749                       .072083    .5187028
------------------------------------------------------------------------------------------

52 . margins, at(v2x_execorr=(0 .1 .2 .3 .4 .5 .6 .7 .8 .9 1.0)) predict(pr)

Predictive margins                              Number of obs     =     11,580
Model VCE    : Robust

Expression   : Pr(leftistny=1), predict(pr)

1._at        : v2x_execorr     =           0

2._at        : v2x_execorr     =          .1

3._at        : v2x_execorr     =          .2

4._at        : v2x_execorr     =          .3

5._at        : v2x_execorr     =          .4

6._at        : v2x_execorr     =          .5

7._at        : v2x_execorr     =          .6

8._at        : v2x_execorr     =          .7

9._at        : v2x_execorr     =          .8

10._at       : v2x_execorr     =          .9

11._at       : v2x_execorr     =           1
```

```
------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          at |
           1  |    .004177   .0011282     3.70   0.000     .0019657    .0063883
           2  |   .0044251   .0010483     4.22   0.000     .0023706    .0064797
           3  |    .004688   .0009657     4.85   0.000     .0027951    .0065808
           4  |   .0049663   .0008873     5.60   0.000     .0032273    .0067053
           5  |   .0052611   .0008244     6.38   0.000     .0036454    .0068768
           6  |   .0055732   .0007947     7.01   0.000     .0040156    .0071308
           7  |   .0059037   .0008193     7.21   0.000      .004298    .0075094
           8  |   .0062537    .000913     6.85   0.000     .0044642    .0080432
           9  |   .0066243   .0010784     6.14   0.000     .0045107    .0087378
          10  |   .0070166    .001309     5.36   0.000      .004451    .0095822
          11  |    .007432   .0015977     4.65   0.000     .0043005    .0105634
------------------------------------------------------------------------------
```

```
53 .
54 . * Figure 3.3
55 . xtcloglog urbancivicny c.gdppcthl##c.gdppcthl c.time1##c.time1##c.time1 if indstate==1, vce(robust) eform nolog

Calculating robust standard errors:

Random-effects complementary log-log model      Number of obs     =     11,042
Group variable: cowcode                         Number of groups  =        164

Random effects u_i ~ Gaussian                   Obs per group:
                                                              min =         10
                                                              avg =       67.3
                                                              max =        115

Integration method: mvaghermite                 Integration pts.  =         12

                                                Wald chi2(5)      =      44.40
Log pseudolikelihood  = -298.49629              Prob > chi2       =     0.0000

                                       (Std. Err. adjusted for 164 clusters in cowcode)
------------------------------------------------------------------------------------------
                         |               Robust
              urbancivicny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------------------+----------------------------------------------------------------
                gdppcthl |   1.352199   .1456203     2.80   0.005     1.094898    1.669967
                         |
  c.gdppcthl#c.gdppcthl |   .9748752   .0073925    -3.36   0.001     .9604932    .9894725
                         |
                   time1 |   .9331617   .0731267    -0.88   0.377     .8003002     1.08808
                         |
          c.time1#c.time1 |   1.001773   .0013091     1.36   0.175     .9992101    1.004342
                         |
c.time1#c.time1#c.time1 |   .9999917   6.56e-06    -1.27   0.205     .9999788    1.000005
                         |
                   _cons |   .0004842   .0008109    -4.56   0.000     .0000182    .0128982
-------------------------+----------------------------------------------------------------
                /lnsig2u |  -3.246525      6.543                     -16.07057    9.577519
-------------------------+----------------------------------------------------------------
                 sigma_u |   .1972541   .6453169                      .0003238    120.1522
                     rho |   .0231074   .1476979                      6.38e-08    .9998861
------------------------------------------------------------------------------------------

56 . margins, at(gdppcthl=(0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15)) predict(pr)

Predictive margins                              Number of obs     =     11,042
Model VCE    : Robust

Expression   : Pr(urbancivicny=1), predict(pr)

1._at        : gdppcthl        =           0

2._at        : gdppcthl        =           1

3._at        : gdppcthl        =           2

4._at        : gdppcthl        =           3

5._at        : gdppcthl        =           4

6._at        : gdppcthl        =           5

7._at        : gdppcthl        =           6

8._at        : gdppcthl        =           7

9._at        : gdppcthl        =           8

10._at       : gdppcthl        =           9

11._at       : gdppcthl        =          10

12._at       : gdppcthl        =          11

13._at       : gdppcthl        =          12

14._at       : gdppcthl        =          13

15._at       : gdppcthl        =          14

16._at       : gdppcthl        =          15
```

	Delta-method				
	Margin	Std. Err.	z	P>|z|	[95% Conf. Interval]
at					
1	.0031041	.0009816	3.16	0.002	.0011802 .005028
2	.0040882	.0009596	4.26	0.000	.0022075 .005969
3	.005117	.0009107	5.62	0.000	.0033322 .0069019
4	.0060873	.00092	6.62	0.000	.004284 .0078905
5	.0068832	.0010464	6.58	0.000	.0048323 .0089341
6	.0073989	.0012466	5.94	0.000	.0049557 .0098422
7	.0075611	.0014342	5.27	0.000	.0047502 .010372
8	.0073459	.0015509	4.74	0.000	.0043063 .0103856
9	.0067849	.0015799	4.29	0.000	.0036885 .0098814
10	.0059572	.0015343	3.88	0.000	.0029501 .0089644
11	.0049717	.0014384	3.46	0.001	.0021525 .0077909
12	.0039435	.0013109	3.01	0.003	.0013742 .0065128
13	.0029726	.0011601	2.56	0.010	.0006989 .0052462
14	.0021293	.0009897	2.15	0.031	.0001895 .004069
15	.0014493	.000807	1.80	0.073	-.0001324 .003031
16	.0009374	.0006247	1.50	0.133	-.0002869 .0021617

57 . xtcloglog leftistny gdppcthl c.time1##c.time1##c.time1 if indstate==1, vce(robust) eform nolog

Calculating robust standard errors:

Random-effects complementary log-log model Number of obs = 11,042
Group variable: cowcode Number of groups = 164

Random effects u_i ~ Gaussian Obs per group:
min = 10
avg = 67.3
max = 115

Integration method: mvaghermite Integration pts. = 12

Wald chi2(4) = 41.83
Log pseudolikelihood = -371.60028 Prob > chi2 = 0.0000

(Std. Err. adjusted for 164 clusters in cowcode)

	Robust				
leftistny	exp(b)	Std. Err.	z	P>|z|	[95% Conf. Interval]
gdppcthl	.8990926	.0422104	-2.27	0.023	.8200539 .9857493
time1	.9601783	.0310018	-1.26	0.208	.9012985 1.022905
c.time1#c.time1	1.001404	.0007465	1.88	0.060	.9999422 1.002868
c.time1#c.time1#c.time1	.9999876	4.75e-06	-2.62	0.009	.9999783 .9999969
_cons	.0140395	.0064059	-9.35	0.000	.0057407 .0343348
/lnsig2u	-1.205998	.8547113			-2.881202 .469205
sigma_u	.5471681	.2338354			.2367854 1.264406
rho	.1539828	.111345			.0329614 .4928767

58 . margins, at(gdppcthl=(0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15)) predict(pr)

Predictive margins Number of obs = 11,042
Model VCE : Robust

Expression : Pr(leftistny=1), predict(pr)

1._at : gdppcthl = 0

2._at : gdppcthl = 1

3._at : gdppcthl = 2

4._at : gdppcthl = 3

5._at : gdppcthl = 4

6._at : gdppcthl = 5

7._at : gdppcthl = 6

8._at : gdppcthl = 7

9._at : gdppcthl = 8

10._at : gdppcthl = 9

11._at : gdppcthl = 10

12._at : gdppcthl = 11

13._at : gdppcthl = 12

14._at : gdppcthl = 13

15._at : gdppcthl = 14

16._at : gdppcthl = 15

```
------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          at |
           1  |   .0078519   .0014818     5.30   0.000     .0049476    .0107563
           2  |   .0070653   .0011331     6.24   0.000     .0048445    .0092861
           3  |    .006357   .0009021     7.05   0.000      .004589     .008125
           4  |   .0057193    .000786     7.28   0.000     .0041787    .0072599
           5  |   .0051452   .0007631     6.74   0.000     .0036495    .0066408
           6  |   .0046284   .0007946     5.82   0.000      .003071    .0061858
           7  |   .0041634   .0008464     4.92   0.000     .0025044    .0058223
           8  |   .0037449   .0008986     4.17   0.000     .0019836    .0055061
           9  |   .0033683   .0009421     3.58   0.000     .0015218    .0052147
          10  |   .0030294   .0009736     3.11   0.002     .0011212    .0049376
          11  |   .0027246   .0009927     2.74   0.006      .000779    .0046702
          12  |   .0024504   .0010002     2.45   0.014       .00049    .0044107
          13  |   .0022036   .0009975     2.21   0.027     .0002486    .0041587
          14  |   .0019817   .0009861     2.01   0.044      .000049    .0039145
          15  |   .0017821   .0009675     1.84   0.065    -.0001141    .0036784
          16  |   .0016026    .000943     1.70   0.089    -.0002457    .0034509
------------------------------------------------------------------------------
```

```
59 .
60 . * Figure 3.4
61 . xtcloglog urbancivicny gdppcgrow1yrl c.time1##c.time1##c.time1 if indstate==1, vce(robust) eform nolog

Calculating robust standard errors:

Random-effects complementary log-log model      Number of obs     =     10,980
Group variable: cowcode                         Number of groups  =        164

Random effects u_i ~ Gaussian                   Obs per group:
                                                              min =          9
                                                              avg =       67.0
                                                              max =        114

Integration method: mvaghermite                 Integration pts.  =         12

                                                Wald chi2(4)      =      33.01
Log pseudolikelihood  = -306.04863              Prob > chi2       =     0.0000

                                       (Std. Err. adjusted for 164 clusters in cowcode)
------------------------------------------------------------------------------
                        |               Robust
           urbancivicny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
------------------------+-----------------------------------------------------------------
          gdppcgrow1yrl |   1.023162   .0099809     2.35   0.019     1.003786    1.042912
                  time1 |   .9220375   .0741837    -1.01   0.313     .7875245    1.079526
                        |
        c.time1#c.time1 |   1.001959   .0013547     1.45   0.148      .999307    1.004617
                        |
c.time1#c.time1#c.time1 |   .9999907   6.81e-06    -1.37   0.171     .9999773    1.000004
                        |
                   cons |   .0009143   .0015393    -4.16   0.000     .0000337    .0247856
------------------------+-----------------------------------------------------------------
               /lnsig2u |  -1.796819   1.469043                     -4.67609    1.082451
------------------------+-----------------------------------------------------------------
                sigma_u |   .4072168   .2991094                      .0965162    1.718111
                    rho |   .0915779   .1222117                      .0056312    .6421599
------------------------------------------------------------------------------

62 . margins, at(gdppcgrow1yrl=(-10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10)) predict(pr)

Predictive margins                              Number of obs     =     10,980
Model VCE    : Robust

Expression   : Pr(urbancivicny=1), predict(pr)

1._at        : gdppcgrow1~l    =         -10

2._at        : gdppcgrow1~l    =          -9

3._at        : gdppcgrow1~l    =          -8

4._at        : gdppcgrow1~l    =          -7

5._at        : gdppcgrow1~l    =          -6

6._at        : gdppcgrow1~l    =          -5

7._at        : gdppcgrow1~l    =          -4

8._at        : gdppcgrow1~l    =          -3

9._at        : gdppcgrow1~l    =          -2

10._at       : gdppcgrow1~l    =          -1

11._at       : gdppcgrow1~l    =           0

12._at       : gdppcgrow1~l    =           1

13._at       : gdppcgrow1~l    =           2

14._at       : gdppcgrow1~l    =           3

15._at       : gdppcgrow1~l    =           4

16._at       : gdppcgrow1~l    =           5
```

```
17._at       : gdppcgrow1~l    =           6

18._at       : gdppcgrow1~l    =           7

19._at       : gdppcgrow1~l    =           8

20._at       : gdppcgrow1~l    =           9

21._at       : gdppcgrow1~l    =          10
```

	Delta-method				
	Margin	Std. Err.	z	P>|z|	[95% Conf. Interval]
_at					
1	.0035051	.0006805	5.15	0.000	.0021713 .0048389
2	.003586	.0006731	5.33	0.000	.0022666 .0049053
3	.0036688	.0006661	5.51	0.000	.0023631 .0049744
4	.0037534	.0006597	5.69	0.000	.0024605 .0050464
5	.00384	.0006539	5.87	0.000	.0025583 .0051217
6	.0039286	.0006491	6.05	0.000	.0026564 .0052009
7	.0040193	.0006455	6.23	0.000	.0027542 .0052843
8	.004112	.0006432	6.39	0.000	.0028513 .0053727
9	.0042068	.0006426	6.55	0.000	.0029473 .0054664
10	.0043039	.0006441	6.68	0.000	.0030415 .0055662
11	.0044031	.0006477	6.80	0.000	.0031336 .0056727
12	.0045047	.000654	6.89	0.000	.0032229 .0057864
13	.0046085	.0006631	6.95	0.000	.003309 .0059081
14	.0047148	.0006753	6.98	0.000	.0033913 .0060383
15	.0048235	.0006909	6.98	0.000	.0034694 .0061776
16	.0049347	.0007101	6.95	0.000	.0035429 .0063264
17	.0050484	.0007331	6.89	0.000	.0036116 .0064852
18	.0051647	.00076	6.80	0.000	.0036752 .0066543
19	.0052837	.0007909	6.68	0.000	.0037335 .0068339
20	.0054055	.000826	6.54	0.000	.0037865 .0070244
21	.00553	.0008653	6.39	0.000	.0038341 .0072259

```
63 . xtcloglog leftistny gdppcgrow1yrl c.time1##c.time1##c.time1 if indstate==1, vce(robust) eform nolog

   Calculating robust standard errors:

   Random-effects complementary log-log model      Number of obs     =     10,980
   Group variable: cowcode                         Number of groups  =        164

   Random effects u i ~ Gaussian                   Obs per group:
                                                                 min =          9
                                                                 avg =       67.0
                                                                 max =        114

   Integration method: mvaghermite                 Integration pts.  =         12

                                                   Wald chi2(4)      =      49.72
   Log pseudolikelihood  = -368.21201              Prob > chi2       =     0.0000

