(R)
Statistics/Data Analysis

User: Mark R. Beissinger
Project: The Revolutionary City

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      name:  <unnamed>
       log:  C:\Users\mbeissin\Desktop\Stata files for book\Logfiles\chapter4.log
  log type:  text
 opened on:  25 Jan 2022, 22:03:27

. * ================================================================================
. * STATISTICAL RESULTS APPEARING IN CHAPTER 4
. * STATA Do file for Chapter 4
. * Results reported in Chapter 4
. * Author: Mark R. Beissinger
. * Date:  January 2022
. * Princeton, NJ
. * ================================================================================
. * BEFORE RUNNING, YOU MUST SET THE DEFAULT PATH FOR WHERE THE DATA
. *   FILES RESIDE
. * ================================================================================
. * Before running, you must download the following packages for STATA:
. *   looclass from http://fmwww.bc.edu/RePEc/bocode/l
. *   mimrgns from http://fmwww.bc.edu/RePEc/bocode/m
. * ================================================================================
. * The following datafiles are used in this chapter:
. *   States and episodes--statesandepisodes.dta
. *   Dataset of revolutionary episodes--revolutionaryeps.dta
. *   Dataset of revolutionary episodes, multiple imputation (regime model)--revolutionaryepsmireg.dta
. *       Dataset of revolutionary episodes, multiple imputation (opposition model)--revolutionaryepsmiopp.dta
. *       Dataset of revolutionary episodes, multiple imputation (combined model)--revolutionaryepsmicomb.dta
. * ================================================================================
. * Output produced:  Logfiles\chapter4.log
. *                                    Logfiles\figure4_6a.pdf
. *                                    Logfiles\figure4_6b.pdf
. *                                    Logfiles\figure4_10a.pdf
. *                                    Logfiles\figure4_10b.pdf
. *       --All output from this chapter has been combined into a single file and can
. *               be found in a pdf file (chapter4.pdf) in the "Outputfiles" folder
. * ================================================================================
.
.
. * ====================
. * DATA FOR FIGURE 4.1
. * ====================
. use revolutionaryeps.dta

. tab fiveyrperiodstr success if startyear>1899

 Five-year | Succeeded in gaining
    period |        power?
    string |        no        yes |     Total
-----------+----------------------+----------
   1900-04 |         8          0 |         8
   1905-09 |         8          2 |        10
   1910-14 |         3          3 |         6
   1915-19 |        17         10 |        27
   1920-24 |        16          3 |        19
   1925-29 |        10          1 |        11
   1930-34 |         8          2 |        10
   1935-39 |         6          1 |         7
   1940-44 |         4          4 |         8
   1945-49 |        11          5 |        16
   1950-54 |         4          5 |         9
   1955-59 |         9          3 |        12
   1960-64 |        11         10 |        21
   1965-69 |        12          5 |        17
   1970-74 |         8          4 |        12
   1975-79 |         8          5 |        13
   1980-84 |        10          4 |        14
   1985-89 |        11         15 |        26
   1990-94 |        14         16 |        30
   1995-99 |         5          4 |         9
   2000-04 |         7          6 |        13
   2005-09 |        15          4 |        19
   2010-14 |        15         11 |        26
-----------+----------------------+----------
     Total |       220        123 |       343


. * ================================================================================
. * COUNT MODELS, EFFECT OF TIME ON NUMBER OF SUCCESSFUL REVOLUITIONS AND
. *   NUMBER OF FAILED REVOLUTIONS (WITH AND W/OUT COLLAPSE OF COMMUNISM
. * ================================================================================
. clear

. use statesandepisodes.dta

. * Failed cases
. poisson failed year , vce(robust) irr nolog

Poisson regression                              Number of obs     =        115
                                                Wald chi2(1)      =       1.11
                                                Prob > chi2       =     0.2917
Log pseudolikelihood = -197.45223               Pseudo R2         =     0.0033

------------------------------------------------------------------------------
             |               Robust
      failed |        IRR   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        year |   1.002336   .0022179     1.05   0.292     .9979983    1.006693
       _cons |    .019831   .0860873    -0.90   0.366     4.00e-06    98.27711
------------------------------------------------------------------------------
```

```
47 . estat gof

          Deviance goodness-of-fit =  145.5044
          Prob > chi2(113)         =    0.0213

          Pearson goodness-of-fit  =  127.3602
          Prob > chi2(113)         =    0.1682

48 . *  Result:  Failed goodness of fit test--must use negative binomial
49 . nbreg failed year , vce(robust) irr nolog

Negative binomial regression                    Number of obs     =        115
                                                Wald chi2(1)      =       1.11
Dispersion           = mean                     Prob > chi2       =     0.2910
Log pseudolikelihood = -197.16558               Pseudo R2         =     0.0030

------------------------------------------------------------------------------
             |               Robust
      failed |        IRR   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        year |   1.002318   .0021981     1.06   0.291     .9980192    1.006636
       _cons |   .0205336   .0883428    -0.90   0.366     4.47e-06    94.32778
-------------+----------------------------------------------------------------
    /lnalpha |  -2.890079   1.327496                     -5.491923   -.2882358
-------------+----------------------------------------------------------------
       alpha |   .0555718   .0737713                      .0041199    .7495849
------------------------------------------------------------------------------

50 . * Successful cases
51 . poisson success year , vce(robust) irr nolog

Poisson regression                              Number of obs     =        115
                                                Wald chi2(1)      =      15.21
                                                Prob > chi2       =     0.0001
Log pseudolikelihood = -159.56227               Pseudo R2         =     0.0598

------------------------------------------------------------------------------
             |               Robust
     success |        IRR   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        year |   1.012631    .003259     3.90   0.000     1.006263    1.019038
       _cons |   2.11e-11   1.34e-10    -3.87   0.000     8.23e-17    5.41e-06
------------------------------------------------------------------------------

52 . estat gof

          Deviance goodness-of-fit =  157.7972
          Prob > chi2(113)         =    0.0035

          Pearson goodness-of-fit  =  172.2202
          Prob > chi2(113)         =    0.0003

53 . *  Result:  Failed goodness of fit test--must use negative binomial
54 . nbreg success year , vce(robust) irr nolog

Negative binomial regression                    Number of obs     =        115
                                                Wald chi2(1)      =      14.30
Dispersion           = mean                     Prob > chi2       =     0.0002
Log pseudolikelihood = -156.14208               Pseudo R2         =     0.0434

------------------------------------------------------------------------------
             |               Robust
     success |        IRR   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        year |   1.012881   .0034286     3.78   0.000     1.006184    1.019624
       _cons |   1.30e-11   8.67e-11    -3.75   0.000     2.68e-17    6.28e-06
-------------+----------------------------------------------------------------
    /lnalpha |  -1.065712    .447845                     -1.943472   -.1879516
-------------+----------------------------------------------------------------
       alpha |   .3444826   .1542748                      .1432059    .8286548
------------------------------------------------------------------------------

55 . * Without collapse of European communism cases
56 . nbreg failnocommcoll year , vce(robust) irr nolog

Negative binomial regression                    Number of obs     =        115
                                                Wald chi2(1)      =       0.45
Dispersion           = mean                     Prob > chi2       =     0.5034
Log pseudolikelihood = -195.29915               Pseudo R2         =     0.0012

------------------------------------------------------------------------------
             |               Robust
failnocommcoll |        IRR   Std. Err.      z    P>|z|     [95% Conf. Interval]
---------------+--------------------------------------------------------------
          year |   1.001514   .0022645     0.67   0.503     .9970856    1.005962
         _cons |   .0953175   .4224837    -0.53   0.596     .0000161    564.9695
---------------+--------------------------------------------------------------
      /lnalpha |  -2.792818   1.300848                     -5.342432   -.2432028
---------------+--------------------------------------------------------------
         alpha |   .0612484   .0796748                      .0047842    .7841124
------------------------------------------------------------------------------
```

```
57 . nbreg succnocommcoll year , vce(robust) irr nolog

Negative binomial regression                    Number of obs     =        115
                                                Wald chi2(1)      =      11.17
Dispersion           = mean                     Prob > chi2       =     0.0008
Log pseudolikelihood = -147.37464               Pseudo R2         =     0.0358

------------------------------------------------------------------------------
             |               Robust
succnocommcoll |        IRR   Std. Err.      z    P>|z|     [95% Conf. Interval]
---------------+--------------------------------------------------------------
          year |   1.010638   .0031998     3.34   0.001     1.004386    1.016929
          cons |   9.22e-10   5.78e-09    -3.32   0.001     4.28e-15    .0001989
---------------+--------------------------------------------------------------
       /lnalpha |   -1.91692   1.020059                     -3.916198    .0823584
---------------+--------------------------------------------------------------
          alpha |   .1470593   .1500091                      .0199167    1.085845
------------------------------------------------------------------------------

58 .
59 . * ============================
60 . * PREDICTIONS OF COUNT MODEL
61 . * ============================
62 . nbreg success year , vce(robust) irr nolog

Negative binomial regression                    Number of obs     =        115
                                                Wald chi2(1)      =      14.30
Dispersion           = mean                     Prob > chi2       =     0.0002
Log pseudolikelihood = -156.14208               Pseudo R2         =     0.0434

------------------------------------------------------------------------------
             |               Robust
     success |        IRR   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        year |   1.012881   .0034286     3.78   0.000     1.006184    1.019624
       _cons |   1.30e-11   8.67e-11    -3.75   0.000     2.68e-17    6.28e-06
-------------+----------------------------------------------------------------
    /lnalpha |  -1.065712    .447845                     -1.943472   -.1879516
-------------+----------------------------------------------------------------
       alpha |   .3444826   .1542748                      .1432059    .8286548
------------------------------------------------------------------------------

63 . predict succpred
   (option n assumed; predicted number of events)

64 . list year succpred

     +-----------------+
     | year   succpred |
     |-----------------|
  1. | 1900   .4726209 |
  2. | 1901    .478709 |
  3. | 1902   .4848755 |
  4. | 1903   .4911214 |
  5. | 1904   .4974478 |
     |-----------------|
  6. | 1905   .5038556 |
  7. | 1906    .510346 |
  8. | 1907     .51692 |
  9. | 1908   .5235787 |
 10. | 1909   .5303232 |
     |-----------------|
 11. | 1910   .5371546 |
 12. | 1911   .5440739 |
 13. | 1912   .5510824 |
 14. | 1913   .5581811 |
 15. | 1914   .5653713 |
     |-----------------|
 16. | 1915   .5726541 |
 17. | 1916   .5800307 |
 18. | 1917   .5875024 |
 19. | 1918   .5950703 |
 20. | 1919   .6027357 |
     |-----------------|
 21. | 1920   .6104998 |
 22. | 1921   .6183639 |
 23. | 1922   .6263294 |
 24. | 1923   .6343974 |
 25. | 1924   .6425694 |
     |-----------------|
 26. | 1925   .6508467 |
 27. | 1926   .6592305 |
 28. | 1927   .6677223 |
 29. | 1928   .6763236 |
 30. | 1929   .6850356 |
     |-----------------|
 31. | 1930   .6938599 |
 32. | 1931   .7027979 |
 33. | 1932   .7118509 |
 34. | 1933   .7210206 |
 35. | 1934   .7303084 |
     |-----------------|
 36. | 1935   .7397159 |
 37. | 1936   .7492445 |
 38. | 1937   .7588959 |
 39. | 1938   .7686716 |
 40. | 1939   .7785732 |
     |-----------------|
 41. | 1940   .7886024 |
 42. | 1941   .7987607 |
 43. | 1942     .80905 |
```

44.	1943	.8194717
45.	1944	.8300277
46.	1945	.8407197
47.	1946	.8515494
48.	1947	.8625186
49.	1948	.8736292
50.	1949	.8848827
51.	1950	.8962814
52.	1951	.9078268
53.	1952	.9195209
54.	1953	.9313657
55.	1954	.9433631
56.	1955	.955515
57.	1956	.9678234
58.	1957	.9802904
59.	1958	.992918
60.	1959	1.005708
61.	1960	1.018663
62.	1961	1.031785
63.	1962	1.045076
64.	1963	1.058538
65.	1964	1.072174
66.	1965	1.085985
67.	1966	1.099974
68.	1967	1.114143
69.	1968	1.128495
70.	1969	1.143032
71.	1970	1.157756
72.	1971	1.172669
73.	1972	1.187775
74.	1973	1.203075
75.	1974	1.218573
76.	1975	1.23427
77.	1976	1.250169
78.	1977	1.266273
79.	1978	1.282584
80.	1979	1.299106
81.	1980	1.31584
82.	1981	1.33279
83.	1982	1.349959
84.	1983	1.367348
85.	1984	1.384961
86.	1985	1.402802
87.	1986	1.420872
88.	1987	1.439175
89.	1988	1.457714
90.	1989	1.476491
91.	1990	1.495511
92.	1991	1.514775
93.	1992	1.534287
94.	1993	1.554051
95.	1994	1.57407
96.	1995	1.594346
97.	1996	1.614884
98.	1997	1.635686
99.	1998	1.656756
100.	1999	1.678097
101.	2000	1.699714
102.	2001	1.721608
103.	2002	1.743785
104.	2003	1.766248
105.	2004	1.789
106.	2005	1.812045
107.	2006	1.835387
108.	2007	1.859029
109.	2008	1.882976
110.	2009	1.907231
111.	2010	1.931799
112.	2011	1.956684
113.	2012	1.981889
114.	2013	2.007418
115.	2014	2.033277

65 .

```
66 . * ====================
67 . * DATA FOR FIGURE 4.2
68 . * ====================
69 . clear

70 . use revolutionaryeps.dta

71 . logit success startyear if startyear>1899, or nolog

Logistic regression                             Number of obs     =        343
                                                LR chi2(1)        =       8.36
                                                Prob > chi2       =     0.0038
Log likelihood = -219.66306                     Pseudo R2         =     0.0187

------------------------------------------------------------------------------
     success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   startyear |   1.009978   .0035236     2.85   0.004     1.003095    1.016908
       _cons |   1.88e-09   1.29e-08    -2.93   0.003     2.71e-15    .0013053
------------------------------------------------------------------------------

72 . margins, at(startyear=(1900 1905 1910 1915 1920 1925 1930 1935 1940 1945 1950 1955 1960 1965 1970 1975 1980 1985
>  1990 1995 2000 2005 2010 2015))

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(success), predict()

1._at        : startyear       =        1900

2._at        : startyear       =        1905

3._at        : startyear       =        1910

4._at        : startyear       =        1915

5._at        : startyear       =        1920

6._at        : startyear       =        1925

7._at        : startyear       =        1930

8._at        : startyear       =        1935

9._at        : startyear       =        1940

10._at       : startyear       =        1945

11._at       : startyear       =        1950

12._at       : startyear       =        1955

13._at       : startyear       =        1960

14._at       : startyear       =        1965

15._at       : startyear       =        1970

16._at       : startyear       =        1975

17._at       : startyear       =        1980

18._at       : startyear       =        1985

19._at       : startyear       =        1990

20._at       : startyear       =        1995

21._at       : startyear       =        2000

22._at       : startyear       =        2005

23._at       : startyear       =        2010

24._at       : startyear       =        2015

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         _at |
          1  |    .226646   .0454169     4.99   0.000     .1376304    .3156615
          2  |    .235465   .0438476     5.37   0.000     .1495254    .3214047
          3  |   .2445187   .0421733     5.80   0.000     .1618605    .3271769
          4  |    .253805   .0404079     6.28   0.000     .1746069    .3330031
          5  |    .263321     .03857     6.83   0.000     .1877251    .3389168
          6  |   .2730632   .0366844     7.44   0.000     .2011631    .3449633
          7  |   .2830274   .0347838     8.14   0.000     .2148525    .3512023
          8  |   .2932085   .0329108     8.91   0.000     .2287045    .3577126
          9  |   .3036008   .0311205     9.76   0.000     .2426058    .3645958
         10  |   .3141977   .0294818    10.66   0.000     .2564145    .3719809
         11  |   .3249918   .0280786    11.57   0.000     .2699587     .380025
         12  |   .3359751   .0270069    12.44   0.000     .2830426    .3889077
         13  |   .3471387    .026366    13.17   0.000     .2954623    .3988152
         14  |    .358473    .026244    13.66   0.000     .3070357    .4099104
         15  |   .3699677   .0266994    13.86   0.000     .3176378    .4222976
         16  |   .3816117   .0277484    13.75   0.000     .3272258    .4359975
         17  |   .3933933   .0293637    13.40   0.000     .3358416     .450945
         18  |   .4053002   .0314858    12.87   0.000     .3435892    .4670113
         19  |   .4173197   .0340392    12.26   0.000      .350604    .4840353
```

```
          20  |   .4294381   .0369454    11.62   0.000     .3570265    .5018497
          21  |   .4416418   .0401312    11.00   0.000     .3629862    .5202974
          22  |   .4539163    .043532    10.43   0.000     .3685952    .5392374
          23  |   .4662472   .0470922     9.90   0.000     .3739482    .5585461
          24  |   .4786194    .050764     9.43   0.000     .3791237    .5781151
------------------------------------------------------------------------------

. 
. * ====================
. * DATA FOR FIGURE 4.3
. * ====================
. logit success startyear urbandum if startprior1900==0, or nolog

Logistic regression                             Number of obs     =        343
                                                LR chi2(2)        =      21.17
                                                Prob > chi2       =     0.0000
Log likelihood = -213.25837                     Pseudo R2         =     0.0473

------------------------------------------------------------------------------
     success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   startyear |   1.008273   .0035918     2.31   0.021     1.001257    1.015337
    urbandum |    2.31381   .5500442     3.53   0.000     1.452038    3.687035
       _cons |   3.26e-08   2.28e-07    -2.47   0.014     3.64e-14     .029195
------------------------------------------------------------------------------

. margins, atmeans at(urbandum=(0 1))

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(success), predict()

1._at        : startyear       =    1963.443 (mean)
               urbandum        =           0

2._at        : startyear       =    1963.443 (mean)
               urbandum        =           1

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         _at |
          1  |   .2568209   .0346933     7.40   0.000     .1888233    .3248186
          2  |   .4443163   .0376727    11.79   0.000     .3704791    .5181535
------------------------------------------------------------------------------

. logit success startyear urbancivic if startprior1900==0, or nolog

Logistic regression                             Number of obs     =        343
                                                LR chi2(2)        =      18.82
                                                Prob > chi2       =     0.0001
Log likelihood = -214.43637                     Pseudo R2         =     0.0420

------------------------------------------------------------------------------
     success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   startyear |   1.005104   .0038348     1.33   0.182     .9976164    1.012649
  urbancivic |    2.90011   .9682882     3.19   0.001     1.507354    5.579734
       _cons |   .0000211   .0001578    -1.44   0.150     9.10e-12    48.93537
------------------------------------------------------------------------------

. margins, atmeans at(urbancivic=1)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : startyear       =    1963.443 (mean)
               urbancivic      =           1

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .5733315   .0740802     7.74   0.000     .4281371     .718526
------------------------------------------------------------------------------

. logit success startyear urbanleftist if startprior1900==0, or nolog

Logistic regression                             Number of obs     =        343
                                                LR chi2(2)        =      11.02
                                                Prob > chi2       =     0.0040
Log likelihood = -218.33278                     Pseudo R2         =     0.0246

------------------------------------------------------------------------------
     success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   startyear |   1.008987   .0035597     2.54   0.011     1.002035    1.015989
urbanleftist |   .4792472   .2284422    -1.54   0.123     .1882861    1.219834
       _cons |   1.37e-08   9.50e-08    -2.61   0.009     1.68e-14    .0111439
------------------------------------------------------------------------------
```

```
82 . margins, atmeans at(urbanleftist=1)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : startyear       =    1963.443 (mean)
               urbanleftist    =           1

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .2184294   .0784699     2.78   0.005     .0646311    .3722276
------------------------------------------------------------------------------

83 . logit success startyear ruralleftist if startprior1900==0, or nolog

Logistic regression                             Number of obs     =        343
                                                LR chi2(2)        =       9.23
                                                Prob > chi2       =     0.0099
Log likelihood = -219.23057                     Pseudo R2         =     0.0206

------------------------------------------------------------------------------
     success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   startyear |   1.009787   .0035139     2.80   0.005     1.002924    1.016698
ruralleftist |   .7167856   .2609578    -0.91   0.360     .3511519    1.463132
       _cons |   2.83e-09   1.94e-08    -2.87   0.004     4.21e-15    .0019068
------------------------------------------------------------------------------

84 . margins, atmeans at(ruralleftist=1)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : startyear       =    1963.443 (mean)
               ruralleftist    =           1

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .2909317   .0707329     4.11   0.000     .1522976    .4295657
------------------------------------------------------------------------------

85 . logit success startyear otherrev if startprior1900==0, or nolog

Logistic regression                             Number of obs     =        343
                                                LR chi2(2)        =      10.84
                                                Prob > chi2       =     0.0044
Log likelihood = -218.42615                     Pseudo R2         =     0.0242

------------------------------------------------------------------------------
     success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   startyear |   1.009134   .0035773     2.57   0.010     1.002147     1.01617
    otherrev |   .6902005   .1624062    -1.58   0.115     .4351962    1.094625
       _cons |   1.22e-08   8.52e-08    -2.61   0.009     1.36e-14    .0109357
------------------------------------------------------------------------------

86 . margins, atmeans at(otherrev=1)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : startyear       =    1963.443 (mean)
               otherrev        =           1

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .3227028   .0324324     9.95   0.000     .2591366    .3862691
------------------------------------------------------------------------------

87 . * Excluding cases associated with collapse of European communism
88 . logit success startyear urbancivic  if startyear>1899 & incgovcommunist==0 , or nolog

Logistic regression                             Number of obs     =        313
                                                LR chi2(2)        =      11.24
                                                Prob > chi2       =     0.0036
Log likelihood = -197.30859                     Pseudo R2         =     0.0277

------------------------------------------------------------------------------
     success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   startyear |   1.004215   .0039175     1.08   0.281      .996566    1.011923
  urbancivic |   2.430963     .87861     2.46   0.014     1.197107     4.93655
       _cons |   .0001226   .0009366    -1.18   0.239     3.83e-11    391.8203
------------------------------------------------------------------------------
```

```
 89 . * Restricting sample to post-Cold War cases
 90 . logit success urbancivic  if  startyear>1984, or nolog

Logistic regression                             Number of obs     =        123
                                                LR chi2(1)        =       6.07
                                                Prob > chi2       =     0.0137
Log likelihood = -81.727229                     Pseudo R2         =     0.0358

------------------------------------------------------------------------------
     success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
  urbancivic |   2.526316    .961639     2.43   0.015     1.198061    5.327169
        cons |   .5833333   .1387152    -2.27   0.023     .3660187    .9296733
------------------------------------------------------------------------------

 91 .
 92 .
 93 . * ================================================
 94 . * Regime characteristics and revolutionary outcomes
 95 . * ================================================
 96 . * ============================================================
 97 . * DATA FOR FIGURE 4.4 on effect of Polity scores on outcomes
 98 . * ============================================================
 99 . * Testing for quadratic specification on complete sample
100 . logit success politymin1 if startyear>1899 , or nolog

Logistic regression                             Number of obs     =        272
                                                LR chi2(1)        =      17.26
                                                Prob > chi2       =     0.0000
Log likelihood = -173.23362                     Pseudo R2         =     0.0475

------------------------------------------------------------------------------
     success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
  politymin1 |   .9121584   .0209893    -4.00   0.000      .871934    .9542385
       _cons |   .5373615   .0745656    -4.48   0.000     .4094036    .7053122
------------------------------------------------------------------------------

101 . estat ic

Akaike's information criterion and Bayesian information criterion

-----------------------------------------------------------------------------
       Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
-------------+---------------------------------------------------------------
           . |        272 -181.8636  -173.2336       2    350.4672   357.6788
-----------------------------------------------------------------------------
               Note: N=Obs used in calculating BIC; see [R] BIC note.

102 . logit success politymin1 politymin1sq if startyear>1899 , or nolog

Logistic regression                             Number of obs     =        272
                                                LR chi2(2)        =      23.52
                                                Prob > chi2       =     0.0000
Log likelihood = -170.10178                     Pseudo R2         =     0.0647

------------------------------------------------------------------------------
     success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
  politymin1 |    .890595    .024434    -4.22   0.000     .8439701    .9397956
politymin1sq |   .9874349   .0051461    -2.43   0.015     .9774002    .9975727
       _cons |    .792373   .1642329    -1.12   0.262     .5278415    1.189476
------------------------------------------------------------------------------

103 . estat ic

Akaike's information criterion and Bayesian information criterion

-----------------------------------------------------------------------------
       Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
-------------+---------------------------------------------------------------
           . |        272 -181.8636  -170.1018       3    346.2036    357.021
-----------------------------------------------------------------------------
               Note: N=Obs used in calculating BIC; see [R] BIC note.

104 . * Use Multiple imputation sample for all episodes, excluding colonies
105 . clear

106 . use revolutionaryepsmireg.dta

107 . set seed 1234

108 . * Outcomes for all episodes
109 . mi estimate, post dots eform saving(miest, replace): logit success newpolitymin1 newpolitymin1sq if startyear>18
    > 99

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

Multiple-imputation estimates                   Imputations       =         20
Logistic regression                             Number of obs     =        288
                                                Average RVI       =     0.0339
                                                Largest FMI       =     0.0718
DF adjustment:   Large sample                   DF:     min       =   3,738.70
                                                        avg       =  10,760.55
                                                        max       =  14,426.71
Model F test:       Equal FMI                   F(   2,13437.8)   =       9.09
Within VCE type:          OIM                   Prob > F          =     0.0001
```

```
------------------------------------------------------------------------------
     success |      exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
  newpolitym~1 |   .8950604   .0238367    -4.16   0.000     .8495359    .9430243
newpolitym~1sq |   .9868593   .0050673    -2.58   0.010     .9769742    .9968444
       _cons |   .7930292   .1640453    -1.12   0.262     .5286829    1.189551
------------------------------------------------------------------------------
```

```
110 . mimrgns, at(newpolitymin1=-10 newpolitymin1sq=100) at(newpolitymin1=-9 newpolitymin1sq=81) at(newpolitymin1=-8 n
    > ewpolitymin1sq=64) at(newpolitymin1=-7 newpolitymin1sq=49) at(newpolitymin1=-6 newpolitymin1sq=36) at(newpolitym
    > in1=-5 newpolitymin1sq=25) at(newpolitymin1=-4 newpolitymin1sq=16) at(newpolitymin1=-3 newpolitymin1sq=9) at(new
    > politymin1=-2 newpolitymin1sq=4) at(newpolitymin1=-1 newpolitymin1sq=1) at(newpolitymin1=0 newpolitymin1sq=0) at
    > (newpolitymin1=1 newpolitymin1sq=1) at(newpolitymin1=2 newpolitymin1sq=4) at(newpolitymin1=3 newpolitymin1sq=9)
    > at(newpolitymin1=4 newpolitymin1sq=16) at(newpolitymin1=5 newpolitymin1sq=25) at(newpolitymin1=6 newpolitymin1sq
    > =36) at(newpolitymin1=7 newpolitymin1sq=49) at(newpolitymin1=8 newpolitymin1sq=64) at(newpolitymin1=9 newpolitym
    > in1sq=81) at(newpolitymin1=10 newpolitymin1sq=100) predict(pr)

Multiple-imputation estimates                   Imputations       =         20
Adjusted predictions                            Number of obs     =        288
                                                Average RVI       =     0.0129
                                                Largest FMI       =     0.0602
DF adjustment:   Large sample                   DF:     min       =   5,309.96
                                                        avg       =  37,481.33
Within VCE type: Delta-method                           max       = 150,325.39

Expression   : Pr(success), predict(pr)

1._at        : newpolitym~1    =         -10
               newpolitym~q    =         100

2._at        : newpolitym~1    =          -9
               newpolitym~q    =          81

3._at        : newpolitym~1    =          -8
               newpolitym~q    =          64

4._at        : newpolitym~1    =          -7
               newpolitym~q    =          49

5._at        : newpolitym~1    =          -6
               newpolitym~q    =          36

6._at        : newpolitym~1    =          -5
               newpolitym~q    =          25

7. at        : newpolitym~1    =          -4
               newpolitym~q    =          16

8._at        : newpolitym~1    =          -3
               newpolitym~q    =           9

9._at        : newpolitym~1    =          -2
               newpolitym~q    =           4

10. at       : newpolitym~1    =          -1
               newpolitym~q    =           1

11._at       : newpolitym~1    =           0
               newpolitym~q    =           0

12._at       : newpolitym~1    =           1
               newpolitym~q    =           1

13._at       : newpolitym~1    =           2
               newpolitym~q    =           4

14._at       : newpolitym~1    =           3
               newpolitym~q    =           9

15._at       : newpolitym~1    =           4
               newpolitym~q    =          16

16._at       : newpolitym~1    =           5
               newpolitym~q    =          25

17._at       : newpolitym~1    =           6
               newpolitym~q    =          36

18._at       : newpolitym~1    =           7
               newpolitym~q    =          49

19._at       : newpolitym~1    =           8
               newpolitym~q    =          64

20._at       : newpolitym~1    =           9
               newpolitym~q    =          81

21. at       : newpolitym~1    =          10
               newpolitym~q    =         100
```

	Margin	Std. Err.	t	P>|t|	[95% Conf.	Interval]
_at						
1	.3904147	.0793062	4.92	0.000	.2349589	.5458704
2	.424233	.0632846	6.70	0.000	.3001885	.5482775
3	.4522643	.0501273	9.02	0.000	.3540138	.5505148
4	.4740228	.0416244	11.39	0.000	.3924399	.5556057
5	.4892743	.0386025	12.67	0.000	.4136141	.5649345
6	.4979327	.0399237	12.47	0.000	.4196811	.5761842
7	.4999789	.0432971	11.55	0.000	.4151122	.5848456
8	.4954131	.0468846	10.57	0.000	.4035122	.587314
9	.4842413	.0496516	9.75	0.000	.3869156	.5815671
10	.4664983	.0510891	9.13	0.000	.3663553	.5666413
11	.4423048	.0510086	8.67	0.000	.3423212	.5422885
12	.4119563	.0495026	8.32	0.000	.3149272	.5089855
13	.3760311	.0470007	8.00	0.000	.2839081	.4681541
14	.3354935	.0443083	7.57	0.000	.2486494	.4223377
15	.2917521	.0424162	6.88	0.000	.2086168	.3748874
16	.2466243	.0419249	5.88	0.000	.1644513	.3287974
17	.202177	.0424705	4.76	0.000	.1189319	.285422
18	.1604535	.0429139	3.74	0.000	.0763353	.2445717
19	.1231606	.0421297	2.92	0.003	.0405752	.2057459
20	.0914176	.0395774	2.31	0.021	.013832	.1690032
21	.0656533	.0353785	1.86	0.064	-.0037031	.1350097

```
111 . * Outcomes for all rural episodes
112 . mi estimate, post dots eform saving(miest, replace): logit success newpolitymin1 newpolitymin1sq  if startyear>1
    > 899 & urbandum==0

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        123
                                                    Average RVI       =     0.0211
                                                    Largest FMI       =     0.0433
    DF adjustment:   Large sample                   DF:     min       =  10,223.05
                                                            avg       =  62,876.17
                                                            max       = 152,065.03
    Model F test:       Equal FMI                   F(   2,35652.5)   =       4.21
    Within VCE type:          OIM                   Prob > F          =     0.0149

    ------------------------------------------------------------------------------
           success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    ---------------+--------------------------------------------------------------
      newpolitymin1 |    .866733   .0428024    -2.90   0.004     .7867733    .9548189
    newpolitymin1sq |   .9923637   .0088134    -0.86   0.388     .9752372    1.009791
              _cons |   .3169799   .1147549    -3.17   0.002     .1559052    .6444701
    ------------------------------------------------------------------------------

113 . mimrgns, at(newpolitymin1=-10 newpolitymin1sq=100) at(newpolitymin1=-9 newpolitymin1sq=81) at(newpolitymin1=-8 n
    > ewpolitymin1sq=64) at(newpolitymin1=-7 newpolitymin1sq=49) at(newpolitymin1=-6 newpolitymin1sq=36) at(newpolitym
    > in1=-5 newpolitymin1sq=25) at(newpolitymin1=-4 newpolitymin1sq=16) at(newpolitymin1=-3 newpolitymin1sq=9) at(new
    > politymin1=-2 newpolitymin1sq=4) at(newpolitymin1=-1 newpolitymin1sq=1) at(newpolitymin1=0 newpolitymin1sq=0) at
    > (newpolitymin1=1 newpolitymin1sq=1) at(newpolitymin1=2 newpolitymin1sq=4) at(newpolitymin1=3 newpolitymin1sq=9)
    > at(newpolitymin1=4 newpolitymin1sq=16) at(newpolitymin1=5 newpolitymin1sq=25) at(newpolitymin1=6 newpolitymin1sq
    > =36) at(newpolitymin1=7 newpolitymin1sq=49) at(newpolitymin1=8 newpolitymin1sq=64) at(newpolitymin1=9 newpolitym
    > in1sq=81) at(newpolitymin1=10 newpolitymin1sq=100) predict(pr)

    Multiple-imputation estimates                   Imputations       =         20
    Adjusted predictions                            Number of obs     =        123
                                                    Average RVI       =     0.0096
                                                    Largest FMI       =     0.0414
    DF adjustment:   Large sample                   DF:     min       =  11,163.33
                                                            avg       = 106,207.96
    Within VCE type: Delta-method                           max       = 463,903.69

    Expression   : Pr(success), predict(pr)

    1._at        : newpolitym~1    =         -10
                   newpolitym~q    =         100

    2._at        : newpolitym~1    =          -9
                   newpolitym~q    =          81

    3._at        : newpolitym~1    =          -8
                   newpolitym~q    =          64

    4._at        : newpolitym~1    =          -7
                   newpolitym~q    =          49