                                          (Std. Err. adjusted for 164 clusters in cowcode)
```

leftistny	exp(b)	Robust Std. Err.	z	P>|z|	[95% Conf. Interval]
gdppcgrow1yrl	.9457661	.0112912	-4.67	0.000	.9238926 .9681574
time1	.9412079	.0323814	-1.76	0.078	.879834 1.006863
c.time1#c.time1	1.00184	.0007972	2.31	0.021	1.000279 1.003404
c.time1#c.time1#c.time1	.9999845	5.18e-06	-2.99	0.003	.9999743 .9999947
_cons	.0140165	.0067618	-8.85	0.000	.0054451 .0360805
/lnsig2u	-.8113529	.6521318			-2.089508 .466802
sigma_u	.6665258	.2173313			.3517784 1.262888
rho	.2126453	.1091847			.0699662 .492276

```
64 . margins, at(gdppcgrow1yrl=(-10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10)) predict(pr)

   Predictive margins                              Number of obs     =     10,980
   Model VCE    : Robust

   Expression   : Pr(leftistny=1), predict(pr)

   1._at        : gdppcgrow1~l    =         -10

   2._at        : gdppcgrow1~l    =          -9

   3._at        : gdppcgrow1~l    =          -8

   4._at        : gdppcgrow1~l    =          -7

   5._at        : gdppcgrow1~l    =          -6

   6._at        : gdppcgrow1~l    =          -5

   7._at        : gdppcgrow1~l    =          -4

   8._at        : gdppcgrow1~l    =          -3

   9._at        : gdppcgrow1~l    =          -2
```

```
10._at       : gdppcgrow1~l    =          -1

11._at       : gdppcgrow1~l    =           0

12._at       : gdppcgrow1~l    =           1

13._at       : gdppcgrow1~l    =           2

14._at       : gdppcgrow1~l    =           3

15._at       : gdppcgrow1~l    =           4

16._at       : gdppcgrow1~l    =           5

17._at       : gdppcgrow1~l    =           6

18._at       : gdppcgrow1~l    =           7

19._at       : gdppcgrow1~l    =           8

20._at       : gdppcgrow1~l    =           9

21._at       : gdppcgrow1~l    =          10
```

	Delta-method				
	Margin	Std. Err.	z	P>|z|	[95% Conf. Interval]
_at					
1	.0106249	.001946	5.46	0.000	.0068108 .0144389
2	.0100558	.001769	5.68	0.000	.0065887 .013523
3	.0095169	.0016099	5.91	0.000	.0063615 .0126722
4	.0090065	.0014677	6.14	0.000	.0061299 .0118831
5	.0085232	.0013413	6.35	0.000	.0058943 .0111521
6	.0080656	.0012298	6.56	0.000	.0056551 .010476
7	.0076323	.0011323	6.74	0.000	.0054131 .0098515
8	.0072221	.0010476	6.89	0.000	.0051687 .0092754
9	.0068337	.0009749	7.01	0.000	.0049228 .0087446
10	.0064661	.0009131	7.08	0.000	.0046763 .0082558
11	.006118	.0008611	7.10	0.000	.0044303 .0078058
12	.0057886	.0008178	7.08	0.000	.0041858 .0073914
13	.0054768	.000782	7.00	0.000	.0039442 .0070094
14	.0051817	.0007526	6.89	0.000	.0037067 .0066567
15	.0049024	.0007285	6.73	0.000	.0034745 .0063303
16	.004638	.0007088	6.54	0.000	.0032488 .0060273
17	.0043879	.0006926	6.34	0.000	.0030305 .0057452
18	.0041511	.0006789	6.11	0.000	.0028204 .0054818
19	.0039271	.0006673	5.89	0.000	.0026193 .0052349
20	.0037151	.000657	5.65	0.000	.0024274 .0050028
21	.0035145	.0006477	5.43	0.000	.002245 .004784

```
65 .
66 . * Economic growth, using the previous three years prior to onset
67 . xtcloglog leftistny gdppcgrow3yrsl c.time1##c.time1##c.time1 if indstate==1, vce(robust) eform nolog

Calculating robust standard errors:

Random-effects complementary log-log model      Number of obs     =     10,849
Group variable: cowcode                         Number of groups  =        164

Random effects u_i ~ Gaussian                   Obs per group:
                                                              min =          7
                                                              avg =       66.2
                                                              max =        112

Integration method: mvaghermite                 Integration pts.  =         12

                                                Wald chi2(4)      =      32.51
Log pseudolikelihood  = -366.20592              Prob > chi2       =     0.0000

                                       (Std. Err. adjusted for 164 clusters in cowcode)
```

leftistny	exp(b)	Robust Std. Err.	z	P>|z|	[95% Conf. Interval]
gdppcgrow3yrsl	.9685276	.008843	-3.50	0.000	.9513497 .9860157
time1	.9116347	.0350698	-2.40	0.016	.8454266 .9830279
c.time1#c.time1	1.002497	.0008716	2.87	0.004	1.00079 1.004207
c.time1#c.time1#c.time1	.9999805	5.70e-06	-3.42	0.001	.9999693 .9999917
_cons	.0236263	.0126964	-6.97	0.000	.0082409 .0677356
/lnsig2u	-.8347271	.6445816			-2.098084 .4286296
sigma u	.6587814	.2123192			.3502732 1.239013
rho	.2087581	.1064708			.0694102 .4827392

```
68 . xtcloglog urbancivicny gdppcgrow3yrsl c.time1##c.time1##c.time1 if indstate==1, vce(robust) eform nolog

Calculating robust standard errors:

Random-effects complementary log-log model      Number of obs     =     10,849
Group variable: cowcode                         Number of groups  =        164

Random effects u_i ~ Gaussian                   Obs per group:
                                                              min =          7
                                                              avg =       66.2
                                                              max =        112

Integration method: mvaghermite                 Integration pts.  =         12

                                                Wald chi2(4)      =      32.21
Log pseudolikelihood  = -304.82928              Prob > chi2       =     0.0000

                                          (Std. Err. adjusted for 164 clusters in cowcode)
------------------------------------------------------------------------------------------
                         |               Robust
              urbancivicny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------------------+----------------------------------------------------------------
         gdppcgrow3yrsl |   1.015101   .0043938     3.46   0.001     1.006525    1.023749
                  time1 |   .9025563   .0779243    -1.19   0.235     .7620508    1.068968
                        |
        c.time1#c.time1 |   1.002276   .0014412     1.58   0.114     .9994549    1.005104
                        |
c.time1#c.time1#c.time1 |   .9999892   7.19e-06    -1.50   0.134     .9999751    1.000003
                        |
                   cons |   .0013299    .002373    -3.71   0.000     .0000403    .0439153
-------------------------+----------------------------------------------------------------
                /lnsig2u |  -1.859642   1.558983                     -4.915193    1.195909
-------------------------+----------------------------------------------------------------
                 sigma_u |   .3946243   .3076063                      .0856406    1.818395
                     rho |   .0864839   .1231666                      .0044389    .6677904
------------------------------------------------------------------------------------------

69 .
70 . * On the relationship of economic growth to urban civic contention among lower-middle income countries
71 . ttest gdppcgrow3yrsl if gdppcquartersl==2 & indstate==1, by(urbancivicny)

Two-sample t test with equal variances
------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       0 |   4,267    7.553086    .2359672    15.41392    7.090467    8.015704
       1 |      24    13.25563    2.638716    12.92701    7.797028    18.71423
---------+--------------------------------------------------------------------
combined |   4,291    7.584981    .2351814    15.40573    7.123903    8.046058
---------+--------------------------------------------------------------------
    diff |           -5.702541    3.152678               -11.88342    .4783384
------------------------------------------------------------------------------
    diff = mean(0) - mean(1)                                      t =  -1.8088
Ho: diff = 0                                     degrees of freedom =     4289

    Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
 Pr(T < t) = 0.0353         Pr(|T| > |t|) = 0.0706          Pr(T > t) = 0.9647

72 . * Absence of relationship outside of lower-middle incomes
73 . xtcloglog urbancivicny i.gdppcquartersl##c.gdppcgrow1yrl c.time1##c.time1##c.time1 if indstate==1, vce(robust) e
   > form nolog

Calculating robust standard errors:

Random-effects complementary log-log model      Number of obs     =     10,980
Group variable: cowcode                         Number of groups  =        164

Random effects u_i ~ Gaussian                   Obs per group:
                                                              min =          9
                                                              avg =       67.0
                                                              max =        114

Integration method: mvaghermite                 Integration pts.  =         12

                                                Wald chi2(10)     =      72.92
Log pseudolikelihood  = -298.23054              Prob > chi2       =     0.0000

                                                (Std. Err. adjusted for 164 clusters in cowcode)
------------------------------------------------------------------------------------------
                         |               Robust
              urbancivicny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------------------+----------------------------------------------------------------
          gdppcquartersl |
                       2 |   1.135674    .319499     0.45   0.651     .6543124    1.971161
                       3 |   1.120237   .5574428     0.23   0.820     .4224181    2.970828
                       4 |   .1173629   .1237091    -2.03   0.042     .0148697    .9263167
                         |
            gdppcgrow1yrl |   .9775867   .0154451    -1.43   0.151     .9477787    1.008332
                         |
gdppcquartersl#c.gdppcgrow1yrl |
                       2 |   1.051118    .020754     2.52   0.012     1.011218    1.092592
                       3 |   1.089363   .0498515     1.87   0.061     .9959091    1.191586
                       4 |   .9735261   .0193323    -1.35   0.177     .9363634    1.012164
                         |
                   time1 |   .9216375   .0751456    -1.00   0.317     .7855206    1.081341
                         |
          c.time1#c.time1 |   1.001971   .0013681     1.44   0.149     .9992927    1.004656
                         |
 c.time1#c.time1#c.time1 |   .9999907   6.87e-06    -1.35   0.177     .9999773    1.000004
                         |
                   _cons |   .0009348   .0015908    -4.10   0.000     .0000333    .0262592
```

```
------------------------------+------------------------------------------------------------------
                     /lnsig2u |  -3.572014   8.848644                      -20.91504    13.77101
------------------------------+------------------------------------------------------------------
                      sigma_u |   .1676282   .7416411                       .0000287    977.9951
                          rho |   .0167954   .1461202                       5.02e-10    .9999983
-------------------------------------------------------------------------------------------------
```

```
74 .
75 . * Lack of direct bivariate relationship between oil production and revolution
76 . xtcloglog urbancivicny lnoill c.time1##c.time1##c.time1 if indstate==1, vce(robust) eform nolog

   Calculating robust standard errors:

   Random-effects complementary log-log model      Number of obs     =     11,560
   Group variable: cowcode                         Number of groups  =        162

   Random effects u_i ~ Gaussian                   Obs per group:
                                                                 min =         22
                                                                 avg =       71.4
                                                                 max =        114

   Integration method: mvaghermite                 Integration pts.  =         12

                                                   Wald chi2(4)      =      24.91
   Log pseudolikelihood  = -306.89631              Prob > chi2       =     0.0001

                                        (Std. Err. adjusted for 162 clusters in cowcode)
   ------------------------------------------------------------------------------------------
                          |               Robust
              urbancivicny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
   -----------------------+------------------------------------------------------------------
                   lnoill |   1.010538    .030809     0.34   0.731     .9519217    1.072763
                    time1 |   .9444761   .0792696    -0.68   0.496     .8012164    1.113351
                          |
           c.time1#c.time1 |   1.001622   .0013847     1.17   0.241     .9989115     1.00434
                          |
   c.time1#c.time1#c.time1 |   .9999922   6.89e-06    -1.14   0.256     .9999787    1.000006
                          |
                    _cons |   .0005282   .0009415    -4.23   0.000     .0000161    .0173779
   -----------------------+------------------------------------------------------------------
                  /lnsig2u |  -1.737055   1.410395                     -4.501378    1.027269
   -----------------------+------------------------------------------------------------------
                   sigma_u |    .419569    .295879                      .1053266    1.671354
                       rho |   .0966726   .1231656                       .006699    .6293824
   ------------------------------------------------------------------------------------------

77 . xtcloglog leftistny lnoill c.time1##c.time1##c.time1 if indstate==1, vce(robust) eform nolog

   Calculating robust standard errors:

   Random-effects complementary log-log model      Number of obs     =     11,560
   Group variable: cowcode                         Number of groups  =        162

   Random effects u_i ~ Gaussian                   Obs per group:
                                                                 min =         22
                                                                 avg =       71.4
                                                                 max =        114

   Integration method: mvaghermite                 Integration pts.  =         12

                                                   Wald chi2(4)      =      30.60
   Log pseudolikelihood  =  -371.9194              Prob > chi2       =     0.0000

                                        (Std. Err. adjusted for 162 clusters in cowcode)
   ------------------------------------------------------------------------------------------
                          |               Robust
                leftistny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
   -----------------------+------------------------------------------------------------------
                   lnoill |   1.057081   .0398787     1.47   0.141     .9817396    1.138204
                    time1 |   .9528851   .0334684    -1.37   0.169     .8894951    1.020793
                          |
           c.time1#c.time1 |   1.001618   .0007878     2.06   0.040     1.000075    1.003163
                          |
   c.time1#c.time1#c.time1 |   .9999858   5.01e-06    -2.83   0.005      .999976    .9999956
                          |
                    _cons |   .0080904   .0039277    -9.92   0.000     .0031241    .0209512
   -----------------------+------------------------------------------------------------------
                  /lnsig2u |  -.7691891   .6475971                     -2.038456    .5000778
   -----------------------+------------------------------------------------------------------
                   sigma_u |   .6807266   .2204183                      .3608734    1.284075
                       rho |   .2197902   .1110515                       .073362    .5005944
   ------------------------------------------------------------------------------------------

78 .
79 . * ============================================================
80 . * MODELS FOR URBAN CIVIC REVOLUTIONARY EPISODES (TABLE 3.1)
81 . * ============================================================
82 . * Table 3.1:  Model for explaining urban civic revolutionary episodes
83 . *       Territories with colonial status, territories of independent states, and states under foreign occupation
   >  excluded from sample
```

```
84 .
85 . * Create common sample for comparison of BIC and AIC
86 . quietly: xtcloglog urbancivicny lnpopl gdppcthl gdppcthl2 gdppcgrow1yrl polityl polityl2 yrsincleaderinpower v2x
   > _execorr lnoill postcoldwar if  indstate==1, eform nolog

87 . generate sample=0

88 . replace sample=1 if e(sample)
   (10,494 real changes made)

89 . *  Likelihood ratio test for whether inclusion of time controls is necessary when postcoldwar dummy is included
90 . quietly: xtcloglog urbancivicny lnpopl gdppcthl gdppcthl2 gdppcgrow1yrl polityl polityl2 postcoldwar if indstate
   > ==1

91 . estimates store mod1

92 . quietly: xtcloglog urbancivicny lnpopl gdppcthl gdppcthl2 gdppcgrow1yrl polityl polityl2 postcoldwar time1 times
   > q timecub if indstate==1

93 . estimates store mod2

94 . lrtest mod1 mod2, stats

   Likelihood-ratio test                                 LR chi2(3)  =      1.27
   (Assumption: mod1 nested in mod2)                     Prob > chi2 =    0.7365

   Akaike's information criterion and Bayesian information criterion

   -----------------------------------------------------------------------------
          Model |        Obs  ll(null)  ll(model)      df          AIC         BIC
   -------------+---------------------------------------------------------------
           mod1 |     10,611         .  -273.7069       9    565.4138   630.8406
           mod2 |     10,611         .  -273.0724      12    570.1448   657.3805
   -----------------------------------------------------------------------------
                 Note: N=Obs used in calculating BIC; see [R] BIC note.

95 . * RESULT:  No need to include time controls if postcoldwar included
96 . drop _est_mod1 _est_mod2

97 .
98 . * Model 1, with robust errors
99 . xtcloglog urbancivicny lnpopl gdppcthl gdppcthl2 gdppcgrow1yrl polityl polityl2 postcoldwar if indstate==1, vce(
   > robust) eform nolog

   Calculating robust standard errors:

   Random-effects complementary log-log model      Number of obs     =     10,611
   Group variable: cowcode                         Number of groups  =        159

   Random effects u_i ~ Gaussian                   Obs per group:
                                                                 min =          9
                                                                 avg =       66.7
                                                                 max =        114

   Integration method: mvaghermite                 Integration pts.  =         12

                                                   Wald chi2(7)      =      94.29
   Log pseudolikelihood  =  -273.7069              Prob > chi2       =     0.0000

                                (Std. Err. adjusted for 159 clusters in cowcode)
   ------------------------------------------------------------------------------
                |               Robust
    urbancivicny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
   --------------+---------------------------------------------------------------
          lnpopl |   1.254499   .1157297     2.46   0.014     1.046997    1.503125
        gdppcthl |   1.462175   .1614612     3.44   0.001      1.17762    1.815489
       gdppcthl2 |   .9767168   .0073633    -3.12   0.002     .9623911    .9912557
   gdppcgrow1yrl |   1.016118    .010218     1.59   0.112     .9962873    1.036344
         polityl |   .9120294   .0261691    -3.21   0.001     .8621544    .9647895
        polityl2 |   .9829544   .0052482    -3.22   0.001     .9727218    .9932946
     postcoldwar |   8.778389   3.614825     5.28   0.000     3.916528    19.67562
           _cons |   .0001073   .0001172    -8.37   0.000     .0000126    .0009128
   --------------+---------------------------------------------------------------
        /lnsig2u |  -2.181044   3.445429                     -8.93396    4.571873
   --------------+---------------------------------------------------------------
         sigma_u |   .3360411   .5789028                     .0114819     9.83489
             rho |   .0642393   .2071138                     .0000801    .9832781
   ------------------------------------------------------------------------------

100 . xtcloglog urbancivicny lnpopl gdppcthl gdppcthl2 gdppcgrow1yrl polityl polityl2 postcoldwar if indstate==1, nolo
   > g eform

   Random-effects complementary log-log model      Number of obs     =     10,611
   Group variable: cowcode                         Number of groups  =        159

   Random effects u_i ~ Gaussian                   Obs per group:
                                                                 min =          9
                                                                 avg =       66.7
                                                                 max =        114

   Integration method: mvaghermite                 Integration pts.  =         12

                                                   Wald chi2(7)      =      59.77
   Log likelihood  =  -273.7069                    Prob > chi2       =     0.0000
```

```
------------------------------------------------------------------------------
 urbancivicny |      exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
--------------+---------------------------------------------------------------
       lnpopl |   1.254499   .1222466     2.33   0.020     1.036391    1.518508
     gdppcthl |   1.462175   .1967225     2.82   0.005     1.123254     1.90336
    gdppcthl2 |   .9767168    .010481    -2.20   0.028      .956389    .9974767
gdppcgrow1yrl |   1.016118   .0186123     0.87   0.383     .9802857     1.05326
      polityl |   .9120294   .0251732    -3.34   0.001     .8640017    .9627268
     polityl2 |   .9829544   .0055716    -3.03   0.002     .9720946    .9939354
  postcoldwar |   8.778389   3.664839     5.20   0.000     3.873036    19.89656
        _cons |   .0001073    .000119    -8.24   0.000     .0000122    .0009427
--------------+---------------------------------------------------------------
     /lnsig2u |  -2.181044   3.820699                     -9.669476    5.307389
--------------+---------------------------------------------------------------
      sigma_u |   .3360411    .641956                      .0079488    14.20643
          rho |   .0642393   .2296723                      .0000384    .9919155
------------------------------------------------------------------------------
LR test of rho=0: chibar2(01) = 0.07                  Prob >= chibar2 = 0.395

101 . quadchk , nooutput

    Refitting model intpoints() =  8
    Refitting model intpoints() = 16

                           Quadrature check

                Fitted       Comparison     Comparison
              quadrature     quadrature     quadrature
              12 points      8 points       16 points
    ---------------------------------------------------
    Log           -273.7069      -273.7069      -273.7069
    likelihood                    5.359e-09     -7.162e-12   Difference
                                 -1.958e-11      2.617e-14   Relative difference
    ---------------------------------------------------
    urbancivicny: .22673636       .22673636      .22673636
      lnpopl                     -4.317e-12      3.017e-10   Difference
                                 -1.904e-11      1.331e-09   Relative difference
    ---------------------------------------------------
    urbancivicny: .37992507       .37992507      .37992507
    gdppcthl                   -3.034e-12      2.019e-10   Difference
                               -7.985e-12      5.315e-10   Relative difference
    ---------------------------------------------------
    urbancivicny:-.02355852     -.02355852     -.02355852
    gdppcthl2                   1.901e-13     -1.299e-11   Difference
                               -8.068e-12      5.512e-10   Relative difference
    ---------------------------------------------------
    urbancivicny: .01598961       .01598961      .01598961
    gdppcgrow1~l                1.105e-13     -7.142e-12   Difference
                                6.910e-12     -4.467e-10   Relative difference
    ---------------------------------------------------
    urbancivicny: -.0920831      -.0920831      -.0920831
     polityl                    1.858e-12     -1.272e-10   Difference
                               -2.017e-11      1.382e-09   Relative difference
    ---------------------------------------------------
    urbancivicny: -.0171926      -.0171926      -.0171926
    polityl2                    5.217e-14     -3.374e-12   Difference
                               -3.034e-12      1.963e-10   Relative difference
    ---------------------------------------------------
    urbancivicny: 2.1722929       2.1722929      2.1722929
    postcoldwar                -7.070e-12      4.762e-10   Difference
                               -3.255e-12      2.192e-10   Relative difference
    ---------------------------------------------------
    urbancivicny:-9.1398888     -9.1398888     -9.1398888
       _cons                    9.075e-11     -6.122e-09   Difference
                               -9.929e-12      6.698e-10   Relative difference
    ---------------------------------------------------
    lnsig2u:     -2.1810436     -2.1810436     -2.1810436
       _cons                   -7.655e-10      3.859e-08   Difference
                                3.510e-10     -1.769e-08   Relative difference
    ---------------------------------------------------

102 . * Passed
103 . * Compute AIC/BIC
104 . quietly: xtcloglog urbancivicny lnpopl gdppcthl gdppcthl2 gdppcgrow1yrl polityl polityl2 postcoldwar if indstate
    > ==1 & sample==1, nolog eform

105 . estat ic

    Akaike's information criterion and Bayesian information criterion

    ------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
    -------------+----------------------------------------------------------------
               . |     10,494         .  -273.4041       9    564.8082   630.1353
    ------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

106 . * Computing percent correctly predicted with above-average risk
107 . quietly: xtcloglog urbancivicny lnpopl gdppcthl gdppcthl2 gdppcgrow1yrl polityl polityl2 postcoldwar if indstate
    > ==1, vce(robust) eform nolog
```

```
108 . predict prmod1, pr
    (using 12 quadrature points)
    (7644 missing values generated)

109 . * Correctly predicted positive cases
110 . sum urbancivicny if e(sample)

    Variable |        Obs        Mean    Std. Dev.       Min        Max
-------------+---------------------------------------------------------
urbancivicny |     10,611    .0047121     .068486          0          1

111 . local prmean=r(mean)

112 . count if urbancivicny==1 & prmod1>`prmean' & e(sample)
  39

113 . local corposcount=r(N)

114 . count if urbancivicny==1 & prmod1<=`prmean' & e(sample)
  11

115 . local falseposcount=r(N)

116 . display (`corposcount')/(`corposcount' + `falseposcount')
.78

117 . * Correctly predicted negative cases
118 . count if urbancivicny==0 & prmod1>`prmean' & e(sample)
  2,707

119 . local falsenegcount=r(N)

120 . count if urbancivicny==0 & prmod1<=`prmean' & e(sample)
  7,854

121 . local cornegcount=r(N)

122 . display (`falsenegcount')/(`cornegcount' + `falsenegcount')
.25632042

123 . * AUC
124 . roctab urbancivicny prmod1 if e(sample)

                     ROC                    -Asymptotic Normal--
         Obs       Area     Std. Err.      [95% Conf. Interval]
    ---------------------------------------------------------------
      10,611     0.8412       0.0265        0.78932     0.89302

125 . macro drop _all

126 . drop prmod1

127 .
128 . * Model 2, with robust errors
129 . xtcloglog urbancivicny lnpopl gdppcthl gdppcthl2 gedpartyautoc gedmilautoc gedmonautoc gedpersautoc postcoldwar
    > if indstate==1,  eform nolog vce(robust)

    Calculating robust standard errors:

    Random-effects complementary log-log model      Number of obs     =      7,690
    Group variable: cowcode                         Number of groups  =        148

    Random effects u i ~ Gaussian                   Obs per group:
                                                                  min =         17
                                                                  avg =       52.0
                                                                  max =         65

    Integration method: mvaghermite                 Integration pts.  =         12

                                                    Wald chi2(8)      =     145.52
    Log pseudolikelihood  = -215.69631              Prob > chi2       =     0.0000

                                (Std. Err. adjusted for 148 clusters in cowcode)
    ------------------------------------------------------------------------------
                 |               Robust
     urbancivicny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
    --------------+---------------------------------------------------------------
           lnpopl |   1.244136   .1380507     1.97   0.049     1.000962    1.546386
         gdppcthl |   1.436001   .1776377     2.93   0.003      1.12683        1.83
        gdppcthl2 |   .9773042   .0072597    -3.09   0.002     .9631785    .9916371
    gedpartyautoc |   3.312838   1.865038     2.13   0.033     1.098998    9.986275
      gedmilautoc |   15.26314   9.186669     4.53   0.000     4.691564    49.65581
      gedmonautoc |   2.727148   3.452572     0.79   0.428     .2280797     32.6085
     gedpersautoc |   7.232602   3.926891     3.64   0.000     2.495403    20.96276
      postcoldwar |   7.823159   3.076695     5.23   0.000     3.619273    16.90998
            _cons |   .0000218   .0000264    -8.86   0.000     2.03e-06    .0002339
    --------------+---------------------------------------------------------------
         /lnsig2u |  -2.828529   8.868169                     -20.20982    14.55276
    --------------+---------------------------------------------------------------
          sigma_u |   .2431044   1.077945                      .0000409    1445.747
              rho |   .0346823   .2969009                      1.02e-09    .9999992
    ------------------------------------------------------------------------------
```

```
130 . xtcloglog urbancivicny lnpopl gdppcthl gdppcthl2 gedpartyautoc gedmilautoc gedmonautoc gedpersautoc postcoldwar
    > if indstate==1,  eform nolog

    Random-effects complementary log-log model      Number of obs     =      7,690
    Group variable: cowcode                         Number of groups  =        148

    Random effects u_i ~ Gaussian                   Obs per group:
                                                                  min =         17
                                                                  avg =       52.0
                                                                  max =         65

    Integration method: mvaghermite                 Integration pts.  =         12

                                                    Wald chi2(8)      =      50.98
    Log likelihood  = -215.69631                    Prob > chi2       =     0.0000

    ------------------------------------------------------------------------------
     urbancivicny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
    --------------+---------------------------------------------------------------
           lnpopl |   1.244136    .147074     1.85   0.065     .9868337    1.568525
         gdppcthl |   1.436001   .2000003     2.60   0.009     1.092957    1.886716
        gdppcthl2 |   .9773042   .0105771    -2.12   0.034     .9567918    .9982563
    gedpartyautoc |   3.312838   1.795109     2.21   0.027     1.145419    9.581556
      gedmilautoc |   15.26314   8.832006     4.71   0.000     4.910172    47.44507
      gedmonautoc |   2.727148   2.313353     1.18   0.237     .5172036     14.3799
     gedpersautoc |   7.232602   3.967846     3.61   0.000     2.467861    21.19671
      postcoldwar |   7.823159   3.571284     4.51   0.000     3.197476    19.14066
            _cons |   .0000218   .0000298    -7.84   0.000     1.49e-06    .0003187
    --------------+---------------------------------------------------------------
         /lnsig2u |  -2.828529    8.36249                     -19.21871    13.56165
    --------------+---------------------------------------------------------------
          sigma_u |   .2431044   1.016479                      .0000671    880.7952
              rho |   .0346823   .2799711                      2.74e-09    .9999979
    ------------------------------------------------------------------------------
    LR test of rho=0: chibar2(01) = 0.01                  Prob >= chibar2 = 0.451