    5._at        : newpolitym~1    =          -6
                   newpolitym~q    =          36

    6._at        : newpolitym~1    =          -5
                   newpolitym~q    =          25

    7._at        : newpolitym~1    =          -4
                   newpolitym~q    =          16

    8._at        : newpolitym~1    =          -3
                   newpolitym~q    =           9

    9. at        : newpolitym~1    =          -2
                   newpolitym~q    =           4

    10._at       : newpolitym~1    =          -1
                   newpolitym~q    =           1
```

```
11._at       : newpolitym~1    =           0
               newpolitym~q    =           0

12._at       : newpolitym~1    =           1
               newpolitym~q    =           1

13._at       : newpolitym~1    =           2
               newpolitym~q    =           4

14._at       : newpolitym~1    =           3
               newpolitym~q    =           9

15._at       : newpolitym~1    =           4
               newpolitym~q    =          16

16._at       : newpolitym~1    =           5
               newpolitym~q    =          25

17._at       : newpolitym~1    =           6
               newpolitym~q    =          36

18._at       : newpolitym~1    =           7
               newpolitym~q    =          49

19._at       : newpolitym~1    =           8
               newpolitym~q    =          64

20._at       : newpolitym~1    =           9
               newpolitym~q    =          81

21._at       : newpolitym~1    =          10
               newpolitym~q    =         100

------------------------------------------------------------------------------
             |     Margin   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         _at |
          1  |   .3813316   .1330983     2.87   0.004     .1204355    .6422278
          2  |   .3817987   .1031027     3.70   0.000     .1797052    .5838922
          3  |   .3787138   .0797977     4.75   0.000      .222307    .5351206
          4  |   .3720929   .0650555     5.72   0.000     .2445852    .4996005
          5  |   .3620031   .0595982     6.07   0.000     .2451926    .4788137
          6  |   .3485684   .0610181     5.71   0.000     .2289744    .4681623
          7  |   .3319787   .0651376     5.10   0.000      .204309    .4596483
          8  |   .3125028   .0687977     4.54   0.000     .1776576    .4473481
          9  |   .2904998   .0704101     4.13   0.000     .1524928    .4285068
         10  |   .2664268   .0694645     3.84   0.000     .1302725     .402581
         11  |    .240838   .0661419     3.64   0.000     .1111965    .3704795
         12  |   .2143719   .0611132     3.51   0.000     .0945876    .3341561
         13  |   .1877232   .0553908     3.39   0.001     .0791564     .29629
         14  |   .1616008   .0501121     3.22   0.001     .0633814    .2598202
         15  |    .136676   .0461792     2.96   0.003      .046166    .2271861
         16  |   .1135298   .0438508     2.59   0.010     .0275835    .1994762
         17  |   .0926079   .0426456     2.17   0.030     .0090236    .1761922
         18  |   .0741934   .0417248     1.78   0.075    -.0075864    .1559732
         19  |   .0584007   .0403809     1.45   0.148    -.0207459    .1375472
         20  |   .0451904   .0382631     1.18   0.238     -.029806    .1201868
         21  |   .0343999   .0353512     0.97   0.331    -.0348901    .1036898
------------------------------------------------------------------------------

114 . * Outcomes for all urban episodes
115 . mi estimate, post dots eform saving(miest, replace): logit success newpolitymin1 newpolitymin1sq  if startyear>1
    > 899 & urbandum==1

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        165
                                                    Average RVI       =     0.0373
                                                    Largest FMI       =     0.0803
    DF adjustment:   Large sample                   DF:     min       =   2,991.85
                                                            avg       =   7,913.43
                                                            max       =  12,285.05
    Model F test:       Equal FMI                   F(   2,11240.3)   =       5.27
    Within VCE type:          OIM                   Prob > F          =     0.0052

    ------------------------------------------------------------------------------
            success |      exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    ----------------+-------------------------------------------------------------
      newpolitymin1 |    .9096843   .0304155    -2.83   0.005     .8519743    .9713034
    newpolitymin1sq |    .9828808   .0065665    -2.58   0.010     .9700894    .9958408
              _cons |    1.427177   .3876102     1.31   0.190     .8380605    2.430415
    ------------------------------------------------------------------------------

116 . mimrgns, at(newpolitymin1=-10 newpolitymin1sq=100) at(newpolitymin1=-9 newpolitymin1sq=81) at(newpolitymin1=-8 n
    > ewpolitymin1sq=64) at(newpolitymin1=-7 newpolitymin1sq=49) at(newpolitymin1=-6 newpolitymin1sq=36) at(newpolitym
    > in1=-5 newpolitymin1sq=25) at(newpolitymin1=-4 newpolitymin1sq=16) at(newpolitymin1=-3 newpolitymin1sq=9) at(new
    > politymin1=-2 newpolitymin1sq=4) at(newpolitymin1=-1 newpolitymin1sq=1) at(newpolitymin1=0 newpolitymin1sq=0) at
    > (newpolitymin1=1 newpolitymin1sq=1) at(newpolitymin1=2 newpolitymin1sq=4) at(newpolitymin1=3 newpolitymin1sq=9)
    > at(newpolitymin1=4 newpolitymin1sq=16) at(newpolitymin1=5 newpolitymin1sq=25) at(newpolitymin1=6 newpolitymin1sq
    > =36) at(newpolitymin1=7 newpolitymin1sq=49) at(newpolitymin1=8 newpolitymin1sq=64) at(newpolitymin1=9 newpolitym
    > in1sq=81) at(newpolitymin1=10 newpolitymin1sq=100) predict(pr)
```

```
Multiple-imputation estimates                   Imputations       =         20
Adjusted predictions                            Number of obs     =        165
                                                Average RVI       =     0.0147
                                                Largest FMI       =     0.0816
DF adjustment:   Large sample                   DF:     min       =   2,895.37
                                                        avg       =  47,249.71
Within VCE type: Delta-method                           max       = 364,467.23

Expression   : Pr(success), predict(pr)

1._at        : newpolitym~1    =         -10
               newpolitym~q    =         100

2._at        : newpolitym~1    =          -9
               newpolitym~q    =          81

3._at        : newpolitym~1    =          -8
               newpolitym~q    =          64

4._at        : newpolitym~1    =          -7
               newpolitym~q    =          49

5._at        : newpolitym~1    =          -6
               newpolitym~q    =          36

6._at        : newpolitym~1    =          -5
               newpolitym~q    =          25

7._at        : newpolitym~1    =          -4
               newpolitym~q    =          16

8._at        : newpolitym~1    =          -3
               newpolitym~q    =           9

9._at        : newpolitym~1    =          -2
               newpolitym~q    =           4

10._at       : newpolitym~1    =          -1
               newpolitym~q    =           1

11._at       : newpolitym~1    =           0
               newpolitym~q    =           0

12._at       : newpolitym~1    =           1
               newpolitym~q    =           1

13._at       : newpolitym~1    =           2
               newpolitym~q    =           4

14._at       : newpolitym~1    =           3
               newpolitym~q    =           9

15._at       : newpolitym~1    =           4
               newpolitym~q    =          16

16._at       : newpolitym~1    =           5
               newpolitym~q    =          25

17._at       : newpolitym~1    =           6
               newpolitym~q    =          36

18._at       : newpolitym~1    =           7
               newpolitym~q    =          49

19._at       : newpolitym~1    =           8
               newpolitym~q    =          64

20._at       : newpolitym~1    =           9
               newpolitym~q    =          81

21._at       : newpolitym~1    =          10
               newpolitym~q    =         100

------------------------------------------------------------------------------
             |     Margin   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         _at |
          1  |   .3955926   .1008154     3.92   0.000       .19798    .5932053
          2  |   .4524112    .080954     5.59   0.000     .2937372    .6110853
          3  |   .5019599   .0638528     7.86   0.000     .3768093    .6271106
          4  |     .54294   .0528517    10.27   0.000     .4393522    .6465278
          5  |    .574925   .0490879    11.71   0.000     .4787131     .671137
          6  |   .5980103   .0506646    11.80   0.000     .4987037    .6973168
          7  |   .6124991   .0545711    11.22   0.000       .50553    .7194682
          8  |   .6186822   .0587648    10.53   0.000     .5034895    .7338749
          9  |   .6167091   .0622705     9.90   0.000     .4946438    .7387744
         10  |   .6065368   .0646634     9.38   0.000     .4797827    .7332909
         11  |   .5879437   .0657562     8.94   0.000     .4590511    .7168363
         12  |   .5606134   .0655386     8.55   0.000     .4321519    .6890749
         13  |   .5243009   .0643071     8.15   0.000     .3982573    .6503446
         14  |   .4790958   .0628935     7.62   0.000     .3558252    .6023664
         15  |   .4257638   .0626759     6.79   0.000     .3029199    .5486077
         16  |   .3660804   .0647999     5.65   0.000     .2390709    .4930898
         17  |   .3029784   .0688008     4.40   0.000     .1681188     .437838
         18  |   .2403018   .0723604     3.32   0.001     .0984517     .382152
         19  |   .1821001   .0728133     2.50   0.012     .0393487    .3248515
         20  |   .1316928   .0687688     1.92   0.056    -.0031398    .2665254
         21  |   .0909457   .0606169     1.50   0.134    -.0279109    .2098022
------------------------------------------------------------------------------
```

```
117 . * Outcomes for all urban civic episodes
118 . mi estimate, post dots eform saving(miest, replace): logit success newpolitymin1 newpolitymin1sq  if startyear>1
    > 899 & urbancivic==1

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =         54
                                                    Average RVI       =     0.0204
                                                    Largest FMI       =     0.0424
    DF adjustment:   Large sample                   DF:     min       =  10,666.09
                                                            avg       =  39,656.02
                                                            max       =  96,974.46
    Model F test:       Equal FMI                   F(   2,38595.4)   =       2.39
    Within VCE type:          OIM                   Prob > F          =     0.0920

    ------------------------------------------------------------------------------
            success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    ----------------+-------------------------------------------------------------
      newpolitymin1 |   .9403654   .0516946    -1.12   0.263     .8443122    1.047346
    newpolitymin1sq |   .9680189   .0155061    -2.03   0.042     .9380962    .9988961
              _cons |   4.800807   3.371747     2.23   0.026     1.211788    19.01962
    ------------------------------------------------------------------------------

119 . mimrgns, at(newpolitymin1=-10 newpolitymin1sq=100) at(newpolitymin1=-9 newpolitymin1sq=81) at(newpolitymin1=-8 n
    > ewpolitymin1sq=64) at(newpolitymin1=-7 newpolitymin1sq=49) at(newpolitymin1=-6 newpolitymin1sq=36) at(newpolitym
    > in1=-5 newpolitymin1sq=25) at(newpolitymin1=-4 newpolitymin1sq=16) at(newpolitymin1=-3 newpolitymin1sq=9) at(new
    > politymin1=-2 newpolitymin1sq=4) at(newpolitymin1=-1 newpolitymin1sq=1) at(newpolitymin1=0 newpolitymin1sq=0) at
    > (newpolitymin1=1 newpolitymin1sq=1) at(newpolitymin1=2 newpolitymin1sq=4) at(newpolitymin1=3 newpolitymin1sq=9)
    > at(newpolitymin1=4 newpolitymin1sq=16) at(newpolitymin1=5 newpolitymin1sq=25) at(newpolitymin1=6 newpolitymin1sq
    > =36) at(newpolitymin1=7 newpolitymin1sq=49) at(newpolitymin1=8 newpolitymin1sq=64) at(newpolitymin1=9 newpolitym
    > in1sq=81) at(newpolitymin1=10 newpolitymin1sq=100) predict(pr)

    Multiple-imputation estimates                   Imputations       =         20
    Adjusted predictions                            Number of obs     =         54
                                                    Average RVI       =     0.0084
                                                    Largest FMI       =     0.0455
    DF adjustment:   Large sample                   DF:     min       =   9,267.94
                                                            avg       =  63,207.08
    Within VCE type: Delta-method                           max       = 337,634.41

    Expression   : Pr(success), predict(pr)

    1._at        : newpolitym~1    =         -10
                   newpolitym~q    =         100

    2._at        : newpolitym~1    =          -9
                   newpolitym~q    =          81

    3._at        : newpolitym~1    =          -8
                   newpolitym~q    =          64

    4._at        : newpolitym~1    =          -7
                   newpolitym~q    =          49

    5._at        : newpolitym~1    =          -6
                   newpolitym~q    =          36

    6._at        : newpolitym~1    =          -5
                   newpolitym~q    =          25

    7. at        : newpolitym~1    =          -4
                   newpolitym~q    =          16

    8._at        : newpolitym~1    =          -3
                   newpolitym~q    =           9

    9._at        : newpolitym~1    =          -2
                   newpolitym~q    =           4

    10._at       : newpolitym~1    =          -1
                   newpolitym~q    =           1

    11._at       : newpolitym~1    =           0
                   newpolitym~q    =           0

    12._at       : newpolitym~1    =           1
                   newpolitym~q    =           1

    13._at       : newpolitym~1    =           2
                   newpolitym~q    =           4

    14._at       : newpolitym~1    =           3
                   newpolitym~q    =           9

    15._at       : newpolitym~1    =           4
                   newpolitym~q    =          16

    16._at       : newpolitym~1    =           5
                   newpolitym~q    =          25

    17._at       : newpolitym~1    =           6
                   newpolitym~q    =          36

    18. at       : newpolitym~1    =           7
                   newpolitym~q    =          49

    19._at       : newpolitym~1    =           8
                   newpolitym~q    =          64
```

```
20._at       : newpolitym~1    =           9
               newpolitym~q    =          81

21._at       : newpolitym~1    =          10
               newpolitym~q    =         100
```

	Margin	Std. Err.	t	P>|t|	[95% Conf.	Interval]
_at						
1	.2573478	.1930996	1.33	0.183	-.1211489	.6358445
2	.3753981	.1734161	2.16	0.030	.0354931	.7153031
3	.4951107	.1304335	3.80	0.000	.2394609	.7507606
4	.6002278	.0914979	6.56	0.000	.4208946	.7795609
5	.682936	.0760282	8.98	0.000	.5339216	.8319504
6	.7431814	.0781919	9.50	0.000	.5899197	.8964432
7	.7845389	.0840286	9.34	0.000	.6198303	.9492476
8	.811054	.0887675	9.14	0.000	.6370524	.9850557
9	.825868	.0924867	8.93	0.000	.6445742	1.007162
10	.8308778	.0961023	8.65	0.000	.6424962	1.019259
11	.8267504	.1003026	8.24	0.000	.6301359	1.023365
12	.8129621	.105376	7.71	0.000	.6064048	1.019519
13	.787771	.1112024	7.08	0.000	.5697968	1.005745
14	.7481933	.1173469	6.38	0.000	.5181806	.9782061
15	.6902682	.1235721	5.59	0.000	.448061	.9324753
16	.6102373	.1311066	4.65	0.000	.3532691	.8672056
17	.50743	.1428208	3.55	0.000	.227505	.7873551
18	.3884409	.1570892	2.47	0.013	.0805498	.6963319
19	.2687229	.1617402	1.66	0.097	-.0482876	.5857334
20	.1665884	.1454855	1.15	0.252	-.1185685	.4517452
21	.0929212	.1122044	0.83	0.408	-.1270087	.3128511

```
120 . * Outcomes for all social revolutionary episodes
121 . mi estimate, post dots eform saving(miest, replace): logit success newpolitymin1 newpolitymin1sq  if startyear>1
    > 899 & leftist==1

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =         67
                                                    Average RVI       =     0.1108
                                                    Largest FMI       =     0.1807
    DF adjustment:   Large sample                   DF:     min       =     600.02
                                                            avg       =   1,040.34
                                                            max       =   1,352.27
    Model F test:       Equal FMI                   F(   2, 1620.7)   =       5.54
    Within VCE type:          OIM                   Prob > F          =     0.0040
```

success	exp(b)	Std. Err.	t	P>|t|	[95% Conf.	Interval]
newpolitymin1	.803443	.0662225	-2.66	0.008	.6834763	.9444669
newpolitymin1sq	1.007505	.0142715	0.53	0.598	.9798633	1.035927
_cons	.1323924	.0850071	-3.15	0.002	.037569	.4665479

```
122 . mimrgns, at(newpolitymin1=-10 newpolitymin1sq=100) at(newpolitymin1=-9 newpolitymin1sq=81) at(newpolitymin1=-8 n
    > ewpolitymin1sq=64) at(newpolitymin1=-7 newpolitymin1sq=49) at(newpolitymin1=-6 newpolitymin1sq=36) at(newpolitym
    > in1=-5 newpolitymin1sq=25) at(newpolitymin1=-4 newpolitymin1sq=16) at(newpolitymin1=-3 newpolitymin1sq=9) at(new
    > politymin1=-2 newpolitymin1sq=4) at(newpolitymin1=-1 newpolitymin1sq=1) at(newpolitymin1=0 newpolitymin1sq=0) at
    > (newpolitymin1=1 newpolitymin1sq=1) at(newpolitymin1=2 newpolitymin1sq=4) at(newpolitymin1=3 newpolitymin1sq=9)
    > at(newpolitymin1=4 newpolitymin1sq=16) at(newpolitymin1=5 newpolitymin1sq=25) at(newpolitymin1=6 newpolitymin1sq
    > =36) at(newpolitymin1=7 newpolitymin1sq=49) at(newpolitymin1=8 newpolitymin1sq=64) at(newpolitymin1=9 newpolitym
    > in1sq=81) at(newpolitymin1=10 newpolitymin1sq=100) predict(pr)

    Multiple-imputation estimates                   Imputations       =         20
    Adjusted predictions                            Number of obs     =         67
                                                    Average RVI       =     0.0668
                                                    Largest FMI       =     0.1926
    DF adjustment:   Large sample                   DF:     min       =     528.71
                                                            avg       =   5,382.13
    Within VCE type: Delta-method                           max       =  47,416.52

    Expression   : Pr(success), predict(pr)

    1._at        : newpolitym~1    =         -10
                   newpolitym~q    =         100

    2._at        : newpolitym~1    =          -9
                   newpolitym~q    =          81

    3._at        : newpolitym~1    =          -8
                   newpolitym~q    =          64

    4._at        : newpolitym~1    =          -7
                   newpolitym~q    =          49

    5._at        : newpolitym~1    =          -6
                   newpolitym~q    =          36

    6._at        : newpolitym~1    =          -5
                   newpolitym~q    =          25

    7. at        : newpolitym~1    =          -4
                   newpolitym~q    =          16

    8._at        : newpolitym~1    =          -3
                   newpolitym~q    =           9
```

```
9._at        : newpolitym~1    =          -2
               newpolitym~q    =           4

10._at       : newpolitym~1    =          -1
               newpolitym~q    =           1

11._at       : newpolitym~1    =           0
               newpolitym~q    =           0

12._at       : newpolitym~1    =           1
               newpolitym~q    =           1

13._at       : newpolitym~1    =           2
               newpolitym~q    =           4

14._at       : newpolitym~1    =           3
               newpolitym~q    =           9

15._at       : newpolitym~1    =           4
               newpolitym~q    =          16

16._at       : newpolitym~1    =           5
               newpolitym~q    =          25

17._at       : newpolitym~1    =           6
               newpolitym~q    =          36

18._at       : newpolitym~1    =           7
               newpolitym~q    =          49

19._at       : newpolitym~1    =           8
               newpolitym~q    =          64

20._at       : newpolitym~1    =           9
               newpolitym~q    =          81

21._at       : newpolitym~1    =          10
               newpolitym~q    =         100

------------------------------------------------------------------------------
             |     Margin   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         _at |
          1  |    .711636   .1579815     4.50   0.000     .4018379    1.021434
          2  |   .6342969   .1363568     4.65   0.000     .3669794    .9016145
          3  |   .5515898   .1142828     4.83   0.000     .3275896      .77559
          4  |   .4691497   .1013166     4.63   0.000     .2705677    .6677316
          5  |   .3920384   .0993673     3.95   0.000     .1972473    .5868295
          6  |   .3235327   .1012632     3.19   0.001     .1249632    .5221021
          7  |   .2649639   .1006652     2.63   0.009     .0675182    .4624097
          8  |   .2162288   .0957686     2.26   0.024     .0283643    .4040934
          9  |   .1764219   .0873803     2.02   0.044     .0050067    .3478372
         10  |   .1443137   .0770809     1.87   0.061    -.0068935     .295521
         11  |   .1186364   .0663746     1.79   0.074    -.0115615    .2488343
         12  |   .0982267   .0564203     1.74   0.082    -.0124366      .20889
         13  |   .0820835   .0480144     1.71   0.088    -.0120839    .1762509
         14  |   .0693789   .0416529     1.67   0.096    -.0123058    .1510637
         15  |    .059448   .0375848     1.58   0.114    -.0142569    .1331528
         16  |   .0517704     .03584     1.44   0.149    -.0185175    .1220582
         17  |   .0459515   .0362954     1.27   0.206    -.0252435    .1171465
         18  |   .0417062   .0388388     1.07   0.283    -.0345032    .1179156
         19  |   .0388479   .0435819     0.89   0.373    -.0467044    .1244003
         20  |   .0372838   .0510372     0.73   0.465    -.0629458    .1375133
         21  |   .0370164   .0622488     0.59   0.552    -.0852689    .1593017
------------------------------------------------------------------------------

123 .
124 . * ==========================
125 . * Results on regime types
126 . * ==========================
127 . * Regime-types
128 . * Use complete-case sample, as data available for all cases
129 . clear

130 . use revolutionaryeps.dta

131 . * Test on regime-types, excluding colonies
132 . logit success ib(#5).new2incumbgovtype if startyear>1899 & colony==0

    Iteration 0:   log likelihood = -191.03364
    Iteration 1:   log likelihood = -184.43352
    Iteration 2:   log likelihood =  -184.3469
    Iteration 3:   log likelihood = -184.34687
    Iteration 4:   log likelihood = -184.34687

    Logistic regression                             Number of obs     =        288
                                                    LR chi2(5)        =      13.37
                                                    Prob > chi2       =     0.0201
    Log likelihood = -184.34687                     Pseudo R2         =     0.0350
```

```
------------------------------------------------------------------------------
             success |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
---------------------+--------------------------------------------------------------------
  new2incumbgovtype |
           Monarchy  |   1.544899   .5482657     2.82   0.005     .4703184     2.61948
       Military govt  |   1.560648    .518698     3.01   0.003     .5440183    2.577277
One-party auth regime  |   1.294357   .4852758     2.67   0.008     .3432337     2.24548
   Competitive author  |   1.104882   .4706873     2.35   0.019     .1823518    2.027412
               Other  |   .8556661   .5960303     1.44   0.151    -.3125318    2.023864
                      |
                _cons |  -1.609438   .4140393    -3.89   0.000     -2.42094   -.7979357
------------------------------------------------------------------------------
```

```
133 . estat classification

Logistic model for success

              -------- True --------
Classified |         D            ~D  |      Total
-----------+--------------------------+-----------
     +     |         0             0  |          0
     -     |       109           179  |        288
-----------+--------------------------+-----------
   Total   |       109           179  |        288

Classified + if predicted Pr(D) >= .5
True D defined as success != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)    0.00%
Specificity                     Pr( -|~D)  100.00%
Positive predictive value       Pr( D| +)       .%
Negative predictive value       Pr(~D| -)   62.15%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)    0.00%
False - rate for true D         Pr( -| D)  100.00%
False + rate for classified +   Pr(~D| +)       .%
False - rate for classified -   Pr( D| -)   37.85%
--------------------------------------------------
Correctly classified                        62.15%
--------------------------------------------------
```

```
134 . margins i.new2incumbgovtype

Adjusted predictions                            Number of obs     =        288
Model VCE    : OIM

Expression   : Pr(success), predict()

------------------------------------------------------------------------------
                     |            Delta-method
                     |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
---------------------+--------------------------------------------------------------------
  new2incumbgovtype |
           Monarchy  |    .483871   .0897559     5.39   0.000     .3079526    .6597893
       Military govt  |   .4878049   .0780637     6.25   0.000     .3348029    .6408068
One-party auth regime  |    .421875   .0617323     6.83   0.000     .3008818    .5428682
   Competitive author  |   .3764706   .0525514     7.16   0.000     .2734717    .4794695
           Democracy  |   .1666667   .0575055     2.90   0.004      .053958    .2793753
               Other  |        .32   .0932952     3.43   0.001     .1371447    .5028553
------------------------------------------------------------------------------
```

```
135 . * Magnification of threat to all regime types if episode occurs in cities
136 . logit success i.urbandum##ib(#5).new2incumbgovtype if startyear>1899 & colony==0, or nolog

Logistic regression                             Number of obs     =        288
                                                LR chi2(11)       =      30.65
                                                Prob > chi2       =     0.0013
Log likelihood = -175.70934                     Pseudo R2         =     0.0802

------------------------------------------------------------------------------
                     success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-----------------------------+------------------------------------------------------------------
                   urbandum |
                       yes  |          8   9.062744     1.84   0.066     .8685849    73.68307
                            |
          new2incumbgovtype |
                   Monarchy  |        7.5   9.211067     1.64   0.101     .6755612    83.26411
               Military govt  |   10.90909   12.47447     2.09   0.037     1.159967    102.5962
    One-party auth regime  |         10    11.1243     2.07   0.038     1.130051    88.49158
       Competitive author  |   6.428571   7.032826     1.70   0.089     .7531892    54.86872
                     Other  |          6    7.30753     1.47   0.141     .5513843    65.29022
                            |
urbandum#new2incumbgovtype |
             yes#Monarchy  |         .5    .698212    -0.50   0.620     .0323841     7.71984
         yes#Military govt  |   .3208333   .4198307    -0.87   0.385     .0246847    4.169947
yes#One-party auth regime  |   .2261905   .2835137    -1.19   0.236     .0193889     2.63873
   yes#Competitive author  |   .3577778   .4401738    -0.84   0.403     .0320908    3.988837
                yes#Other  |    .297619   .4271143    -0.84   0.398     .0178689    4.957053
                            |
                     _cons |        .05   .0512348    -2.92   0.003     .0067104    .3725564
------------------------------------------------------------------------------
```

```
137 . margins urbandum#new2incumbgovtype

    Adjusted predictions                            Number of obs     =        288
    Model VCE    : OIM

    Expression   : Pr(success), predict()

    ------------------------------------------------------------------------------
                                 |            Delta-method
                                 |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -----------------------------+------------------------------------------------------------------
    urbandum#new2incumbgovtype |
                  no#Monarchy  |   .2727273   .1342816     2.03   0.042     .0095401    .5359144
              no#Military govt  |   .3529412    .115904     3.05   0.002     .1257734    .5801089
     no#One-party auth regime  |   .3333333    .096225     3.46   0.001     .1447357     .521931
        no#Competitive author  |   .2432432   .0705339     3.45   0.001     .1049994    .3814871
                no#Democracy  |    .047619   .0464714     1.02   0.306    -.0434633    .1387014
                    no#Other  |   .2307692   .1168545     1.97   0.048     .0017385    .4597999
                 yes#Monarchy  |         .6   .1095445     5.48   0.000     .3852967    .8147033
             yes#Military govt  |   .5833333   .1006346     5.80   0.000     .3860932    .7805734
    yes#One-party auth regime  |       .475   .0789581     6.02   0.000      .320245     .629755
       yes#Competitive author  |   .4791667   .0721061     6.65   0.000     .3378413     .620492
                yes#Democracy  |   .2857143   .0985808     2.90   0.004     .0924995    .4789291
                    yes#Other  |   .4166667   .1423188     2.93   0.003      .137727    .6956063
    ------------------------------------------------------------------------------

138 .
139 . *  Yrs leader in power
140 . * Use imputed sample on all episodes, excluding colonies
141 . clear

142 . use revolutionaryepsmireg.dta

143 . set seed 1234

144 . * Estimate effect of yrs leader in power on success
145 . mi estimate, post dots eform saving(miest, replace):  logit success newincumbpowerdur if startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        288
                                                    Average RVI       =     0.0016
                                                    Largest FMI       =     0.0029
    DF adjustment:   Large sample                   DF:     min       = 2188529.58
                                                            avg       =   1.87e+07
                                                            max       =   3.53e+07
    Model F test:       Equal FMI                   F(   1, 2.2e+06)  =      13.68
    Within VCE type:          OIM                   Prob > F          =     0.0002

    ------------------------------------------------------------------------------
              success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    ------------------+-----------------------------------------------------------------
    newincumbpowerdur |   1.054869   .0152353     3.70   0.000     1.025427    1.085156
                _cons |   .4011127   .0675773    -5.42   0.000     .2883107    .5580488
    ------------------------------------------------------------------------------

146 . mimrgns, atmeans at(newincumbpowerdur=(0 5 10 15 20 25 30 35)) predict(pr)

    Multiple-imputation estimates                   Imputations       =         20
    Adjusted predictions                            Number of obs     =        288
                                                    Average RVI       =     0.0012
                                                    Largest FMI       =     0.0031
    DF adjustment:   Large sample                   DF:     min       = 1922476.52
                                                            avg       =   3.04e+09
    Within VCE type: Delta-method                           max       =   2.42e+10

    Expression   : Pr(success), predict(pr)

    1._at        : newincumbp~r    =           0

    2._at        : newincumbp~r    =           5

    3._at        : newincumbp~r    =          10

    4._at        : newincumbp~r    =          15

    5._at        : newincumbp~r    =          20

    6._at        : newincumbp~r    =          25

    7._at        : newincumbp~r    =          30

    8._at        : newincumbp~r    =          35

    ------------------------------------------------------------------------------
                 |     Margin   Std. Err.      t    P>|t|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
             _at |
              1  |   .2862824   .0344235     8.32   0.000     .2188135    .3537512
              2  |   .3437942   .0296294    11.60   0.000     .2857216    .4018667
              3  |   .4062839   .0310266    13.09   0.000     .3454729    .4670949
              4  |   .4719626   .0403918    11.68   0.000      .392796    .5511291
              5  |    .538625   .0535425    10.06   0.000     .4336836    .6435663
              6  |   .6039313   .0663744     9.10   0.000     .4738399    .7340227
              7  |    .665727   .0764435     8.71   0.000     .5159003    .8155537
              8  |   .7223105   .0825618     8.75   0.000     .5604922    .8841289
    ------------------------------------------------------------------------------
```

```
147 .
148 . *  Personalist regimes using Geddes et al. classification (since 1945 only, complete case sample)
149 . * Use complete case sample
150 . clear

151 . use revolutionaryeps.dta

152 . *  Analyze impact of personalist regime on success
153 . logit success  gedincpersonal if startyear>1945, or nolog

Logistic regression                             Number of obs     =        139
                                                LR chi2(1)        =       4.77
                                                Prob > chi2       =     0.0290
Log likelihood = -93.670714                     Pseudo R2         =     0.0248

------------------------------------------------------------------------------
     success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
gedincpersonal |   2.302439   .8907575     2.16   0.031     1.078646    4.914703
       _cons |   .6949153   .1412908    -1.79   0.073     .4665141     1.03514
------------------------------------------------------------------------------

154 . estat classification

Logistic model for success

              -------- True --------
Classified |         D            ~D  |      Total
-----------+--------------------------+-----------
     +     |        24            15  |         39
     -     |        41            59  |        100
-----------+--------------------------+-----------
   Total   |        65            74  |        139

Classified + if predicted Pr(D) >= .5
True D defined as success != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)   36.92%
Specificity                     Pr( -|~D)   79.73%
Positive predictive value       Pr( D| +)   61.54%
Negative predictive value       Pr(~D| -)   59.00%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)   20.27%
False - rate for true D         Pr( -| D)   63.08%
False + rate for classified +   Pr(~D| +)   38.46%
False - rate for classified -   Pr( D| -)   41.00%
--------------------------------------------------
Correctly classified                        59.71%
--------------------------------------------------

155 . margins, at(gedincpersonal=(0 1))

Adjusted predictions                            Number of obs     =        139
Model VCE    : OIM

Expression   : Pr(success), predict()

1._at        : gedincpers~l    =           0

2._at        : gedincpers~l    =           1

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         _at |
          1  |        .41   .0491833     8.34   0.000     .3136024    .5063976
          2  |   .6153846    .077903     7.90   0.000     .4626975    .7680717
------------------------------------------------------------------------------

156 . * T-test of yrs incumbent in power for regimes experiencing episode (personalist vs. other regimes)
157 . ttest incumbpowerdur, by(gedincpersonal)

Two-sample t test with equal variances
------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       0 |      99    7.575758    .8541423    8.498608     5.88074    9.270775
       1 |      39    11.23077    1.560071     9.74264    8.072571    14.38897
---------+--------------------------------------------------------------------
combined |     138    8.608696    .7648135    8.984524     7.09633    10.12106
---------+--------------------------------------------------------------------
    diff |           -3.655012    1.675751               -6.968912   -.3411115
------------------------------------------------------------------------------
    diff = mean(0) - mean(1)                                      t =  -2.1811
Ho: diff = 0                                     degrees of freedom =      136

    Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
 Pr(T < t) = 0.0154         Pr(|T| > |t|) = 0.0309          Pr(T > t) = 0.9846
```

```
158 .
159 . * ====================================================
160 . * Results on age of incumbent leader in autocratic regimes
161 . * ====================================================
162 . * Use imputed sample on all episodes, excluding colonies
163 . clear

164 . use revolutionaryepsmireg.dta

165 . set seed 1234

166 . mi estimate, post dots eform saving(miest, replace): logit success newpolitymin1 newpolitymin1sq newincumbage if
    >  startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        288
                                                    Average RVI       =     0.0308
                                                    Largest FMI       =     0.0833
    DF adjustment:   Large sample                   DF:     min       =   2,784.48
                                                            avg       = 412,629.90
                                                            max       = 830,351.91
    Model F test:       Equal FMI                   F(   3,32538.1)   =       7.33
    Within VCE type:          OIM                   Prob > F          =     0.0001