131 . quadchk , nooutput

    Refitting model intpoints() =  8
    Refitting model intpoints() = 16

                            Quadrature check

                  Fitted       Comparison     Comparison
                quadrature     quadrature     quadrature
                12 points      8 points       16 points
    ------------------------------------------------------------
    Log          -215.69631     -215.69631     -215.69631
    likelihood                   3.902e-11      5.306e-11   Difference
                                -1.809e-13     -2.460e-13   Relative difference
    ------------------------------------------------------------
    urbancivicny: .21844108      .21844107      .21844107
      lnpopl                    -1.587e-08     -1.541e-08   Difference
                                -7.267e-08     -7.053e-08   Relative difference
    ------------------------------------------------------------
    urbancivicny: .36186223      .36186222      .36186222
    gdppcthl                    -1.219e-08     -1.197e-08   Difference
                                -3.370e-08     -3.309e-08   Relative difference
    ------------------------------------------------------------
    urbancivicny:-.02295732     -.02295732     -.02295732
    gdppcthl2                    9.895e-10      9.743e-10   Difference
                                -4.310e-08     -4.244e-08   Relative difference
    ------------------------------------------------------------
    urbancivicny: 1.1978053      1.1978052      1.1978052
    gedpartyau~c                -9.709e-08     -9.285e-08   Difference
                                -8.106e-08     -7.752e-08   Relative difference
    ------------------------------------------------------------
    urbancivicny: 2.7254408      2.7254406      2.7254406
    gedmilautoc                 -1.964e-07     -1.906e-07   Difference
                                -7.208e-08     -6.994e-08   Relative difference
    ------------------------------------------------------------
    urbancivicny: 1.0032563      1.0032561      1.0032562
    gedmonautoc                 -1.834e-07     -1.770e-07   Difference
                                -1.828e-07     -1.764e-07   Relative difference
    ------------------------------------------------------------
    urbancivicny: 1.9785989      1.9785988      1.9785988
    gedpersautoc                -1.128e-07     -1.090e-07   Difference
                                -5.700e-08     -5.509e-08   Relative difference
    ------------------------------------------------------------
    urbancivicny: 2.0570884      2.0570883      2.0570883
    postcoldwar                 -8.232e-08     -7.963e-08   Difference
                                -4.002e-08     -3.871e-08   Relative difference
    ------------------------------------------------------------
    urbancivicny:-10.735143     -10.735143     -10.735143
       _cons                     5.921e-07      5.727e-07   Difference
                                -5.515e-08     -5.335e-08   Relative difference
    ------------------------------------------------------------
    lnsig2u:     -2.8285288     -2.8285882     -2.8285879
       _cons                     -.0000594     -.00005906   Difference
                                   .000021      .00002088   Relative difference
    ------------------------------------------------------------
```

```
132 . * Passed
133 . * Computing percent correctly predicted with above-average risk
134 . quietly: xtcloglog urbancivicny lnpopl gdppcthl gdppcthl2 gedpartyautoc gedmilautoc gedmonautoc gedpersautoc pos
    > tcoldwar if indstate==1,  eform nolog vce(robust)

135 . predict prmod2, pr
    (using 12 quadrature points)
    (10691 missing values generated)

136 . * Correctly predicted positive cases
137 . sum urbancivicny if e(sample)

    Variable |        Obs        Mean    Std. Dev.       Min        Max
-------------+---------------------------------------------------------
urbancivicny |      7,690    .0052016    .0719387          0          1

138 . local prmean=r(mean)

139 . count if urbancivicny==1 & prmod2>`prmean' & e(sample)
  31

140 . local corposcount=r(N)

141 . count if urbancivicny==1 & prmod2<=`prmean' & e(sample)
  9

142 . local falseposcount=r(N)

143 . display (`corposcount')/(`corposcount' + `falseposcount')
.775

144 . * Correctly predicted negative cases
145 . count if urbancivicny==0 & prmod2>`prmean' & e(sample)
  2,129

146 . local falsenegcount=r(N)

147 . count if urbancivicny==0 & prmod2<=`prmean' & e(sample)
  5,521

148 . local cornegcount=r(N)

149 . display (`falsenegcount')/(`cornegcount' + `falsenegcount')
.27830065

150 . * AUC
151 . roctab urbancivicny prmod2 if e(sample)

                     ROC                    -Asymptotic Normal--
        Obs       Area     Std. Err.      [95% Conf. Interval]
    ---------------------------------------------------------
      7,690     0.8450       0.0233        0.79938     0.89062

152 . macro drop _all

153 . drop prmod2

154 .
155 . * Model 3, with robust errors
156 . * 22 integration points used after failing quadrature check at 12 and testing for alternative methods of integra
    > tion
157 . xtcloglog urbancivicny lnpopl gdppcthl gdppcthl2 gdppcgrow1yrl polityl polityl2 yrsincleaderinpower v2x_execorr
    > lnoill postcoldwar if indstate==1, vce(robust) eform nolog intpoints(22)

    Calculating robust standard errors:

    Random-effects complementary log-log model      Number of obs     =     10,494
    Group variable: cowcode                         Number of groups  =        157

    Random effects u_i ~ Gaussian                   Obs per group:
                                                                  min =         21
                                                                  avg =       66.8
                                                                  max =        114

    Integration method: mvaghermite                 Integration pts.  =         22

                                                    Wald chi2(10)     =     106.62
    Log pseudolikelihood  = -263.48092              Prob > chi2       =     0.0000

                                      (Std. Err. adjusted for 157 clusters in cowcode)
    ------------------------------------------------------------------------------
                         |               Robust
           urbancivicny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
    ---------------------+--------------------------------------------------------------
                 lnpopl |    1.50806   .1464198     4.23   0.000     1.246735    1.824161
               gdppcthl |   1.805859   .2294703     4.65   0.000     1.407738    2.316573
              gdppcthl2 |   .9678288   .0086085    -3.68   0.000     .9511027    .9848491
          gdppcgrow1yrl |   1.011887   .0146883     0.81   0.416     .9835036    1.041089
                polityl |   .9271132   .0309891    -2.26   0.024     .8683225    .9898845
               polityl2 |   .9842485   .0054542    -2.87   0.004     .9736163    .9949968
    yrsincleaderinpower |   1.032988   .0127816     2.62   0.009     1.008238    1.058346
            v2x_execorr |    5.07339   4.377094     1.88   0.060     .9352322    27.52181
                 lnoill |   .8794048   .0255707    -4.42   0.000     .8306886     .930978
            postcoldwar |   6.911787   3.052429     4.38   0.000     2.908554    16.42493
                  _cons |   6.13e-06   8.25e-06    -8.92   0.000     4.39e-07    .0000856
    ---------------------+--------------------------------------------------------------
               /lnsig2u |  -11.00724      26607                     -52159.77    52137.76
    ---------------------+--------------------------------------------------------------
                sigma_u |    .004072    54.1718                              0           .
                    rho |   .0000101   .2681966                              0           .
    ------------------------------------------------------------------------------
```

```
158 . xtcloglog urbancivicny lnpopl gdppcthl gdppcthl2 gdppcgrow1yrl polityl polityl2 yrsincleaderinpower v2x_execorr
    > lnoill postcoldwar if indstate==1, eform nolog intpoints(22)

    Random-effects complementary log-log model      Number of obs     =     10,494
    Group variable: cowcode                         Number of groups  =        157

    Random effects u_i ~ Gaussian                   Obs per group:
                                                                  min =         21
                                                                  avg =       66.8
                                                                  max =        114

    Integration method: mvaghermite                 Integration pts.  =         22

                                                    Wald chi2(10)     =      83.36
    Log likelihood  = -263.48092                    Prob > chi2       =     0.0000

    ------------------------------------------------------------------------------
           urbancivicny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
    --------------------+---------------------------------------------------------
                lnpopl |    1.50806   .1639795     3.78   0.000     1.218605     1.86627
              gdppcthl |   1.805859   .2720449     3.92   0.000      1.34417    2.426128
             gdppcthl2 |   .9678288   .0114867    -2.76   0.006     .9455752    .9906062
          gdppcgrow1yrl |   1.011887   .0227601     0.53   0.599     .9682465    1.057494
                polityl |   .9271132   .0274312    -2.56   0.011     .8748783    .9824669
               polityl2 |   .9842485   .0055675    -2.81   0.005     .9733967    .9952213
    yrsincleaderinpower |   1.032988   .0142365     2.35   0.019     1.005459    1.061272
            v2x_execorr |    5.07339   3.401425     2.42   0.015     1.363374     18.8791
                lnoill |   .8794048   .0319663    -3.54   0.000     .8189318    .9443434
             postcoldwar |   6.911787    2.97767     4.49   0.000     2.970871     16.0804
                   _cons |   6.13e-06   7.82e-06    -9.42   0.000     5.04e-07    .0000746
    --------------------+---------------------------------------------------------
               /lnsig2u |  -11.00724   46.23797                      -101.632    79.61751
    --------------------+---------------------------------------------------------
                sigma_u |    .004072   .0941404                      8.53e-23    1.94e+17
                    rho |   .0000101   .0004661                      4.42e-45           1
    ------------------------------------------------------------------------------
    LR test of rho=0: chibar2(01) = 3.6e-05                Prob >= chibar2 = 0.498

159 . quadchk 12 22, nofrom nooutput

    Refitting model intpoints() = 12
    Refitting model intpoints() = 22

                            Quadrature check

                  Fitted       Comparison     Comparison
                quadrature     quadrature     quadrature
                22 points      12 points      22 points
    ---------------------------------------------------------
    Log          -263.48092     -263.48094     -263.48092
    likelihood                  -.00001097     -9.720e-12   Difference
                                 4.165e-08      3.689e-14   Relative difference
    ---------------------------------------------------------
    urbancivicny:  .4108241      .41082282       .4108241
      lnpopl                   -1.273e-06     -1.388e-15   Difference
                               -3.099e-06     -3.378e-15   Relative difference
    ---------------------------------------------------------
    urbancivicny: .59103649      .59103731      .59103649
    gdppcthl                    8.249e-07     -1.619e-12   Difference
                                1.396e-06     -2.739e-12   Relative difference
    ---------------------------------------------------------
    urbancivicny:-.03270003     -.03270022     -.03270003
    gdppcthl2                  -1.921e-07      1.725e-13   Difference
                                5.875e-06     -5.276e-12   Relative difference
    ---------------------------------------------------------
    urbancivicny: .01181647      .01181596      .01181647
    gdppcgrow1~l               -5.139e-07     -2.533e-14   Difference
                               -.00004349     -2.144e-12   Relative difference
    ---------------------------------------------------------
    urbancivicny:-.07567957     -.07568143     -.07567957
     polityl                   -1.858e-06      1.524e-14   Difference
                                .00002456     -2.013e-13   Relative difference
    ---------------------------------------------------------
    urbancivicny:-.01587686     -.01587686     -.01587686
    polityl2                   -6.371e-09      8.566e-15   Difference
                                4.013e-07     -5.395e-13   Relative difference
    ---------------------------------------------------------
    urbancivicny: .03245595      .0324576      .03245595
    yrsinclead~r                1.649e-06      1.367e-13   Difference
                                 .0000508      4.212e-12   Relative difference
    ---------------------------------------------------------
    urbancivicny: 1.6240092      1.6239624      1.6240092
    v2x_execorr                -.00004673     -3.090e-12   Difference
                               -.00002877     -1.903e-12   Relative difference
    ---------------------------------------------------------
    urbancivicny:-.12850999     -.12851003     -.12850999
      lnoill                   -4.060e-08      4.277e-14   Difference
                                3.159e-07     -3.328e-13   Relative difference
    ---------------------------------------------------------
    urbancivicny: 1.9332282       1.933247      1.9332282
    postcoldwar                 .00001878      3.957e-13   Difference
                                9.713e-06      2.047e-13   Relative difference
    ---------------------------------------------------------
    urbancivicny:-12.001998     -12.002045     -12.001998
        cons                     -.0000466     -1.428e-12   Difference
                                 3.883e-06      1.190e-13   Relative difference
    ---------------------------------------------------------
    lnsig2u:     -11.007244     -10.564013     -11.007244
       _cons                     .44323062      4.765e-07   Difference
                               -.04026717     -4.329e-08   Relative difference
```

```
------------------------------------------------------

160 . * Passed
161 . * Compute AIC/BIC
162 . quietly: xtcloglog urbancivicny lnpopl gdppcthl gdppcthl2 gdppcgrow1yrl polityl polityl2 yrsincleaderinpower v2x
    > _execorr lnoill postcoldwar if indstate==1 & sample==1, eform nolog intpoints(22)

163 . estat ic

    Akaike's information criterion and Bayesian information criterion

    -------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
    -------------+-----------------------------------------------------------------
               . |     10,494         .  -263.4809      12    550.9618   638.0646
    -------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

164 . * Computing percent correctly predicted with above-average risk
165 . quietly: xtcloglog urbancivicny lnpopl gdppcthl gdppcthl2 gdppcgrow1yrl polityl polityl2 yrsincleaderinpower v2x
    > _execorr lnoill postcoldwar if indstate==1, vce(robust) eform nolog intpoints(22)

166 . predict prmod3, pr
    (using 22 quadrature points)
    (7809 missing values generated)

167 . * Correctly predicted positive cases
168 . sum urbancivicny if e(sample)

        Variable |        Obs        Mean    Std. Dev.       Min        Max
    -------------+---------------------------------------------------------
    urbancivicny |     10,494    .0047646    .0688649          0          1

169 . local prmean=r(mean)

170 . count if urbancivicny==1 & prmod3>`prmean' & e(sample)
      38

171 . local corposcount=r(N)

172 . count if urbancivicny==1 & prmod3<=`prmean' & e(sample)
      12

173 . local falseposcount=r(N)

174 . display (`corposcount')/(`corposcount' + `falseposcount')
    .76

175 . * Correctly predicted negative cases
176 . count if urbancivicny==0 & prmod3>`prmean' & e(sample)
      2,475

177 . local falsenegcount=r(N)

178 . count if urbancivicny==0 & prmod3<=`prmean' & e(sample)
      7,969

179 . local cornegcount=r(N)

180 . display (`falsenegcount')/(`cornegcount' + `falsenegcount')
    .23697817

181 . * AUC
182 . roctab urbancivicny prmod3 if e(sample)

                         ROC                    -Asymptotic Normal--
              Obs       Area     Std. Err.      [95% Conf. Interval]
         ---------------------------------------------------------
            10,494     0.8564       0.0275        0.80254     0.91031

183 . macro drop _all

184 . drop prmod3

185 .
186 . * Model 4, with robust errors
187 . * 22 integration points used after failing quadrature check at 12 and testing for alternative methods of integra
    > tion
188 . xtcloglog urbancivicny lnpopl gdppcthl gdppcthl2 polityl polityl2 yrsincleaderinpower v2x_execorr lnoill postcol
    > dwar if indstate==1, vce(robust) eform nolog intpoints(22)

    Calculating robust standard errors:

    Random-effects complementary log-log model      Number of obs     =     10,516
    Group variable: cowcode                         Number of groups  =        157

    Random effects u_i ~ Gaussian                   Obs per group:
                                                                  min =         21
                                                                  avg =       67.0
                                                                  max =        114

    Integration method: mvaghermite                 Integration pts.  =         22

                                                    Wald chi2(9)      =      96.48
    Log pseudolikelihood  = -263.63108              Prob > chi2       =     0.0000
```

```
                                    (Std. Err. adjusted for 157 clusters in cowcode)
------------------------------------------------------------------------------------------
                     |               Robust
       urbancivicny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
--------------------+---------------------------------------------------------------------
             lnpopl |   1.518911   .1462595     4.34   0.000     1.257674    1.834411
          gdppcthl  |   1.824336   .2345283     4.68   0.000     1.418007    2.347099
         gdppcthl2  |   .9673956   .0086959    -3.69   0.000     .9505011    .9845904
           polityl  |   .9269702   .0307108    -2.29   0.022     .8686908    .9891595
          polityl2  |   .9841294   .0054603    -2.88   0.004     .9734854    .9948897
yrsincleaderinpower |   1.033031   .0125852     2.67   0.008     1.008656    1.057994
        v2x_execorr |   5.163815   4.423932     1.92   0.055     .9632323    27.68281
              lnoill |   .8778001   .0259313    -4.41   0.000     .8284191    .9301246
        postcoldwar |   6.900153   3.029986     4.40   0.000     2.917967    16.31688
              _cons |   5.73e-06   7.66e-06    -9.03   0.000     4.17e-07    .0000788
--------------------+---------------------------------------------------------------------
           /lnsig2u |  -10.91173   21934.54                     -43001.83       42980
--------------------+---------------------------------------------------------------------
            sigma_u |   .0042712   46.84308                             0           .
                rho |   .0000111   .2432564                             0           .
------------------------------------------------------------------------------------------

189 . xtcloglog urbancivicny lnpopl gdppcthl gdppcthl2 polityl polityl2 yrsincleaderinpower v2x_execorr lnoill postcol
    > dwar if indstate==1, eform nolog intpoints(22)

    Random-effects complementary log-log model      Number of obs     =     10,516
    Group variable: cowcode                         Number of groups  =        157

    Random effects u_i ~ Gaussian                   Obs per group:
                                                                  min =         21
                                                                  avg =       67.0
                                                                  max =        114

    Integration method: mvaghermite                 Integration pts.  =         22

                                                    Wald chi2(9)      =      82.87
    Log likelihood  = -263.63108                    Prob > chi2       =     0.0000

------------------------------------------------------------------------------------------
       urbancivicny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
--------------------+---------------------------------------------------------------------
             lnpopl |   1.518911   .1653275     3.84   0.000     1.227107    1.880106
          gdppcthl  |   1.824336   .2727781     4.02   0.000     1.360917    2.445559
         gdppcthl2  |   .9673956   .0114603    -2.80   0.005     .9451926    .9901202
           polityl  |   .9269702   .0274557    -2.56   0.010     .8746903    .9823749
          polityl2  |   .9841294   .0055478    -2.84   0.005     .9733158    .9950631
yrsincleaderinpower |   1.033031   .0141881     2.37   0.018     1.005593    1.061216
        v2x_execorr |   5.163815   3.462612     2.45   0.014     1.387378     19.2197
              lnoill |   .8778001   .0318743    -3.59   0.000     .8174989    .9425493
        postcoldwar |   6.900153   2.971243     4.49   0.000     2.967063    16.04688
              _cons |   5.73e-06   7.31e-06    -9.46   0.000     4.70e-07    .0000698
--------------------+---------------------------------------------------------------------
           /lnsig2u |  -10.91173   47.89722                     -104.7886    82.96509
--------------------+---------------------------------------------------------------------
            sigma_u |   .0042712   .1022886                     1.76e-23    1.04e+18
                rho |   .0000111   .0005312                     1.88e-46           1
------------------------------------------------------------------------------------------
    LR test of rho=0: chibar2(01) = 3.5e-05               Prob >= chibar2 = 0.498

190 . quadchk 12 22, nofrom nooutput

    Refitting model intpoints() = 12
    Refitting model intpoints() = 22

                            Quadrature check

                  Fitted       Comparison     Comparison
                quadrature     quadrature     quadrature
                22 points      12 points      22 points
    ------------------------------------------------------------
    Log          -263.63108     -263.63109     -263.63108
    likelihood                  -.00001053     -1.262e-11   Difference
                                 3.993e-08      4.787e-14   Relative difference
    ------------------------------------------------------------
    urbancivicny: .41799385      .41799214      .41799385
      lnpopl                    -1.710e-06     -5.423e-14   Difference
                                -4.090e-06     -1.297e-13   Relative difference
    ------------------------------------------------------------
    urbancivicny: .60121634      .60121723      .60121634
    gdppcthl                     8.918e-07     -1.794e-12   Difference
                                 1.483e-06     -2.983e-12   Relative difference
    ------------------------------------------------------------
    urbancivicny:-.03314778     -.03314801     -.03314778
    gdppcthl2                   -2.286e-07      1.850e-13   Difference
                                 6.897e-06     -5.582e-12   Relative difference
    ------------------------------------------------------------
    urbancivicny:-.07583382     -.07583585     -.07583382
     polityl                    -2.024e-06     -4.750e-14   Difference
                                 .00002669      6.264e-13   Relative difference
    ------------------------------------------------------------
    urbancivicny:-.01599791      -.0159979     -.01599791
    polityl2                     1.510e-08      1.273e-14   Difference
                                -9.439e-07     -7.957e-13   Relative difference
    ------------------------------------------------------------
    urbancivicny:  .0324968      .03249862       .0324968
    yrsinclead~r                 1.827e-06      2.242e-13   Difference
                                 .00005622      6.899e-12   Relative difference
    ------------------------------------------------------------
    urbancivicny: 1.6416756      1.6416256      1.6416756
    v2x_execorr                 -.00004999     -5.199e-12   Difference
                                -.00003045     -3.167e-12   Relative difference
```

```
    ------------------------------------------------------
    urbancivicny:-.13033639     -.13033641     -.13033639
      lnoill                   -1.585e-08      5.335e-14   Difference
                                1.216e-07     -4.093e-13   Relative difference
    ------------------------------------------------------
    urbancivicny: 1.9315436      1.9315639      1.9315436
    postcoldwar                   .0000203      1.028e-12   Difference
                                  .00001051     5.324e-13   Relative difference
    ------------------------------------------------------
    urbancivicny:-12.070022     -12.070072     -12.070022
       _cons                    -.00005001     -3.480e-12   Difference
                                 4.143e-06      2.883e-13   Relative difference
    ------------------------------------------------------
    lnsig2u:     -10.911735     -10.470038     -10.911734
       _cons                     .44169682      6.478e-07   Difference
                                -.04047906     -5.936e-08   Relative difference
    ------------------------------------------------------

191 . * Passed
192 . * Compute AIC/BIC
193 . quietly: xtcloglog urbancivicny lnpopl gdppcthl gdppcthl2 polityl polityl2 yrsincleaderinpower v2x_execorr lnoil
    > l postcoldwar if indstate==1 & sample==1, eform nolog intpoints(22)

194 . estat ic

    Akaike's information criterion and Bayesian information criterion

    -------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
    -------------+-----------------------------------------------------------------
               . |     10,494         .  -263.6152      11    549.2305   629.0746
    -------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

195 . * Computing percent correctly predicted with above-average risk
196 . quietly: xtcloglog urbancivicny lnpopl gdppcthl gdppcthl2 polityl polityl2 yrsincleaderinpower v2x_execorr lnoil
    > l postcoldwar if indstate==1, vce(robust) eform nolog intpoints(22)

197 . predict prmod4, pr
    (using 22 quadrature points)
    (7786 missing values generated)

198 . * Correctly predicted positive cases
199 . sum urbancivicny if e(sample)

        Variable |        Obs        Mean    Std. Dev.       Min        Max
    -------------+---------------------------------------------------------
    urbancivicny |     10,516    .0047547    .0687932          0          1

200 . local prmean=r(mean)

201 . count if urbancivicny==1 & prmod4>`prmean' & e(sample)
      38

202 . local corposcount=r(N)

203 . count if urbancivicny==1 & prmod4<=`prmean' & e(sample)
      12

204 . local falseposcount=r(N)

205 . display (`corposcount')/(`corposcount' + `falseposcount')
    .76

206 . * Correctly predicted negative cases
207 . count if urbancivicny==0 & prmod4>`prmean' & e(sample)
      2,476

208 . local falsenegcount=r(N)

209 . count if urbancivicny==0 & prmod4<=`prmean' & e(sample)
      7,990

210 . local cornegcount=r(N)

211 . display (`falsenegcount')/(`cornegcount' + `falsenegcount')
    .23657558

212 . * AUC
213 . roctab urbancivicny prmod4 if e(sample)

                         ROC                    -Asymptotic Normal--
              Obs       Area     Std. Err.      [95% Conf. Interval]
         ---------------------------------------------------------------
            10,516     0.8566       0.0275        0.80277     0.91041

214 . macro drop _all

215 . drop prmod4
```

```
216 .
217 . * +++++++++++++++
218 . * Pooled models
219 . * +++++++++++++++
220 . * Pooled complementary log-log model
221 . cloglog urbancivicny lnpopl gdppcthl gdppcthl2 polityl polityl2 yrsincleaderinpower v2x_execorr lnoill postcoldw
    > ar if indstate==1 , vce(robust) eform nolog

    Complementary log-log regression                Number of obs     =     10,516
                                                    Zero outcomes     =     10,466
                                                    Nonzero outcomes  =         50

                                                    Wald chi2(9)      =      74.72
    Log pseudolikelihood = -263.63106               Prob > chi2       =     0.0000

    ------------------------------------------------------------------------------
                         |               Robust
                urbancivicny |     exp(b)   Std. Err.      z    P>|z|     [95% Conf. Interval]
    ---------------------+--------------------------------------------------------
                  lnpopl |   1.518912   .1639994     3.87   0.000     1.229212    1.876887
               gdppcthl |   1.824335   .2536675     4.32   0.000     1.389146    2.395859
              gdppcthl2 |   .9673957   .0091696    -3.50   0.000     .9495895    .9855357
                polityl |   .9269707   .0306614    -2.29   0.022     .8687821    .9890567
               polityl2 |   .9841294   .0051772    -3.04   0.002     .9740343     .994329
    yrsincleaderinpower |    1.03303   .0120824     2.78   0.005     1.009618    1.056985
            v2x_execorr |   5.163875   4.032023     2.10   0.036     1.117754    23.85642
                lnoill |   .8778001   .0297584    -3.84   0.000     .8213702    .9381068
            postcoldwar |   6.900119   2.907724     4.58   0.000     3.021055    15.75994
                  _cons |   5.73e-06   8.05e-06    -8.59   0.000     3.65e-07      .00009
    ------------------------------------------------------------------------------

222 . * Compute AIC/BIC
223 . quietly: cloglog urbancivicny lnpopl gdppcthl gdppcthl2 polityl polityl2 yrsincleaderinpower v2x_execorr lnoill
    > postcoldwar if indstate==1 & sample==1, eform nolog

224 . estat ic

    Akaike's information criterion and Bayesian information criterion

    -------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC         BIC
    -------------+-----------------------------------------------------------------
               . |     10,494 -317.2075  -263.6152      10    547.2304    619.816
    -------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

225 . * Computing percent correctly predicted with above-average risk
226 . quietly: cloglog urbancivicny lnpopl gdppcthl gdppcthl2 polityl polityl2 yrsincleaderinpower v2x_execorr lnoill
    > postcoldwar if indstate==1 , vce(robust) eform

227 . predict prmod5, pr
    (7,786 missing values generated)

228 . * Correctly predicted positive cases
229 . sum urbancivicny if e(sample)

        Variable |        Obs        Mean    Std. Dev.       Min        Max
    -------------+---------------------------------------------------------
    urbancivicny |     10,516    .0047547    .0687932          0          1

230 . local prmean=r(mean)

231 . count if urbancivicny==1 & prmod5>`prmean' & e(sample)
      38

232 . local corposcount=r(N)

233 . count if urbancivicny==1 & prmod5<=`prmean' & e(sample)
      12

234 . local falseposcount=r(N)

235 . display (`corposcount')/(`corposcount' + `falseposcount')
    .76

236 . * Incorrectly predicted negative cases
237 . count if urbancivicny==0 & prmod5>`prmean' & e(sample)
      2,476

238 . local falsenegcount=r(N)

239 . count if urbancivicny==0 & prmod5<=`prmean' & e(sample)
      7,990

240 . local cornegcount=r(N)

241 . display (`falsenegcount')/(`cornegcount' + `falsenegcount')
    .23657558
```

```
242 . macro drop _all

243 . drop prmod5

244 . * Area under the ROC curve
245 . quietly:  cloglog urbancivicny lnpopl gdppcthl gdppcthl2 polityl polityl2 yrsincleaderinpower v2x_execorr lnoill
    >  postcoldwar if indstate==1 , vce(robust) eform

246 . predict double xb, xb
    (7,786 missing values generated)

247 . roctab urbancivicny xb if e(sample)

                        ROC                    -Asymptotic Normal--
           Obs       Area     Std. Err.      [95% Conf. Interval]
      ---------------------------------------------------------------
        10,516     0.8566       0.0275        0.80277     0.91041

248 . drop xb

249 .
250 . * Firth penalized logit
251 . firthlogit urbancivicny lnpopl gdppcthl gdppcthl2 polityl polityl2 yrsincleaderinpower v2x_execorr lnoill postco
    > ldwar if indstate==1, or nolog

                                                Number of obs     =     10,516
                                                Wald chi2(9)      =      81.39
    Penalized log likelihood = -233.87782       Prob > chi2       =     0.0000

    ------------------------------------------------------------------------------
           urbancivicny | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
    --------------------+---------------------------------------------------------
                lnpopl |   1.524346   .1680122     3.82   0.000     1.228188    1.891918
              gdppcthl |   1.744549   .2641513     3.68   0.000     1.296577    2.347297
             gdppcthl2 |   .9718688   .0114051    -2.43   0.015     .9497703    .9944814
               polityl |   .9287739   .0271832    -2.52   0.012     .8769952    .9836097
              polityl2 |   .9846501   .0055482    -2.75   0.006     .9738358    .9955846
    yrsincleaderinpower |   1.034714   .0143301     2.46   0.014     1.007005    1.063185
            v2x_execorr |   4.842704   3.237719     2.36   0.018     1.306154    17.95484
                lnoill |   .8787834   .0322708    -3.52   0.000     .8177563    .9443648
            postcoldwar |   6.523729   2.742933     4.46   0.000     2.861568    14.87263
                  _cons |   6.85e-06   8.78e-06    -9.29   0.000     5.57e-07    .0000843
    ------------------------------------------------------------------------------