    ------------------------------------------------------------------------------
           success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    ---------------+--------------------------------------------------------------
      newpolitymin1 |   .8898401   .0242242    -4.29   0.000     .8436004    .9386144
    newpolitymin1sq |   .9853736   .0052156    -2.78   0.005     .9751996    .9956537
       newincumbage |   1.023701   .0112813     2.13   0.034     1.001827    1.046052
              _cons |   .2248488   .1417501    -2.37   0.018     .0653539    .7735873
    ------------------------------------------------------------------------------

167 . mimrgns, at(newpolitymin1=-6 newpolitymin1sq=36 newincumbage=40) predict(pr)

    Multiple-imputation estimates                   Imputations       =         20
    Adjusted predictions                            Number of obs     =        288
                                                    Average RVI       =     0.0057
                                                    Largest FMI       =     0.0057
    DF adjustment:   Large sample                   DF:     min       = 589,495.80
                                                            avg       = 589,495.80
    Within VCE type: Delta-method                           max       = 589,495.80

    Expression   : Pr(success), predict(pr)
    at           : newpolitym~1    =          -6
                   newpolitym~q    =          36
                   newincumbage    =          40

    ------------------------------------------------------------------------------
                 |     Margin   Std. Err.      t    P>|t|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
            cons |   .4048059   .0542504     7.46   0.000     .2984767     .511135
    ------------------------------------------------------------------------------

168 . mimrgns, at(newpolitymin1=-6 newpolitymin1sq=36 newincumbage=75) predict(pr)

    Multiple-imputation estimates                   Imputations       =         20
    Adjusted predictions                            Number of obs     =        288
                                                    Average RVI       =     0.0115
                                                    Largest FMI       =     0.0114
    DF adjustment:   Large sample                   DF:     min       = 147,349.03
                                                            avg       = 147,349.03
    Within VCE type: Delta-method                           max       = 147,349.03

    Expression   : Pr(success), predict(pr)
    at           : newpolitym~1    =          -6
                   newpolitym~q    =          36
                   newincumbage    =          75

    ------------------------------------------------------------------------------
                 |     Margin   Std. Err.      t    P>|t|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
           _cons |   .6068936   .0650261     9.33   0.000     .4794437    .7343435
    ------------------------------------------------------------------------------

169 . mimrgns, at(newpolitymin1=6 newpolitymin1sq=36 newincumbage=75) predict (pr)

    Multiple-imputation estimates                   Imputations       =         20
    Adjusted predictions                            Number of obs     =        288
                                                    Average RVI       =     0.0189
                                                    Largest FMI       =     0.0186
    DF adjustment:   Large sample                   DF:     min       =  55,147.25
                                                            avg       =  55,147.25
    Within VCE type: Delta-method                           max       =  55,147.25

    Expression   : Pr(success), predict(pr)
    at           : newpolitym~1    =           6
                   newpolitym~q    =          36
                   newincumbage    =          75

    ------------------------------------------------------------------------------
                 |     Margin   Std. Err.      t    P>|t|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
           _cons |   .2757162   .0645434     4.27   0.000     .1492107    .4022218
    ------------------------------------------------------------------------------
```

```
170 . * Controlling for number of years incumbent in office
171 . mi estimate, post dots eform saving(miest, replace): logit success newpolitymin1 newpolitymin1sq newincumbage ne
    > wincumbpowerdur if startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        288
                                                    Average RVI       =     0.0334
                                                    Largest FMI       =     0.1090
    DF adjustment:   Large sample                   DF:     min       =   1,632.73
                                                            avg       = 355,404.80
                                                            max       = 1140137.79
    Model F test:       Equal FMI                   F(   4,43275.1)   =       6.80
    Within VCE type:          OIM                   Prob > F          =     0.0000

    ------------------------------------------------------------------------------
              success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    ------------------+-----------------------------------------------------------
        newpolitymin1 |   .9057748   .0257951    -3.48   0.001     .8565954    .9577777
      newpolitymin1sq |   .9828891   .0054897    -3.09   0.002     .9721803    .9937158
         newincumbage |   1.013947   .0117277     1.20   0.231     .9912197    1.037196
    newincumbpowerdur |    1.04549   .0174759     2.66   0.008     1.011792    1.080311
                _cons |   .3068681   .1961401    -1.85   0.065     .0876779    1.074022
    ------------------------------------------------------------------------------

172 . * Age of leader and yrs incumbent in power only moderately correlated
173 . mi xeq 1: corr newincumbage newincumbpowerdur

    m=1 data:
    -> corr newincumbage newincumbpowerdur
    (obs=288)

                 | newin~ge newinc~r
    -------------+------------------
    newincumbage |   1.0000
    newincumbp~r |   0.2923   1.0000


174 .
175 . * ================================================================
176 . * Results on level of development, oil, military spending per soldier
177 . * ================================================================
178 . mi estimate, post dots eform saving(miest, replace): logit success newpolitymin1 newpolitymin1sq newincumbpowerd
    > ur newgdppcthl newlnoill newmilexpsold10tile civilwar newcivxmilexp if startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        288
                                                    Average RVI       =     0.0798
                                                    Largest FMI       =     0.2120
    DF adjustment:   Large sample                   DF:     min       =     437.43
                                                            avg       =   4,301.25
                                                            max       =  14,659.81
    Model F test:       Equal FMI                   F(   8,22005.8)   =       6.05
    Within VCE type:          OIM                   Prob > F          =     0.0000

    ------------------------------------------------------------------------------
                success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    --------------------+---------------------------------------------------------
          newpolitymin1 |   .8954253   .0284403    -3.48   0.001     .8413614    .9529631
        newpolitymin1sq |   .9784535   .0062559    -3.41   0.001     .9662528    .9908082
      newincumbpowerdur |   1.045536   .0182613     2.55   0.011     1.010346    1.081951
            newgdppcthl |   .8503554   .0665271    -2.07   0.038     .7294369    .9913185
              newlnoill |   .8865447   .0321929    -3.32   0.001     .8256359    .9519469
    newmilexpsold10tile |   1.468702   .1358766     4.15   0.000     1.224627    1.761422
               civilwar |   1.031639   .7203229     0.04   0.964     .2618121    4.065053
          newcivxmilexp |   .7980859   .0971743    -1.85   0.065     .6282326    1.013862
                  _cons |   .3501831    .162551    -2.26   0.024     .1409348     .870106
    ------------------------------------------------------------------------------

179 . mimrgns, atmeans at(newgdppcthl=(1 5 10)) predict(pr)

    Multiple-imputation estimates                   Imputations       =         20
    Adjusted predictions                            Number of obs     =        288
                                                    Average RVI       =     0.0399
                                                    Largest FMI       =     0.0739
    DF adjustment:   Large sample                   DF:     min       =   3,532.77
                                                            avg       =  16,485.70
    Within VCE type: Delta-method                           max       =  41,395.06

    Expression   : Pr(success), predict(pr)

    1._at        : newpolitym~1    =   -1.397049 (mean)
                   newpolitym~q    =    37.89965 (mean)
                   newincumbp~r    =    7.554514 (mean)
                   newgdppcthl     =           1
                   newlnoill       =    3.841717 (mean)
                   newmilexps~e    =    5.531778 (mean)
                   civilwar        =    .4791667 (mean)
                   newcivxmil~p    =    2.524479 (mean)
```

```
2._at        : newpolitym~1    =   -1.397049 (mean)
               newpolitym~q    =    37.89965 (mean)
               newincumbp~r    =    7.554514 (mean)
               newgdppcthl     =           5
               newlnoill       =    3.841717 (mean)
               newmilexps~e    =    5.531778 (mean)
               civilwar        =    .4791667 (mean)
               newcivxmil~p    =    2.524479 (mean)

3._at        : newpolitym~1    =   -1.397049 (mean)
               newpolitym~q    =    37.89965 (mean)
               newincumbp~r    =    7.554514 (mean)
               newgdppcthl     =          10
               newlnoill       =    3.841717 (mean)
               newmilexps~e    =    5.531778 (mean)
               civilwar        =    .4791667 (mean)
               newcivxmil~p    =    2.524479 (mean)

------------------------------------------------------------------------------
             |     Margin   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         _at |
          1  |   .3923862   .0465739     8.43   0.000     .3011003     .483672
          2  |   .2525782    .046382     5.45   0.000     .1616469    .3435095
          3  |   .1315313   .0689317     1.91   0.056    -.0036187    .2666813
------------------------------------------------------------------------------
note: values in at() vary across imputations;
      reported values are mi point estimates.

180 . mimrgns, atmeans at((p10) newlnoill) predict(pr)

Multiple-imputation estimates                   Imputations       =         20
Adjusted predictions                            Number of obs     =        288
                                                Average RVI       =     0.0076
                                                Largest FMI       =     0.0075
DF adjustment:   Large sample                   DF:     min       = 336,597.04
                                                        avg       = 336,597.04
Within VCE type: Delta-method                           max       = 336,597.04

Expression   : Pr(success), predict(pr)
at           : newpolitym~1    =   -1.397049 (mean)
               newpolitym~q    =    37.89965 (mean)
               newincumbp~r    =    7.554514 (mean)
               newgdppcthl     =    2.719166 (mean)
               newlnoill       =           0 (p10)
               newmilexps~e    =    5.531778 (mean)
               civilwar        =    .4791667 (mean)
               newcivxmil~p    =    2.524479 (mean)

------------------------------------------------------------------------------
             |     Margin   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        _cons |   .4370032   .0453864     9.63   0.000     .3480472    .5259591
------------------------------------------------------------------------------
note: values in at() vary across imputations;
      reported values are mi point estimates.

181 . mimrgns, atmeans at((p90) newlnoill) predict(pr)

Multiple-imputation estimates                   Imputations       =         20
Adjusted predictions                            Number of obs     =        288
                                                Average RVI       =     0.0456
                                                Largest FMI       =     0.0438
DF adjustment:   Large sample                   DF:     min       =   9,969.42
                                                        avg       =   9,969.42
Within VCE type: Delta-method                           max       =   9,969.42

Expression   : Pr(success), predict(pr)
at           : newpolitym~1    =   -1.397049 (mean)
               newpolitym~q    =    37.89965 (mean)
               newincumbp~r    =    7.554514 (mean)
               newgdppcthl     =    2.719166 (mean)
               newlnoill       =    10.88438 (p90)
               newmilexps~e    =    5.531778 (mean)
               civilwar        =    .4791667 (mean)
               newcivxmil~p    =    2.524479 (mean)

------------------------------------------------------------------------------
             |     Margin   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        _cons |   .1732543   .0465728     3.72   0.000     .0819622    .2645465
------------------------------------------------------------------------------
note: values in at() vary across imputations;
      reported values are mi point estimates.

182 . * T-tests of GDP per capita/oil and urban location of episodes
183 . mi xeq 1: ttest newgdppcthl if startyear>1899, by(urbandum)

m=1 data:
-> ttest newgdppcthl if startyear>1899, by(urbandum)
```

```
Two-sample t test with equal variances
------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
      no |     123    1.560356    .1453397    1.611895    1.272642    1.848071
     yes |     165    3.569194    .2212025    2.841398    3.132422    4.005966
---------+--------------------------------------------------------------------
combined |     288    2.711253    .1526247    2.590127    2.410847    3.011658
---------+--------------------------------------------------------------------
    diff |           -2.008838    .2853504               -2.570491   -1.447184
------------------------------------------------------------------------------
    diff = mean(no) - mean(yes)                                   t =  -7.0399
Ho: diff = 0                                     degrees of freedom =      286

    Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
 Pr(T < t) = 0.0000         Pr(|T| > |t|) = 0.0000          Pr(T > t) = 1.0000

184 . mi xeq 1: ttest newlnoill if startyear>1899, by(urbandum)

    m=1 data:
    -> ttest newlnoill if startyear>1899, by(urbandum)

    Two-sample t test with equal variances
    ------------------------------------------------------------------------------
    Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
    ---------+--------------------------------------------------------------------
          no |     123    3.328663    .4010346    4.447689    2.534775    4.122551
         yes |     165    4.184929    .3566572    4.581344    3.480697    4.889161
    ---------+--------------------------------------------------------------------
    combined |     288    3.819232    .2673339    4.536807    3.293048    4.345416
    ---------+--------------------------------------------------------------------
        diff |           -.8562655    .5390169               -1.917209    .2046778
    ------------------------------------------------------------------------------
        diff = mean(no) - mean(yes)                                   t =  -1.5886
    Ho: diff = 0                                     degrees of freedom =      286

        Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
     Pr(T < t) = 0.0566         Pr(|T| > |t|) = 0.1133          Pr(T > t) = 0.9434

185 . * Predictions for Haiti in 1946
186 . mimrgns, atmeans at(newgdppcthl=1.046 newlnoill=0) predict(pr)

    Multiple-imputation estimates                   Imputations       =         20
    Adjusted predictions                            Number of obs     =        288
                                                    Average RVI       =     0.0383
                                                    Largest FMI       =     0.0370
    DF adjustment:   Large sample                   DF:     min       =  13,974.78
                                                            avg       =  13,974.78
    Within VCE type: Delta-method                           max       =  13,974.78

    Expression   : Pr(success), predict(pr)
    at           : newpolitym~1    =   -1.397049 (mean)
                   newpolitym~q    =    37.89965 (mean)
                   newincumbp~r    =    7.554514 (mean)
                   newgdppcthl     =       1.046
                   newlnoill       =           0
                   newmilexps~e    =    5.531778 (mean)
                   civilwar        =    .4791667 (mean)
                   newcivxmil~p    =    2.524479 (mean)

    ------------------------------------------------------------------------------
                 |     Margin   Std. Err.      t    P>|t|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
           _cons |   .5044618   .0531498     9.49   0.000     .4002811    .6086424
    ------------------------------------------------------------------------------
    note: values in at() vary across imputations;
          reported values are mi point estimates.

187 . * Predictions for Azerbaijan in 2005
188 . mimrgns, atmeans at(newgdppcthl=4.596682 newlnoill=9.660559) predict(pr)

    Multiple-imputation estimates                   Imputations       =         20
    Adjusted predictions                            Number of obs     =        288
                                                    Average RVI       =     0.0821
                                                    Largest FMI       =     0.0764
    DF adjustment:   Large sample                   DF:     min       =   3,299.78
                                                            avg       =   3,299.78
    Within VCE type: Delta-method                           max       =   3,299.78

    Expression   : Pr(success), predict(pr)
    at           : newpolitym~1    =   -1.397049 (mean)
                   newpolitym~q    =    37.89965 (mean)
                   newincumbp~r    =    7.554514 (mean)
                   newgdppcthl     =    4.596682
                   newlnoill       =    9.660559
                   newmilexps~e    =    5.531778 (mean)
                   civilwar        =    .4791667 (mean)
                   newcivxmil~p    =    2.524479 (mean)

    ------------------------------------------------------------------------------
                 |     Margin   Std. Err.      t    P>|t|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
           _cons |   .1520483   .0414623     3.67   0.000     .0707539    .2333428
    ------------------------------------------------------------------------------
    note: values in at() vary across imputations;
          reported values are mi point estimates.
```

```
189 .
190 . * ================================================================================
191 . * FIGURE 4.5 on interaction between military spending per soldier and civil war
192 . * ================================================================================
193 . * Interaction between military spending per soldier and civil war, controlling for GDP per capital and oil produ
    > ction
194 . mi estimate, post dots eform saving(miest, replace): logit success newpolitymin1 newpolitymin1sq newincumbpowerd
    > ur newgdppcthl newlnoill newmilexpsold10tile civilwar newcivxmilexp if startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        288
                                                    Average RVI       =     0.0798
                                                    Largest FMI       =     0.2120
    DF adjustment:   Large sample                   DF:     min       =     437.43
                                                            avg       =   4,301.25
                                                            max       =  14,659.81
    Model F test:       Equal FMI                   F(   8,22005.8)   =       6.05
    Within VCE type:          OIM                   Prob > F          =     0.0000

    ------------------------------------------------------------------------------
                 success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    ---------------------+--------------------------------------------------------
          newpolitymin1 |   .8954253   .0284403    -3.48   0.001     .8413614    .9529631
        newpolitymin1sq |   .9784535   .0062559    -3.41   0.001     .9662528    .9908082
      newincumbpowerdur |   1.045536   .0182613     2.55   0.011     1.010346    1.081951
            newgdppcthl |   .8503554   .0665271    -2.07   0.038     .7294369    .9913185
              newlnoill |   .8865447   .0321929    -3.32   0.001     .8256359    .9519469
    newmilexpsold10tile |   1.468702   .1358766     4.15   0.000     1.224627    1.761422
              civilwar |   1.031639   .7203229     0.04   0.964     .2618121    4.065053
          newcivxmilexp |   .7980859   .0971743    -1.85   0.065     .6282326    1.013862
                  _cons |   .3501831    .162551    -2.26   0.024     .1409348     .870106
    ------------------------------------------------------------------------------

195 . mimrgns, atmeans at(civilwar=0 newmilexpsold10tile=1 newcivxmilexp=0) at(civilwar=0 newmilexpsold10tile=2 newciv
    > xmilexp=0) at(civilwar=0 newmilexpsold10tile=3 newcivxmilexp=0) at(civilwar=0 newmilexpsold10tile=4 newcivxmilex
    > p=0) at(civilwar=0 newmilexpsold10tile=5 newcivxmilexp=0) at(civilwar=0 newmilexpsold10tile=6 newcivxmilexp=0) a
    > t(civilwar=0 newmilexpsold10tile=7 newcivxmilexp=0) at(civilwar=0 newmilexpsold10tile=8 newcivxmilexp=0) at(civi
    > lwar=0 newmilexpsold10tile=9 newcivxmilexp=0) at(civilwar=0 newmilexpsold10tile=10 newcivxmilexp=0) predict(pr)

    Multiple-imputation estimates                   Imputations       =         20
    Adjusted predictions                            Number of obs     =        288
                                                    Average RVI       =     0.0487
                                                    Largest FMI       =     0.1657
    DF adjustment:   Large sample                   DF:     min       =     712.09
                                                            avg       =   8,115.63
    Within VCE type: Delta-method                           max       =  43,063.99

    Expression   : Pr(success), predict(pr)

    1._at        : newpolitym~1    =   -1.397049 (mean)
                   newpolitym~q    =    37.89965 (mean)
                   newincumbp~r    =    7.554514 (mean)
                   newgdppcthl     =    2.719166 (mean)
                   newlnoill       =    3.841717 (mean)
                   newmilexps~e    =           1
                   civilwar        =           0
                   newcivxmil~p    =           0

    2._at        : newpolitym~1    =   -1.397049 (mean)
                   newpolitym~q    =    37.89965 (mean)
                   newincumbp~r    =    7.554514 (mean)
                   newgdppcthl     =    2.719166 (mean)
                   newlnoill       =    3.841717 (mean)
                   newmilexps~e    =           2
                   civilwar        =           0
                   newcivxmil~p    =           0

    3._at        : newpolitym~1    =   -1.397049 (mean)
                   newpolitym~q    =    37.89965 (mean)
                   newincumbp~r    =    7.554514 (mean)
                   newgdppcthl     =    2.719166 (mean)
                   newlnoill       =    3.841717 (mean)
                   newmilexps~e    =           3
                   civilwar        =           0
                   newcivxmil~p    =           0

    4._at        : newpolitym~1    =   -1.397049 (mean)
                   newpolitym~q    =    37.89965 (mean)
                   newincumbp~r    =    7.554514 (mean)
                   newgdppcthl     =    2.719166 (mean)
                   newlnoill       =    3.841717 (mean)
                   newmilexps~e    =           4
                   civilwar        =           0
                   newcivxmil~p    =           0

    5._at        : newpolitym~1    =   -1.397049 (mean)
                   newpolitym~q    =    37.89965 (mean)
                   newincumbp~r    =    7.554514 (mean)
                   newgdppcthl     =    2.719166 (mean)
                   newlnoill       =    3.841717 (mean)
                   newmilexps~e    =           5
                   civilwar        =           0
                   newcivxmil~p    =           0
```

```
6._at        : newpolitym~1    =   -1.397049 (mean)
               newpolitym~q    =    37.89965 (mean)
               newincumbp~r    =    7.554514 (mean)
               newgdppcthl     =    2.719166 (mean)
               newlnoill       =    3.841717 (mean)
               newmilexps~e    =           6
               civilwar        =           0
               newcivxmil~p    =           0

7._at        : newpolitym~1    =   -1.397049 (mean)
               newpolitym~q    =    37.89965 (mean)
               newincumbp~r    =    7.554514 (mean)
               newgdppcthl     =    2.719166 (mean)
               newlnoill       =    3.841717 (mean)
               newmilexps~e    =           7
               civilwar        =           0
               newcivxmil~p    =           0

8._at        : newpolitym~1    =   -1.397049 (mean)
               newpolitym~q    =    37.89965 (mean)
               newincumbp~r    =    7.554514 (mean)
               newgdppcthl     =    2.719166 (mean)
               newlnoill       =    3.841717 (mean)
               newmilexps~e    =           8
               civilwar        =           0
               newcivxmil~p    =           0

9._at        : newpolitym~1    =   -1.397049 (mean)
               newpolitym~q    =    37.89965 (mean)
               newincumbp~r    =    7.554514 (mean)
               newgdppcthl     =    2.719166 (mean)
               newlnoill       =    3.841717 (mean)
               newmilexps~e    =           9
               civilwar        =           0
               newcivxmil~p    =           0

10._at       : newpolitym~1    =   -1.397049 (mean)
               newpolitym~q    =    37.89965 (mean)
               newincumbp~r    =    7.554514 (mean)
               newgdppcthl     =    2.719166 (mean)
               newlnoill       =    3.841717 (mean)
               newmilexps~e    =          10
               civilwar        =           0
               newcivxmil~p    =           0

------------------------------------------------------------------------------
             |     Margin   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         _at |
          1  |    .131084   .0530867     2.47   0.014     .0268588    .2353092
          2  |   .1805765   .0568158     3.18   0.002     .0690642    .2920888
          3  |   .2438596   .0569773     4.28   0.000     .1320808    .3556384
          4  |   .3210038   .0536972     5.98   0.000     .2157179    .4262898
          5  |   .4096396   .0500621     8.18   0.000     .3115148    .5077644
          6  |   .5047049   .0512214     9.85   0.000     .4043101    .6050998
          7  |   .5993745   .0578842    10.35   0.000     .4858925    .7128565
          8  |   .6869493   .0649337    10.58   0.000     .5595846     .814314
          9  |   .7626675   .0680331    11.21   0.000     .6291647    .8961703
         10  |   .8244723   .0661502    12.46   0.000     .6946238    .9543208
------------------------------------------------------------------------------
note: values in at() vary across imputations;
      reported values are mi point estimates.

196 . mimrgns, atmeans at(civilwar=1 newmilexpsold10tile=1 newcivxmilexp=1) at(civilwar=1 newmilexpsold10tile=2 newciv
    > xmilexp=2) at(civilwar=1 newmilexpsold10tile=3 newcivxmilexp=3) at(civilwar=1 newmilexpsold10tile=4 newcivxmilex
    > p=4) at(civilwar=1 newmilexpsold10tile=5 newcivxmilexp=5) at(civilwar=1 newmilexpsold10tile=6 newcivxmilexp=6) a
    > t(civilwar=1 newmilexpsold10tile=7 newcivxmilexp=7) at(civilwar=1 newmilexpsold10tile=8 newcivxmilexp=8) at(civi
    > lwar=1 newmilexpsold10tile=9 newcivxmilexp=9) at(civilwar=1 newmilexpsold10tile=10 newcivxmilexp=10) predict(pr)

Multiple-imputation estimates                   Imputations       =         20
Adjusted predictions                            Number of obs     =        288
                                                Average RVI       =     0.0507
                                                Largest FMI       =     0.1292
DF adjustment:   Large sample                   DF:     min       =   1,164.31
                                                        avg       =   3,005.79
Within VCE type: Delta-method                           max       =   7,152.74

Expression   : Pr(success), predict(pr)

1. at        : newpolitym~1    =   -1.397049 (mean)
               newpolitym~q    =    37.89965 (mean)
               newincumbp~r    =    7.554514 (mean)
               newgdppcthl     =    2.719166 (mean)
               newlnoill       =    3.841717 (mean)
               newmilexps~e    =           1
               civilwar        =           1
               newcivxmil~p    =           1

2._at        : newpolitym~1    =   -1.397049 (mean)
               newpolitym~q    =    37.89965 (mean)
               newincumbp~r    =    7.554514 (mean)
               newgdppcthl     =    2.719166 (mean)
               newlnoill       =    3.841717 (mean)
               newmilexps~e    =           2
               civilwar        =           1
               newcivxmil~p    =           2
```

```
3._at        : newpolitym~1    =   -1.397049 (mean)
               newpolitym~q    =    37.89965 (mean)
               newincumbp~r    =    7.554514 (mean)
               newgdppcthl     =    2.719166 (mean)
               newlnoill       =    3.841717 (mean)
               newmilexps~e    =           3
               civilwar        =           1
               newcivxmil~p    =           3

4._at        : newpolitym~1    =   -1.397049 (mean)
               newpolitym~q    =    37.89965 (mean)
               newincumbp~r    =    7.554514 (mean)
               newgdppcthl     =    2.719166 (mean)
               newlnoill       =    3.841717 (mean)
               newmilexps~e    =           4
               civilwar        =           1
               newcivxmil~p    =           4

5._at        : newpolitym~1    =   -1.397049 (mean)
               newpolitym~q    =    37.89965 (mean)
               newincumbp~r    =    7.554514 (mean)
               newgdppcthl     =    2.719166 (mean)
               newlnoill       =    3.841717 (mean)
               newmilexps~e    =           5
               civilwar        =           1
               newcivxmil~p    =           5

6._at        : newpolitym~1    =   -1.397049 (mean)
               newpolitym~q    =    37.89965 (mean)
               newincumbp~r    =    7.554514 (mean)
               newgdppcthl     =    2.719166 (mean)
               newlnoill       =    3.841717 (mean)
               newmilexps~e    =           6
               civilwar        =           1
               newcivxmil~p    =           6

7._at        : newpolitym~1    =   -1.397049 (mean)
               newpolitym~q    =    37.89965 (mean)
               newincumbp~r    =    7.554514 (mean)
               newgdppcthl     =    2.719166 (mean)
               newlnoill       =    3.841717 (mean)
               newmilexps~e    =           7
               civilwar        =           1
               newcivxmil~p    =           7

8._at        : newpolitym~1    =   -1.397049 (mean)
               newpolitym~q    =    37.89965 (mean)
               newincumbp~r    =    7.554514 (mean)
               newgdppcthl     =    2.719166 (mean)
               newlnoill       =    3.841717 (mean)
               newmilexps~e    =           8
               civilwar        =           1
               newcivxmil~p    =           8

9._at        : newpolitym~1    =   -1.397049 (mean)
               newpolitym~q    =    37.89965 (mean)
               newincumbp~r    =    7.554514 (mean)
               newgdppcthl     =    2.719166 (mean)
               newlnoill       =    3.841717 (mean)
               newmilexps~e    =           9
               civilwar        =           1
               newcivxmil~p    =           9

10._at       : newpolitym~1    =   -1.397049 (mean)
               newpolitym~q    =    37.89965 (mean)
               newincumbp~r    =    7.554514 (mean)
               newgdppcthl     =    2.719166 (mean)
               newlnoill       =    3.841717 (mean)
               newmilexps~e    =          10
               civilwar        =           1
               newcivxmil~p    =          10
```

_at	Margin	Std. Err.	t	P>|t|	[95% Conf.	Interval]
1	.1103617	.0469891	2.35	0.019	.018169	.2025545
2	.1265168	.0447652	2.83	0.005	.0387025	.214331
3	.144787	.0420673	3.44	0.001	.0622848	.2272893
4	.1653364	.0396966	4.17	0.000	.0875041	.2431688
5	.1882994	.0392444	4.80	0.000	.1113675	.2652312
6	.2137646	.0428286	4.99	0.000	.1298078	.2977214
7	.2417581	.0517783	4.67	0.000	.1402421	.3432741
8	.272226	.0658382	4.13	0.000	.1431119	.4013401
9	.3050215	.0839219	3.63	0.000	.1404033	.4696398
10	.3398971	.1048388	3.24	0.001	.1342088	.5455855

note: values in at() vary across imputations;
reported values are mi point estimates.

```
197 . * Favorability of revolutionary civil wars fought by conventional armies to opposition
198 . clear

199 . use revolutionaryeps.dta

200 . logit success  conventional  if startyear>1899 & civilwar==1, or nolog

Logistic regression                             Number of obs     =        174
                                                LR chi2(1)        =       3.80
                                                Prob > chi2       =     0.0513
Log likelihood =  -100.5876                     Pseudo R2         =     0.0185

------------------------------------------------------------------------------
     success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
conventional |   3.457143   2.183045     1.96   0.049     1.002809    11.91836
       _cons |   .3471074   .0621642    -5.91   0.000     .2443546    .4930687
------------------------------------------------------------------------------

201 .
202 . * ============================================================
203 . * Results on transnational revolutionary waves, political reform,
204 . *   electoral revolution, external war
205 . * ============================================================
206 . * Bivariate relationships
207 . clear

208 . use revolutionaryepsmireg.dta

209 . set seed 1234

210 . mi estimate, post dots eform saving(miest, replace): logit success newrevwaveny  if startyear>1899

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

Multiple-imputation estimates                   Imputations       =         20
Logistic regression                             Number of obs     =        288
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
DF adjustment:   Large sample                   DF:     min       =          .
                                                        avg       =          .
                                                        max       =          .
Model F test:       Equal FMI                   F(   1,      .)   =      11.05
Within VCE type:          OIM                   Prob > F          =     0.0009

------------------------------------------------------------------------------
     success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
newrevwaveny |   2.332864   .5945358     3.32   0.001     1.415659    3.844325
       _cons |   .4461538   .0704495    -5.11   0.000     .3273983    .6079849
------------------------------------------------------------------------------

211 . mimrgns,  at(newrevwaveny=(0 1)) predict(pr)

Multiple-imputation estimates                   Imputations       =         20
Adjusted predictions                            Number of obs     =        288
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
DF adjustment:   Large sample                   DF:     min       =          .
                                                        avg       =          .
Within VCE type: Delta-method                           max       =          .

Expression   : Pr(success), predict(pr)

1._at        : newrevwaveny    =           0

2._at        : newrevwaveny    =           1

------------------------------------------------------------------------------
             |     Margin   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         _at |
          1  |   .3085106    .033686     9.16   0.000     .2424874    .3745339
          2  |        .51     .04999    10.20   0.000     .4120214    .6079786
------------------------------------------------------------------------------

212 . * Waves, for urban revolutions only
213 . mi estimate, post dots eform saving(miest, replace): logit success newrevwaveny  if startyear>1899 & urbandum==1

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

Multiple-imputation estimates                   Imputations       =         20
Logistic regression                             Number of obs     =        165
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
DF adjustment:   Large sample                   DF:     min       =   3.94e+63
                                                        avg       =   3.94e+63
                                                        max       =          .
Model F test:       Equal FMI                   F(   1,      .)   =       4.32
Within VCE type:          OIM                   Prob > F          =     0.0376

------------------------------------------------------------------------------
     success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
newrevwaveny |   1.928571   .6092981     2.08   0.038     1.038278    3.582266
       _cons |   .6666667   .1476025    -1.83   0.067      .431966    1.028888
------------------------------------------------------------------------------
```

```
214 . * Without control vars
215 . mi estimate, post dots eform saving(miest, replace): logit success newrevwaveny politreform electoralrev externa
    > lwar if startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        288
                                                    Average RVI       =     0.0000
                                                    Largest FMI       =     0.0000
    DF adjustment:   Large sample                   DF:     min       =          .
                                                            avg       =          .
                                                            max       =          .
    Model F test:       Equal FMI                   F(   4,      .)   =       3.99
    Within VCE type:          OIM                   Prob > F          =     0.0031

    ------------------------------------------------------------------------------
         success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
    newrevwaveny |   2.098994   .5533002     2.81   0.005     1.252081    3.518764
     politreform |    1.63281   .5608641     1.43   0.153     .8328199    3.201254
    electoralrev |   1.821194   .6759125     1.62   0.106     .8799215    3.769369
     externalwar |   1.518255   .4729851     1.34   0.180     .8244568    2.795898
           _cons |   .3637201   .0672751    -5.47   0.000     .2531197    .5226474
    ------------------------------------------------------------------------------

216 . * With control vars
217 . mi estimate, post dots eform saving(miest, replace): logit success newpolitymin1 newpolitymin1sq newincumbpowerd
    > ur newgdppcthl newmilexpsold10tile newrevwaveny politreform electoralrev externalwar startyear if startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        288
                                                    Average RVI       =     0.0435
                                                    Largest FMI       =     0.1876
    DF adjustment:   Large sample                   DF:     min       =     557.15
                                                            avg       =  54,524.14
                                                            max       = 241,589.31
    Model F test:       Equal FMI                   F(  10,93837.3)   =       4.31
    Within VCE type:          OIM                   Prob > F          =     0.0000

    ------------------------------------------------------------------------------
                success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    --------------------+---------------------------------------------------------
          newpolitymin1 |   .9017405   .0274749    -3.39   0.001     .8494596     .957239
        newpolitymin1sq |   .9827863   .0057306    -2.98   0.003     .9716137    .9940874
      newincumbpowerdur |   1.047572   .0184992     2.63   0.009     1.011932    1.084468
            newgdppcthl |   .8880464   .0610261    -1.73   0.084     .7761301    1.016101
    newmilexpsold10tile |   1.243825    .097482     2.78   0.006     1.066358    1.450827
           newrevwaveny |   2.070408    .637528     2.36   0.018     1.132268    3.785842
            politreform |   1.252343   .4943568     0.57   0.569     .5777137    2.714776
           electoralrev |   1.713322   .7032701     1.31   0.190     .7663748    3.830334
            externalwar |   1.752575   .6366983     1.54   0.122      .859871     3.57207
              startyear |   .9993501   .0061419    -0.11   0.916     .9873762    1.011469
                  _cons |   .5861743   6.961908    -0.04   0.964     4.49e-11    7.66e+09
    ------------------------------------------------------------------------------

218 . mimrgns, atmeans at(newrevwaveny=(0 1)) predict(pr)

    Multiple-imputation estimates                   Imputations       =         20
    Adjusted predictions                            Number of obs     =        288
                                                    Average RVI       =     0.0079
                                                    Largest FMI       =     0.0124
    DF adjustment:   Large sample                   DF:     min       = 123,053.54
                                                            avg       = 1031884.67
    Within VCE type: Delta-method                           max       = 1940715.79

    Expression   : Pr(success), predict(pr)

    1._at        : newpolitym~1    =   -1.397049 (mean)
                   newpolitym~q    =    37.89965 (mean)
                   newincumbp~r    =    7.554514 (mean)
                   newgdppcthl     =    2.719166 (mean)
                   newmilexps~e    =    5.531778 (mean)
                   newrevwaveny    =           0
                   politreform     =    .1597222 (mean)
                   electoralrev    =        .125 (mean)
                   externalwar     =    .1909722 (mean)
                   startyear       =    1969.438 (mean)

    2._at        : newpolitym~1    =   -1.397049 (mean)
                   newpolitym~q    =    37.89965 (mean)
                   newincumbp~r    =    7.554514 (mean)
                   newgdppcthl     =    2.719166 (mean)
                   newmilexps~e    =    5.531778 (mean)
                   newrevwaveny    =           1
                   politreform     =    .1597222 (mean)
                   electoralrev    =        .125 (mean)
                   externalwar     =    .1909722 (mean)
                   startyear       =    1969.438 (mean)
```

```
------------------------------------------------------------------------------
             |     Margin   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         _at |
          1  |   .2925449   .0375512     7.79   0.000     .2189459    .3661439
          2  |    .461252   .0602563     7.65   0.000     .3431506    .5793534
------------------------------------------------------------------------------
note: values in at() vary across imputations;
      reported values are mi point estimates.