252 . * Compute AIC/BIC
253 . quietly: firthlogit urbancivicny lnpopl gdppcthl gdppcthl2 polityl polityl2 yrsincleaderinpower v2x_execorr lnoi
    > ll postcoldwar if indstate==1 & sample==1,  or nolog

254 . estat ic

    Akaike's information criterion and Bayesian information criterion

    ------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
    -------------+----------------------------------------------------------------
               . |     10,494         .  -233.8621      10    487.7243   560.3099
    ------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

255 . * Computing percent correctly predicted with above-average risk
256 . quietly: firthlogit urbancivicny lnpopl gdppcthl gdppcthl2 polityl polityl2 yrsincleaderinpower v2x_execorr lnoi
    > ll postcoldwar if indstate==1, or nolog

257 . predict prmod6, xb
    (7,786 missing values generated)

258 . quietly replace prmod6 = invlogit(prmod6)

259 . * Correctly predicted positive cases
260 . sum urbancivicny if e(sample)

        Variable |        Obs        Mean    Std. Dev.       Min        Max
    -------------+---------------------------------------------------------
    urbancivicny |     10,516    .0047547    .0687932          0          1

261 . local prmean=r(mean)

262 . count if urbancivicny==1 & prmod6>`prmean' & e(sample)
      40

263 . local corposcount=r(N)

264 . count if urbancivicny==1 & prmod6<=`prmean' & e(sample)
      10

265 . local falseposcount=r(N)

266 . display (`corposcount')/(`corposcount' + `falseposcount')
    .8
```

```
267 . * Correctly predicted negative cases
268 . count if urbancivicny==0 & prmod6>`prmean' & e(sample)
      2,681

269 . local falsenegcount=r(N)

270 . count if urbancivicny==0 & prmod6<=`prmean' & e(sample)
      7,785

271 . local cornegcount=r(N)

272 . display (`falsenegcount')/(`cornegcount' + `falsenegcount')
    .25616281

273 . macro drop _all

274 . drop prmod6

275 . * Area under the ROC curve
276 . predict double xb, xb
    (7,786 missing values generated)

277 . roctab urbancivicny xb if e(sample)

                       ROC                    -Asymptotic Normal--
            Obs       Area     Std. Err.      [95% Conf. Interval]
         -------------------------------------------------------------
           10,516     0.8556       0.0279        0.80080     0.91033

278 . drop xb

279 . *
280 . * Drop comparison sample variable
281 . drop sample

282 .
283 . * ++++++++++++++++++++++++++
284 . * Multiple imputation models
285 . * ++++++++++++++++++++++++++
286 . * Use multiple imputation sample previously generated for 20 imputed samples
287 . * See robustness tests for details on imputation process and post-imputation tests
288 . clear

289 . use revspredictbycntryyrmi.dta

290 . * Calculate estimation for Model 4--panel complementary log-log model
291 . mi estimate, post dots eform saving(miest, replace): xtcloglog urbancivicny lnpopl c.gdppcthl##c.gdppcthl c.poli
    > tyl##c.polityl yrsincleaderinpower v2x_execorr lnoill postcoldwar, vce(robust)

    Imputations (20):
      .........10.........20 done

    Multiple-imputation estimates                   Imputations       =         20
    Random-effects complementary log-log model      Number of obs     =     11,742

    Group variable: cowcode                         Number of groups  =        164
    Random effects u_i ~ Gaussian                   Obs per group:
                                                                  min =         10
    Integration points = 12                                       avg =       71.6
                                                                  max =        115
                                                    Average RVI       =     0.0039
                                                    Largest FMI       =     0.0235
    DF adjustment:   Large sample                   DF:     min       =  34,657.90
                                                            avg       =   2.72e+18
                                                            max       =   2.99e+19
    Model F test:       Equal FMI                   F(   9, 8.1e+06)  =      11.67
    Within VCE type:       Robust                   Prob > F          =     0.0000

                                      (Within VCE adjusted for 164 clusters in cowcode)
    ------------------------------------------------------------------------------
             urbancivicny |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    ----------------------+-------------------------------------------------------
                   lnpopl |   1.531639   .1378796     4.74   0.000     1.283898    1.827185
                gdppcthl |    1.83485   .2367177     4.70   0.000     1.424903    2.362739
                         |
    c.gdppcthl#c.gdppcthl |   .9668665   .0088675    -3.67   0.000     .9496418    .9844036
                         |
                  polityl |    .926198   .0301023    -2.36   0.018     .8690384    .9871171
                         |
      c.polityl#c.polityl |   .9852065   .0054904    -2.67   0.007     .9745036     .996027
                         |
      yrsincleaderinpower |   1.034881   .0121307     2.93   0.003     1.011377    1.058932
              v2x_execorr |   5.257668    4.39035     1.99   0.047     1.023312    27.01335
                   lnoill |   .8769103   .0257931    -4.47   0.000     .8277863    .9289495
              postcoldwar |   7.640183   3.286123     4.73   0.000     3.288464    17.75066
                    _cons |   4.32e-06   5.49e-06    -9.71   0.000     3.57e-07    .0000522
    ----------------------+-------------------------------------------------------
                /lnsig2u |  -10.23687   11385.54                     -22325.49    22305.02
    ----------------------+-------------------------------------------------------
                 sigma_u |   .0059854   34.07334                             0           .
                     rho |   .0000218   .2479524                             0           .
    ------------------------------------------------------------------------------
```

```
292 . * Model predictions
293 . mi predict xburbmi using miest, xb

294 . generate prurbmi = invlogit(xburbmi)

295 . * Obtain accuracy of prediction
296 . * True positive rate
297 . sum urbancivicny if e(N_mi)

    Variable |        Obs        Mean    Std. Dev.       Min        Max
-------------+---------------------------------------------------------
urbancivicny |     11,742    .0043434    .0657639          0          1

298 . local prmean=r(mean)

299 . count if urbancivicny==1 & prurbmi>`prmean'
  39

300 . local corposcount=r(N)

301 . count if urbancivicny==1 & prurbmi<=`prmean'
  12

302 . local falseposcount=r(N)

303 . display (`corposcount')/(`corposcount' + `falseposcount')
.76470588

304 . * False positive rate
305 . count if urbancivicny==0 & prurbmi>`prmean'
  2,686

306 . local falsenegcount=r(N)

307 . count if urbancivicny==0 & prurbmi<=`prmean'
  9,005

308 . local cornegcount=r(N)

309 . display (`falsenegcount')/(`cornegcount' + `falsenegcount')
.22974938

310 . macro drop _all

311 . * Area under the ROC curve
312 . roctab urbancivicny xburbmi

                     ROC                    -Asymptotic Normal--
         Obs       Area     Std. Err.      [95% Conf. Interval]
    ------------------------------------------------------------
      11,742     0.8654       0.0263        0.81383     0.91706

313 . drop xburbmi

314 .
315 . * Calculate estimation for pooled Firth model
316 . * Can take a while to calculate
317 . mi estimate, cmdok post saving(miest, replace) eform: firthlogit urbancivicny lnpopl c.gdppcthl##c.gdppcthl  c.p
    > olityl##c.polityl yrsincleaderinpower v2x_execorr lnoill postcoldwar, nolog

Multiple-imputation estimates                   Imputations       =         20
                                                Number of obs     =     11,742
                                                Average RVI       =     0.0032
                                                Largest FMI       =     0.0233
DF adjustment:   Large sample                   DF:     min       =  35,289.59
                                                        avg       =   1.86e+08
                                                        max       =   8.43e+08
Model F test:       Equal FMI                   F(   9, 1.3e+07)  =       9.65
Within VCE type:          OIM                   Prob > F          =     0.0000

------------------------------------------------------------------------------
urbancivicny |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
lnpopl |   1.533431   .1588788     4.13   0.000     1.251617    1.878699
gdppcthl |   1.758509   .2650802     3.74   0.000      1.30868    2.362958
|
c.gdppcthl#c.gdppcthl |   .9712003     .01146    -2.48   0.013     .9489968    .9939233
|
polityl |   .9279909    .026926    -2.58   0.010     .8766894    .9822944
|
c.polityl#c.polityl |   .9857246   .0055146    -2.57   0.010     .9749749    .9965928
|
yrsincleaderinpower |   1.036598   .0139795     2.67   0.008     1.009558    1.064363
v2x_execorr |   4.951367   3.293104     2.41   0.016      1.34462    18.23268
lnoill |   .8778079   .0318929    -3.59   0.000     .8174726    .9425963
postcoldwar |   7.222037   3.024241     4.72   0.000     3.178466    16.40975
_cons |   5.25e-06   6.46e-06    -9.88   0.000     4.70e-07    .0000586
------------------------------------------------------------------------------
```

```
318 . * Predictions of Firth model
319 . mi predict xburbfirthmi using miest, xb

320 . generate prurbfirthmi = invlogit(xburbfirthmi)

321 . * Obtain accuracy of prediction
322 . sum urbancivicny if e(N_mi)

    Variable |        Obs        Mean    Std. Dev.       Min        Max
-------------+---------------------------------------------------------
urbancivicny |     11,742    .0043434    .0657639          0          1

323 . local prmean=r(mean)

324 . * True positive rate
325 . count if urbancivicny==1 & prurbfirthmi>`prmean'
  42

326 . local corposcount=r(N)

327 . count if urbancivicny==1 & prurbfirthmi<=`prmean'
  9

328 . local falseposcount=r(N)

329 . display (`corposcount')/(`corposcount' + `falseposcount')
.82352941

330 . * False positive rate
331 . count if urbancivicny==0 & prurbfirthmi>`prmean'
  2,884

332 . local falsenegcount=r(N)

333 . count if urbancivicny==0 & prurbfirthmi<=`prmean'
  8,807

334 . local cornegcount=r(N)

335 . display (`falsenegcount')/(`cornegcount' + `falsenegcount')
.24668548

336 . macro drop _all

337 . * Area under the ROC curve
338 . roctab urbancivicny xburbfirthmi

                      ROC                    -Asymptotic Normal--
         Obs       Area     Std. Err.      [95% Conf. Interval]
    ---------------------------------------------------------------
      11,742     0.8647       0.0267        0.81229     0.91705

339 . drop xburbfirthmi

340 .
341 .
342 . * ====================================================================
343 . * MODELS FOR TABLE 3.2, FACTORS ASSOCIATED WITH ONSET OF REVOLUTIONARY
344 . *   CONTENTION AND ATTEMPTED COUPS--MULTIPLE IMPUTATION MODELS
345 . * ====================================================================
346 . * All revolutionary episodes
347 . mi estimate, post dots eform saving(miest, replace): xtcloglog revny lnpopl gdppcthl gdppcgrow1yrl c.polityl##c.
    > polityl yrsincleaderinpower v2x_execorr lnoill postcoldwar, vce(robust)

    Imputations (20):
      .........10.........20 done

    Multiple-imputation estimates                   Imputations       =         20
    Random-effects complementary log-log model      Number of obs     =     11,742

    Group variable: cowcode                         Number of groups  =        164
    Random effects u_i ~ Gaussian                   Obs per group:
                                                                  min =         10
    Integration points = 12                                       avg =       71.6
                                                                  max =        115
                                                    Average RVI       =     0.0118
                                                    Largest FMI       =     0.0339
    DF adjustment:   Large sample                   DF:     min       =  16,619.31
                                                            avg       = 2795968.29
                                                            max       =   2.66e+07
    Model F test:       Equal FMI                   F(   9,930480.6)  =      19.55
    Within VCE type:       Robust                   Prob > F          =     0.0000

                                      (Within VCE adjusted for 164 clusters in cowcode)
    ------------------------------------------------------------------------------------
                   revny |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    ---------------------+--------------------------------------------------------------
                 lnpopl |    1.41875   .0679445     7.30   0.000      1.29164    1.558369
              gdppcthl |   .9588001    .027525    -1.47   0.143      .906341    1.014295
         gdppcgrow1yrl |   .9746153   .0081375    -3.08   0.002     .9587958    .9906958
               polityl |   .9807792   .0148852    -1.28   0.201     .9520324    1.010394
                       |
    c.polityl#c.polityl |   .9899276   .0027066    -3.70   0.000     .9846367     .995247
                       |
    yrsincleaderinpower |   1.008977   .0069685     1.29   0.196     .9954111    1.022728
            v2x execorr |   2.217746   .6494682     2.72   0.007     1.249203    3.937231
                 lnoill |   .9909602    .018214    -0.49   0.621     .9558965     1.02731
            postcoldwar |    1.00915   .1549037     0.06   0.953     .7469589    1.363372
                  _cons |   .0009952   .0004936   -13.94   0.000     .0003765    .0026308
    ---------------------+--------------------------------------------------------------
               /lnsig2u |  -2.365383   .6091618                     -3.559318   -1.171448
```

```
------------------+----------------------------------------------------------------
         sigma_u |   .3064528   .0933397                      .1686956    .5567027
             rho |   .0540089   .0311233                      .0170063    .1585378
------------------------------------------------------------------------------------
```

```
348 . *
349 . * All rural revolutionary episodes
350 . mi estimate, post dots eform saving(miest, replace): xtcloglog ruralrevny lnpopl gdppcthl gdppcgrow1yrl c.polity
    > 1##c.polityl yrsincleaderinpower v2x_execorr lnoill postcoldwar, vce(robust)

    Imputations (20):
      .........10.........20 done

    Multiple-imputation estimates                   Imputations       =         20
    Random-effects complementary log-log model      Number of obs     =     11,742

    Group variable: cowcode                         Number of groups  =        164
    Random effects u_i ~ Gaussian                   Obs per group:
                                                                  min =         10
    Integration points = 12                                       avg =       71.6
                                                                  max =        115
                                                    Average RVI       =     0.0257
                                                    Largest FMI       =     0.0490
    DF adjustment:   Large sample                   DF:     min       =   7,996.89
                                                            avg       = 3464401.46
                                                            max       =   3.64e+07
    Model F test:       Equal FMI                   F(   9,191119.5)  =      12.04
    Within VCE type:        Robust                  Prob > F          =     0.0000

                                      (Within VCE adjusted for 164 clusters in cowcode)
    ------------------------------------------------------------------------------------
             ruralrevny |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    --------------------+---------------------------------------------------------------
                lnpopl |   1.452477   .1022032     5.30   0.000      1.26536    1.667264
              gdppcthl |   .6942727   .0685931    -3.69   0.000     .5720423    .8426204
          gdppcgrow1yrl |   .9644883   .0095699    -3.64   0.000     .9459121    .9834294
                polityl |   1.019525   .0211021     0.93   0.350     .9789876    1.061742
                        |
    c.polityl#c.polityl |   .9976456   .0036236    -0.65   0.516     .9905682    1.004774
                        |
    yrsincleaderinpower |   .9828718    .018202    -0.93   0.351     .9478363    1.019202
            v2x_execorr |   2.637673    1.14696     2.23   0.026      1.12469    6.185987
                 lnoill |   1.021044   .0272879     0.78   0.436     .9689326    1.075958
            postcoldwar |   .7652157   .1534874    -1.33   0.182     .5164734    1.133757
                  _cons |   .0004985   .0003848    -9.85   0.000     .0001098    .0022633
    --------------------+---------------------------------------------------------------
              /lnsig2u |  -1.261198   .5267648                     -2.293638    -.228758
    --------------------+---------------------------------------------------------------
                sigma_u |   .5322729   .1401913                      .3176456    .8919198
                    rho |   .1469284   .0660249                       .057794    .3259724
    ------------------------------------------------------------------------------------

351 . *
352 . * All urban revolutionary episodes
353 . mi estimate, post dots eform saving(miest, replace): xtcloglog urbanrevny lnpopl gdppcthl gdppcgrow1yrl c.polity
    > 1##c.polityl yrsincleaderinpower v2x_execorr lnoill postcoldwar, vce(robust)

    Imputations (20):
      .........10.........20 done

    Multiple-imputation estimates                   Imputations       =         20
    Random-effects complementary log-log model      Number of obs     =     11,742

    Group variable: cowcode                         Number of groups  =        164
    Random effects u_i ~ Gaussian                   Obs per group:
                                                                  min =         10
    Integration points = 12                                       avg =       71.6
                                                                  max =        115
                                                    Average RVI       =     0.0112
                                                    Largest FMI       =     0.0470
    DF adjustment:   Large sample                   DF:     min       =   8,700.48
                                                            avg       =   1.44e+07
                                                            max       =   1.35e+08
    Model F test:       Equal FMI                   F(   9, 1.0e+06)  =       9.79
    Within VCE type:        Robust                  Prob > F          =     0.0000

                                      (Within VCE adjusted for 164 clusters in cowcode)
    ------------------------------------------------------------------------------------
             urbanrevny |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    --------------------+---------------------------------------------------------------
                lnpopl |   1.355275    .085075     4.84   0.000      1.19838     1.53271
              gdppcthl |   1.043003    .026922     1.63   0.103     .9915482    1.097127
          gdppcgrow1yrl |   .9886568   .0125857    -0.90   0.370     .9642944    1.013635
                polityl |   .9511996   .0194376    -2.45   0.014      .913853    .9900725
                        |
    c.polityl#c.polityl |    .984001   .0039346    -4.03   0.000     .9763184    .9917441
                        |
    yrsincleaderinpower |   1.021418   .0089742     2.41   0.016     1.003979    1.039159
            v2x_execorr |   1.753255   .7768392     1.27   0.205     .7356835    4.178296
                 lnoill |   .9830466   .0256202    -0.66   0.512     .9340927    1.034566
            postcoldwar |   1.311917   .3047612     1.17   0.243     .8320905    2.068438
                  _cons |   .0006936   .0004841   -10.42   0.000     .0001766    .0027238
    --------------------+---------------------------------------------------------------
              /lnsig2u |  -1.450257   .6494218                     -2.723101   -.1774137
    --------------------+---------------------------------------------------------------
                sigma_u |   .4842623   .1572453                      .2562632    .9151138
                    rho |   .1247762   .0709215                      .0383904    .3373527
    ------------------------------------------------------------------------------------
```

```
354 . *
355 . * Social revolutionary episodes
356 . mi estimate, post dots eform saving(miest, replace): xtcloglog leftistny lnpopl gdppcthl gdppcgrow1yrl c.polityl
    > ##c.polityl yrsincleaderinpower v2x_execorr lnoill postcoldwar, vce(robust)

    Imputations (20):
      .........10.........20 done

    Multiple-imputation estimates                   Imputations       =         20
    Random-effects complementary log-log model      Number of obs     =     11,742

    Group variable: cowcode                         Number of groups  =        164
    Random effects u_i ~ Gaussian                   Obs per group:
                                                                  min =         10
    Integration points = 12                                       avg =       71.6
                                                                  max =        115
                                                    Average RVI       =     0.0141
                                                    Largest FMI       =     0.0567
    DF adjustment:   Large sample                   DF:     min       =   5,983.34
                                                            avg       = 2019356.42
                                                            max       =   1.00e+07
    Model F test:       Equal FMI                   F(   9,599998.6)  =       9.76
    Within VCE type:        Robust                  Prob > F          =     0.0000

                                        (Within VCE adjusted for 164 clusters in cowcode)
    ------------------------------------------------------------------------------
              leftistny |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    --------------------+---------------------------------------------------------
                 lnpopl |   1.427661    .127243     3.99   0.000     1.198837    1.700162
               gdppcthl |   .9095366   .0503882    -1.71   0.087     .8159498    1.013857
         gdppcgrow1yrl |   .9453875    .012149    -4.37   0.000     .9218733    .9695016
                polityl |    1.04359     .02494     1.79   0.074     .9958258    1.093644
                        |
    c.polityl#c.polityl |   .9939982   .0049216    -1.22   0.224     .9843979    1.003692
                        |
    yrsincleaderinpower |   1.008496   .0153269     0.56   0.578     .9788987    1.038988
            v2x_execorr |    1.87141   .9170753     1.28   0.201     .7162053    4.889906
                 lnoill |   1.029679   .0426706     0.71   0.480     .9493521    1.116804
            postcoldwar |   .0775433   .0395477    -5.01   0.000     .0285381    .2106995
                  _cons |    .000373   .0003441    -8.56   0.000     .0000612     .002275
    --------------------+---------------------------------------------------------
              /lnsig2u |  -2.307631   1.687231                     -5.614543    .9992814
    --------------------+---------------------------------------------------------
                sigma_u |    .315431   .2661024                      .0603695    1.648129
                    rho |   .0570368   .0907453                      .0022107    .6228308
    ------------------------------------------------------------------------------

357 . *
358 . * Urban civic revolutionary episodes
359 . mi estimate, post dots eform saving(miest, replace): xtcloglog urbancivicny lnpopl gdppcthl gdppcgrow1yrl c.poli
    > tyl##c.polityl yrsincleaderinpower v2x_execorr lnoill postcoldwar, vce(robust)

    Imputations (20):
      .........10.........20 done

    Multiple-imputation estimates                   Imputations       =         20
    Random-effects complementary log-log model      Number of obs     =     11,742

    Group variable: cowcode                         Number of groups  =        164
    Random effects u_i ~ Gaussian                   Obs per group:
                                                                  min =         10
    Integration points = 12                                       avg =       71.6
                                                                  max =        115
                                                    Average RVI       =     0.0043
                                                    Largest FMI       =     0.0243
    DF adjustment:   Large sample                   DF:     min       =  32,288.52
                                                            avg       =   2.34e+08
                                                            max       =   1.94e+09
    Model F test:       Equal FMI                   F(   9, 6.1e+06)  =       8.49
    Within VCE type:        Robust                  Prob > F          =     0.0000

                                        (Within VCE adjusted for 164 clusters in cowcode)
    ------------------------------------------------------------------------------
           urbancivicny |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    --------------------+---------------------------------------------------------
                 lnpopl |   1.472027   .1498249     3.80   0.000     1.205811    1.797017
               gdppcthl |   1.093999   .0412199     2.38   0.017     1.016121    1.177847
         gdppcgrow1yrl |   1.026131   .0121351     2.18   0.029     1.002621    1.050194
                polityl |   .9184554   .0349744    -2.23   0.025     .8524023    .9896269
                        |
    c.polityl#c.polityl |   .9852594   .0060937    -2.40   0.016     .9733876    .9972761
                        |
    yrsincleaderinpower |   1.035597   .0130664     2.77   0.006     1.010301    1.061526
            v2x_execorr |   4.313372   3.625638     1.74   0.082     .8304868    22.40273
                 lnoill |   .9238442   .0301399    -2.43   0.015       .86662    .9848469
            postcoldwar |   8.536188   3.722713     4.92   0.000     3.631172    20.06694
                  _cons |   .0000126   .0000177    -8.03   0.000     8.01e-07    .0001976
    --------------------+---------------------------------------------------------
              /lnsig2u |  -1.567387    1.82463                     -5.143595    2.008822
    --------------------+---------------------------------------------------------
                sigma_u |   .4567161   .4166689                      .0763981    2.730298
                    rho |   .1125368   .1822299                      .0035357    .8192274
    ------------------------------------------------------------------------------
```

```
360 . *
361 . * All other revolutionary episodes
362 . mi estimate, post dots eform saving(miest, replace): xtcloglog noturbancivorleftny lnpopl gdppcthl gdppcgrow1yrl
    >  c.polityl##c.polityl yrsincleaderinpower v2x_execorr lnoill postcoldwar, vce(robust)

    Imputations (20):
      .........10.........20 done

    Multiple-imputation estimates                   Imputations       =         20
    Random-effects complementary log-log model      Number of obs     =     11,742

    Group variable: cowcode                         Number of groups  =        164
    Random effects u_i ~ Gaussian                   Obs per group:
                                                                  min =         10
    Integration points = 12                                       avg =       71.6
                                                                  max =        115
                                                    Average RVI       =     0.0214
                                                    Largest FMI       =     0.0556
    DF adjustment:   Large sample                   DF:     min       =   6,210.16
                                                            avg       = 3708709.56
                                                            max       =   3.82e+07
    Model F test:       Equal FMI                   F(   9,262620.0)  =      11.97
    Within VCE type:        Robust                  Prob > F          =     0.0000

                                        (Within VCE adjusted for 164 clusters in cowcode)
    ------------------------------------------------------------------------------------
    noturbancivorleftny |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    --------------------+---------------------------------------------------------------
                lnpopl |   1.384314   .0753306     5.98   0.000     1.244268    1.540121
              gdppcthl |   .8892972   .0466233    -2.24   0.025     .8024512    .9855421
         gdppcgrow1yrl |   .9794272   .0116782    -1.74   0.081     .9568032    1.002586
               polityl |    .977938   .0186171    -1.17   0.241     .9421148    1.015123
                       |
    c.polityl#c.polityl |   .9904319   .0037044    -2.57   0.010     .9831966    .9977206
                       |
    yrsincleaderinpower |   .9911387   .0133237    -0.66   0.508     .9653657      1.0176
            v2x_execorr |   2.228084   .8015777     2.23   0.026     1.100734    4.510043
                 lnoill |   1.013249   .0243634     0.55   0.584     .9666047    1.062145
            postcoldwar |   1.185929   .2084318     0.97   0.332     .8403417    1.673636
                  _cons |   .0007615   .0004703   -11.63   0.000     .0002269    .0025551
    --------------------+---------------------------------------------------------------
              /lnsig2u |   -2.17936   1.074251                     -4.284853   -.0738675
    --------------------+---------------------------------------------------------------
               sigma_u |    .336324   .1806482                      .1173697      .96374
                   rho |   .0643406   .0646708                       .008305    .3608751
    ------------------------------------------------------------------------------------

363 . *
364 . * Coup attempts
365 . mi estimate, post dots eform saving(miest, replace): xtcloglog coupattempt lnpopl gdppcthl gdppcgrow1yrl c.polit
    > yl##c.polityl yrsincleaderinpower v2x_execorr lnoill postcoldwar, vce(robust)

    Imputations (20):
      .........10.........20 done

    Multiple-imputation estimates                   Imputations       =         20
    Random-effects complementary log-log model      Number of obs     =      8,934

    Group variable: cowcode                         Number of groups  =        163
    Random effects u_i ~ Gaussian                   Obs per group:
                                                                  min =         21
    Integration points = 12                                       avg =       54.8
                                                                  max =         69
                                                    Average RVI       =     0.0086
                                                    Largest FMI       =     0.0294
    DF adjustment:   Large sample                   DF:     min       =  22,116.32
                                                            avg       = 8843553.77
                                                            max       =   7.30e+07
    Model F test:       Equal FMI                   F(   9, 1.6e+06)  =      23.21
    Within VCE type:        Robust                  Prob > F          =     0.0000

                                        (Within VCE adjusted for 163 clusters in cowcode)
    ------------------------------------------------------------------------------------
            coupattempt |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    --------------------+---------------------------------------------------------------
                lnpopl |   .8725133   .0600075    -1.98   0.047     .7624828    .9984217
              gdppcthl |   .8713096   .0438288    -2.74   0.006     .7895054    .9615899
         gdppcgrow1yrl |   .9826157    .009165    -1.88   0.060     .9648159    1.000744
               polityl |   .9650355   .0147685    -2.33   0.020     .9365184     .994421
                       |
    c.polityl#c.polityl |   .9882247   .0024692    -4.74   0.000     .9833968    .9930763
                       |
    yrsincleaderinpower |   .8435051   .0236793    -6.06   0.000     .7983482    .8912161
            v2x_execorr |   2.542368   .9525412     2.49   0.013     1.219891    5.298537
                 lnoill |   1.058831   .0250116     2.42   0.016     1.010924    1.109008
            postcoldwar |   .5077631   .0773648    -4.45   0.000     .3766765    .6844689
                  _cons |   .3721834   .2100092    -1.75   0.080     .1231556     1.12476
    --------------------+---------------------------------------------------------------
              /lnsig2u |  -.4878929   .2853193                     -1.047108    .0713227
    --------------------+---------------------------------------------------------------
               sigma_u |   .7835296   .1117781                      .5924112    1.036305
                   rho |   .2717834   .0564696                      .1758373    .3949917
    ------------------------------------------------------------------------------------
```

```
366 . *
367 . * All urban revolutionary episodes, excluding urban civic episodes
368 . mi estimate, post dots eform saving(miest, replace): xtcloglog urbanrevnocivic lnpopl gdppcthl gdppcgrow1yrl c.p
    > olityl##c.polityl yrsincleaderinpower v2x_execorr lnoill postcoldwar if urbancivicny==0, vce(robust)

    Imputations (20):
      .........10.........20 done

    Multiple-imputation estimates                   Imputations       =         20
    Random-effects complementary log-log model      Number of obs     =     11,691

    Group variable: cowcode                         Number of groups  =        164
    Random effects u_i ~ Gaussian                   Obs per group:
                                                                  min =         10
    Integration points = 12                                       avg =       71.3
                                                                  max =        115
                                                    Average RVI       =     0.0210
                                                    Largest FMI       =     0.0575
    DF adjustment:   Large sample                   DF:     min       =   5,810.11
                                                            avg       = 1072022.93
                                                            max       = 4727082.80
    Model F test:       Equal FMI                   F(   9,370034.9)  =       6.22
    Within VCE type:       Robust                   Prob > F          =     0.0000