219 .
220 . * Matching to identify the independent treatment effect on the treated for
221 . *    mobilizing within a revolutionary wave
222 . * Using propensity score matching on complete-case sample (n=272)
223 . teffects psmatch (success) (newrevwaveny newpolitymin1 newpolitymin1sq  newgdppcthl   urbandum, logit ), atet nn
> (1) vce(robust)

Treatment-effects estimation                   Number of obs      =        272
Estimator      : propensity-score matching     Matches: requested =          1
Outcome model  : matching                                     min =          1
Treatment model: logit                                        max =          2
------------------------------------------------------------------------------
             |              AI Robust
     success |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
ATET         |
newrevwaveny |
   (1 vs 0)  |   .1666667   .0799507     2.08   0.037     .0099661    .3233672
------------------------------------------------------------------------------

224 . * Balances checked before and after matching
225 . tebalance summarize
note: refitting the model using the generate() option

  Covariate balance summary
                                                    Raw      Matched
                          ----------------------------------------------
                          Number of obs =          272          192
                          Treated obs   =           96           96
                          Control obs   =          176           96
                          ----------------------------------------------

  ----------------------------------------------------------------------
                 |Standardized differences          Variance ratio
                 |        Raw     Matched           Raw    Matched
  ----------------+-----------------------------------------------------
    newpolitymin1 |   -.246184    .0922208        .93064   1.148024
  newpolitymin1sq |   .0770106    .0559115      .7938582   .7976309
      newgdppcthl |   .5092342    .0915151      1.730871   .9817142
         urbandum |    .741873           0      .6410007          1
  ----------------------------------------------------------------------

226 . * note: refitting the model using the generate() option
227 . *                       Raw      Matched
228 . * Number of obs =       272          192
229 . * Treated obs   =        96           96
230 . * Control obs   =       176          96
231 . *
232 . *                       Standardized differences                Variance ratio
233 . *                                Raw     Matched                 Raw       Matched
234 . * newpolitymin1    -.246184     .0922208         .93064    1.148024
235 . * newpolitymin1sq   .0770106   .0559115         .7938582   .7976309
236 . * newgdppcthl      .5092342   .0915151          1.730871   .9817142
237 . * urbandum          .741873          0          .6410007      1
238 . *
239 . * ============================
240 . *  TABLE 4.1--regression table
241 . * ============================
242 . * Model 1
243 . clear

244 . use revolutionaryepsmireg.dta

245 . mi estimate, post dots eform saving(miest, replace):  logit success c.newpolitymin1 newpolitymin1sq if startyear
> >1899

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

Multiple-imputation estimates                   Imputations       =         20
Logistic regression                             Number of obs     =        288
                                                Average RVI       =     0.0339
                                                Largest FMI       =     0.0718
DF adjustment:   Large sample                   DF:     min       =   3,738.70
                                                        avg       =  10,760.55
                                                        max       =  14,426.71
Model F test:       Equal FMI                   F(   2,13437.8)   =       9.09
Within VCE type:          OIM                   Prob > F          =     0.0001

------------------------------------------------------------------------------
        success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
----------------+-------------------------------------------------------------
  newpolitymin1 |   .8950604   .0238367    -4.16   0.000     .8495359    .9430243
newpolitymin1sq |   .9868593   .0050673    -2.58   0.010     .9769742    .9968444
          _cons |   .7930292   .1640453    -1.12   0.262     .5286829    1.189551
------------------------------------------------------------------------------
```

```
246 . * Accuracy of predictions
247 . mi predict xbsuccmi using miest, xb
    (57 missing values generated)

248 . generate prsuccmi = invlogit(xbsuccmi)
    (57 missing values generated)

249 . * Obtain accuracy of prediction
250 . * Area under the ROC curve
251 . roctab success xbsuccmi

                        ROC                    -Asymptotic Normal--
            Obs       Area     Std. Err.      [95% Conf. Interval]
       ---------------------------------------------------------------
            288     0.6311       0.0324        0.56770     0.69457

252 . drop xbsuccmi

253 . drop prsuccmi

254 . * AIC and BIC on common complete-case model
255 . clear

256 . use revolutionaryeps.dta

257 . * create comparison sample for information criteria using model with smallest sample size
258 . quietly: logit success c.newpolitymin1##c.newpolitymin1 ib(#5).new2incumbgovtype newincumbage newincumbpowerdur
    > newgdppcthl newlnoill civilwar##c.newmilexpsold10tile if startyear>1899 & colony==0 , or nolog

259 . generate sample=e(sample)

260 . quietly: logit success c.newpolitymin1##c.newpolitymin1 if startyear>1899 & sample==1, or nolog

261 . estat ic

    Akaike's information criterion and Bayesian information criterion

    ------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
    -------------+----------------------------------------------------------------
               . |        233 -154.4599  -143.8411       3    293.6823   304.0354
    ------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

262 . * True positive and false positive rates on complete-case sample
263 . estat classification

    Logistic model for success

                 -------- True --------
    Classified |         D             ~D  |      Total
    -----------+--------------------------+-----------
         +     |        21             24  |         45
         -     |        67            121  |        188
    -----------+--------------------------+-----------
       Total   |        88            145  |        233

    Classified + if predicted Pr(D) >= .5
    True D defined as success != 0
    -------------------------------------------------
    Sensitivity                     Pr( +| D)   23.86%
    Specificity                     Pr( -|~D)   83.45%
    Positive predictive value       Pr( D| +)   46.67%
    Negative predictive value       Pr(~D| -)   64.36%
    -------------------------------------------------
    False + rate for true ~D        Pr( +|~D)   16.55%
    False - rate for true D         Pr( -| D)   76.14%
    False + rate for classified +   Pr(~D| +)   53.33%
    False - rate for classified -   Pr( D| -)   35.64%
    -------------------------------------------------
    Correctly classified                        60.94%
    -------------------------------------------------

264 . drop sample

265 .
266 . * Model 2
267 . clear

268 . use revolutionaryepsmireg.dta

269 . mi estimate, post dots eform saving(miest, replace): logit success incgovmonarchy incgovmilitary incgovoneparty
    > incgovcompauth incgovother if startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        288
                                                    Average RVI       =     0.0000
                                                    Largest FMI       =     0.0000
    DF adjustment:   Large sample                   DF:     min       =   1.88e+62
                                                            avg       =   1.88e+62
                                                            max       =          .
    Model F test:       Equal FMI                   F(   5,      .)   =       2.30
    Within VCE type:          OIM                   Prob > F          =     0.0426
```

```
------------------------------------------------------------------------------
     success |      exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
incgovmonarchy |     4.6875   2.569995     2.82   0.005     1.600504    13.72859
incgovmilitary |   4.761905    2.46999     3.01   0.003     1.722916    13.16125
incgovoneparty |   3.648649   1.770601     2.67   0.008     1.409498    9.444948
incgovcompauth |   3.018868   1.420943     2.35   0.019     1.200036    7.594406
   incgovother |   2.352941   1.402424     1.44   0.151     .7315924    7.567509
         _cons |          .2   .0828079    -3.89   0.000     .0888381    .4502575
------------------------------------------------------------------------------
```

```
270 . * Accuracy of model
271 . mi predict xbsuccmi using miest, xb
    (57 missing values generated)

272 . generate prsuccmi = invlogit(xbsuccmi)
    (57 missing values generated)

273 . * Obtain accuracy of prediction
274 . * Area under the ROC curve
275 . roctab success xbsuccmi

                        ROC                    -Asymptotic Normal--
          Obs       Area     Std. Err.      [95% Conf. Interval]
        -------------------------------------------------------------
          288     0.6118       0.0327        0.54765     0.67597

276 . drop xbsuccmi

277 . drop prsuccmi

278 . * AIC and BIC on common complete-case model
279 . clear

280 . use revolutionaryeps.dta

281 . * create comparison sample for information criteria using model with smallest sample size
282 . quietly: logit success c.newpolitymin1##c.newpolitymin1 ib(#5).new2incumbgovtype newincumbage newincumbpowerdur
    > newgdppcthl newlnoill civilwar##c.newmilexpsold10tile if startyear>1899 & colony==0 , or nolog

283 . generate sample=e(sample)

284 . quietly: logit success ib(#5).new2incumbgovtype if startyear>1899 & sample==1, or nolog

285 . estat ic

    Akaike's information criterion and Bayesian information criterion

    ------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
    -------------+----------------------------------------------------------------
               . |        233 -154.4599  -147.7534       6    307.5068    328.213
    ------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

286 . * True positive and false positive rates on complete-case sample
287 . estat classification

    Logistic model for success

                  -------- True --------
    Classified |         D            ~D  |      Total
    -----------+--------------------------+-----------
         +     |         0             0  |          0
         -     |        88           145  |        233
    -----------+--------------------------+-----------
       Total   |        88           145  |        233

    Classified + if predicted Pr(D) >= .5
    True D defined as success != 0
    --------------------------------------------------
    Sensitivity                     Pr( +| D)    0.00%
    Specificity                     Pr( -|~D)  100.00%
    Positive predictive value       Pr( D| +)       .%
    Negative predictive value       Pr(~D| -)   62.23%
    --------------------------------------------------
    False + rate for true ~D        Pr( +|~D)    0.00%
    False - rate for true D         Pr( -| D)  100.00%
    False + rate for classified +   Pr(~D| +)       .%
    False - rate for classified -   Pr( D| -)   37.77%
    --------------------------------------------------
    Correctly classified                       62.23%
    --------------------------------------------------

288 . drop sample

289 .
290 . * Model 3
291 . clear
```

```
292 . use revolutionaryepsmireg.dta

293 . mi estimate, post dots eform saving(miest, replace): logit success c.newpolitymin1 newpolitymin1sq incgovmonarch
    > y incgovmilitary incgovoneparty incgovcompauth incgovother if startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        288
                                                    Average RVI       =     0.0180
                                                    Largest FMI       =     0.0865
    DF adjustment:   Large sample                   DF:     min       =   2,578.55
                                                            avg       =  45,574.14
                                                            max       = 106,128.06
    Model F test:       Equal FMI                   F(   7,313170.4)  =       2.81
    Within VCE type:          OIM                   Prob > F          =     0.0064

    ------------------------------------------------------------------------------
            success |      exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    ----------------+-------------------------------------------------------------
      newpolitymin1 |    .8973213   .0331369    -2.93   0.003     .8346571    .9646901
    newpolitymin1sq |    .9866661   .0055988    -2.37   0.018     .9757483    .9977061
     incgovmonarchy |    1.490686   1.014342     0.59   0.557     .3928044    5.657126
     incgovmilitary |    1.227786   .8299883     0.30   0.761     .3263567     4.61905
     incgovoneparty |    .9314234   .6109041    -0.11   0.914     .2575398    3.368604
     incgovcompauth |      1.1294   .6418354     0.21   0.830     .3707707    3.440252
        incgovother |    .9175738   .6428353    -0.12   0.902     .2324288    3.622364
              _cons |    .7331425   .4231389    -0.54   0.591     .2365251    2.272477
    ------------------------------------------------------------------------------

294 . * Accuracy of model
295 . mi predict xbsuccmi using miest, xb
    (57 missing values generated)

296 . generate prsuccmi = invlogit(xbsuccmi)
    (57 missing values generated)

297 . * Obtain accuracy of prediction
298 . * Area under the ROC curve
299 . roctab success xbsuccmi

                         ROC                    -Asymptotic Normal--
               Obs       Area     Std. Err.      [95% Conf. Interval]
          ------------------------------------------------------------
               288     0.6536       0.0320        0.59095     0.71631

300 . drop xbsuccmi

301 . drop prsuccmi

302 . * AIC and BIC on common complete-case model
303 . clear

304 . use revolutionaryeps.dta

305 . * create comparison sample for information criteria using model with smallest sample size
306 . quietly: logit success c.newpolitymin1##c.newpolitymin1 ib(#5).new2incumbgovtype newincumbage newincumbpowerdur
    > newgdppcthl newlnoill civilwar##c.newmilexpsold10tile if startyear>1899 & colony==0 , or nolog

307 . generate sample=e(sample)

308 . quietly: logit success c.newpolitymin1##c.newpolitymin1 ib(#5).new2incumbgovtype if startyear>1899 & sample==1,
    > nolog or

309 . estat ic

    Akaike's information criterion and Bayesian information criterion

    ------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
    -------------+----------------------------------------------------------------
               . |        233 -154.4599  -141.9348       8    299.8696   327.4779
    ------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

310 . * True positive and false positive rates on complete-case sample
311 . estat classification

    Logistic model for success

                  -------- True --------
    Classified |         D             ~D  |      Total
    -----------+--------------------------+-----------
         +     |        25             23  |         48
         -     |        63            122  |        185
    -----------+--------------------------+-----------
       Total   |        88            145  |        233

    Classified + if predicted Pr(D) >= .5
    True D defined as success != 0
    -------------------------------------------------
    Sensitivity                     Pr( +| D)   28.41%
    Specificity                     Pr( -|~D)   84.14%
    Positive predictive value       Pr( D| +)   52.08%
    Negative predictive value       Pr(~D| -)   65.95%
    -------------------------------------------------
    False + rate for true ~D        Pr( +|~D)   15.86%
    False - rate for true D         Pr( -| D)   71.59%
    False + rate for classified +   Pr(~D| +)   47.92%
    False - rate for classified -   Pr( D| -)   34.05%
```

```
    --------------------------------------------------
    Correctly classified                       63.09%
    --------------------------------------------------

312 . drop sample

313 .
314 . * Model 4
315 . clear

316 . use revolutionaryepsmireg.dta

317 . mi estimate, post dots eform saving(miest, replace): logit success newpolitymin1 newpolitymin1sq newincumbpowerd
    > ur newincumbage if startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        288
                                                    Average RVI       =     0.0334
                                                    Largest FMI       =     0.1090
    DF adjustment:   Large sample                   DF:     min       =   1,632.73
                                                            avg       = 355,404.80
                                                            max       = 1140137.79
    Model F test:       Equal FMI                   F(   4,43275.1)   =       6.80
    Within VCE type:          OIM                   Prob > F          =     0.0000

    ------------------------------------------------------------------------------
              success |      exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    ------------------+-----------------------------------------------------------
        newpolitymin1 |   .9057748   .0257951    -3.48   0.001     .8565954    .9577777
      newpolitymin1sq |   .9828891   .0054897    -3.09   0.002     .9721803    .9937158
    newincumbpowerdur |    1.04549   .0174759     2.66   0.008     1.011792    1.080311
         newincumbage |   1.013947   .0117277     1.20   0.231     .9912197    1.037196
                _cons |   .3068681   .1961401    -1.85   0.065     .0876779    1.074022
    ------------------------------------------------------------------------------

318 . * Accuracy of model
319 . mi predict xbsuccmi using miest, xb
    (57 missing values generated)

320 . generate prsuccmi = invlogit(xbsuccmi)
    (57 missing values generated)

321 . * Obtain accuracy of prediction
322 . * Area under the ROC curve
323 . roctab success xbsuccmi

                           ROC                    -Asymptotic Normal--
                Obs       Area     Std. Err.      [95% Conf. Interval]
           ---------------------------------------------------------------
                288     0.7044       0.0313        0.64300     0.76580

324 . drop xbsuccmi

325 . drop prsuccmi

326 . * AIC and BIC on common complete-case model
327 . clear

328 . use revolutionaryeps.dta

329 . * create comparison sample for information criteria using model with smallest sample size
330 . quietly: logit success c.newpolitymin1##c.newpolitymin1 ib(#5).new2incumbgovtype newincumbage newincumbpowerdur
    > newgdppcthl newlnoill civilwar##c.newmilexpsold10tile if startyear>1899 & colony==0 , or nolog

331 . generate sample=e(sample)

332 . quietly: logit success c.newpolitymin1##c.newpolitymin1 newincumbpowerdur newincumbage if startyear>1899 & sampl
    > e==1, or nolog

333 . estat ic

    Akaike's information criterion and Bayesian information criterion

    ------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
    -------------+----------------------------------------------------------------
                 |        233 -154.4599  -134.6781       5    279.3562   296.6114
    ------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

334 . * True positive and false positive rates on complete-case sample
335 . estat classification

    Logistic model for success

                  -------- True --------
    Classified |         D            ~D  |      Total
    -----------+--------------------------+-----------
         +     |        37            18  |         55
         -     |        51           127  |        178
    -----------+--------------------------+-----------
       Total   |        88           145  |        233
```

```
Classified + if predicted Pr(D) >= .5
True D defined as success != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)   42.05%
Specificity                     Pr( -|~D)   87.59%
Positive predictive value       Pr( D| +)   67.27%
Negative predictive value       Pr(~D| -)   71.35%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)   12.41%
False - rate for true D         Pr( -| D)   57.95%
False + rate for classified +   Pr(~D| +)   32.73%
False - rate for classified -   Pr( D| -)   28.65%
--------------------------------------------------
Correctly classified                        70.39%
--------------------------------------------------
```

```
336 . drop sample

337 .
338 . * Model 5
339 . clear

340 . use revolutionaryepsmireg.dta

341 . mi estimate, post dots eform saving(miest, replace): logit success newpolitymin1 newpolitymin1sq newincumbpowerd
    > ur newgdppcthl newlnoill newmilexpsold10tile if startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        288
                                                    Average RVI       =     0.0549
                                                    Largest FMI       =     0.1272
    DF adjustment:   Large sample                   DF:     min       =   1,200.70
                                                            avg       =   8,456.38
                                                            max       =  19,161.31
    Model F test:       Equal FMI                   F(   6,32648.5)   =       6.98
    Within VCE type:          OIM                   Prob > F          =     0.0000

    ------------------------------------------------------------------------------
                success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    --------------------+---------------------------------------------------------
          newpolitymin1 |   .8920419   .0272617    -3.74   0.000     .8401646    .9471225
        newpolitymin1sq |   .9806065    .005834    -3.29   0.001     .9692307    .9921158
      newincumbpowerdur |    1.05458   .0179845     3.12   0.002     1.019909    1.090428
            newgdppcthl |   .9777451   .0639303    -0.34   0.731      .860131    1.111442
              newlnoill |    .895363   .0303414    -3.26   0.001     .8378233    .9568543
    newmilexpsold10tile |   1.276194    .081868     3.80   0.000      1.12527    1.447359
                  _cons |   .2618776   .0944115    -3.72   0.000     .1291746    .5309083
    ------------------------------------------------------------------------------

342 . * Accuracy of model
343 . mi predict xbsuccmi using miest, xb
    (57 missing values generated)

344 . generate prsuccmi = invlogit(xbsuccmi)
    (57 missing values generated)

345 . * Obtain accuracy of prediction
346 . * Area under the ROC curve
347 . roctab success xbsuccmi

                         ROC                    -Asymptotic Normal--
              Obs       Area     Std. Err.      [95% Conf. Interval]
         ------------------------------------------------------------
              288     0.7696       0.0279        0.71486     0.82427

348 . drop xbsuccmi

349 . drop prsuccmi

350 . * AIC and BIC on common complete-case model
351 . clear

352 . use revolutionaryeps.dta

353 . * create comparison sample for information criteria using model with smallest sample size
354 . quietly: logit success c.newpolitymin1##c.newpolitymin1 ib(#5).new2incumbgovtype newincumbage newincumbpowerdur
    > newgdppcthl newlnoill civilwar##c.newmilexpsold10tile if startyear>1899 & colony==0 , or nolog

355 . generate sample=e(sample)

356 . quietly: logit success c.newpolitymin1##c.newpolitymin1 newincumbpowerdur newgdppcthl newlnoill newmilexpsold10t
    > ile if startyear>1899 & sample==1, nolog or

357 . estat ic

    Akaike's information criterion and Bayesian information criterion

    -------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
    -------------+-----------------------------------------------------------------
                . |        233 -154.4599  -123.8098       7    261.6195   285.7768
    -------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.
```

```
. * True positive and false positive rates on complete-case sample
. estat classification

Logistic model for success

              -------- True --------
Classified |         D            ~D  |      Total
-----------+--------------------------+-----------
     +     |        50             27  |         77
     -     |        38            118  |        156
-----------+--------------------------+-----------
   Total   |        88            145  |        233

Classified + if predicted Pr(D) >= .5
True D defined as success != 0
-------------------------------------------------
Sensitivity                     Pr( +| D)   56.82%
Specificity                     Pr( -|~D)   81.38%
Positive predictive value       Pr( D| +)   64.94%
Negative predictive value       Pr(~D| -)   75.64%
-------------------------------------------------
False + rate for true ~D        Pr( +|~D)   18.62%
False - rate for true D         Pr( -| D)   43.18%
False + rate for classified +   Pr(~D| +)   35.06%
False - rate for classified -   Pr( D| -)   24.36%
-------------------------------------------------
Correctly classified                        72.10%
-------------------------------------------------

. drop sample

.
. * Model 6
. clear

. use revolutionaryepsmireg.dta

. mi estimate, post dots eform saving(miest, replace): logit success newpolitymin1 newpolitymin1sq newincumbpowerd
> ur newgdppcthl newlnoill newmilexpsold10tile civilwar newcivxmilexp if startyear>1899

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

Multiple-imputation estimates                   Imputations       =         20
Logistic regression                             Number of obs     =        288
                                                Average RVI       =     0.0798
                                                Largest FMI       =     0.2120
DF adjustment:   Large sample                   DF:     min       =     437.43
                                                        avg       =   4,301.25
                                                        max       =  14,659.81
Model F test:       Equal FMI                   F(   8,22005.8)   =       6.05
Within VCE type:          OIM                   Prob > F          =     0.0000

------------------------------------------------------------------------------
     success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
 newpolitymin1 |   .8954253   .0284403    -3.48   0.001     .8413614    .9529631
newpolitymin1sq |   .9784535   .0062559    -3.41   0.001     .9662528    .9908082
newincumbpowerdur |   1.045536   .0182613     2.55   0.011     1.010346    1.081951
newgdppcthl |   .8503554   .0665271    -2.07   0.038     .7294369    .9913185
newlnoill |   .8865447   .0321929    -3.32   0.001     .8256359    .9519469
newmilexpsold10tile |   1.468702   .1358766     4.15   0.000     1.224627    1.761422
civilwar |   1.031639   .7203229     0.04   0.964     .2618121    4.065053
newcivxmilexp |   .7980859   .0971743    -1.85   0.065     .6282326    1.013862
_cons |   .3501831    .162551    -2.26   0.024     .1409348     .870106
------------------------------------------------------------------------------

. * Accuracy of model
. mi predict xbsuccmi using miest, xb
(57 missing values generated)

. generate prsuccmi = invlogit(xbsuccmi)
(57 missing values generated)

. * Obtain accuracy of prediction
. * Area under the ROC curve
. roctab success xbsuccmi

                        ROC                    -Asymptotic Normal--
        Obs       Area     Std. Err.      [95% Conf. Interval]
     -------------------------------------------------------------
        288     0.8088       0.0264        0.75704     0.86051

. drop xbsuccmi

. drop prsuccmi

. * AIC and BIC on common complete-case model
. clear
```

```
376 . use revolutionaryeps.dta

377 . * create comparison sample for information criteria using model with smallest sample size
378 . quietly: logit success c.newpolitymin1##c.newpolitymin1 ib(#5).new2incumbgovtype newincumbage newincumbpowerdur
    > newgdppcthl newlnoill civilwar##c.newmilexpsold10tile newrevwaveny if startyear>1899 & colony==0 , or nolog

379 . generate sample=e(sample)

380 . quietly: logit success c.newpolitymin1##c.newpolitymin1 newincumbpowerdur newgdppcthl newlnoill i.civilwar##c.ne
    > wmilexpsold10tile newrevwaveny if startyear>1899 & sample==1, nolog or

381 . estat ic

    Akaike's information criterion and Bayesian information criterion

    ------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
    -------------+----------------------------------------------------------------
               . |        233 -154.4599  -116.5483      10    253.0967    287.607
    ------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

382 . * True positive and false positive rates on complete-case sample
383 . estat classification

    Logistic model for success

                  -------- True --------
    Classified |         D             ~D  |      Total
    -----------+--------------------------+-----------
         +     |        58             20  |         78
         -     |        30            125  |        155
    -----------+--------------------------+-----------
       Total   |        88            145  |        233

    Classified + if predicted Pr(D) >= .5
    True D defined as success != 0
    --------------------------------------------------
    Sensitivity                     Pr( +| D)   65.91%
    Specificity                     Pr( -|~D)   86.21%
    Positive predictive value       Pr( D| +)   74.36%
    Negative predictive value       Pr(~D| -)   80.65%
    --------------------------------------------------
    False + rate for true ~D        Pr( +|~D)   13.79%
    False - rate for true D         Pr( -| D)   34.09%
    False + rate for classified +   Pr(~D| +)   25.64%
    False - rate for classified -   Pr( D| -)   19.35%
    --------------------------------------------------
    Correctly classified                        78.54%
    --------------------------------------------------

384 . drop sample

385 .
386 . * Model 7
387 . clear

388 . use revolutionaryepsmireg.dta

389 . mi estimate, post dots eform saving(miest, replace): logit success newpolitymin1 newpolitymin1sq newincumbpowerd
    > ur revwaveny politreform electoralrev externalwar if startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        288
                                                    Average RVI       =     0.0184
                                                    Largest FMI       =     0.0925
    DF adjustment:   Large sample                   DF:     min       =   2,261.75
                                                            avg       = 3907269.90
                                                            max       =   2.20e+07
    Model F test:       Equal FMI                   F(   7,300037.2)  =       4.90
    Within VCE type:          OIM                   Prob > F          =     0.0000

    ------------------------------------------------------------------------------
              success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    ------------------+-----------------------------------------------------------
        newpolitymin1 |   .9139564   .0264828    -3.11   0.002     .8634922    .9673699
      newpolitymin1sq |   .9830445    .005534    -3.04   0.002      .972252    .9939568
    newincumbpowerdur |   1.051617   .0174424     3.03   0.002     1.017979    1.086366
            revwaveny |   1.668357    .453704     1.88   0.060      .979056    2.842958
          politreform |   1.518511   .5520136     1.15   0.251     .7447088    3.096346
         electoralrev |    1.95052   .7703911     1.69   0.091     .8994019    4.230064
          externalwar |   1.574229   .5228676     1.37   0.172     .8210091    3.018477
                _cons |   .3839224   .1059119    -3.47   0.001     .2235728    .6592771
    ------------------------------------------------------------------------------

390 . * Accuracy of model
```

```
391 . mi predict xbsuccmi using miest, xb
    (57 missing values generated)

392 . generate prsuccmi = invlogit(xbsuccmi)
    (57 missing values generated)

393 . * Obtain accuracy of prediction
394 . * Area under the ROC curve
395 . roctab success xbsuccmi

                        ROC                    -Asymptotic Normal--
             Obs       Area     Std. Err.      [95% Conf. Interval]
         ------------------------------------------------------------
             288     0.7309       0.0303        0.67142     0.79031

396 . drop xbsuccmi

397 . drop prsuccmi

398 . * AIC and BIC on common complete-case model
399 . clear

400 . use revolutionaryeps.dta

401 . * create comparison sample for information criteria using model with smallest sample size
402 . quietly: logit success c.newpolitymin1##c.newpolitymin1 ib(#5).new2incumbgovtype newincumbage newincumbpowerdur
    > newgdppcthl newlnoill civilwar##c.newmilexpsold10tile newrevwaveny if startyear>1899 & colony==0 , or nolog

403 . generate sample=e(sample)

404 . quietly:  logit success newpolitymin1 newpolitymin1sq newincumbpowerdur revwaveny politreform electoralrev exter
    > nalwar if startyear>1899 & sample==1, nolog or

405 . estat ic

    Akaike's information criterion and Bayesian information criterion

    ------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
    -------------+----------------------------------------------------------------
               . |        233 -154.4599  -132.7868       8    281.5737    309.182
    ------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

406 . * True positive and false positive rates on complete-case sample
407 . estat classification

    Logistic model for success

                 -------- True --------
    Classified |         D             ~D  |      Total
    -----------+--------------------------+-----------
         +     |        41             20  |         61
         -     |        47            125  |        172
    -----------+--------------------------+-----------
       Total   |        88            145  |        233

    Classified + if predicted Pr(D) >= .5
    True D defined as success != 0
    --------------------------------------------------
    Sensitivity                     Pr( +| D)   46.59%
    Specificity                     Pr( -|~D)   86.21%
    Positive predictive value       Pr( D| +)   67.21%
    Negative predictive value       Pr(~D| -)   72.67%
    --------------------------------------------------
    False + rate for true ~D        Pr( +|~D)   13.79%
    False - rate for true D         Pr( -| D)   53.41%
    False + rate for classified +   Pr(~D| +)   32.79%
    False - rate for classified -   Pr( D| -)   27.33%
    --------------------------------------------------
    Correctly classified                        71.24%
    --------------------------------------------------

408 . drop sample

409 .
410 . * Model 8
411 . clear

412 . use revolutionaryepsmireg.dta

413 . mi estimate, post dots eform saving(miest, replace): logit success newpolitymin1 newpolitymin1sq newincumbpowerd
    > ur newgdppcthl newlnoill newmilexpsold10tile civilwar newcivxmilexp newrevwaveny if startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        288
                                                    Average RVI       =     0.0708
                                                    Largest FMI       =     0.2045
    DF adjustment:   Large sample                   DF:     min       =     469.71
                                                            avg       =   6,673.10
                                                            max       =  29,064.82
    Model F test:       Equal FMI                   F(   9,31832.7)   =       5.60
    Within VCE type:          OIM                   Prob > F          =     0.0000
```

success	exp(b)	Std. Err.	t	P>|t|	[95% Conf.	Interval]
newpolitymin1	.8993727	.0285551	-3.34	0.001	.8450918	.95714
newpolitymin1sq	.9787406	.0062254	-3.38	0.001	.9666015	.9910322
newincumbpowerdur	1.042662	.0184831	2.36	0.018	1.007054	1.07953
newgdppcthl	.8302218	.0669511	-2.31	0.021	.708818	.9724192
newlnoill	.8926493	.0327846	-3.09	0.002	.8306453	.9592817
newmilexpsold10tile	1.470884	.136243	4.17	0.000	1.226215	1.764371
civilwar	1.147286	.8076768	0.20	0.845	.2879294	4.571484
newcivxmilexp	.7962587	.0969596	-1.87	0.062	.6268109	1.011514
newrevwaveny	1.582682	.5145338	1.41	0.158	.8368629	2.99318
cons	.3014427	.144425	-2.50	0.012	.1178242	.7712145

```
414 . * Accuracy of model
415 . mi predict xbsuccmi using miest, xb
    (57 missing values generated)

416 . generate prsuccmi = invlogit(xbsuccmi)
    (57 missing values generated)

417 . * Obtain accuracy of prediction
418 . * Area under the ROC curve
419 . roctab success xbsuccmi

                        ROC                    -Asymptotic Normal--
            Obs       Area     Std. Err.      [95% Conf. Interval]
       -------------------------------------------------------------
            288     0.8112       0.0260        0.76017     0.86219

420 . drop xbsuccmi

421 . drop prsuccmi

422 . * AIC and BIC on common complete-case model
423 . clear

424 . use revolutionaryeps.dta

425 . * create comparison sample for information criteria using model with smallest sample size
426 . quietly: logit success c.newpolitymin1##c.newpolitymin1 ib(#5).new2incumbgovtype newincumbage newincumbpowerdur
    > newgdppcthl newlnoill civilwar##c.newmilexpsold10tile newrevwaveny if startyear>1899 & colony==0 , or nolog

427 . generate sample=e(sample)

428 . quietly: logit success c.newpolitymin1##c.newpolitymin1 newincumbpowerdur newgdppcthl newlnoill i.civilwar##c.ne
    > wmilexpsold10tile newrevwaveny if startyear>1899 & sample==1, nolog or

429 . estat ic

    Akaike's information criterion and Bayesian information criterion

    -----------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
    -------------+---------------------------------------------------------------
               . |        233 -154.4599  -116.5483      10    253.0967    287.607
    -----------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

430 . * True positive and false positive rates on complete-case sample
431 . estat classification

    Logistic model for success

                  -------- True --------
    Classified |         D             ~D  |      Total
    -----------+--------------------------+-----------
         +     |        58             20  |         78
         -     |        30            125  |        155
    -----------+--------------------------+-----------
       Total   |        88            145  |        233

    Classified + if predicted Pr(D) >= .5
    True D defined as success != 0
    --------------------------------------------------
    Sensitivity                     Pr( +| D)   65.91%
    Specificity                     Pr( -|~D)   86.21%
    Positive predictive value       Pr( D| +)   74.36%
    Negative predictive value       Pr(~D| -)   80.65%
    --------------------------------------------------
    False + rate for true ~D        Pr( +|~D)   13.79%
    False - rate for true D         Pr( -| D)   34.09%
    False + rate for classified +   Pr(~D| +)   25.64%
    False - rate for classified -   Pr( D| -)   19.35%
    --------------------------------------------------
    Correctly classified                        78.54%
    --------------------------------------------------
```

```
. drop sample

. 
. * Model 9--complete case analysis (based on Model 6, which has lowest BIC and AIC)
. clear

. use revolutionaryepsmireg.dta

. * create comparison sample for information criteria using model with smallest sample size
. quietly: logit success c.newpolitymin1##c.newpolitymin1 ib(#5).new2incumbgovtype newincumbage newincumbpowerdur
> newgdppcthl newlnoill civilwar##c.newmilexpsold10tile if startyear>1899 & colony==0 , or nolog

. generate sample=e(sample)

. logit success c.newpolitymin1##c.newpolitymin1 newincumbpowerdur newgdppcthl newlnoill i.civilwar##c.newmilexpso
> ld10tile if startyear>1899 & sample==1, nolog or

Logistic regression                             Number of obs     =        233
                                                LR chi2(8)        =      75.80
                                                Prob > chi2       =     0.0000
Log likelihood = -116.56069                     Pseudo R2         =     0.2454

------------------------------------------------------------------------------------------------------
                     success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-----------------------------+------------------------------------------------------------------------
           newpolitymin1 |   .9107321   .0313063    -2.72   0.007     .8513942    .9742056
                         |
c.newpolitymin1#c.newpolitymin1 |   .9733624   .0068914    -3.81   0.000     .9599488    .9869634
                         |
       newincumbpowerdur |   1.065094   .0214257     3.13   0.002     1.023917    1.107926
             newgdppcthl |   .8417981   .0704414    -2.06   0.040     .7144628    .9918277
               newlnoill |   .8638559   .0345239    -3.66   0.000     .7987724    .9342422
                         |
                civilwar |
                    yes  |   1.072652   .8160559     0.09   0.927     .2414786    4.764737
      newmilexpsold10tile |   1.536096   .1478575     4.46   0.000     1.271996    1.855031
                         |
 civilwar#c.newmilexpsold10tile |
                    yes  |   .7894942    .101372    -1.84   0.066     .6138378    1.015417
                         |
                   _cons |   .3343205     .16716    -2.19   0.028     .1254766    .8907651
------------------------------------------------------------------------------------------------------

. estat ic

Akaike's information criterion and Bayesian information criterion

-------------------------------------------------------------------------------
       Model |        Obs  ll(null)  ll(model)      df         AIC         BIC
-------------+-----------------------------------------------------------------
           . |        233 -154.4599  -116.5607       9    251.1214   282.1807
-------------------------------------------------------------------------------
               Note: N=Obs used in calculating BIC; see [R] BIC note.

. * AUC
. lroc success, nograph

Logistic model for success

number of observations =      233
area under ROC curve   =   0.8197

. * True positive and false positive rates on complete-case sample
. estat classification

Logistic model for success

              -------- True --------
Classified |         D             ~D  |      Total
-----------+--------------------------+-----------
     +     |        57             20  |         77
     -     |        31            125  |        156
-----------+--------------------------+-----------
   Total   |        88            145  |        233

Classified + if predicted Pr(D) >= .5
True D defined as success != 0
-------------------------------------------------
Sensitivity                     Pr( +| D)   64.77%
Specificity                     Pr( -|~D)   86.21%
Positive predictive value       Pr( D| +)   74.03%
Negative predictive value       Pr(~D| -)   80.13%
-------------------------------------------------
False + rate for true ~D        Pr( +|~D)   13.79%
False - rate for true D         Pr( -| D)   35.23%
False + rate for classified +   Pr(~D| +)   25.97%
False - rate for classified -   Pr( D| -)   19.87%
-------------------------------------------------
Correctly classified                        78.11%
-------------------------------------------------
```

```
446 .
447 . * ======================================
448 . * FIGURE 4.6--ROC curves, by urban/rural
449 . * ======================================
450 . * Complete-case sample (based on Model 6)
451 . * Figure 4.6a--regime factors, by urban/rural
452 . clear

453 . use revolutionaryeps.dta

454 . quietly: logit success c.newpolitymin1##c.newpolitymin1 newincumbpowerdur newgdppcthl newlnoill i.civilwar##c.ne
    > wmilexpsold10tile if startyear>1899 & colony==0, or nolog

455 . generate sample=e(sample)

456 . * Accuracy of model
457 . predict xbsucc if sample==1, xb
    (111 missing values generated)

458 . roccomp success xbsucc if sample==1, by(urbandum) graph summary legend(position(6) order (1 2) cols(2)) ysize(6)
    >  xsize(6) plotregion(lcolor(black)) ylabel(, nogrid labsize(small)) xlabel(, nogrid labsize(small)) ytick(0(.1)1
    > ) xtick(0(.1)1) ylabel(0(.1)1) xlabel(0(.1)1) title({bf: 4.6A: Complete case sample} , size(medlarge)) ytitle({b
    > f: True positive rate} , size(medsmall)) xtitle({bf: False positive rate} , size(medsmall)) rlopts(lpattern(dash
    > )) plot1opts(msize(medlarge)) plot2opts(msize(medlarge))

                                ROC                    -Asymptotic Normal--
    urbandum           Obs       Area     Std. Err.      [95% Conf. Interval]
    ---------------------------------------------------------------------------
    0                   98     0.6830       0.0650        0.55560     0.81039
    1                  136     0.8464       0.0331        0.78153     0.91118
    ---------------------------------------------------------------------------
    Ho: area(0) = area(1)
        chi2(1) =     5.02       Prob>chi2 =   0.0251

459 . * Saving graph to hard drive as figure4_6a.pdf
460 . graph export Logfiles\figure4_6a.pdf, replace
    (file Logfiles\figure4_6a.pdf written in PDF format)

461 . drop xbsucc

462 .
463 . * Imputed sample (based on Model 6)
464 . * Figure 4.6b--regime factors, by urban/rural
465 . clear

466 . use revolutionaryepsmireg.dta

467 . mi estimate, post dots eform saving(miest, replace): logit success newpolitymin1 newpolitymin1sq newincumbpowerd
    > ur newgdppcthl newlnoill newmilexpsold10tile civilwar newcivxmilexp if startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        288
                                                    Average RVI       =     0.0798
                                                    Largest FMI       =     0.2120
    DF adjustment:   Large sample                   DF:     min       =     437.43
                                                            avg       =   4,301.25
                                                            max       =  14,659.81
    Model F test:       Equal FMI                   F(   8,22005.8)   =       6.05
    Within VCE type:          OIM                   Prob > F          =     0.0000

    ------------------------------------------------------------------------------
                success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    --------------------+---------------------------------------------------------
          newpolitymin1 |   .8954253   .0284403    -3.48   0.001     .8413614    .9529631
        newpolitymin1sq |   .9784535   .0062559    -3.41   0.001     .9662528    .9908082
      newincumbpowerdur |   1.045536   .0182613     2.55   0.011     1.010346    1.081951
            newgdppcthl |   .8503554   .0665271    -2.07   0.038     .7294369    .9913185
              newlnoill |   .8865447   .0321929    -3.32   0.001     .8256359    .9519469
    newmilexpsold10tile |   1.468702   .1358766     4.15   0.000     1.224627    1.761422
                civilwar |   1.031639   .7203229     0.04   0.964     .2618121    4.065053
          newcivxmilexp |   .7980859   .0971743    -1.85   0.065     .6282326    1.013862
                  _cons |   .3501831    .162551    -2.26   0.024     .1409348     .870106
    ------------------------------------------------------------------------------

468 . * Accuracy of model
469 . mi predict xbsuccmi using miest, xb
    (57 missing values generated)

470 . roccomp success xbsuccmi, by(urbandum) graph summary legend(position(6) order (1 2) cols(2)) ysize(6) xsize(6) p
    > lotregion(lcolor(black)) ylabel(, nogrid labsize(small)) xlabel(, nogrid labsize(small)) ytick(0(.1)1) xtick(0(.
    > 1)1) ylabel(0(.1)1) xlabel(0(.1)1) title({bf: 4.6B: Multiple imputation (20 samples)} , size(medlarge)) ytitle({
    > it: True positive rate} , size(medsmall)) xtitle({it: False positive rate} , size(medsmall)) rlopts(lpattern(das
    > h)) plot1opts(msize(medlarge)) plot2opts(msize(medlarge))

                                ROC                    -Asymptotic Normal--
    urbandum           Obs       Area     Std. Err.      [95% Conf. Interval]
    ---------------------------------------------------------------------------
    0                  123     0.7513       0.0525        0.64832     0.85419
    1                  165     0.8016       0.0344        0.73418     0.86900
    ---------------------------------------------------------------------------
    Ho: area(0) = area(1)
        chi2(1) =     0.64       Prob>chi2 =   0.4227
```

```
471 . * Saving graph to hard drive as figure4_6a.pdf
472 . graph export Logfiles\figure4_6b.pdf, replace
    (file Logfiles\figure4_6b.pdf written in PDF format)

473 . * Figures manipulated in Stata graph editor
474 . * Figures combined in Stata graph editor and edited.
475 . drop xbsuccmi

476 .
477 . * ================================================
478 . * Movement characteristics and revolutionary outcomes
479 . * ================================================
480 . * ================================================
481 . * FIGURE 4.7--effect of participation on outcomes
482 . * ================================================
483 . * Using multiple imputation data for opposition tactics
484 . clear

485 . use revolutionaryepsmiopp.dta

486 . set seed 1234

487 . mi estimate, post dots eform saving(miest, replace): logit success lnparticnum if startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        343
                                                    Average RVI       =     0.0171
                                                    Largest FMI       =     0.0283
    DF adjustment:   Large sample                   DF:     min       =  23,941.92
                                                            avg       =  24,136.32
                                                            max       =  24,330.73
    Model F test:       Equal FMI                   F(   1,24330.7)   =      34.94
    Within VCE type:          OIM                   Prob > F          =     0.0000

    ------------------------------------------------------------------------------
         success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
     lnparticnum |   1.528654   .1097591     5.91   0.000     1.327972    1.759663
           _cons |   .0059561   .0046822    -6.52   0.000     .0012758    .0278063
    ------------------------------------------------------------------------------

488 . mimrgns, at (lnparticnum = (6.907705527 9.210340372 9.903487553 10.30895266 10.59663473 10.81977828 11.00209984
    > 11.15625052 11.28978191 11.40756495 11.51292546 11.60823564 11.69524702 11.77528973 11.8493977 11.91839057 11.98
    > 292909 12.04355372 12.10071213 12.15477935 12.20607265 12.25486281 12.30138283 12.34583459 12.3883942 12.4292162
    >  12.46843691 12.50617724 12.54254488 12.5776362 12.61153775 12.64432758 12.67607627 12.70684793 12.7367009 12.76
    > 568843 12.79385931 12.82125828 12.84792653 12.87390202 12.89921983 12.92391244 12.94800999 12.97154049 12.994530
    > 01 13.01700286 13.03898177 13.06048797 13.08154138 13.10216067 13.12236338 13.142166 13.16158409 13.18063229 13.
    > 19932442 13.21767356 13.23569206 13.25339164 13.27078338 13.28787782 13.30468493)) expression(exp(predict(xb))/(
    > 1+exp(predict(xb))))

    Multiple-imputation estimates                   Imputations       =         20
    Adjusted predictions                            Number of obs     =        343
                                                    Average RVI       =     0.0088
                                                    Largest FMI       =     0.0259
    DF adjustment:   Large sample                   DF:     min       =  28,503.85
                                                            avg       = 151,306.98
    Within VCE type: Delta-method                           max       = 697,581.58

    Expression   : exp(predict(xb))/(1+exp(predict(xb)))

    1._at        : lnparticnum     =    6.907706

    2._at        : lnparticnum     =     9.21034

    3._at        : lnparticnum     =    9.903488

    4._at        : lnparticnum     =    10.30895

    5._at        : lnparticnum     =    10.59663

    6._at        : lnparticnum     =    10.81978

    7._at        : lnparticnum     =     11.0021

    8._at        : lnparticnum     =    11.15625

    9._at        : lnparticnum     =    11.28978

    10._at       : lnparticnum     =    11.40756

    11._at       : lnparticnum     =    11.51293

    12._at       : lnparticnum     =    11.60824

    13._at       : lnparticnum     =    11.69525

    14._at       : lnparticnum     =    11.77529

    15._at       : lnparticnum     =     11.8494

    16._at       : lnparticnum     =    11.91839

    17._at       : lnparticnum     =    11.98293

    18._at       : lnparticnum     =    12.04355

    19._at       : lnparticnum     =    12.10071
```

20._at : lnparticnum = 12.15478

21._at : lnparticnum = 12.20607

22._at : lnparticnum = 12.25486

23._at : lnparticnum = 12.30138

24._at : lnparticnum = 12.34583

25._at : lnparticnum = 12.38839

26._at : lnparticnum = 12.42922

27._at : lnparticnum = 12.46844

28._at : lnparticnum = 12.50618

29._at : lnparticnum = 12.54254

30._at : lnparticnum = 12.57764

31._at : lnparticnum = 12.61154

32._at : lnparticnum = 12.64433

33._at : lnparticnum = 12.67608

34._at : lnparticnum = 12.70685

35._at : lnparticnum = 12.7367

36._at : lnparticnum = 12.76569

37._at : lnparticnum = 12.79386

38._at : lnparticnum = 12.82126

39._at : lnparticnum = 12.84793

40._at : lnparticnum = 12.8739

41._at : lnparticnum = 12.89922

42._at : lnparticnum = 12.92391

43._at : lnparticnum = 12.94801

44._at : lnparticnum = 12.97154

45._at : lnparticnum = 12.99453

46._at : lnparticnum = 13.017

47._at : lnparticnum = 13.03898

48._at : lnparticnum = 13.06049

49._at : lnparticnum = 13.08154

50._at : lnparticnum = 13.10216

51._at : lnparticnum = 13.12236

52._at : lnparticnum = 13.14217

53._at : lnparticnum = 13.16158

54._at : lnparticnum = 13.18063

55._at : lnparticnum = 13.19932

56._at : lnparticnum = 13.21767

57._at : lnparticnum = 13.23569

58._at : lnparticnum = 13.25339

59._at : lnparticnum = 13.27078

60._at : lnparticnum = 13.28788

61._at : lnparticnum = 13.30468

	Margin	Std. Err.	t	P>|t|	[95% Conf.	Interval]
at						
1	.1005704	.0276293	3.64	0.000	.0464156	.1547252
2	.2289152	.0294431	7.77	0.000	.1712066	.2866239
3	.2848836	.0279413	10.20	0.000	.2301191	.339648
4	.3211887	.0274332	11.71	0.000	.2674202	.3749571
5	.3483647	.0275658	12.64	0.000	.2943365	.402393
6	.3701579	.0280646	13.19	0.000	.3151523	.4251636
7	.3883707	.0287635	13.50	0.000	.3319952	.4447463
8	.404019	.0295646	13.67	0.000	.3460733	.4619648
9	.417735	.0304103	13.74	0.000	.3581319	.4773382
10	.4299408	.0312663	13.75	0.000	.3686598	.4912219
11	.4409323	.0321128	13.73	0.000	.3779921	.5038725
12	.4509257	.0329384	13.69	0.000	.3863674	.515484
13	.4600839	.0337366	13.64	0.000	.3939611	.5262066

```
          14  |   .4685325   .0345042    13.58   0.000     .4009051    .5361599
          15  |   .4763709   .0352401    13.52   0.000     .4073011    .5454407
          16  |   .4836788   .0359442    13.46   0.000      .413229    .5541285
          17  |   .4905212    .036617    13.40   0.000     .4187527    .5622898
          18  |   .4969518   .0372597    13.34   0.000     .4239236    .5699801
          19  |   .5030158   .0378735    13.28   0.000     .4287844    .5772471
          20  |   .5087509   .0384599    13.23   0.000     .4333702    .5841316
          21  |   .5141897   .0390202    13.18   0.000     .4377107    .5906686
          22  |   .5193599   .0395559    13.13   0.000     .4418309    .5968888
          23  |   .5242856   .0400684    13.08   0.000     .4457522     .602819
          24  |   .5289879   .0405589    13.04   0.000     .4494931    .6084827
          25  |   .5334852   .0410287    13.00   0.000     .4530696    .6139009
          26  |   .5377938    .041479    12.97   0.000     .4564955    .6190921
          27  |    .541928   .0419109    12.93   0.000     .4597831    .6240729
          28  |   .5459006   .0423254    12.90   0.000     .4629433     .628858
          29  |   .5497234   .0427236    12.87   0.000     .4659856    .6334611
          30  |   .5534062   .0431062    12.84   0.000     .4689185    .6378939
          31  |   .5569587   .0434742    12.81   0.000     .4717497    .6421677
          32  |   .5603891   .0438283    12.79   0.000      .474486    .6462922
          33  |   .5637051   .0441692    12.76   0.000     .4771336    .6502765
          34  |   .5669136   .0444978    12.74   0.000     .4796982     .654129
          35  |   .5700209   .0448145    12.72   0.000     .4821848    .6578571
          36  |   .5730329     .04512    12.70   0.000     .4845979    .6614679
          37  |   .5759548   .0454148    12.68   0.000     .4869419    .6649676
          38  |   .5787915   .0456995    12.67   0.000     .4892206    .6683624
          39  |   .5815475   .0459746    12.65   0.000     .4914374    .6716576
          40  |   .5842271   .0462405    12.63   0.000     .4935959    .6748584
          41  |    .586834   .0464976    12.62   0.000     .4956987    .6779692
          42  |   .5893718   .0467464    12.61   0.000      .497749    .6809947
          43  |    .591844   .0469872    12.60   0.000     .4997491    .6839389
          44  |   .5942534   .0472204    12.58   0.000     .5017014    .6868054
          45  |    .596603   .0474463    12.57   0.000     .5036083    .6895978
          46  |   .5988956   .0476652    12.56   0.000     .5054717    .6923195
          47  |   .6011335   .0478775    12.56   0.000     .5072935    .6949735
          48  |   .6033193   .0480834    12.55   0.000     .5090757    .6975629
          49  |    .605455   .0482832    12.54   0.000     .5108199    .7000901
          50  |   .6075428   .0484771    12.53   0.000     .5125276     .702558
          51  |   .6095845   .0486653    12.53   0.000     .5142003    .7049688
          52  |   .6115822   .0488482    12.52   0.000     .5158395    .7073248
          53  |   .6135373   .0490259    12.51   0.000     .5174465    .7096282
          54  |   .6154517   .0491985    12.51   0.000     .5190224    .7118811
          55  |   .6173268   .0493664    12.51   0.000     .5205685    .7140852
          56  |   .6191641   .0495296    12.50   0.000     .5220858    .7162424
          57  |    .620965   .0496884    12.50   0.000     .5235754    .7183545
          58  |   .6227307   .0498429    12.49   0.000     .5250383    .7204231
          59  |   .6244626   .0499933    12.49   0.000     .5264754    .7224497
          60  |   .6261617   .0501397    12.49   0.000     .5278876    .7244358
          61  |   .6278292   .0502822    12.49   0.000     .5292757    .7263827
------------------------------------------------------------------------------

489 . * Classificatory power of participation alone--complete case sample
490 . clear

491 . use revolutionaryeps.dta

492 . logit success lnparticnum if startyear>1899, or nolog

Logistic regression                             Number of obs     =        320
                                                LR chi2(1)        =      37.77
                                                Prob > chi2       =     0.0000
Log likelihood = -187.67289                     Pseudo R2         =     0.0914

------------------------------------------------------------------------------
     success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
 lnparticnum |    1.51772   .1112015     5.69   0.000     1.314695    1.752097
       _cons |   .0061637   .0049408    -6.35   0.000     .0012809    .0296591
------------------------------------------------------------------------------

493 . estat classification

Logistic model for success

              -------- True --------
Classified |         D             ~D  |      Total
-----------+--------------------------+-----------
     +     |        41             26  |         67
     -     |        70            183  |        253
-----------+--------------------------+-----------
   Total   |       111            209  |        320

Classified + if predicted Pr(D) >= .5
True D defined as success != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)   36.94%
Specificity                     Pr( -|~D)   87.56%
Positive predictive value       Pr( D| +)   61.19%
Negative predictive value       Pr(~D| -)   72.33%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)   12.44%
False - rate for true D         Pr( -| D)   63.06%
False + rate for classified +   Pr(~D| +)   38.81%
False - rate for classified -   Pr( D| -)   27.67%
--------------------------------------------------
Correctly classified                        70.00%
--------------------------------------------------
```

```
494 .
495 . *  Median levels of participation, urban vs. rural revolts
496 . sum particnum if urbandum==1 & startyear>1899, detail

            Peak number of civilian rebel participants
                      (estimated from sources)
-------------------------------------------------------------
      Percentiles      Smallest
 1%         1500           1000
 5%         3000           1500
10%        10000           1760       Obs                 159
25%        25000           2000       Sum of Wgt.         159

50%       100000                      Mean           425338.1
                        Largest       Std. Dev.       1210041
75%       300000        2500000
90%      1000000        3000000       Variance       1.46e+12
95%      2000000       1.00e+07       Skewness       6.472594
99%     1.00e+07       1.00e+07       Kurtosis       50.26205

497 . sum particnum if urbandum==0 & startyear>1899, detail

            Peak number of civilian rebel participants
                      (estimated from sources)
-------------------------------------------------------------
      Percentiles      Smallest
 1%         1000           1000
 5%         1500           1000
10%         2500           1000       Obs                 161
25%         7500           1000       Sum of Wgt.         161

50%        15000                      Mean           63544.72
                        Largest       Std. Dev.      323905.9
75%        30000         350000
90%        90000         450000       Variance       1.05e+11
95%       170000         775000       Skewness        11.3403
99%       775000        4000000       Kurtosis       137.3626

498 . * t-tests of literacy, schooling, newspaper readership, television ownership, and mobile phone ownership in urba
    > n vs. rural environments
499 . ttest litpercbefrev if startyear>1899, by(urbandum)

Two-sample t test with equal variances
------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
      no |      65    34.47385    2.904216    23.41454    28.67201    40.27569
     yes |     145    63.50069    2.575273     31.0104    58.41047    68.59091
---------+--------------------------------------------------------------------
combined |     210    54.51619    2.194564    31.80225    50.18987    58.84251
---------+--------------------------------------------------------------------
    diff |           -29.02684    4.311887               -37.52745   -20.52624
------------------------------------------------------------------------------
    diff = mean(no) - mean(yes)                                   t =  -6.7318
Ho: diff = 0                                     degrees of freedom =      208

    Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
 Pr(T < t) = 0.0000         Pr(|T| > |t|) = 0.0000          Pr(T > t) = 1.0000

500 . ttest avgtotalyrsschool if startyear>1899, by(urbandum)

Two-sample t test with equal variances
------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
      no |      43    2.473256    .2304184    1.510955    2.008253    2.938259
     yes |      86    5.050698    .3242326    3.006809    4.406036    5.695359
---------+--------------------------------------------------------------------
combined |     129     4.19155    .2527466     2.87065    3.691448    4.691653
---------+--------------------------------------------------------------------
    diff |           -2.577442    .4872562               -3.541634    -1.61325
------------------------------------------------------------------------------
    diff = mean(no) - mean(yes)                                   t =  -5.2897
Ho: diff = 0                                     degrees of freedom =      127

    Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
 Pr(T < t) = 0.0000         Pr(|T| > |t|) = 0.0000          Pr(T > t) = 1.0000

501 . ttest newspercap if startyear>1899, by(urbandum)

Two-sample t test with equal variances
------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
      no |      42    250.3333    48.58442     314.863    152.2151    348.4516
     yes |      67    950.9104    154.4178    1263.964    642.6054    1259.215
---------+--------------------------------------------------------------------
combined |     109    680.9633    101.8757    1063.614     479.028    882.8986
---------+--------------------------------------------------------------------
    diff |           -700.5771    199.1038               -1095.277   -305.8771
------------------------------------------------------------------------------
    diff = mean(no) - mean(yes)                                   t =  -3.5187
Ho: diff = 0                                     degrees of freedom =      107

    Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
 Pr(T < t) = 0.0003         Pr(|T| > |t|) = 0.0006          Pr(T > t) = 0.9997
```

```
502 . ttest televispercap if startyear>1899, by(urbandum)

    Two-sample t test with equal variances
------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
      no |      45    1883.444    509.6588    3418.895    856.2946    2910.594
     yes |      67    10675.24    1839.858    15059.89    7001.843    14348.63
---------+--------------------------------------------------------------------
combined |     112    7142.821    1188.611    12579.08    4787.508    9498.134
---------+--------------------------------------------------------------------
    diff |           -8791.794    2286.643               -13323.38   -4260.205
------------------------------------------------------------------------------
    diff = mean(no) - mean(yes)                                   t =  -3.8448
Ho: diff = 0                                     degrees of freedom =      110

    Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
 Pr(T < t) = 0.0001         Pr(|T| > |t|) = 0.0002          Pr(T > t) = 0.9999

503 . ttest mobilepercap if startyear>1899, by(urbandum)

    Two-sample t test with equal variances
------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
      no |      15      3202.2    2763.517    10703.05   -2724.953    9129.353
     yes |      39    17904.26    4538.461    28342.68    8716.623    27091.89
---------+--------------------------------------------------------------------
combined |      54    13820.35    3470.505     25502.9      6859.4     20781.3
---------+--------------------------------------------------------------------
    diff |           -14702.06    7552.122               -29856.5    452.3841
------------------------------------------------------------------------------
    diff = mean(no) - mean(yes)                                   t =  -1.9467
Ho: diff = 0                                     degrees of freedom =       52

    Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
 Pr(T < t) = 0.0285         Pr(|T| > |t|) = 0.0570          Pr(T > t) = 0.9715

504 .
505 . * ================================================================
506 . * FIGURE 4.8--effect of participation on outcomes in urban, rural,
507 . *    urban civic, and social revolutionary episodes
508 . * ================================================================
509 . * Multiple imputation sample
510 . clear

511 . use revolutionaryepsmiopp.dta

512 . set seed 1234

513 . mi estimate, post dots eform saving(miest, replace): logit success lnparticnum if startyear>1899 & urbandum==1

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        180
                                                    Average RVI       =     0.0304
                                                    Largest FMI       =     0.0524
    DF adjustment:   Large sample                   DF:     min       =   7,004.12
                                                            avg       =   7,049.55
                                                            max       =   7,094.99
    Model F test:       Equal FMI                   F(   1, 7095.0)   =      12.37
    Within VCE type:          OIM                   Prob > F          =     0.0004

------------------------------------------------------------------------------
     success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
 lnparticnum |   1.392736   .1311799     3.52   0.000     1.157928    1.675159
       _cons |    .019147   .0208631    -3.63   0.000     .0022618    .1620892
------------------------------------------------------------------------------

514 . mimrgns, at (lnparticnum = (1 9.210340372 9.903487553 10.30895266 10.59663473 10.81977828 11.00209984 11.1562505
    > 2 11.28978191 11.40756495 11.51292546 11.60823564 11.69524702 11.77528973 11.8493977 11.91839057 11.98292909 12.
    > 04355372 12.10071213 12.15477935 12.20607265 12.25486281 12.30138283 12.34583459 12.3883942 12.4292162 12.468436
    > 91 12.50617724 12.54254488 12.5776362 12.61153775 12.64432758 12.67607627 12.70684793 12.7367009 12.76568843 12.
    > 79385931 12.82125828 12.84792653 12.87390202 12.89921983 12.92391244 12.94800999 12.97154049 12.99453001 13.0170
    > 0286 13.03898177 13.06048797 13.08154138 13.10216067 13.12236338 13.142166 13.16158409 13.18063229 13.19932442 1
    > 3.21767356 13.23569206 13.25339164 13.27078338 13.28787782 13.30468493)) expression(exp(predict(xb))/(1+exp(pred
    > ict(xb))))

    Multiple-imputation estimates                   Imputations       =         20
    Adjusted predictions                            Number of obs     =        180
                                                    Average RVI       =     0.0139
                                                    Largest FMI       =     0.0464
    DF adjustment:   Large sample                   DF:     min       =   8,925.15
                                                            avg       = 123,875.17
    Within VCE type: Delta-method                           max       = 567,532.70

    Expression   : exp(predict(xb))/(1+exp(predict(xb)))

    1._at        : lnparticnum     =           1

    2._at        : lnparticnum     =     9.21034

    3._at        : lnparticnum     =    9.903488

    4._at        : lnparticnum     =    10.30895

    5._at        : lnparticnum     =    10.59663
```

6._at : lnparticnum = 10.81978

7._at : lnparticnum = 11.0021

8._at : lnparticnum = 11.15625

9._at : lnparticnum = 11.28978

10._at : lnparticnum = 11.40756

11._at : lnparticnum = 11.51293

12._at : lnparticnum = 11.60824

13._at : lnparticnum = 11.69525

14._at : lnparticnum = 11.77529

15._at : lnparticnum = 11.8494

16._at : lnparticnum = 11.91839

17._at : lnparticnum = 11.98293

18._at : lnparticnum = 12.04355

19._at : lnparticnum = 12.10071

20._at : lnparticnum = 12.15478

21._at : lnparticnum = 12.20607

22._at : lnparticnum = 12.25486

23._at : lnparticnum = 12.30138

24._at : lnparticnum = 12.34583

25._at : lnparticnum = 12.38839

26._at : lnparticnum = 12.42922

27._at : lnparticnum = 12.46844

28._at : lnparticnum = 12.50618

29._at : lnparticnum = 12.54254

30._at : lnparticnum = 12.57764

31._at : lnparticnum = 12.61154

32._at : lnparticnum = 12.64433

33._at : lnparticnum = 12.67608

34._at : lnparticnum = 12.70685

35._at : lnparticnum = 12.7367

36._at : lnparticnum = 12.76569

37._at : lnparticnum = 12.79386

38._at : lnparticnum = 12.82126

39._at : lnparticnum = 12.84793

40._at : lnparticnum = 12.8739

41._at : lnparticnum = 12.89922

42._at : lnparticnum = 12.92391

43._at : lnparticnum = 12.94801

44._at : lnparticnum = 12.97154

45._at : lnparticnum = 12.99453

46._at : lnparticnum = 13.017

47._at : lnparticnum = 13.03898

48._at : lnparticnum = 13.06049

49._at : lnparticnum = 13.08154

50._at : lnparticnum = 13.10216

51._at : lnparticnum = 13.12236

52._at : lnparticnum = 13.14217

53._at : lnparticnum = 13.16158

54._at : lnparticnum = 13.18063

55._at : lnparticnum = 13.19932

56._at : lnparticnum = 13.21767

57._at : lnparticnum = 13.23569

58._at : lnparticnum = 13.25339

59._at : lnparticnum = 13.27078

60._at : lnparticnum = 13.28788

61._at : lnparticnum = 13.30468

	Margin	Std. Err.	t	P>|t|	[95% Conf.	Interval]
_at						
1	.0265208	.0259713	1.02	0.307	-.024389	.0774305
2	.2882361	.0538017	5.36	0.000	.1827761	.393696
3	.3374538	.0477439	7.07	0.000	.2438716	.4310361
4	.368083	.0441156	8.34	0.000	.2816145	.4545514
5	.3905032	.0418398	9.33	0.000	.3084967	.4725097
6	.4082266	.0404069	10.10	0.000	.3290295	.4874237
7	.4228908	.0395342	10.70	0.000	.3454046	.5003771
8	.4353983	.0390485	11.15	0.000	.3588643	.5119323
9	.4463006	.0388361	11.49	0.000	.370183	.5224183
10	.455961	.0388197	11.75	0.000	.3798756	.5320464
11	.464631	.0389449	11.93	0.000	.3883003	.5409617
12	.4724927	.0391727	12.06	0.000	.3957155	.5492699
13	.479682	.0394748	12.15	0.000	.4023126	.5570513
14	.486303	.0398304	12.21	0.000	.4082366	.5643693
15	.4924374	.040224	12.24	0.000	.4135995	.5712753
16	.4981504	.0406441	12.26	0.000	.4184891	.5778117
17	.503495	.0410819	12.26	0.000	.4229756	.5840145
18	.5085147	.0415309	12.24	0.000	.4271154	.5899141
19	.5132459	.041986	12.22	0.000	.4309544	.5955373
20	.5177189	.0424434	12.20	0.000	.4345308	.600907
21	.5219598	.0429003	12.17	0.000	.4378761	.6060435
22	.5259907	.0433545	12.13	0.000	.4410167	.6109647
23	.5298308	.0438044	12.10	0.000	.443975	.6156867
24	.5334969	.0442487	12.06	0.000	.4467702	.6202236
25	.5370035	.0446865	12.02	0.000	.4494186	.6245884
26	.5403634	.0451171	11.98	0.000	.4519344	.6287925
27	.543588	.0455402	11.94	0.000	.4543297	.6328464
28	.5466874	.0459553	11.90	0.000	.4566153	.6367595
29	.5496707	.0463623	11.86	0.000	.4588007	.6405406
30	.5525457	.0467612	11.82	0.000	.4608939	.6441974
31	.5553199	.0471518	11.78	0.000	.4629025	.6477374
32	.5579998	.0475341	11.74	0.000	.4648328	.6511668
33	.5605914	.0479084	11.70	0.000	.4666907	.654492
34	.5631	.0482746	11.66	0.000	.4684814	.6577186
35	.5655306	.048633	11.63	0.000	.4702095	.6608517
36	.5678877	.0489836	11.59	0.000	.4718794	.6638961
37	.5701754	.0493266	11.56	0.000	.4734946	.6668561
38	.5723975	.0496622	11.53	0.000	.4750589	.6697361
39	.5745574	.0499905	11.49	0.000	.4765751	.6725397
40	.5766586	.0503118	11.46	0.000	.4780464	.6752707
41	.5787038	.0506262	11.43	0.000	.4794752	.6779323
42	.5806958	.050934	11.40	0.000	.480864	.6805276
43	.5826374	.0512352	11.37	0.000	.482215	.6830597
44	.5845307	.0515301	11.34	0.000	.4835302	.6855311
45	.586378	.0518189	11.32	0.000	.4848115	.6879445
46	.5881815	.0521017	11.29	0.000	.4860606	.6903024
47	.5899429	.0523787	11.26	0.000	.487279	.6926068
48	.5916643	.05265	11.24	0.000	.4884685	.6948601
49	.5933472	.0529159	11.21	0.000	.4896302	.6970642
50	.5949932	.0531764	11.19	0.000	.4907655	.699221
51	.5966039	.0534318	11.17	0.000	.4918755	.7013323
52	.5981807	.0536821	11.14	0.000	.4929615	.7033999
53	.5997248	.0539276	11.12	0.000	.4940244	.7054253
54	.6012377	.0541683	11.10	0.000	.4950653	.70741
55	.6027203	.0544045	11.08	0.000	.496085	.7093555
56	.6041738	.0546361	11.06	0.000	.4970844	.7112632
57	.6055993	.0548634	11.04	0.000	.4980643	.7131343
58	.6069978	.0550865	11.02	0.000	.4990255	.7149701
59	.6083703	.0553055	11.00	0.000	.4999688	.7167719
60	.6097177	.0555204	10.98	0.000	.5008947	.7185407
61	.6110407	.0557315	10.96	0.000	.5018039	.7202775

515 . mi estimate, post dots eform saving(miest, replace): logit success lnparticnum if startyear>1899 & urbandum==0

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

Multiple-imputation estimates — Imputations = 20
Logistic regression — Number of obs = 163
Average RVI = 0.0015
Largest FMI = 0.0023
DF adjustment: Large sample — DF: min = 3592598.56
avg = 4253578.46
max = 4914558.35
Model F test: Equal FMI — F(1, 3.6e+06) = 12.11
Within VCE type: OIM — Prob > F = 0.0005

success	exp(b)	Std. Err.	t	P>|t|	[95% Conf.	Interval]
lnparticnum	1.671912	.2469742	3.48	0.001	1.251625	2.233329
_cons	.0021277	.0031707	-4.13	0.000	.0001147	.0394789