                                        (Within VCE adjusted for 164 clusters in cowcode)
    ------------------------------------------------------------------------------------
        urbanrevnocivic |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    --------------------+---------------------------------------------------------------
                lnpopl |   1.295027   .0846001     3.96   0.000      1.13939    1.471924
             gdppcthl |   1.016846   .0316814     0.54   0.592     .9566072    1.080878
          gdppcgrow1yrl |   .9698628   .0148432    -2.00   0.046     .9412025    .9993957
                polityl |    .969272   .0224733    -1.35   0.178     .9262022    1.014345
                        |
    c.polityl#c.polityl |   .9846771   .0049749    -3.06   0.002     .9749733    .9944774
                        |
    yrsincleaderinpower |   1.009569   .0122066     0.79   0.431     .9859254    1.033779
            v2x_execorr |    1.30678   .6404877     0.55   0.585     .5000391     3.41508
                 lnoill |   1.018248   .0318116     0.58   0.563     .9577684    1.082546
            postcoldwar |   .5592719   .1679974    -1.93   0.053     .3104088    1.007655
                  _cons |   .0012013   .0007829   -10.32   0.000     .0003349    .0043089
    --------------------+---------------------------------------------------------------
              /lnsig2u |  -1.380516   .7552846                     -2.860847    .0998154
    --------------------+---------------------------------------------------------------
                sigma_u |   .5014468   .1893675                      .2392076    1.051174
                    rho |   .1325939   .0868674                      .0336164    .4018206
    ------------------------------------------------------------------------------------

369 .
370 .
371 . * ================================================
372 . * COUNTRY PREDICTIONS FROM POOLED PENALIZED MODEL OF
373 . *   MULTIPLE IMPUTATION SAMPLE, FIGURES 3.6-3.15
374 . * ================================================
375 . * Obtain average for all country-years for independent states
376 . sum prurbfirthmi

        Variable |        Obs        Mean    Std. Dev.       Min        Max
    -------------+---------------------------------------------------------
    prurbfirthmi |     11,742    .0047135    .0101464   2.20e-18   .1465416

377 . * Figure 3.6--Tunisia
378 . list year prurbfirthmi if country=="Tunisia" &  year>1959, clean noobs

         year   prurbf~i
         1960    .000654
         1961   .0007265
         1962   .0007931
         1963   .0008057
         1964   .0009167
         1965    .000974
         1966     .00105
         1967   .0005065
         1968   .0004511
         1969    .000479
         1970   .0005112
         1971   .0006443
         1972   .0006108
         1973   .0007329
         1974   .0007479
         1975   .0007461
         1976    .000809
         1977   .0009023
         1978   .0009431
         1979   .0010195
         1980   .0011053
         1981   .0012192
         1982   .0015615
         1983   .0015896
         1984   .0017068
         1985   .0130353
         1986   .0141961
         1987   .0048859
         1988   .0081131
         1989    .009191
         1990   .0097803
         1991   .0110864
         1992   .0116682
         1993   .0130745
         1994   .0150243
         1995   .0160919
         1996   .0170306
```

1997	.0190612
1998	.0210953
1999	.0229511
2000	.0252458
2001	.0276907
2002	.0306616
2003	.0311441
2004	.0347425
2005	.0381816
2006	.0411246
2007	.0454739
2008	.0482864
2009	.0529161
2010	.056976
2011	.025591
2012	.0107318
2013	.0096906
2014	.0070393

```
379 . * Figure 3.7--Serbia
380 . list year prurbfirthmi if country=="Yugoslavia" &  year>1959, clean noobs
```

year	prurbf~i
1960	.0012285
1961	.001168
1962	.001212
1963	.0012471
1964	.0014106
1965	.0015862
1966	.0016545
1967	.0017932
1968	.0018607
1969	.0019601
1970	.0022784
1971	.0026169
1972	.0030991
1973	.003303
1974	.0035437
1975	.0042572
1976	.0043238
1977	.0046124
1978	.0052009
1979	.005712
1980	.0017366
1981	.0022673
1982	.0022959
1983	.0023065
1984	.0023295
1985	.0170378
1986	.0170183
1987	.0178015
1988	.017505
1989	.0172421
1990	.0199977
1991	.0284112
1992	.0248118
1993	.0230095
1994	.0155545
1995	.0169554
1996	.0190659
1997	.0223921
1998	.0297769
1999	.0331736
2000	.0334956
2001	.0068169
2002	.0048149
2003	.0095306
2004	.0132827
2005	.0146579
2006	.0144073
2007	.0092391
2008	.0094503
2009	.0102355
2010	.0102488
2011	.0107462
2012	.0041361
2013	.0044115
2014	.0041464

```
381 . * Figure 3.8--Myanmar
382 . list year prurbfirthmi if country=="Myanmar" &  year>1959, clean noobs
```

year	prurbf~i
1960	.0000984
1961	.0000939
1962	.0000909
1963	.000772
1964	.0008906
1965	.0009344
1966	.0009757
1967	.000994
1968	.0010361
1969	.001081
1970	.0011284
1971	.0011853
1972	.0012342
1973	.0012733
1974	.0013204
1975	.0015659
1976	.0016345
1977	.001705

1978	.0017841
1979	.001889
1980	.0019834
1981	.001637
1982	.0017551
1983	.0018564
1984	.0019549
1985	.0145971
1986	.0154402
1987	.0161171
1988	.0171395
1989	.009271
1990	.0095469
1991	.0090591
1992	.0081249
1993	.0087351
1994	.0093312
1995	.0100138
1996	.0111902
1997	.0122015
1998	.0128893
1999	.0134587
2000	.0148027
2001	.0160911
2002	.0175203
2003	.0464436
2004	.0529139
2005	.053054
2006	.061315
2007	.0712244
2008	.0823429
2009	.1108481
2010	.1263948
2011	.0716851
2012	.0267942
2013	.0307654
2014	.0275765

```
383 . * Figure 3.9--Ukraine
384 . list year prurbfirthmi if country=="Ukraine" &  year>1991, clean noobs
```

year	prurbf~i
1992	.033858
1993	.014649
1994	.0139296
1995	.0062404
1996	.0063942
1997	.0060658
1998	.0061322
1999	.0062864
2000	.0060765
2001	.0084001
2002	.0099832
2003	.0327839
2004	.0387395
2005	.0295132
2006	.0327929
2007	.0298565
2008	.0338148
2009	.0369397
2010	.0287345
2011	.0386676
2012	.0151884
2013	.0161435
2014	.0175193

```
385 . * Figure 3.10--South Korea
386 . list year prurbfirthmi if country=="Korea, South" &  year>1959, clean noobs
```

year	prurbf~i
1960	.0043259
1961	.0003875
1962	.0016474
1963	.0020144
1964	.0018428
1965	.0020038
1966	.0021473
1967	.0023966
1968	.0025992
1969	.0029397
1970	.0034091
1971	.003772
1972	.0042332
1973	.0043133
1974	.0061935
1975	.0069697
1976	.0076923
1977	.0090105
1978	.0104316
1979	.0063077
1980	.0070748
1981	.0070449
1982	.0108851
1983	.0122632
1984	.0145084
1985	.1087023
1986	.120001
1987	.1389094
1988	.1132471
1989	.0530309
1990	.0573988

1991	.0625424
1992	.0664662
1993	.0574596
1994	.0394689
1995	.016338
1996	.0146211
1997	.0160243
1998	.0099241
1999	.0057918
2000	.0048289
2001	.0037328
2002	.0031038
2003	.0060728
2004	.0046658
2005	.0034456
2006	.0027247
2007	.0018647
2008	.0010086
2009	.0010573
2010	.0006555
2011	.0002983
2012	.0001962
2013	.0001385
2014	.0001041

```
387 . * Figure 3.11--Czechoslovakia
388 . list year prurbfirthmi if (country=="Czechoslovakia" | country=="Czech Republic") &  year>1959, clean noobs
```

year	prurbf~i
1960	.0037934
1961	.004255
1962	.0045406
1963	.0046812
1964	.0046902
1965	.0050825
1966	.0055047
1967	.0060109
1968	.0043949
1969	.0047969
1970	.0050795
1971	.0051336
1972	.00555
1973	.0059743
1974	.0064813
1975	.0070636
1976	.0075483
1977	.0079927
1978	.0086616
1979	.0091014
1980	.0095605
1981	.0090412
1982	.0093193
1983	.0097875
1984	.0102459
1985	.1262047
1986	.1307385
1987	.1361329
1988	.1407283
1989	.1465416
1990	.085888
1991	.00932
1992	.0090092
1993	.0051275
1994	.0032444
1995	.0033539
1996	.0035389
1997	.003103
1998	.0031773
1999	.0032392
2000	.0033682
2001	.0029621
2002	.0026067
2003	.0058209
2004	.0056068
2005	.0055367
2006	.0053232
2007	.0072124
2008	.0067478
2009	.0059306
2010	.0060421
2011	.0059026
2012	.0030134
2013	.0029087
2014	.0030627

```
389 . * Figure 3.12--Indonesia
390 . list year prurbfirthmi if country=="Indonesia" &  year>1959, clean noobs
```

year	prurbf~i
1960	.0016555
1961	.0017993
1962	.0019112
1963	.001958
1964	.0019901
1965	.0020884
1966	.0011743
1967	.0013142
1968	.0012238
1969	.0013057
1970	.0013951
1971	.0014978

1972	.0016366
1973	.001761
1974	.0019274
1975	.0020479
1976	.0021264
1977	.0022858
1978	.0024542
1979	.0026555
1980	.002868
1981	.0031525
1982	.0034194
1983	.0035703
1984	.0038112
1985	.0289419
1986	.0304775
1987	.0327197
1988	.0352672
1989	.0380164
1990	.0419617
1991	.04653
1992	.0498844
1993	.0570434
1994	.0628546
1995	.0696622
1996	.0777637
1997	.0867607
1998	.0938309
1999	.0255155
2000	.0085733
2001	.0070615
2002	.007662
2003	.0083403
2004	.0082521
2005	.0052198
2006	.005797
2007	.0064114
2008	.0072063
2009	.0079494
2010	.0084739
2011	.0097002
2012	.0108709
2013	.0121025
2014	.0094148

```
391 . * Figure 3.13--Philippines
392 . list year prurbfirthmi if country=="Philippines" &  year>1959, clean noobs
```

year	prurbf~i
1960	.0013393
1961	.0012039
1962	.0012862
1963	.0013665
1964	.0014755
1965	.0013455
1966	.0014667
1967	.0015553
1968	.0016608
1969	.0017693
1970	.0031798
1971	.0033585
1972	.0035945
1973	.0042051
1974	.0047846
1975	.0050507
1976	.0054252
1977	.0059944
1978	.0064478
1979	.0069105
1980	.0032839
1981	.0034331
1982	.0050131
1983	.0054719
1984	.0060636
1985	.0408162
1986	.0403941
1987	.0142455
1988	.0032252
1989	.0034936
1990	.0038592
1991	.0040995
1992	.0034143
1993	.0030155
1994	.0030957
1995	.0035486
1996	.0040315
1997	.0044674
1998	.0042565
1999	.0046437
2000	.0048644
2001	.0046494
2002	.0039185
2003	.0090368
2004	.0097083
2005	.0121976
2006	.0131361
2007	.014198
2008	.0156423
2009	.0166482
2010	.012335
2011	.0108328
2012	.0045465

```
        2013   .0052506
        2014    .005682

393 . * Figure 3.14--Mexico
394 . list year prurbfirthmi if country=="Mexico" &  year>1959, clean noobs

        year   prurbf~i
        1960   .0021211
        1961   .0023359
        1962    .002448
        1963   .0025943
        1964   .0022992
        1965   .0026385
        1966   .0028717
        1967   .0031213
        1968   .0033621
        1969   .0036773
        1970   .0032116
        1971   .0035023
        1972   .0037313
        1973   .0041851
        1974   .0047018
        1975   .0050149
        1976   .0042869
        1977   .0045284
        1978   .0055111
        1979   .0060389
        1980   .0067041
        1981   .0072707
        1982   .0064497
        1983   .0057425
        1984     .00554
        1985   .0408927
        1986    .043047
        1987   .0421944
        1988   .0354799
        1989   .0334908
        1990   .0358734
        1991   .0388068
        1992    .041367
        1993   .0440009
        1994   .0459191
        1995   .0169029
        1996   .0160412
        1997   .0173284
        1998   .0123966
        1999   .0133739
        2000   .0116469
        2001   .0057756
        2002   .0061147
        2003     .00632
        2004   .0065251
        2005    .006979
        2006   .0059986
        2007   .0065039
        2008    .006951
        2009   .0073348
        2010      .0072
        2011   .0078618
        2012   .0068647
        2013    .007681
        2014   .0126374

395 . * Figure 3.15--Malaysia
396 . list year prurbfirthmi if country=="Malaysia" &  year>1959, clean noobs

        year   prurbf~i
        1960   .0000845
        1961   .0000547
        1962    .000052
        1963   .0000523
        1964   .0000533
        1965   .0000557
        1966   .0000589
        1967   .0000616
        1968   .0000629
        1969   .0000683
        1970   .0003971
        1971   .0005485
        1972   .0003248
        1973   .0003613
        1974   .0004253
        1975   .0004697
        1976   .0003859
        1977   .0004194
        1978   .0004617
        1979   .0005091
        1980   .0005512
        1981   .0005178
        1982   .0006654
        1983   .0008663
        1984    .000961
        1985   .0075296
        1986   .0075214
        1987   .0076152
        1988   .0082801
        1989   .0093001
        1990   .0105266
        1991    .011992
        1992   .0154165
        1993   .0174502
```

```
        1994   .0199905
        1995   .0225323
        1996    .031116
        1997   .0347156
        1998   .0374975
        1999   .0358587
        2000   .0388912
        2001   .0427409
        2002   .0442299
        2003   .0223659
        2004   .0238621
        2005    .025439
        2006   .0269388
        2007   .0283424
        2008   .0297943
        2009    .013692
        2010   .0145278
        2011   .0155174
        2012   .0161662
        2013   .0162898
        2014    .013978

397 .
398 . drop prurbfirthmi prurbmi

399 .
400 . log close
          name:  <unnamed>
           log:  C:\Users\mbeissin\Desktop\Stata files for book\Logfiles\chapter3.log
      log type:  text
     closed on:  25 Jan 2022, 20:39:53
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