```
516 . mimrgns, at (lnparticnum = (1 9.210340372 9.903487553 10.30895266 10.59663473 10.81977828 11.00209984 11.1562505
    > 2 11.28978191 11.40756495 11.51292546 11.60823564 11.69524702 11.77528973 11.8493977 11.91839057 11.98292909 12.
    > 04355372 12.10071213 12.15477935 12.20607265 12.25486281 12.30138283 12.34583459 12.3883942 12.4292162 12.468436
    > 91 12.50617724 12.54254488 12.5776362 12.61153775 12.64432758 12.67607627 12.70684793 12.7367009 12.76568843 12.
    > 79385931 12.82125828 12.84792653 12.87390202 12.89921983 12.92391244 12.94800999 12.97154049 12.99453001 13.0170
    > 0286 13.03898177 13.06048797 13.08154138 13.10216067 13.12236338 13.142166 13.16158409 13.18063229 13.19932442 1
    > 3.21767356 13.23569206 13.25339164 13.27078338 13.28787782 13.30468493)) expression(exp(predict(xb))/(1+exp(pred
    > ict(xb))))

Multiple-imputation estimates                   Imputations       =         20
Adjusted predictions                            Number of obs     =        163
                                                Average RVI       =     0.0010
                                                Largest FMI       =     0.0030
DF adjustment:   Large sample                   DF:     min       = 2143934.03
                                                        avg       =   6.91e+07
Within VCE type: Delta-method                           max       =   4.01e+09

Expression   : exp(predict(xb))/(1+exp(predict(xb)))

1._at        : lnparticnum     =           1

2._at        : lnparticnum     =     9.21034

3._at        : lnparticnum     =    9.903488

4._at        : lnparticnum     =    10.30895

5._at        : lnparticnum     =    10.59663

6._at        : lnparticnum     =    10.81978

7._at        : lnparticnum     =     11.0021

8._at        : lnparticnum     =    11.15625

9._at        : lnparticnum     =    11.28978

10._at       : lnparticnum     =    11.40756

11._at       : lnparticnum     =    11.51293

12._at       : lnparticnum     =    11.60824

13._at       : lnparticnum     =    11.69525

14._at       : lnparticnum     =    11.77529

15._at       : lnparticnum     =     11.8494

16._at       : lnparticnum     =    11.91839

17._at       : lnparticnum     =    11.98293

18._at       : lnparticnum     =    12.04355

19._at       : lnparticnum     =    12.10071

20._at       : lnparticnum     =    12.15478

21._at       : lnparticnum     =    12.20607

22._at       : lnparticnum     =    12.25486

23._at       : lnparticnum     =    12.30138

24._at       : lnparticnum     =    12.34583

25._at       : lnparticnum     =    12.38839

26._at       : lnparticnum     =    12.42922

27._at       : lnparticnum     =    12.46844

28._at       : lnparticnum     =    12.50618

29._at       : lnparticnum     =    12.54254

30._at       : lnparticnum     =    12.57764

31._at       : lnparticnum     =    12.61154

32._at       : lnparticnum     =    12.64433

33._at       : lnparticnum     =    12.67608

34._at       : lnparticnum     =    12.70685

35._at       : lnparticnum     =     12.7367

36._at       : lnparticnum     =    12.76569

37._at       : lnparticnum     =    12.79386

38._at       : lnparticnum     =    12.82126

39._at       : lnparticnum     =    12.84793

40._at       : lnparticnum     =     12.8739

41._at       : lnparticnum     =    12.89922
```

```
42._at       : lnparticnum     =    12.92391

43._at       : lnparticnum     =    12.94801

44._at       : lnparticnum     =    12.97154

45._at       : lnparticnum     =    12.99453

46._at       : lnparticnum     =      13.017

47._at       : lnparticnum     =    13.03898

48._at       : lnparticnum     =    13.06049

49._at       : lnparticnum     =    13.08154

50._at       : lnparticnum     =    13.10216

51._at       : lnparticnum     =    13.12236

52._at       : lnparticnum     =    13.14217

53._at       : lnparticnum     =    13.16158

54._at       : lnparticnum     =    13.18063

55._at       : lnparticnum     =    13.19932

56._at       : lnparticnum     =    13.21767

57._at       : lnparticnum     =    13.23569

58._at       : lnparticnum     =    13.25339

59._at       : lnparticnum     =    13.27078

60._at       : lnparticnum     =    13.28788

61._at       : lnparticnum     =    13.30468
```

	Margin	Std. Err.	t	P>|t|	[95% Conf.	Interval]
_at						
1	.0035504	.0047613	0.75	0.456	-.0057816	.0128823
2	.1948335	.0349543	5.57	0.000	.1263244	.2633426
3	.2568043	.0362391	7.09	0.000	.185777	.3278316
4	.2985434	.0407263	7.33	0.000	.2187212	.3783655
5	.3303991	.0461033	7.17	0.000	.2400382	.4207599
6	.3562472	.0514147	6.93	0.000	.2554763	.4570181
7	.3780151	.0563592	6.71	0.000	.267553	.4884773
8	.3968152	.0608703	6.52	0.000	.2775115	.516119
9	.4133526	.0649606	6.36	0.000	.2860322	.5406731
10	.428105	.0686672	6.23	0.000	.2935197	.5626903
11	.4414112	.0720321	6.13	0.000	.3002308	.5825917
12	.4535216	.0750953	6.04	0.000	.3063374	.6007058
13	.464626	.0778925	5.96	0.000	.3119595	.6172925
14	.4748723	.0804547	5.90	0.000	.317184	.6325607
15	.4843779	.0828088	5.85	0.000	.3220756	.6466803
16	.4932377	.084978	5.80	0.000	.3266838	.6597916
17	.5015294	.0869822	5.77	0.000	.3310473	.6720114
18	.5093173	.0888385	5.73	0.000	.335197	.6834377
19	.516656	.0905619	5.71	0.000	.3391578	.6941542
20	.5235912	.0921654	5.68	0.000	.3429502	.7042322
21	.5301622	.0936603	5.66	0.000	.3465912	.7137331
22	.5364027	.0950565	5.64	0.000	.3500953	.7227102
23	.5423424	.0963628	5.63	0.000	.3534746	.7312102
24	.5480067	.097587	5.62	0.000	.3567396	.7392737
25	.5534182	.0987358	5.61	0.000	.3598995	.746937
26	.558597	.0998155	5.60	0.000	.3629621	.7542318
27	.5635606	.1008314	5.59	0.000	.3659345	.7611867
28	.5683247	.1017886	5.58	0.000	.3688226	.7678268
29	.5729038	.1026914	5.58	0.000	.3716323	.7741754
30	.5773102	.1035437	5.58	0.000	.3743681	.7802523
31	.5815557	.1043493	5.57	0.000	.3770347	.7860767
32	.5856504	.1051113	5.57	0.000	.3796359	.7916648
33	.5896038	.1058327	5.57	0.000	.3821754	.7970323
34	.5934246	.1065163	5.57	0.000	.3846564	.8021929
35	.5971205	.1071644	5.57	0.000	.387082	.8071591
36	.6006988	.1077795	5.57	0.000	.3894548	.8119428
37	.6041659	.1083634	5.58	0.000	.3917775	.8165543
38	.607528	.1089181	5.58	0.000	.3940523	.8210038
39	.6107906	.1094455	5.58	0.000	.3962813	.8252999
40	.6139591	.109947	5.58	0.000	.3984668	.8294514
41	.6170379	.1104242	5.59	0.000	.4006103	.8334655
42	.6200317	.1108785	5.59	0.000	.4027137	.8373498
43	.6229447	.1113112	5.60	0.000	.4047786	.8411108
44	.6257805	.1117234	5.60	0.000	.4068065	.8447545
45	.6285427	.1121163	5.61	0.000	.4087987	.8482867
46	.6312349	.1124908	5.61	0.000	.4107568	.851713
47	.6338598	.112848	5.62	0.000	.4126817	.855038
48	.6364208	.1131887	5.62	0.000	.4145748	.8582667
49	.6389202	.1135138	5.63	0.000	.4164372	.8614033
50	.6413609	.113824	5.63	0.000	.4182699	.864452
51	.6437452	.1141201	5.64	0.000	.4200738	.8674166
52	.6460754	.1144028	5.65	0.000	.42185	.8703009
53	.6483536	.1146726	5.65	0.000	.4235993	.8731079
54	.6505819	.1149303	5.66	0.000	.4253225	.8758413
55	.6527621	.1151764	5.67	0.000	.4270205	.8785038
56	.6548961	.1154113	5.67	0.000	.4286939	.8810982
57	.6569856	.1156357	5.68	0.000	.4303436	.8836275

```
         58  |   .6590321     .11585     5.69   0.000     .4319702     .886094
         59  |   .6610374   .1160546     5.70   0.000     .4335744    .8885003
         60  |   .6630027     .11625     5.70   0.000     .4351568    .8908486
         61  |   .6649295   .1164365     5.71   0.000      .436718    .8931409
-------------------------------------------------------------------------------

517 . mi estimate, post dots eform saving(miest, replace): logit success lnparticnum if startyear>1899 & urbancivic==1

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

Multiple-imputation estimates                   Imputations       =         20
Logistic regression                             Number of obs     =         54
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
DF adjustment:   Large sample                   DF:     min       =          .
                                                        avg       =          .
                                                        max       =          .
Model F test:       Equal FMI                   F(   1,      .)   =       5.79
Within VCE type:          OIM                   Prob > F          =     0.0161

------------------------------------------------------------------------------
     success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
 lnparticnum |   1.870578   .4869525     2.41   0.016     1.123025    3.115748
       _cons |   .0008042   .0025255    -2.27   0.023     1.71e-06    .3788975
------------------------------------------------------------------------------

518 . mimrgns, at (lnparticnum = (1 9.210340372 9.903487553 10.30895266 10.59663473 10.81977828 11.00209984 11.1562505
    > 2 11.28978191 11.40756495 11.51292546 11.60823564 11.69524702 11.77528973 11.8493977 11.91839057 11.98292909 12.
    > 04355372 12.10071213 12.15477935 12.20607265 12.25486281 12.30138283 12.34583459 12.3883942 12.4292162 12.468436
    > 91 12.50617724 12.54254488 12.5776362 12.61153775 12.64432758 12.67607627 12.70684793 12.7367009 12.76568843 12.
    > 79385931 12.82125828 12.84792653 12.87390202 12.89921983 12.92391244 12.94800999 12.97154049 12.99453001 13.0170
    > 0286 13.03898177 13.06048797 13.08154138 13.10216067 13.12236338 13.142166 13.16158409 13.18063229 13.19932442 1
    > 3.21767356 13.23569206 13.25339164 13.27078338 13.28787782 13.30468493)) expression(exp(predict(xb))/(1+exp(pred
    > ict(xb))))

Multiple-imputation estimates                   Imputations       =         20
Adjusted predictions                            Number of obs     =         54
                                                Average RVI       =     0.0000
                                                Largest FMI       =     0.0000
DF adjustment:   Large sample                   DF:     min       =   1.19e+62
                                                        avg       =   2.46e+63
Within VCE type: Delta-method                           max       =          .

Expression   : exp(predict(xb))/(1+exp(predict(xb)))

1._at        : lnparticnum     =           1

2._at        : lnparticnum     =     9.21034

3._at        : lnparticnum     =    9.903488

4._at        : lnparticnum     =    10.30895

5._at        : lnparticnum     =    10.59663

6._at        : lnparticnum     =    10.81978

7._at        : lnparticnum     =     11.0021

8._at        : lnparticnum     =    11.15625

9._at        : lnparticnum     =    11.28978

10._at       : lnparticnum     =    11.40756

11._at       : lnparticnum     =    11.51293

12._at       : lnparticnum     =    11.60824

13._at       : lnparticnum     =    11.69525

14._at       : lnparticnum     =    11.77529

15._at       : lnparticnum     =     11.8494

16._at       : lnparticnum     =    11.91839

17._at       : lnparticnum     =    11.98293

18._at       : lnparticnum     =    12.04355

19._at       : lnparticnum     =    12.10071

20._at       : lnparticnum     =    12.15478

21._at       : lnparticnum     =    12.20607

22._at       : lnparticnum     =    12.25486

23._at       : lnparticnum     =    12.30138

24._at       : lnparticnum     =    12.34583

25._at       : lnparticnum     =    12.38839

26._at       : lnparticnum     =    12.42922

27._at       : lnparticnum     =    12.46844
```

28._at   : lnparticnum   =   12.50618

29._at   : lnparticnum   =   12.54254

30._at   : lnparticnum   =   12.57764

31._at   : lnparticnum   =   12.61154

32._at   : lnparticnum   =   12.64433

33._at   : lnparticnum   =   12.67608

34._at   : lnparticnum   =   12.70685

35._at   : lnparticnum   =   12.7367

36._at   : lnparticnum   =   12.76569

37._at   : lnparticnum   =   12.79386

38._at   : lnparticnum   =   12.82126

39._at   : lnparticnum   =   12.84793

40._at   : lnparticnum   =   12.8739

41._at   : lnparticnum   =   12.89922

42._at   : lnparticnum   =   12.92391

43._at   : lnparticnum   =   12.94801

44._at   : lnparticnum   =   12.97154

45._at   : lnparticnum   =   12.99453

46._at   : lnparticnum   =   13.017

47._at   : lnparticnum   =   13.03898

48._at   : lnparticnum   =   13.06049

49._at   : lnparticnum   =   13.08154

50._at   : lnparticnum   =   13.10216

51._at   : lnparticnum   =   13.12236

52._at   : lnparticnum   =   13.14217

53._at   : lnparticnum   =   13.16158

54._at   : lnparticnum   =   13.18063

55._at   : lnparticnum   =   13.19932

56._at   : lnparticnum   =   13.21767

57._at   : lnparticnum   =   13.23569

58._at   : lnparticnum   =   13.25339

59._at   : lnparticnum   =   13.27078

60._at   : lnparticnum   =   13.28788

61._at   : lnparticnum   =   13.30468

	Margin	Std. Err.	t	P>|t|	[95% Conf.	Interval]
_at						
1	.001502	.0043214	0.35	0.728	-.0069678	.0099717
2	.2046053	.1281029	1.60	0.110	-.0464717	.4556823
3	.2842098	.1269148	2.24	0.025	.0354613	.5329584
4	.3385522	.1194663	2.83	0.005	.1044026	.5727019
5	.3799896	.1114832	3.41	0.001	.1614866	.5984927
6	.413419	.1041797	3.97	0.000	.2092306	.6176075
7	.4413535	.0978229	4.51	0.000	.2496242	.6330828
8	.4652725	.0924141	5.03	0.000	.2841443	.6464007
9	.4861259	.0878741	5.53	0.000	.3138958	.6583559
10	.5045626	.0841027	6.00	0.000	.3397243	.6694009
11	.5210456	.0809997	6.43	0.000	.3622892	.6798021
12	.5359181	.0784715	6.83	0.000	.3821167	.6897194
13	.5494406	.0764343	7.19	0.000	.3996321	.6992491
14	.5618165	.0748138	7.51	0.000	.415184	.7084489
15	.5732069	.0735451	7.79	0.000	.4290611	.7173527
16	.583742	.0725719	8.04	0.000	.4415037	.7259803
17	.5935285	.0718457	8.26	0.000	.4527135	.7343434
18	.6026543	.0713249	8.45	0.000	.46286	.7424485
19	.6111936	.0709743	8.61	0.000	.4720865	.7503008
20	.619209	.070764	8.75	0.000	.480514	.7579039
21	.6267535	.0706688	8.87	0.000	.4882453	.7652618
22	.6338731	.0706673	8.97	0.000	.4953677	.7723786
23	.6406076	.0707419	9.06	0.000	.501956	.7792592
24	.6469912	.0708777	9.13	0.000	.5080736	.7859089
25	.6530545	.0710622	9.19	0.000	.5137751	.7923338
26	.6588239	.0712852	9.24	0.000	.5191075	.7985402
27	.6643231	.071538	9.29	0.000	.5241112	.8045349
28	.6695729	.0718135	9.32	0.000	.528821	.8103247
29	.6745922	.0721059	9.36	0.000	.5332673	.8159172

```
          30  |   .6793976   .0724102     9.38   0.000     .5374763    .8213189
          31  |   .6840044   .0727224     9.41   0.000     .5414711    .8265376
          32  |   .6884258   .0730392     9.43   0.000     .5452716     .83158
          33  |   .6926745   .0733579     9.44   0.000     .5488957    .8364532
          34  |   .6967615   .0736762     9.46   0.000     .5523589    .8411642
          35  |    .700697   .0739923     9.47   0.000     .5556747    .8457193
          36  |   .7044902   .0743048     9.48   0.000     .5588554     .850125
          37  |   .7081497   .0746125     9.49   0.000     .5619118    .8543875
          38  |   .7116832   .0749145     9.50   0.000     .5648535    .8585128
          39  |   .7150978   .0752099     9.51   0.000     .5676891    .8625065
          40  |   .7184004   .0754983     9.52   0.000     .5704265    .8663743
          41  |   .7215967   .0757791     9.52   0.000     .5730724    .8701211
          42  |   .7246926   .0760522     9.53   0.000     .5756331    .8737521
          43  |   .7276934   .0763172     9.54   0.000     .5781144    .8772723
          44  |   .7306035    .076574     9.54   0.000     .5805212    .8806858
          45  |   .7334277   .0768226     9.55   0.000     .5828583    .8839972
          46  |   .7361703   .0770628     9.55   0.000     .5851298    .8872107
          47  |   .7388348   .0772949     9.56   0.000     .5873396     .89033
          48  |   .7414253   .0775187     9.56   0.000     .5894914    .8933592
          49  |   .7439449   .0777345     9.57   0.000     .5915881    .8963016
          50  |   .7463969   .0779422     9.58   0.000      .593633    .8991608
          51  |   .7487843   .0781421     9.58   0.000     .5956286     .90194
          52  |   .7511099   .0783343     9.59   0.000     .5975775    .9046423
          53  |   .7533762   .0785189     9.59   0.000     .5994819    .9072705
          54  |    .755586   .0786962     9.60   0.000     .6013442    .9098277
          55  |   .7577413   .0788663     9.61   0.000     .6031662    .9123164
          56  |   .7598444   .0790293     9.61   0.000     .6049497    .9147391
          57  |   .7618975   .0791856     9.62   0.000     .6066966    .9170984
          58  |   .7639024   .0793351     9.63   0.000     .6084084    .9193964
          59  |   .7658612   .0794782     9.64   0.000     .6100867    .9216357
          60  |   .7677754   .0796151     9.64   0.000     .6117328     .923818
          61  |   .7696467   .0797458     9.65   0.000     .6133479    .9259455
------------------------------------------------------------------------------
```

```
519 . mi estimate, post dots eform saving(miest, replace): logit success lnparticnum if startyear>1899 & urbandum==1 &
>  urbancivic==0

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

Multiple-imputation estimates                   Imputations       =         20
Logistic regression                             Number of obs     =        126
                                                Average RVI       =     0.0370
                                                Largest FMI       =     0.0659
DF adjustment:   Large sample                   DF:     min       =   4,429.03
                                                        avg       =   4,456.99
                                                        max       =   4,484.96
Model F test:       Equal FMI                   F(   1, 4485.0)   =       4.76
Within VCE type:          OIM                   Prob > F          =     0.0292

------------------------------------------------------------------------------
     success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
 lnparticnum |   1.254666   .1304697     2.18   0.029     1.023269     1.53839
        cons |   .0515481   .0605665    -2.52   0.012     .0051501    .5159481
------------------------------------------------------------------------------

520 . mimrgns, at (lnparticnum = (1 9.210340372 9.903487553 10.30895266 10.59663473 10.81977828 11.00209984 11.1562505
> 2 11.28978191 11.40756495 11.51292546 11.60823564 11.69524702 11.77528973 11.8493977 11.91839057 11.98292909 12.
> 04355372 12.10071213 12.15477935 12.20607265 12.25486281 12.30138283 12.34583459 12.3883942 12.4292162 12.468436
> 91 12.50617724 12.54254488 12.5776362 12.61153775 12.64432758 12.67607627 12.70684793 12.7367009 12.76568843 12.
> 79385931 12.82125828 12.84792653 12.87390202 12.89921983 12.92391244 12.94800999 12.97154049 12.99453001 13.0170
> 0286 13.03898177 13.06048797 13.08154138 13.10216067 13.12236338 13.142166 13.16158409 13.18063229 13.19932442 1
> 3.21767356 13.23569206 13.25339164 13.27078338 13.28787782 13.30468493)) expression(exp(predict(xb))/(1+exp(pred
> ict(xb))))

Multiple-imputation estimates                   Imputations       =         20
Adjusted predictions                            Number of obs     =        126
                                                Average RVI       =     0.0161
                                                Largest FMI       =     0.0580
DF adjustment:   Large sample                   DF:     min       =   5,710.81
                                                        avg       = 169,676.23
Within VCE type: Delta-method                   max       = 1459447.94

Expression   : exp(predict(xb))/(1+exp(predict(xb)))

1._at        : lnparticnum     =           1

2._at        : lnparticnum     =     9.21034

3._at        : lnparticnum     =    9.903488

4._at        : lnparticnum     =    10.30895

5._at        : lnparticnum     =    10.59663

6._at        : lnparticnum     =    10.81978

7._at        : lnparticnum     =     11.0021

8._at        : lnparticnum     =    11.15625

9._at        : lnparticnum     =    11.28978

10._at       : lnparticnum     =    11.40756

11._at       : lnparticnum     =    11.51293

12._at       : lnparticnum     =    11.60824
```

13._at : lnparticnum = 11.69525

14._at : lnparticnum = 11.77529

15._at : lnparticnum = 11.8494

16._at : lnparticnum = 11.91839

17._at : lnparticnum = 11.98293

18._at : lnparticnum = 12.04355

19._at : lnparticnum = 12.10071

20._at : lnparticnum = 12.15478

21._at : lnparticnum = 12.20607

22._at : lnparticnum = 12.25486

23._at : lnparticnum = 12.30138

24._at : lnparticnum = 12.34583

25._at : lnparticnum = 12.38839

26._at : lnparticnum = 12.42922

27._at : lnparticnum = 12.46844

28._at : lnparticnum = 12.50618

29._at : lnparticnum = 12.54254

30._at : lnparticnum = 12.57764

31._at : lnparticnum = 12.61154

32._at : lnparticnum = 12.64433

33._at : lnparticnum = 12.67608

34._at : lnparticnum = 12.70685

35._at : lnparticnum = 12.7367

36._at : lnparticnum = 12.76569

37._at : lnparticnum = 12.79386

38._at : lnparticnum = 12.82126

39._at : lnparticnum = 12.84793

40._at : lnparticnum = 12.8739

41._at : lnparticnum = 12.89922

42._at : lnparticnum = 12.92391

43._at : lnparticnum = 12.94801

44._at : lnparticnum = 12.97154

45._at : lnparticnum = 12.99453

46._at : lnparticnum = 13.017

47._at : lnparticnum = 13.03898

48._at : lnparticnum = 13.06049

49._at : lnparticnum = 13.08154

50._at : lnparticnum = 13.10216

51._at : lnparticnum = 13.12236

52._at : lnparticnum = 13.14217

53._at : lnparticnum = 13.16158

54._at : lnparticnum = 13.18063

55._at : lnparticnum = 13.19932

56._at : lnparticnum = 13.21767

57._at : lnparticnum = 13.23569

58._at : lnparticnum = 13.25339

59._at : lnparticnum = 13.27078

60._at : lnparticnum = 13.28788

61._at : lnparticnum = 13.30468

	Margin	Std. Err.	t	P>|t|	[95% Conf.	Interval]
_at						
1	.0624117	.063457	0.98	0.325	-.0619881	.1868114
2	.2941984	.0571517	5.15	0.000	.18217	.4062267
3	.3277903	.0502114	6.53	0.000	.2293722	.4262085
4	.3483424	.0469482	7.42	0.000	.2563232	.4403615
5	.3632878	.0453425	8.01	0.000	.2744172	.4521584
6	.3750703	.0446458	8.40	0.000	.2875657	.462575
7	.3848113	.0444935	8.65	0.000	.2976054	.4720171
8	.3931213	.0446823	8.80	0.000	.3055455	.4806972
9	.400371	.0450903	8.88	0.000	.3119957	.4887464
10	.4068028	.0456403	8.91	0.000	.3173495	.4962562
11	.4125838	.046282	8.91	0.000	.3218725	.503295
12	.4178344	.046982	8.89	0.000	.3257512	.5099176
13	.4226443	.0477173	8.86	0.000	.3291199	.5161687
14	.4270821	.0484722	8.81	0.000	.3320781	.5220861
15	.4312014	.0492356	8.76	0.000	.334701	.5277019
16	.435045	.05	8.70	0.000	.3370463	.5330437
17	.4386475	.0507599	8.64	0.000	.3391592	.5381358
18	.4420374	.0515117	8.58	0.000	.3410756	.5429993
19	.4452385	.0522527	8.52	0.000	.3428241	.5476528
20	.4482706	.0529812	8.46	0.000	.3444282	.5521129
21	.4511506	.053696	8.40	0.000	.345907	.5563943
22	.4538931	.0543966	8.34	0.000	.3472763	.56051
23	.4565106	.0550824	8.29	0.000	.3485493	.5644719
24	.4590139	.0557533	8.23	0.000	.3497374	.5682905
25	.4614126	.0564095	8.18	0.000	.3508498	.5719753
26	.4637149	.0570509	8.13	0.000	.3518947	.5755351
27	.4659284	.0576779	8.08	0.000	.352879	.5789777
28	.4680595	.0582907	8.03	0.000	.3538088	.5823102
29	.4701142	.0588898	7.98	0.000	.3546891	.5855392
30	.4720976	.0594753	7.94	0.000	.3555246	.5886706
31	.4740147	.0600479	7.89	0.000	.3563193	.59171
32	.4758695	.0606077	7.85	0.000	.3570766	.5946624
33	.477666	.0611553	7.81	0.000	.3577997	.5975324
34	.4794078	.061691	7.77	0.000	.3584913	.6003244
35	.481098	.0622151	7.73	0.000	.3591539	.6030422
36	.4827396	.0627282	7.70	0.000	.3597897	.6056896
37	.4843353	.0632305	7.66	0.000	.3604006	.6082699
38	.4858875	.0637224	7.63	0.000	.3609885	.6107865
39	.4873985	.0642042	7.59	0.000	.3615549	.6132421
40	.4888705	.0646763	7.56	0.000	.3621013	.6156397
41	.4903053	.0651391	7.53	0.000	.362629	.6179816
42	.4917048	.0655927	7.50	0.000	.3631391	.6202705
43	.4930708	.0660376	7.47	0.000	.3636329	.6225086
44	.4944046	.0664739	7.44	0.000	.3641113	.6246978
45	.4957078	.066902	7.41	0.000	.3645752	.6268403
46	.4969817	.0673222	7.38	0.000	.3650254	.628938
47	.4982277	.0677346	7.36	0.000	.3654628	.6309925
48	.4994468	.0681396	7.33	0.000	.365888	.6330057
49	.5006403	.0685373	7.30	0.000	.3663016	.6349789
50	.5018091	.068928	7.28	0.000	.3667044	.6369138
51	.5029542	.069312	7.26	0.000	.3670968	.6388116
52	.5040767	.0696893	7.23	0.000	.3674795	.6406739
53	.5051772	.0700603	7.21	0.000	.3678527	.6425017
54	.5062568	.0704251	7.19	0.000	.3682172	.6442964
55	.507316	.0707838	7.17	0.000	.3685731	.6460589
56	.5083557	.0711367	7.15	0.000	.368921	.6477905
57	.5093766	.0714839	7.13	0.000	.3692611	.6494921
58	.5103794	.0718256	7.11	0.000	.369594	.6511647
59	.5113646	.0721619	7.09	0.000	.3699198	.6528094
60	.5123328	.0724931	7.07	0.000	.3702388	.6544268
61	.5132846	.0728191	7.05	0.000	.3705514	.6560179

```
521 .
522 . * The effect of various tactics in urban and rural settings on the
523 . *    probability of success, controlling for participation
524 . clear

525 . use revolutionaryeps.dta

526 . logit success lnpartic demonstrations strikes riots armed if startyear>1899 & urbandum==1

    Iteration 0:   log likelihood = -109.07246
    Iteration 1:   log likelihood =  -97.95021
    Iteration 2:   log likelihood = -97.836785
    Iteration 3:   log likelihood = -97.836538
    Iteration 4:   log likelihood = -97.836538

    Logistic regression                             Number of obs     =        159
                                                    LR chi2(5)        =      22.47
                                                    Prob > chi2       =     0.0004
    Log likelihood = -97.836538                     Pseudo R2         =     0.1030

    ------------------------------------------------------------------------------
           success |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    ---------------+--------------------------------------------------------------
       lnparticnum |   .2428949   .1086885     2.23   0.025     .0298693    .4559205
    demonstrations |   1.495631    .555857     2.69   0.007     .4061712     2.58509
           strikes |   .2579834   .3494309     0.74   0.460    -.4268885    .9428554
             riots |  -.3061745   .3570082    -0.86   0.391    -1.005898    .3935486
             armed |   .1585681   .3954773     0.40   0.688    -.6165531    .9336893
              cons |  -4.295795   1.351133    -3.18   0.001    -6.943968   -1.647623
    ------------------------------------------------------------------------------
```

```
527 . margins, atmeans at(demonstrations=1 riots=0  strikes=0 armed=0)

Adjusted predictions                            Number of obs     =        159
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : lnparticnum     =    11.37967 (mean)
               demonstrat~s    =           1
               strikes         =           0
               riots           =           0
               armed           =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .4909757   .0796945     6.16   0.000     .3347775     .647174
------------------------------------------------------------------------------

528 . margins, atmeans at(demonstrations=0 riots=1  strikes=0 armed=0)

Adjusted predictions                            Number of obs     =        159
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : lnparticnum     =    11.37967 (mean)
               demonstrat~s    =           0
               strikes         =           0
               riots           =           1
               armed           =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .1372991    .077462     1.77   0.076    -.0145237    .2891219
------------------------------------------------------------------------------

529 . margins, atmeans at(demonstrations=0 riots=0  strikes=1 armed=0)

Adjusted predictions                            Number of obs     =        159
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : lnparticnum     =    11.37967 (mean)
               demonstrat~s    =           0
               strikes         =           1
               riots           =           0
               armed           =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        cons |   .2186163   .1071681     2.04   0.041     .0085706     .428662
------------------------------------------------------------------------------

530 . margins, atmeans at(demonstrations=0 riots=0  strikes=0 armed=1)

Adjusted predictions                            Number of obs     =        159
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : lnparticnum     =    11.37967 (mean)
               demonstrat~s    =           0
               strikes         =           0
               riots           =           0
               armed           =           1

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .2021092   .0795065     2.54   0.011     .0462792    .3579391
------------------------------------------------------------------------------

531 . margins, atmeans at(demonstrations=0 riots=0  strikes=0 armed=0)

Adjusted predictions                            Number of obs     =        159
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : lnparticnum     =    11.37967 (mean)
               demonstrat~s    =           0
               strikes         =           0
               riots           =           0
               armed           =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .1777404   .0873797     2.03   0.042     .0064793    .3490015
------------------------------------------------------------------------------
```

```
532 . *  Civil war vs. other armed
533 . logit success lnpartic demonstrations strikes riots armednocivwar civilwar if startyear>1899 & urbandum==1

    Iteration 0:   log likelihood = -109.07246
    Iteration 1:   log likelihood = -97.926458
    Iteration 2:   log likelihood = -97.812962
    Iteration 3:   log likelihood = -97.812717
    Iteration 4:   log likelihood = -97.812717

    Logistic regression                               Number of obs     =        159
                                                      LR chi2(6)        =      22.52
                                                      Prob > chi2       =     0.0010
    Log likelihood = -97.812717                       Pseudo R2         =     0.1032

    ------------------------------------------------------------------------------
           success |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    ---------------+--------------------------------------------------------------
       lnparticnum |   .2445319   .1089291     2.24   0.025     .0310348     .458029
    demonstrations |   1.471901   .5659003     2.60   0.009     .3627571    2.581046
           strikes |   .2506191   .3510397     0.71   0.475    -.4374061    .9386444
             riots |   -.310618   .3578813    -0.87   0.385    -1.012052    .3908164
     armednocivwar |   .1971509   .4331907     0.46   0.649    -.6518874    1.046189
          civilwar |   .0737533   .5541338     0.13   0.894    -1.012329    1.159836
             _cons |  -4.287119   1.349655    -3.18   0.001    -6.932394   -1.641844
    ------------------------------------------------------------------------------

534 . margins, atmeans at(demonstrations=1 riots=0  strikes=0 armednocivwar=0 civilwar=0)

    Adjusted predictions                              Number of obs     =        159
    Model VCE    : OIM

    Expression   : Pr(success), predict()
    at           : lnparticnum     =    11.37967 (mean)
                   demonstrat~s    =           1
                   strikes         =           0
                   riots           =           0
                   armednociv~r    =           0
                   civilwar        =           0

    ------------------------------------------------------------------------------
                 |            Delta-method
                 |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
           _cons |   .4918692   .0798285     6.16   0.000     .3354082    .6483302
    ------------------------------------------------------------------------------

535 . margins, atmeans at(demonstrations=0 riots=1  strikes=0 armednocivwar=0 civilwar=0)

    Adjusted predictions                              Number of obs     =        159
    Model VCE    : OIM

    Expression   : Pr(success), predict()
    at           : lnparticnum     =    11.37967 (mean)
                   demonstrat~s    =           0
                   strikes         =           0
                   riots           =           1
                   armednociv~r    =           0
                   civilwar        =           0

    ------------------------------------------------------------------------------
                 |            Delta-method
                 |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
           _cons |   .1400294   .0797639     1.76   0.079     -.016305    .2963639
    ------------------------------------------------------------------------------

536 . margins, atmeans at(demonstrations=0 riots=0  strikes=1 armednocivwar=0 civilwar=0)

    Adjusted predictions                              Number of obs     =        159
    Model VCE    : OIM

    Expression   : Pr(success), predict()
    at           : lnparticnum     =    11.37967 (mean)
                   demonstrat~s    =           0
                   strikes         =           1
                   riots           =           0
                   armednociv~r    =           0
                   civilwar        =           0

    ------------------------------------------------------------------------------
                 |            Delta-method
                 |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
           _cons |   .2220416   .1092712     2.03   0.042      .007874    .4362092
    ------------------------------------------------------------------------------

537 . margins, atmeans at(demonstrations=0 riots=0  strikes=0 armednocivwar=1 civilwar=0)

    Adjusted predictions                              Number of obs     =        159
    Model VCE    : OIM

    Expression   : Pr(success), predict()
    at           : lnparticnum     =    11.37967 (mean)
                   demonstrat~s    =           0
                   strikes         =           0
                   riots           =           0
                   armednociv~r    =           1
                   civilwar        =           0
```

```
------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        cons |   .2129429   .0966261     2.20   0.028     .0235593    .4023265
------------------------------------------------------------------------------

538 . margins, atmeans at(demonstrations=0 riots=0  strikes=0 armednocivwar=0 civilwar=1)

Adjusted predictions                            Number of obs     =        159
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : lnparticnum     =    11.37967 (mean)
               demonstrat~s    =           0
               strikes         =           0
               riots           =           0
               armednociv~r    =           0
               civilwar        =           1

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .1929937   .0875932     2.20   0.028     .0213141    .3646732
------------------------------------------------------------------------------

539 . logit success demonstrations  riots civilwar if startyear>1899 & urbandum==0

Iteration 0:   log likelihood = -91.934261
Iteration 1:   log likelihood = -88.036821
Iteration 2:   log likelihood = -87.787278
Iteration 3:   log likelihood = -87.786544
Iteration 4:   log likelihood = -87.786544

Logistic regression                             Number of obs     =        163
                                                LR chi2(3)        =       8.30
                                                Prob > chi2       =     0.0403
Log likelihood = -87.786544                     Pseudo R2         =     0.0451

------------------------------------------------------------------------------
     success |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
demonstrations |   1.068751   .6824589     1.57   0.117    -.2688438    2.406346
       riots |   .9445275    .967396     0.98   0.329    -.9515339    2.840589
    civilwar |    1.67038   .8514788     1.96   0.050      .001512    3.339247
       _cons |  -2.761661   .8499332    -3.25   0.001     -4.4275   -1.095823
------------------------------------------------------------------------------

540 .
541 . * ============================================================================
542 . * FIGURE 4.9--effect of number of deaths on rev outcomes in urban/rural revs
543 . * ============================================================================
544 . clear

545 . use revolutionaryepsmiopp.dta

546 . set seed 1234

547 . mi estimate, post dots eform saving(miest, replace): logit success i.urbandum##c.deathtile10 if startyear>1899

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

Multiple-imputation estimates                   Imputations       =         20
Logistic regression                             Number of obs     =        343
                                                Average RVI       =     0.0059
                                                Largest FMI       =     0.0086
DF adjustment:   Large sample                   DF:     min       = 258,392.89
                                                        avg       = 516,991.74
                                                        max       = 815,205.45
Model F test:       Equal FMI                   F(   3,992339.1)  =      13.08
Within VCE type:          OIM                   Prob > F          =     0.0000

------------------------------------------------------------------------------
             success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
---------------------+--------------------------------------------------------
            urbandum |
                yes  |   136.6561     130.19     5.16   0.000     21.12038    884.2124
        deathtile10 |   1.472991   .1636949     3.49   0.000     1.184691     1.83145
                    |
urbandum#c.deathtile10 |
                yes  |   .5145065   .0676672    -5.05   0.000     .3975955    .6657945
                    |
               _cons |   .0174434   .0157757    -4.48   0.000     .0029635    .1026721
------------------------------------------------------------------------------

548 . mimrgns, at(urbandum=(0 1) deathtile10=(1 2 3 4 5 6 7 8 9 10)) predict(pr)

Multiple-imputation estimates                   Imputations       =         20
Adjusted predictions                            Number of obs     =        343
                                                Average RVI       =     0.0027
                                                Largest FMI       =     0.0132
DF adjustment:   Large sample                   DF:     min       = 108,692.93
                                                        avg       =   1.77e+07
Within VCE type: Delta-method                           max       =   2.76e+08

Expression   : Pr(success), predict(pr)
```

```
1._at        : urbandum        =           0
               deathtile10     =           1

2._at        : urbandum        =           0
               deathtile10     =           2

3._at        : urbandum        =           0
               deathtile10     =           3

4._at        : urbandum        =           0
               deathtile10     =           4

5. at        : urbandum        =           0
               deathtile10     =           5

6._at        : urbandum        =           0
               deathtile10     =           6

7._at        : urbandum        =           0
               deathtile10     =           7

8._at        : urbandum        =           0
               deathtile10     =           8

9._at        : urbandum        =           0
               deathtile10     =           9

10._at       : urbandum        =           0
               deathtile10     =          10

11._at       : urbandum        =           1
               deathtile10     =           1

12._at       : urbandum        =           1
               deathtile10     =           2

13._at       : urbandum        =           1
               deathtile10     =           3

14._at       : urbandum        =           1
               deathtile10     =           4

15._at       : urbandum        =           1
               deathtile10     =           5

16. at       : urbandum        =           1
               deathtile10     =           6

17._at       : urbandum        =           1
               deathtile10     =           7

18._at       : urbandum        =           1
               deathtile10     =           8

19. at       : urbandum        =           1
               deathtile10     =           9

20._at       : urbandum        =           1
               deathtile10     =          10

------------------------------------------------------------------------------
             |     Margin   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         _at |
          1  |   .0250813   .0194825     1.29   0.198    -.0131039    .0632664
          2  |   .0364972   .0242278     1.51   0.132    -.0109884    .0839828
          3  |   .0528316   .0291579     1.81   0.070    -.0043169    .1099801
          4  |    .075906   .0335853     2.26   0.024     .0100799    .1417321
          5  |   .1079175   .0365044     2.96   0.003     .0363703    .1794648
          6  |   .1512294   .0369896     4.09   0.000     .0787312    .2237276
          7  |   .2078839   .0357053     5.82   0.000     .1379028    .2778651
          8  |   .2787998   .0379848     7.34   0.000     .2043509    .3532487
          9  |   .3628289   .0512045     7.09   0.000     .2624697    .4631881
         10  |   .4561577   .0732179     6.23   0.000     .3126528    .5996626
         11  |   .6436682   .0555104    11.60   0.000     .5348687    .7524678
         12  |   .5778957   .0473662    12.20   0.000      .485059    .6707324
         13  |   .5092276   .0408423    12.47   0.000     .4291781    .5892771
         14  |   .4402037   .0394178    11.17   0.000     .3629463    .5174612
         15  |    .373417   .0433616     8.61   0.000     .2884299    .4584042
         16  |   .3111363   .0493343     6.31   0.000     .2144428    .4078298
         17  |   .2550235   .0542373     4.70   0.000     .1487201    .3613268
         18  |   .2060135   .0566398     3.64   0.000     .0950012    .3170258
         19  |   .1643536   .0563283     2.92   0.004     .0539516    .2747556
         20  |   .1297496   .0537328     2.41   0.016     .0244346    .2350646
------------------------------------------------------------------------------

549 .
550 . * ============================================================
551 . * Contextual nature of the advantage of non-violent action in
```

```
552 . *   urban/rural episodes--beyond participation
553 . * ============================================================
554 . mi estimate, post dots eform saving(miest, replace): logit success lnparticnum lndeaths if startyear>1899 & urba
    > ndum==0

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        149
                                                    Average RVI       =     0.0004
                                                    Largest FMI       =     0.0010
    DF adjustment:   Large sample                   DF:     min       =   1.78e+07
                                                            avg       =   7.76e+07
                                                            max       =   1.17e+08
    Model F test:       Equal FMI                   F(   2, 1.1e+08)  =       7.62
    Within VCE type:          OIM                   Prob > F          =     0.0005

    ------------------------------------------------------------------------------
         success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
     lnparticnum |   1.279675   .2255481     1.40   0.162     .9058826    1.807705
        lndeaths |   1.301573   .1426259     2.41   0.016     1.050012    1.613403
           _cons |    .002354    .003634    -3.92   0.000     .0001142     .048514
    ------------------------------------------------------------------------------

555 . mi estimate, post dots eform saving(miest, replace): logit success lnparticnum lndeaths if startyear>1899 & urba
    > ndum==1

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        176
                                                    Average RVI       =     0.0210
                                                    Largest FMI       =     0.0483
    DF adjustment:   Large sample                   DF:     min       =   8,215.96
                                                            avg       = 132,016.91
                                                            max       = 379,604.08
    Model F test:       Equal FMI                   F(   2,39004.1)   =      11.26
    Within VCE type:          OIM                   Prob > F          =     0.0000

    ------------------------------------------------------------------------------
         success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
     lnparticnum |   1.403476    .141587     3.36   0.001      1.15165    1.710368
        lndeaths |   .8286552   .0414408    -3.76   0.000     .7512861    .9139919
           _cons |   .0451286     .05261    -2.66   0.008     .0045919     .443517
    ------------------------------------------------------------------------------

556 .
557 . * ===============
558 . * Movement goals
559 . * ===============
560 . clear

561 . use revolutionaryeps.dta

562 . logit success democrat leftist independ antimonarch ethnicorder islamist if startyear>1899, or nolog

    Logistic regression                             Number of obs     =        343
                                                    LR chi2(6)        =      47.78
                                                    Prob > chi2       =     0.0000
    Log likelihood =  -199.9555                     Pseudo R2         =     0.1067

    ------------------------------------------------------------------------------
         success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
        democrat |   3.599876   1.157272     3.98   0.000      1.91711    6.759711
         leftist |   .8109078   .2583955    -0.66   0.511     .4342465    1.514281
        independ |   .6440757   .2036165    -1.39   0.164     .3466093    1.196833
     antimonarch |   2.879657   1.240479     2.46   0.014     1.237844    6.699087
     ethnicorder |   1.670605   .5693819     1.51   0.132     .8565724    3.258243
        islamist |     .47678   .2527444    -1.40   0.162     .1686903    1.347553
           _cons |   .4113077   .1130102    -3.23   0.001     .2400448    .7047603
    ------------------------------------------------------------------------------

563 . estat classification

    Logistic model for success

                 -------- True --------
    Classified |         D             ~D  |      Total
    -----------+--------------------------+-----------
         +     |        60             39  |         99
         -     |        63            181  |        244
    -----------+--------------------------+-----------
       Total   |       123            220  |        343

    Classified + if predicted Pr(D) >= .5
    True D defined as success != 0
    --------------------------------------------------
    Sensitivity                     Pr( +| D)   48.78%
    Specificity                     Pr( -|~D)   82.27%
    Positive predictive value       Pr( D| +)   60.61%
    Negative predictive value       Pr(~D| -)   74.18%
    --------------------------------------------------
    False + rate for true ~D        Pr( +|~D)   17.73%
    False - rate for true D         Pr( -| D)   51.22%
    False + rate for classified +   Pr(~D| +)   39.39%
    False - rate for classified -   Pr( D| -)   25.82%
```

```
------------------------------------------------
Correctly classified                      70.26%
------------------------------------------------
```

```
564 . margins, at (democrat=1 leftist=0 antimonarch=0 independ=0 ethnicorder=0 islamist=0)

Adjusted predictions                              Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : democrat        =           1
               leftist         =           0
               independ        =           0
               antimonarch     =           0
               ethnicorder     =           0
               islamist        =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |    .596881   .0551412    10.82   0.000     .4888062    .7049558
------------------------------------------------------------------------------

565 . margins, at (democrat=0 leftist=0 antimonarch=1 independ=0 ethnicorder=0 islamist=0)

Adjusted predictions                              Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : democrat        =           0
               leftist         =           0
               independ        =           0
               antimonarch     =           1
               ethnicorder     =           0
               islamist        =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .5422137   .1022327     5.30   0.000     .3418413    .7425861
------------------------------------------------------------------------------

566 . margins, at (democrat=0 leftist=1 antimonarch=0 independ=0 ethnicorder=0 islamist=0)

Adjusted predictions                              Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : democrat        =           0
               leftist         =           1
               independ        =           0
               antimonarch     =           0
               ethnicorder     =           0
               islamist        =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .2501121   .0540656     4.63   0.000     .1441454    .3560788
------------------------------------------------------------------------------

567 . margins, at (democrat=0 leftist=0 antimonarch=0 independ=1 ethnicorder=0 islamist=0)

Adjusted predictions                              Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : democrat        =           0
               leftist         =           0
               independ        =           1
               antimonarch     =           0
               ethnicorder     =           0
               islamist        =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |    .209432   .0408255     5.13   0.000     .1294154    .2894485
------------------------------------------------------------------------------

568 . margins, at (democrat=0 leftist=0 antimonarch=0 independ=0 ethnicorder=1 islamist=0)

Adjusted predictions                              Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : democrat        =           0
               leftist         =           0
               independ        =           0
               antimonarch     =           0
               ethnicorder     =           1
               islamist        =           0
```

```
------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        cons |   .4072784   .0738095     5.52   0.000     .2626145    .5519423
------------------------------------------------------------------------------

569 . margins, at (democrat=0 leftist=0 antimonarch=0 independ=0 ethnicorder=0 islamist=1)

Adjusted predictions                              Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : democrat        =           0
               leftist         =           0
               independ        =           0
               antimonarch     =           0
               ethnicorder     =           0
               islamist        =           1

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .1639518   .0740575     2.21   0.027     .0188017    .3091019
------------------------------------------------------------------------------

570 . * Relationship between levels of participation and movement goals
571 . reg lnparticnum democrat leftist independ antimonarch ethnicorder islamist if startyear>1899, vce(robust)

Linear regression                                 Number of obs     =        320
                                                  F(6, 313)         =      13.55
                                                  Prob > F          =     0.0000
                                                  R-squared         =     0.1879
                                                  Root MSE          =     1.6809

------------------------------------------------------------------------------
             |               Robust
 lnparticnum |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    democrat |    1.39247    .249104     5.59   0.000     .9023398      1.8826
     leftist |  -.2473132   .2552655    -0.97   0.333    -.7495664      .25494
    independ |  -.4276532    .232732    -1.84   0.067    -.8855701    .0302637
 antimonarch |   .7914982   .3993824     1.98   0.048     .0056846    1.577312
 ethnicorder |   -.794449   .2266262    -3.51   0.001    -1.240352   -.3485457
    islamist |  -.3950841   .3365231    -1.17   0.241    -1.057217    .2670493
       _cons |   10.49017   .2101507    49.92   0.000     10.07668    10.90365
------------------------------------------------------------------------------

572 . * Median peak participation by goals
573 . sum particnum if startyear>1899 & democrat==1, detail

          Peak number of civilian rebel participants
                    (estimated from sources)
-------------------------------------------------------------
      Percentiles      Smallest
 1%         1000           1000
 5%        10000          10000
10%        16000          10000       Obs                  77
25%        30000          10000       Sum of Wgt.          77

50%       100000                      Mean           466194.8
                        Largest       Std. Dev.       1218617
75%       400000        2000000
90%      1000000        2000000       Variance       1.49e+12
95%      2000000        2500000       Skewness       6.473363
99%     1.00e+07       1.00e+07       Kurtosis       50.16268

574 . sum particnum if startyear>1899 & antimonarch==1, detail

          Peak number of civilian rebel participants
                    (estimated from sources)
-------------------------------------------------------------
      Percentiles      Smallest
 1%         1800           1800
 5%         3000           3000
10%         4000           4000       Obs                  25
25%        20000           8000       Sum of Wgt.          25

50%       100000                      Mean             298152
                        Largest       Std. Dev.      556132.3
75%       290000         500000
90%      1000000        1000000       Variance       3.09e+11
95%      2000000        2000000       Skewness       2.453134
99%      2000000        2000000       Kurtosis       7.758752

575 . sum particnum if startyear>1899 & leftist==1, detail

          Peak number of civilian rebel participants
                    (estimated from sources)
-------------------------------------------------------------
      Percentiles      Smallest
 1%         1000           1000
 5%         1500           1000
10%         2000           1000       Obs                  75
25%         8000           1500       Sum of Wgt.          75
```

```
     50%        20000                       Mean           335662.7
                            Largest       Std. Dev.       1301856
     75%       100000        2000000
     90%       300000        3000000       Variance       1.69e+12
     95%      2000000        4000000       Skewness       6.031034
     99%     1.00e+07       1.00e+07       Kurtosis       42.77024

576 . sum particnum if startyear>1899 & independ==1, detail

             Peak number of civilian rebel participants
                       (estimated from sources)
-------------------------------------------------------------
      Percentiles      Smallest
 1%         1000           1000
 5%         1760           1000
10%         3000           1000       Obs                 116
25%         8500           1500       Sum of Wgt.         116

50%        20000                       Mean           114144.5
                            Largest       Std. Dev.      311338.7
75%        45000        1000000
90%       300000        1000000       Variance       9.69e+10
95%       600000        2000000       Skewness       4.539991
99%      2000000        2000000       Kurtosis       25.44768

577 . sum particnum if startyear>1899 & ethnicorder==1, detail

             Peak number of civilian rebel participants
                       (estimated from sources)
-------------------------------------------------------------
      Percentiles      Smallest
 1%         1000           1000
 5%         2000           1500
10%         3000           2000       Obs                  53
25%        10000           2400       Sum of Wgt.          53

50%        20000                       Mean           52875.47
                           Largest       Std. Dev.      87872.89
75%        50000         200000
90%       150000         200000       Variance       7.72e+09
95%       200000         300000       Skewness       3.231898
99%       500000         500000       Kurtosis       14.90064

578 . sum particnum if startyear>1899 & islamist==1, detail

             Peak number of civilian rebel participants
                       (estimated from sources)
-------------------------------------------------------------
      Percentiles      Smallest
 1%         1000           1000
 5%         1500           1500
10%         1500           1500       Obs                  29
25%         9000           1500       Sum of Wgt.          29

50%        15000                       Mean             108931
                           Largest       Std. Dev.      368909.1
75%        40000         150000
90%       200000         200000       Variance       1.36e+11
95%       250000         250000       Skewness       4.884126
99%      2000000        2000000       Kurtosis       25.54559

579 . * Effect of movement ideology and goals, independent of participation effects
580 . clear

581 . use revolutionaryepsmiopp.dta

582 . mi estimate, post dots eform saving(miest, replace): logit success lnparticnum democrat leftist independ antimon
    > arch ethnicorder islamist if startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        343
                                                    Average RVI       =     0.0079
                                                    Largest FMI       =     0.0256
    DF adjustment:   Large sample                   DF:     min       =  29,108.61
                                                            avg       = 2296222.67
                                                            max       = 9156405.47
    Model F test:       Equal FMI                   F(   7, 1.8e+06)  =       7.78
    Within VCE type:          OIM                   Prob > F          =     0.0000

    ------------------------------------------------------------------------------
         success |      exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
     lnparticnum |   1.420076   .1120804     4.44   0.000     1.216542    1.657662
        democrat |   2.418989   .8252881     2.59   0.010     1.239447    4.721064
         leftist |    .850133   .2825529    -0.49   0.625     .4431785    1.630779
        independ |   .7326268   .2420103    -0.94   0.346     .3834452    1.399788
     antimonarch |   2.332727   1.067303     1.85   0.064     .9514915    5.719037
     ethnicorder |   2.326527   .8350692     2.35   0.019     1.151285    4.701468
        islamist |   .4885454   .2733452    -1.28   0.200     .1631739    1.462714
           _cons |   .0097498   .0087799    -5.14   0.000      .001669    .0569571
    ------------------------------------------------------------------------------
```

```
583 . mi estimate, post dots eform saving(miest, replace): logit success  democrat leftist independ antimonarch ethnic
    > order islamist if startyear>1899 & urbandum==1

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        180
                                                    Average RVI       =     0.0000
                                                    Largest FMI       =     0.0000
    DF adjustment:   Large sample                   DF:     min       =   5.93e+63
                                                            avg       =   5.93e+63
                                                            max       =          .
    Model F test:       Equal FMI                   F(   6, 8.5e+65)  =       4.25
    Within VCE type:          OIM                   Prob > F          =     0.0003

    ------------------------------------------------------------------------------
         success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
        democrat |   3.220476   1.302252     2.89   0.004     1.457884    7.114057
         leftist |   .4114269    .201873    -1.81   0.070     .1572669    1.076336
        independ |   .7145469   .3425877    -0.70   0.483     .2792057    1.828678
     antimonarch |   3.813495   2.062715     2.47   0.013     1.321019    11.00873
     ethnicorder |   .5740852   .3050864    -1.04   0.296     .2025918    1.626787
        islamist |   .2815138   .3165522    -1.13   0.260     .0310709    2.550617
           _cons |   .5609988    .208133    -1.56   0.119     .2711206    1.160811
    ------------------------------------------------------------------------------

584 . mi estimate, post dots eform saving(miest, replace): logit success  democrat leftist independ antimonarch ethnic
    > order islamist if startyear>1899 & urbandum==0

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        163
                                                    Average RVI       =     0.0000
                                                    Largest FMI       =     0.0000
    DF adjustment:   Large sample                   DF:     min       =   3.26e+62
                                                            avg       =   3.26e+62
                                                            max       =          .
    Model F test:       Equal FMI                   F(   6,      .)   =       2.98
    Within VCE type:          OIM                   Prob > F          =     0.0066

    ------------------------------------------------------------------------------
         success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
        democrat |   2.459809   2.790472     0.79   0.428     .2662418     22.7262
         leftist |   2.170237   1.008431     1.67   0.095     .8729398    5.395477
        independ |   .7900793   .3693447    -0.50   0.614     .3160477    1.975098
     antimonarch |   1.436049   1.310098     0.40   0.692     .2402279    8.584498
     ethnicorder |   5.111418   2.661217     3.13   0.002     1.842343    14.18118
        islamist |   1.091585   .7060212     0.14   0.892     .3072649     3.87795
           _cons |   .1798158    .085436    -3.61   0.000     .0708591    .4563098
    ------------------------------------------------------------------------------

585 . * Urban location of episodes by type of goals
586 . clear

587 . use revolutionaryeps.dta

588 . logit urbandum democrat leftist independ antimonarch ethnicorder islamist if startyear>1899, or nolog

    Logistic regression                             Number of obs     =        343
                                                    LR chi2(6)        =     145.56
                                                    Prob > chi2       =     0.0000
    Log likelihood =  -164.5487                     Pseudo R2         =     0.3067

    ------------------------------------------------------------------------------
        urbandum | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
        democrat |    22.9137    12.8753     5.57   0.000     7.617312    68.92688
         leftist |   .6348386    .207161    -1.39   0.164     .3348873     1.20345
        independ |   .2618827   .0831878    -4.22   0.000     .1405142    .4880827
     antimonarch |   3.217945   1.582207     2.38   0.017     1.227602    8.435279
     ethnicorder |   .2113758   .0875502    -3.75   0.000      .093863    .4760103
        islamist |   .3761769   .1866334    -1.97   0.049     .1422604    .9947189
           _cons |   1.542372   .4351615     1.54   0.125     .8872236    2.681299
    ------------------------------------------------------------------------------

589 . margins, at (democrat=1 leftist=0 antimonarch=0 independ=0 ethnicorder=0 islamist=0)

    Adjusted predictions                            Number of obs     =        343
    Model VCE    : OIM

    Expression   : Pr(urbandum), predict()
    at           : democrat        =           1
                   leftist         =           0
                   independ        =           0
                   antimonarch     =           0
                   ethnicorder     =           0
                   islamist        =           0

    ------------------------------------------------------------------------------
                 |            Delta-method
                 |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
           _cons |   .9724832   .0148582    65.45   0.000     .9433618    1.001605
    ------------------------------------------------------------------------------
```

```
590 . margins, at (democrat=0 leftist=0 antimonarch=1 independ=0 ethnicorder=0 islamist=0)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(urbandum), predict()
at           : democrat        =           0
               leftist         =           0
               independ        =           0
               antimonarch     =           1
               ethnicorder     =           0
               islamist        =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .8323067   .0696862    11.94   0.000     .6957244    .9688891
------------------------------------------------------------------------------

591 . margins, at (democrat=0 leftist=1 antimonarch=0 independ=0 ethnicorder=0 islamist=0)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(urbandum), predict()
at           : democrat        =           0
               leftist         =           1
               independ        =           0
               antimonarch     =           0
               ethnicorder     =           0
               islamist        =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        cons |   .4947345   .0667512     7.41   0.000     .3639046    .6255644
------------------------------------------------------------------------------

592 . margins, at (democrat=0 leftist=0 antimonarch=0 independ=1 ethnicorder=0 islamist=0)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(urbandum), predict()
at           : democrat        =           0
               leftist         =           0
               independ        =           1
               antimonarch     =           0
               ethnicorder     =           0
               islamist        =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |    .287709   .0472481     6.09   0.000     .1951045    .3803135
------------------------------------------------------------------------------

593 . margins, at (democrat=0 leftist=0 antimonarch=0 independ=0 ethnicorder=1 islamist=0)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(urbandum), predict()
at           : democrat        =           0
               leftist         =           0
               independ        =           0
               antimonarch     =           0
               ethnicorder     =           1
               islamist        =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .2458637     .06722     3.66   0.000     .1141149    .3776125
------------------------------------------------------------------------------

594 . margins, at (democrat=0 leftist=0 antimonarch=0 independ=0 ethnicorder=0 islamist=1)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(urbandum), predict()
at           : democrat        =           0
               leftist         =           0
               independ        =           0
               antimonarch     =           0
               ethnicorder     =           0
               islamist        =           1

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .3671707   .1143876     3.21   0.001     .1429752    .5913662
------------------------------------------------------------------------------
```

```
595 . * Likelihood of civil war by type of goals
596 . logit civilwar democrat leftist independ antimonarch ethnicorder islamist if startyear>1899, or nolog

Logistic regression                             Number of obs     =        343
                                                LR chi2(6)        =     136.93
                                                Prob > chi2       =     0.0000
Log likelihood = -169.24876                     Pseudo R2         =     0.2880

------------------------------------------------------------------------------
    civilwar | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    democrat |   .1128668   .0478065    -5.15   0.000     .0492069    .2588843
     leftist |   2.278026   .7611438     2.46   0.014     1.183455    4.384962
    independ |   3.402703   1.081328     3.85   0.000     1.825261    6.343415
 antimonarch |    .205108   .1072988    -3.03   0.002     .0735684    .5718396
 ethnicorder |    10.1061   4.399754     5.31   0.000     4.305343    23.72245
    islamist |   3.212744   1.640612     2.29   0.022     1.180874    8.740747
       _cons |   .6128302    .173003    -1.73   0.083      .352407    1.065702
------------------------------------------------------------------------------

597 . margins, at (democrat=1 leftist=0 antimonarch=0 independ=0 ethnicorder=0 islamist=0)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(civilwar), predict()
at           : democrat        =           1
               leftist         =           0
               independ        =           0
               antimonarch     =           0
               ethnicorder     =           0
               islamist        =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        cons |   .0646934   .0241415     2.68   0.007      .017377    .1120099
------------------------------------------------------------------------------

598 . margins, at (democrat=0 leftist=0 antimonarch=1 independ=0 ethnicorder=0 islamist=0)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(civilwar), predict()
at           : democrat        =           0
               leftist         =           0
               independ        =           0
               antimonarch     =           1
               ethnicorder     =           0
               islamist        =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |    .111661   .0537689     2.08   0.038     .0062759    .2170462
------------------------------------------------------------------------------

599 . margins, at (democrat=0 leftist=1 antimonarch=0 independ=0 ethnicorder=0 islamist=0)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(civilwar), predict()
at           : democrat        =           0
               leftist         =           1
               independ        =           0
               antimonarch     =           0
               ethnicorder     =           0
               islamist        =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .5826453     .06599     8.83   0.000     .4533073    .7119832
------------------------------------------------------------------------------

600 . margins, at (democrat=0 leftist=0 antimonarch=0 independ=1 ethnicorder=0 islamist=0)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(civilwar), predict()
at           : democrat        =           0
               leftist         =           0
               independ        =           1
               antimonarch     =           0
               ethnicorder     =           0
               islamist        =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .6758802   .0492747    13.72   0.000     .5793036    .7724568
------------------------------------------------------------------------------
```

```
601 . margins, at (democrat=0 leftist=0 antimonarch=0 independ=0 ethnicorder=1 islamist=0)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(civilwar), predict()
at           : democrat        =           0
               leftist         =           0
               independ        =           0
               antimonarch     =           0
               ethnicorder     =           1
               islamist        =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .8609822   .0492321    17.49   0.000     .7644892    .9574753
------------------------------------------------------------------------------

602 . margins, at (democrat=0 leftist=0 antimonarch=0 independ=0 ethnicorder=0 islamist=1)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(civilwar), predict()
at           : democrat        =           0
               leftist         =           0
               independ        =           0
               antimonarch     =           0
               ethnicorder     =           0
               islamist        =           1

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        cons |   .6631711   .1130022     5.87   0.000      .441691    .8846513
------------------------------------------------------------------------------

603 .
604 . * ====================================
605 . * Forms of organization and leadership
606 . * ====================================
607 . logit success  coalitionleadership vanguard traditionalleadership paramilorg underground libmovement if startyea
    > r>1899, or nolog

Logistic regression                             Number of obs     =        343
                                                LR chi2(6)        =      34.24
                                                Prob > chi2       =     0.0000
Log likelihood = -206.72513                     Pseudo R2         =     0.0765

------------------------------------------------------------------------------
             success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
---------------------+--------------------------------------------------------
  coalitionleadership |   3.222529   1.047407     3.60   0.000     1.704252    6.093402
             vanguard |   .6063307   .2538876    -1.19   0.232     .2668626    1.377626
traditionalleadership |   .3545357   .1617205    -2.27   0.023     .1450063    .8668287
           paramilorg |   .7683418   .2740838    -0.74   0.460     .3818676    1.545952
          underground |   .5965683   .2656105    -1.16   0.246     .2492752    1.427714
          libmovement |   1.177278    .407669     0.47   0.637     .5972061     2.32078
                _cons |    .540085   .1208641    -2.75   0.006     .3483166    .8374332
------------------------------------------------------------------------------

608 . estat classification

Logistic model for success

              -------- True --------
Classified |         D             ~D  |      Total
-----------+--------------------------+-----------
     +     |        42             25  |         67
     -     |        81            195  |        276
-----------+--------------------------+-----------
   Total   |       123            220  |        343

Classified + if predicted Pr(D) >= .5
True D defined as success != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)   34.15%
Specificity                     Pr( -|~D)   88.64%
Positive predictive value       Pr( D| +)   62.69%
Negative predictive value       Pr(~D| -)   70.65%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)   11.36%
False - rate for true D         Pr( -| D)   65.85%
False + rate for classified +   Pr(~D| +)   37.31%
False - rate for classified -   Pr( D| -)   29.35%
--------------------------------------------------
Correctly classified                        69.10%
--------------------------------------------------
```

```
609 . margins, at(coalitionleadership=1 vanguard=0 traditionalleadership=0 paramil=0 underground=0 libmovement=0)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : coalitionl~p    =           1
               vanguard        =           0
               traditiona~p    =           0
               paramilorg      =           0
               underground     =           0
               libmovement     =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |    .635095   .0581315    10.93   0.000     .5211593    .7490307
------------------------------------------------------------------------------

610 . margins, at(coalitionleadership=0 vanguard=0 traditionalleadership=1 paramil=0 underground=0 libmovement=0)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : coalitionl~p    =           0
               vanguard        =           0
               traditiona~p    =           1
               paramilorg      =           0
               underground     =           0
               libmovement     =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        cons |   .1607073   .0568265     2.83   0.005     .0493295    .2720851
------------------------------------------------------------------------------

611 . margins, at(coalitionleadership=0 vanguard=1 traditionalleadership=0 paramil=0 underground=0 libmovement=0)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : coalitionl~p    =           0
               vanguard        =           1
               traditiona~p    =           0
               paramilorg      =           0
               underground     =           0
               libmovement     =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .2466874   .0677109     3.64   0.000     .1139765    .3793983
------------------------------------------------------------------------------

612 . margins, at(coalitionleadership=0 vanguard=0 traditionalleadership=0 paramil=0 underground=1 libmovement=0)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : coalitionl~p    =           0
               vanguard        =           0
               traditiona~p    =           0
               paramilorg      =           0
               underground     =           1
               libmovement     =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .2436834   .0762457     3.20   0.001     .0942445    .3931222
------------------------------------------------------------------------------

613 . margins, at(coalitionleadership=0 vanguard=0 traditionalleadership=0 paramil=1 underground=0 libmovement=0)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : coalitionl~p    =           0
               vanguard        =           0
               traditiona~p    =           0
               paramilorg      =           1
               underground     =           0
               libmovement     =           0

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .2932712   .0637281     4.60   0.000     .1683664     .418176
------------------------------------------------------------------------------
```

```
614 . margins, at(coalitionleadership=0 vanguard=0 traditionalleadership=0 paramil=0 underground=0 libmovement=1)

Adjusted predictions                            Number of obs     =        343
Model VCE    : OIM

Expression   : Pr(success), predict()
at           : coalitionl~p    =           0
               vanguard        =           0
               traditiona~p    =           0
               paramilorg      =           0
               underground     =           0
               libmovement     =           1

------------------------------------------------------------------------------
             |            Delta-method
             |     Margin   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       _cons |   .3886897   .0678677     5.73   0.000     .2556714    .5217079
------------------------------------------------------------------------------

615 . tab coalitionleadership urbandum if startyear>1899, row all

+----------------+
| Key            |
|----------------|
|   frequency    |
| row percentage |
+----------------+

Leadership |
  consists |
        of |
 coalition |
        of |
  parties, |
movements, |   Episode occurred
     civil | primarily in an urban
   society |        setting
   groups? |        no        yes |     Total
-----------+----------------------+----------
        no |       156        118 |       274
           |     56.93      43.07 |    100.00
-----------+----------------------+----------
       yes |         7         62 |        69
           |     10.14      89.86 |    100.00
-----------+----------------------+----------
     Total |       163        180 |       343
           |     47.52      52.48 |    100.00

          Pearson chi2(1) =  48.3869   Pr = 0.000
 likelihood-ratio chi2(1) =  54.7992   Pr = 0.000
                Cramér's V =   0.3756
                     gamma =   0.8426  ASE = 0.060
          Kendall's tau-b =   0.3756  ASE = 0.041

616 . count if coalitionleadership==1
  69

617 . count if coalitionleadership==1 & (democrat==1 | antimonarch==1)
  52

618 . *  Independent effect of organizational forms aside from participation effects
619 . clear

620 . use revolutionaryepsmiopp.dta

621 . set seed 1234

622 . mi estimate, post dots eform saving(miest, replace): logit success lnparticnum coalitionleadership vanguard trad
    > itionalleadership paramilorg underground libmovement if startyear>1899

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

Multiple-imputation estimates                   Imputations       =         20
Logistic regression                             Number of obs     =        343
                                                Average RVI       =     0.0074
                                                Largest FMI       =     0.0343
DF adjustment:   Large sample                   DF:     min       =  16,288.01
                                                        avg       = 1106208.37
                                                        max       = 3214864.90
Model F test:       Equal FMI                   F(   7, 2.1e+06)  =       6.74
Within VCE type:          OIM                   Prob > F          =     0.0000

------------------------------------------------------------------------------
             success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
---------------------+--------------------------------------------------------
          lnparticnum |   1.450628   .1144868     4.71   0.000     1.242717    1.693323
  coalitionleadership |    2.44259   .8307592     2.63   0.009     1.254134    4.757266
              vanguard |   .6554839   .2877257    -0.96   0.336     .2772845    1.549524
traditionalleadership |   .4587412   .2146781    -1.67   0.096      .183328    1.147907
           paramilorg |   1.151311   .4344132     0.37   0.709     .5495604    2.411957
          underground |   .8215707   .3795474    -0.43   0.671     .3322068    2.031802
          libmovement |   1.580702    .572748     1.26   0.206     .7770115    3.215679
                _cons |   .0089492   .0081202    -5.20   0.000     .0015114    .0529892
------------------------------------------------------------------------------
```

```
623 . mi estimate, post dots eform saving(miest, replace): logit success lnparticnum coalitionleadership  if startyear
    > >1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        343
                                                    Average RVI       =     0.0123
                                                    Largest FMI       =     0.0266
    DF adjustment:   Large sample                   DF:     min       =  26,965.31
                                                            avg       =  96,746.00
                                                            max       = 234,605.13
    Model F test:       Equal FMI                   F(   2,115907.8)  =      21.56
    Within VCE type:          OIM                   Prob > F          =     0.0000

    ------------------------------------------------------------------------------
                success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    --------------------+---------------------------------------------------------
           lnparticnum |   1.433986   .1066096     4.85   0.000     1.239537    1.658938
    coalitionleadership |   2.544758   .7679993     3.09   0.002     1.408496    4.597667
                  _cons |   .0096059   .0076797    -5.81   0.000     .0020045    .0460345
    ------------------------------------------------------------------------------

624 . mimrgns, atmeans at(coalitionleadership=(0 1)) predict(pr)

    Multiple-imputation estimates                   Imputations       =         20
    Adjusted predictions                            Number of obs     =        343
                                                    Average RVI       =     0.0049
                                                    Largest FMI       =     0.0085
    DF adjustment:   Large sample                   DF:     min       = 261,988.30
                                                            avg       = 7091398.07
    Within VCE type: Delta-method                           max       =   1.39e+07

    Expression   : Pr(success), predict(pr)

    1._at        : lnparticnum     =    10.54071 (mean)
                   coalitionl~p    =           0

    2._at        : lnparticnum     =    10.54071 (mean)
                   coalitionl~p    =           1

    ------------------------------------------------------------------------------
                 |     Margin   Std. Err.      t    P>|t|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
              at |
               1 |   .3003059    .029187    10.29   0.000     .2431005    .3575114
               2 |   .5220303   .0670168     7.79   0.000     .3906791    .6533815
    ------------------------------------------------------------------------------
    note: values in at() vary across imputations;
          reported values are mi point estimates.

625 . * Goals of liberation movements
626 . clear

627 . use revolutionaryeps.dta

628 . tab libmovement democrat if startyear>1899, row chi

    +----------------+
    | Key            |
    |----------------|
    |   frequency    |
    | row percentage |
    +----------------+

               |     Goal: liberal
    Leadership |   (civil/political
             : |      liberties,
      National | democratization, curb
    liberation |    predatory govt)
      movement |        no        yes |     Total
    -----------+----------------------+----------
            no |       204         85 |       289
               |     70.59      29.41 |    100.00
    -----------+----------------------+----------
           yes |        52          2 |        54
               |     96.30       3.70 |    100.00
    -----------+----------------------+----------
         Total |       256         87 |       343
               |     74.64      25.36 |    100.00

               Pearson chi2(1) =  15.8842   Pr = 0.000

629 . tab libmovement antimonarch if startyear>1899, row chi

    +----------------+
    | Key            |
    |----------------|
    |   frequency    |
    | row percentage |
    +----------------+
```

Leadership : National liberation movement	Goal: constitutional (republican, anti-monarchical, constitutional) no	yes	Total
no	262	27	289
	90.66	9.34	100.00
yes	53	1	54
	98.15	1.85	100.00
Total	315	28	343
	91.84	8.16	100.00

Pearson chi2(1) = 3.4054 Pr = 0.065

630 . tab libmovement leftist if startyear>1899, row chi

Key
frequency
row percentage

Leadership : National liberation movement	Goal: social revolutionary (aimed at transformation of class structure) no	yes	Total
no	221	68	289
	76.47	23.53	100.00
yes	42	12	54
	77.78	22.22	100.00
Total	263	80	343
	76.68	23.32	100.00

Pearson chi2(1) = 0.0435 Pr = 0.835

631 . tab libmovement independ if startyear>1899, row chi

Key
frequency
row percentage

Leadership : National liberation movement	Goal: attain independent statehood (includes both anti-colonial and separatist) no	yes	Total
no	210	79	289
	72.66	27.34	100.00
yes	14	40	54
	25.93	74.07	100.00
Total	224	119	343
	65.31	34.69	100.00

Pearson chi2(1) = 43.8671 Pr = 0.000

632 . tab libmovement ethnicorder if startyear>1899, row chi

Key
frequency
row percentage

Leadership : National liberation movement	Goal: ethnic stratification (reverse ethnic/racial domination) no	yes	Total
no	249	40	289
	86.16	13.84	100.00
yes	38	16	54
	70.37	29.63	100.00
Total	287	56	343
	83.67	16.33	100.00

Pearson chi2(1) = 8.3026 Pr = 0.004

```
633 .
634 . * ============================
635 . *  TABLE 4.2--regression table
636 . * ============================
637 . * create comparison sample for information criteria using model with smallest sample size
638 . clear

639 . use revolutionaryepsmiopp.dta

640 . set seed 1234

641 . quietly: logit success lnparticnum i.urbandum##c.deathtile10 democrat antimonarch if startyear>1899, or nolog

642 . generate sample=e(sample)

643 .
644 . * Model 1
645 . * Multiple imputation model
646 . mi estimate, post dots eform saving(miest, replace): logit success lnparticnum if startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        343
                                                    Average RVI       =     0.0171
                                                    Largest FMI       =     0.0283
    DF adjustment:   Large sample                   DF:     min       =  23,941.92
                                                            avg       =  24,136.32
                                                            max       =  24,330.73
    Model F test:       Equal FMI                   F(   1,24330.7)   =      34.94
    Within VCE type:          OIM                   Prob > F          =     0.0000

    ------------------------------------------------------------------------------
         success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
     lnparticnum |   1.528654   .1097591     5.91   0.000     1.327972    1.759663
            cons |   .0059561   .0046822    -6.52   0.000     .0012758    .0278063
    ------------------------------------------------------------------------------

647 . mi predict xbsuccmi using miest if startyear>1899, xb
    (2 missing values generated)

648 . generate prsuccmi = invlogit(xbsuccmi)
    (2 missing values generated)

649 . * Obtain accuracy of prediction
650 . * Area under the ROC curve
651 . roctab success xbsuccmi

                        ROC                    -Asymptotic Normal--
            Obs       Area     Std. Err.      [95% Conf. Interval]
        -------------------------------------------------------------
            343     0.7202       0.0281        0.66509     0.77534

652 . drop xbsuccmi

653 . drop prsuccmi

654 . * AIC and BIC on common complete-case model
655 . quietly:  logit success lnparticnum if startyear>1899 & sample==1, or nolog

656 . estat ic

    Akaike's information criterion and Bayesian information criterion

    ------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
    -------------+----------------------------------------------------------------
               . |        304 -199.5194  -183.6735       2     371.347    378.781
    ------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

657 . * True positive and false positive rates on complete-case sample
658 . estat classification

    Logistic model for success

                 -------- True --------
    Classified |         D            ~D  |      Total
    -----------+--------------------------+-----------
         +     |        41            26  |         67
         -     |        70           167  |        237
    -----------+--------------------------+-----------
       Total   |       111           193  |        304

    Classified + if predicted Pr(D) >= .5
    True D defined as success != 0
    -------------------------------------------------
    Sensitivity                     Pr( +| D)   36.94%
    Specificity                     Pr( -|~D)   86.53%
    Positive predictive value       Pr( D| +)   61.19%
    Negative predictive value       Pr(~D| -)   70.46%
    -------------------------------------------------
    False + rate for true ~D        Pr( +|~D)   13.47%
    False - rate for true D         Pr( -| D)   63.06%
    False + rate for classified +   Pr(~D| +)   38.81%
    False - rate for classified -   Pr( D| -)   29.54%
    -------------------------------------------------
    Correctly classified                        68.42%
    -------------------------------------------------
```

```
659 .
660 . * Model 2
661 . mi estimate, post dots eform saving(miest, replace): logit success i.urbandum##c.deathtile10 if startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        343
                                                    Average RVI       =     0.0059
                                                    Largest FMI       =     0.0086
    DF adjustment:   Large sample                   DF:     min       = 258,392.89
                                                            avg       = 516,991.74
                                                            max       = 815,205.45
    Model F test:       Equal FMI                   F(   3,992339.1)  =      13.08
    Within VCE type:          OIM                   Prob > F          =     0.0000

    ------------------------------------------------------------------------------
                 success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    ---------------------+--------------------------------------------------------
                urbandum |
                     yes |   136.6561     130.19     5.16   0.000     21.12038    884.2124
            deathtile10 |   1.472991   .1636949     3.49   0.000     1.184691     1.83145
                        |
    urbandum#c.deathtile10 |
                     yes |   .5145065   .0676672    -5.05   0.000     .3975955    .6657945
                        |
                   _cons |   .0174434   .0157757    -4.48   0.000     .0029635    .1026721
    ------------------------------------------------------------------------------

662 . mi predict xbsuccmi using miest if startyear>1899, xb
    (2 missing values generated)

663 . generate prsuccmi = invlogit(xbsuccmi)
    (2 missing values generated)

664 . * Obtain accuracy of prediction
665 . * Area under the ROC curve
666 . roctab success xbsuccmi

                          ROC                    -Asymptotic Normal--
                Obs       Area     Std. Err.      [95% Conf. Interval]
           ---------------------------------------------------------------
                343     0.7277       0.0285        0.67192     0.78355

667 . drop xbsuccmi

668 . drop prsuccmi

669 . * AIC and BIC on common complete-case model
670 . quietly: logit success i.urbandum##c.deathtile10 if startyear>1899 & sample==1, or nolog

671 . estat ic

    Akaike's information criterion and Bayesian information criterion

    -------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
    -------------+-----------------------------------------------------------------
               . |        304 -199.5194  -182.6614       4    373.3227   388.1908
    -------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

672 . * True positive and false positive rates on complete-case sample
673 . estat classification

    Logistic model for success

                  -------- True --------
    Classified |         D             ~D  |      Total
    -----------+--------------------------+-----------
         +     |        34             22  |         56
         -     |        77            171  |        248
    -----------+--------------------------+-----------
       Total   |       111            193  |        304

    Classified + if predicted Pr(D) >= .5
    True D defined as success != 0
    --------------------------------------------------
    Sensitivity                     Pr( +| D)   30.63%
    Specificity                     Pr( -|~D)   88.60%
    Positive predictive value       Pr( D| +)   60.71%
    Negative predictive value       Pr(~D| -)   68.95%
    --------------------------------------------------
    False + rate for true ~D        Pr( +|~D)   11.40%
    False - rate for true D         Pr( -| D)   69.37%
    False + rate for classified +   Pr(~D| +)   39.29%
    False - rate for classified -   Pr( D| -)   31.05%
    --------------------------------------------------
    Correctly classified                        67.43%
    --------------------------------------------------
```

```
674 .
675 . * Model 3
676 . logit success demonstrations strikes riots armednocivwar i.urbandum##i.civilwar if startyear>1899, or nolog

Logistic regression                               Number of obs     =        343
                                                  LR chi2(7)        =      53.45
                                                  Prob > chi2       =     0.0000
Log likelihood = -197.12141                       Pseudo R2         =     0.1194

------------------------------------------------------------------------------
     success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
demonstrations |    6.25566   2.508115     4.57   0.000     2.850994    13.72619
     strikes |   1.913823   .6071236     2.05   0.041     1.027719     3.56393
       riots |   .7702947   .2431651    -0.83   0.408     .4149075    1.430087
armednocivwar |    1.36104   .5040502     0.83   0.405     .6586207    2.812591
              |
      urbandum |
          yes |   3.550151   2.964397     1.52   0.129     .6910167    18.23917
              |
      civilwar |
          yes |   7.653286   6.930393     2.25   0.025     1.297319     45.1491
              |
urbandum#civilwar |
     yes#yes |   .1191556   .1142108    -2.22   0.026     .0182069    .7798158
              |
        _cons |   .0423655   .0378794    -3.54   0.000     .0073442    .2443875
------------------------------------------------------------------------------

677 . lroc , nograph

Logistic model for success

number of observations =      343
area under ROC curve   =   0.7243

678 . quietly: logit success demonstrations strikes riots armednocivwar i.urbandum##i.civilwar if startyear>1899 & sam
> ple, or nolog

679 . estat classification

Logistic model for success

              -------- True --------
Classified |         D             ~D  |      Total
-----------+--------------------------+-----------
     +     |        34             27  |         61
     -     |        77            166  |        243
-----------+--------------------------+-----------
   Total   |       111            193  |        304

Classified + if predicted Pr(D) >= .5
True D defined as success != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)   30.63%
Specificity                     Pr( -|~D)   86.01%
Positive predictive value       Pr( D| +)   55.74%
Negative predictive value       Pr(~D| -)   68.31%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)   13.99%
False - rate for true D         Pr( -| D)   69.37%
False + rate for classified +   Pr(~D| +)   44.26%
False - rate for classified -   Pr( D| -)   31.69%
--------------------------------------------------
Correctly classified                        65.79%
--------------------------------------------------

680 . estat ic

Akaike's information criterion and Bayesian information criterion

------------------------------------------------------------------------------
       Model |        Obs  ll(null)  ll(model)      df         AIC         BIC
-------------+----------------------------------------------------------------
           . |        304 -199.5194  -183.6438       8    383.2876    413.0238
------------------------------------------------------------------------------
               Note: N=Obs used in calculating BIC; see [R] BIC note.

681 .
682 . * Model 4
683 . logit success democrat leftist independ antimonarch ethnicorder islamist if startyear>1899, or nolog

Logistic regression                               Number of obs     =        343
                                                  LR chi2(6)        =      47.78
                                                  Prob > chi2       =     0.0000
Log likelihood =  -199.9555                       Pseudo R2         =     0.1067

------------------------------------------------------------------------------
     success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    democrat |   3.599876   1.157272     3.98   0.000      1.91711    6.759711
     leftist |   .8109078   .2583955    -0.66   0.511     .4342465    1.514281
    independ |   .6440757   .2036165    -1.39   0.164     .3466093    1.196833
 antimonarch |   2.879657   1.240479     2.46   0.014     1.237844    6.699087
 ethnicorder |   1.670605   .5693819     1.51   0.132     .8565724    3.258243
    islamist |     .47678   .2527444    -1.40   0.162     .1686903    1.347553
       _cons |   .4113077   .1130102    -3.23   0.001     .2400448    .7047603
------------------------------------------------------------------------------
```

```
684 . lroc , nograph

    Logistic model for success

    number of observations =      343
    area under ROC curve   =   0.7126

685 . quietly: logit success democrat leftist independ antimonarch ethnicorder islamist if startyear>1899 & sample, or
    >  nolog

686 . estat classification

    Logistic model for success

                 -------- True --------
    Classified |         D             ~D  |      Total
    -----------+--------------------------+-----------
         +     |        53             35  |         88
         -     |        58            158  |        216
    -----------+--------------------------+-----------
       Total   |       111            193  |        304

    Classified + if predicted Pr(D) >= .5
    True D defined as success != 0
    -------------------------------------------------
    Sensitivity                     Pr( +| D)   47.75%
    Specificity                     Pr( -|~D)   81.87%
    Positive predictive value       Pr( D| +)   60.23%
    Negative predictive value       Pr(~D| -)   73.15%
    -------------------------------------------------
    False + rate for true ~D        Pr( +|~D)   18.13%
    False - rate for true D         Pr( -| D)   52.25%
    False + rate for classified +   Pr(~D| +)   39.77%
    False - rate for classified -   Pr( D| -)   26.85%
    -------------------------------------------------
    Correctly classified                        69.41%
    -------------------------------------------------

687 . estat ic

    Akaike's information criterion and Bayesian information criterion

    ------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
    -------------+----------------------------------------------------------------
               . |        304 -199.5194  -181.7464       7    377.4927   403.5119
    ------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

688 .
689 . * Model 5
690 . logit success coalitionleadership vanguard othpolpartylead traditionalleadership paramilorg underground libmovem
    > ent if startyear>1899, or nolog

    Logistic regression                             Number of obs     =        343
                                                    LR chi2(7)        =      34.55
                                                    Prob > chi2       =     0.0000
    Log likelihood = -206.56998                     Pseudo R2         =     0.0772

    ------------------------------------------------------------------------------
                 success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
    ---------------------+--------------------------------------------------------
      coalitionleadership |   3.000136   1.047301     3.15   0.002      1.51356    5.946786
                 vanguard |   .5647716   .2471703    -1.31   0.192     .2395232    1.331675
          othpolpartylead |   .7824141   .3473973    -0.55   0.581     .3277158    1.867996
    traditionalleadership |   .3330452   .1564008    -2.34   0.019     .1326697    .8360545
               paramilorg |   .7341257   .2688071    -0.84   0.399     .3581747    1.504686
              underground |   .5658809   .2577612    -1.25   0.211      .231739    1.381819
              libmovement |    1.10405   .4030194     0.27   0.786     .5398441    2.257922
                    _cons |   .5828763   .1525212    -2.06   0.039     .3490138    .9734422
    ------------------------------------------------------------------------------

691 . lroc , nograph

    Logistic model for success

    number of observations =      343
    area under ROC curve   =   0.6764

692 . quietly:  logit success coalitionleadership vanguard othpolpartylead traditionalleadership paramilorg undergroun
    > d libmovement if startyear>1899 & sample, or nolog

693 . estat classification

    Logistic model for success

                 -------- True --------
    Classified |         D             ~D  |      Total
    -----------+--------------------------+-----------
         +     |        36             24  |         60
         -     |        75            169  |        244
    -----------+--------------------------+-----------
       Total   |       111            193  |        304
```

```
Classified + if predicted Pr(D) >= .5
True D defined as success != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)   32.43%
Specificity                     Pr( -|~D)   87.56%
Positive predictive value       Pr( D| +)   60.00%
Negative predictive value       Pr(~D| -)   69.26%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)   12.44%
False - rate for true D         Pr( -| D)   67.57%
False + rate for classified +   Pr(~D| +)   40.00%
False - rate for classified -   Pr( D| -)   30.74%
--------------------------------------------------
Correctly classified                        67.43%
--------------------------------------------------
```

```
694 . estat ic

Akaike's information criterion and Bayesian information criterion

------------------------------------------------------------------------------
       Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
-------------+----------------------------------------------------------------
           . |        304 -199.5194  -188.1802       8    392.3604   422.0967
------------------------------------------------------------------------------
               Note: N=Obs used in calculating BIC; see [R] BIC note.

695 .
696 . * Model 6
697 . mi estimate, post dots eform saving(miest, replace): logit success lnparticnum i.urbandum##c.deathtile10 demonst
    > rations strikes civilwar democrat antimonarch coalitionleadership traditionalleadership if startyear>1899

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

Multiple-imputation estimates                   Imputations       =         20
Logistic regression                             Number of obs     =        343
                                                Average RVI       =     0.0059
                                                Largest FMI       =     0.0305
DF adjustment:   Large sample                   DF:     min       =  20,568.19
                                                        avg       = 5874686.56
                                                        max       =   5.90e+07
Model F test:       Equal FMI                   F(  11, 5.3e+06)  =       5.91
Within VCE type:          OIM                   Prob > F          =     0.0000

------------------------------------------------------------------------------
             success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
---------------------+--------------------------------------------------------
          lnparticnum |   1.315324   .1296292     2.78   0.005     1.084275    1.595608
                      |
             urbandum |
                  yes |   16.31347    18.5343     2.46   0.014     1.759805    151.2266
          deathtile10 |    1.28691   .1589807     2.04   0.041     1.010165    1.639473
                      |
urbandum#c.deathtile10 |
                  yes |   .5743116   .0828973    -3.84   0.000     .4327959    .7621002
                      |
       demonstrations |   3.555482   1.609356     2.80   0.005     1.464232    8.633506
              strikes |   2.016088   .7104095     1.99   0.047     1.010581    4.022052
             civilwar |   4.013419   2.297707     2.43   0.015     1.306754    12.32637
             democrat |   2.433301   .9115246     2.37   0.018     1.167702    5.070604
           antimonarch |   2.769086   1.391762     2.03   0.043     1.033986    7.415801
  coalitionleadership |   1.118954    .416435     0.30   0.763     .5395409    2.320598
traditionalleadership |   .5066721   .2399984    -1.44   0.151     .2002319    1.282096
                _cons |    .000831   .0010619    -5.55   0.000     .0000679    .0101693
------------------------------------------------------------------------------

698 . mi predict xbsuccmi using miest if startyear>1899, xb
    (2 missing values generated)

699 . generate prsuccmi = invlogit(xbsuccmi)
    (2 missing values generated)

700 . * Obtain accuracy of prediction
701 . * Area under the ROC curve
702 . roctab success xbsuccmi

                       ROC                    -Asymptotic Normal--
          Obs       Area     Std. Err.      [95% Conf. Interval]
     ---------------------------------------------------------------
          343     0.8048       0.0241        0.75760     0.85209

703 . drop xbsuccmi

704 . drop prsuccmi

705 . * AIC and BIC on common complete-case model
706 . quietly: logit success lnparticnum i.urbandum##c.deathtile10 demonstrations strikes civilwar democrat antimonarc
    > h coalitionleadership traditionalleadership if startyear>1899, or nolog
```

```
707 . estat ic

    Akaike's information criterion and Bayesian information criterion

    -------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC         BIC
    -------------+-----------------------------------------------------------------
                 |        304 -199.5194  -164.6394      12    353.2788   397.8831
    -------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

708 . * True positive and false positive rates on complete-case sample
709 . estat classification

    Logistic model for success

                  -------- True --------
    Classified |         D            ~D  |      Total
    -----------+--------------------------+-----------
         +     |        59            31  |         90
         -     |        52           162  |        214
    -----------+--------------------------+-----------
       Total   |       111           193  |        304

    Classified + if predicted Pr(D) >= .5
    True D defined as success != 0
    --------------------------------------------------
    Sensitivity                     Pr( +| D)   53.15%
    Specificity                     Pr( -|~D)   83.94%
    Positive predictive value       Pr( D| +)   65.56%
    Negative predictive value       Pr(~D| -)   75.70%
    --------------------------------------------------
    False + rate for true ~D        Pr( +|~D)   16.06%
    False - rate for true D         Pr( -| D)   46.85%
    False + rate for classified +   Pr(~D| +)   34.44%
    False - rate for classified -   Pr( D| -)   24.30%
    --------------------------------------------------
    Correctly classified                        72.70%
    --------------------------------------------------

710 .
711 . * Model 7
712 . mi estimate, post dots eform saving(miest, replace): logit success lnparticnum i.urbandum##c.deathtile10 demonst
    > rations strikes civilwar democrat antimonarch if startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        343
                                                    Average RVI       =     0.0068
                                                    Largest FMI       =     0.0306
    DF adjustment:   Large sample                   DF:     min       =  20,377.43
                                                            avg       = 852,731.34
                                                            max       = 4459723.75
    Model F test:       Equal FMI                   F(   9, 3.1e+06)  =       7.12
    Within VCE type:          OIM                   Prob > F          =     0.0000

    ------------------------------------------------------------------------------------------
                   success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    -----------------------+------------------------------------------------------------------
               lnparticnum |    1.32269   .1285724     2.88   0.004     1.093231     1.60031
                           |
                  urbandum |
                       yes |   18.53091   21.03551     2.57   0.010     2.002838     171.454
              deathtile10 |   1.287144   .1595506     2.04   0.042     1.009516    1.641123
                          |
    urbandum#c.deathtile10 |
                       yes |   .5638201   .0807644    -4.00   0.000     .4258041    .7465712
                           |
           demonstrations |   3.654176   1.628343     2.91   0.004     1.525752    8.751753
                  strikes |   2.010159   .7023156     2.00   0.046     1.013526    3.986814
                 civilwar |   4.087759   2.313473     2.49   0.013     1.348169    12.39442
                 democrat |   2.538741   .9280224     2.55   0.011     1.240127    5.197217
              antimonarch |   2.746393   1.365274     2.03   0.042      1.03661     7.27629
                    _cons |   .0007008   .0008872    -5.74   0.000     .0000586    .0083781
    ------------------------------------------------------------------------------------------

713 . mi predict xbsuccmi using miest if startyear>1899, xb
    (2 missing values generated)

714 . generate prsuccmi = invlogit(xbsuccmi)
    (2 missing values generated)

715 . * Obtain accuracy of prediction
716 . * Area under the ROC curve
717 . roctab success xbsuccmi

                            ROC                    -Asymptotic Normal--
                Obs       Area     Std. Err.      [95% Conf. Interval]
           ---------------------------------------------------------------
                343     0.8005       0.0243        0.75294     0.84806
```

```
718 . drop xbsuccmi

719 . drop prsuccmi

720 . * AIC and BIC on common complete-case model
721 . quietly: logit success lnparticnum i.urbandum##c.deathtile10 demonstrations strikes civilwar democrat antimonarc
    > h if startyear>1899, or nolog

722 . estat ic

    Akaike's information criterion and Bayesian information criterion

    ------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
    -------------+----------------------------------------------------------------
               . |        304 -199.5194  -165.4411      10    350.8821   388.0524
    ------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

723 . * True positive and false positive rates on complete-case sample
724 . estat classification

    Logistic model for success

                  -------- True --------
    Classified |         D             ~D  |      Total
    -----------+--------------------------+-----------
         +     |        55             32  |         87
         -     |        56            161  |        217
    -----------+--------------------------+-----------
       Total   |       111            193  |        304

    Classified + if predicted Pr(D) >= .5
    True D defined as success != 0
    --------------------------------------------------
    Sensitivity                     Pr( +| D)   49.55%
    Specificity                     Pr( -|~D)   83.42%
    Positive predictive value       Pr( D| +)   63.22%
    Negative predictive value       Pr(~D| -)   74.19%
    --------------------------------------------------
    False + rate for true ~D        Pr( +|~D)   16.58%
    False - rate for true D         Pr( -| D)   50.45%
    False + rate for classified +   Pr(~D| +)   36.78%
    False - rate for classified -   Pr( D| -)   25.81%
    --------------------------------------------------
    Correctly classified                        71.05%
    --------------------------------------------------

725 .
726 . * Likelihood ratio test between Model 7 and Model 1 (Model 1 has lower BIC; Model 7 has lower AIC)
727 . * Model 1
728 . quietly: logit success lnparticnum if startyear>1899 & sample, nolog or

729 . estimates store mod1

730 . * Model 7
731 . quietly: logit success lnparticnum i.urbandum##c.deathtile10 demonstrations strikes civilwar democrat antimonarc
    > h if startyear>1899 & sample, or nolog

732 . estimates store mod7

733 . lrtest mod1 mod7

    Likelihood-ratio test                                 LR chi2(8)  =     36.46
    (Assumption: mod1 nested in mod7)                     Prob > chi2 =    0.0000

734 . *  RESULT:  Superiority of Model 7 over nested Model 1 shown
735 . drop _est_mod1 _est_mod7

736 .
737 . * Likelihood ratio test between Model 7 and Model 2 (Model 2 has lower BIC; Model 7 has lower AIC)
738 . * Model 2
739 . quietly: logit success i.urbandum##c.deathtile10 if startyear>1899 & sample, nolog or

740 . estimates store mod2

741 . * Model 7
742 . quietly: logit success lnparticnum i.urbandum##c.deathtile10 demonstrations strikes civilwar democrat antimonarc
    > h if startyear>1899 & sample, or nolog

743 . estimates store mod7

744 . lrtest mod2 mod7

    Likelihood-ratio test                                 LR chi2(6)  =     34.44
    (Assumption: mod2 nested in mod7)                     Prob > chi2 =    0.0000

745 . *  RESULT:  Superiority of Model 7 over nested Model 2 shown
746 . drop _est_mod2 _est_mod7
```

```
747 . * clear the sample selection variable for comparing information criteria
748 . drop sample

749 .
750 . * ================================================================================
751 . * FIGURE 4.10--ROC curves for opposition tactics, by urban/rural episodes
752 . * ================================================================================
753 . * Complete-case sample
754 . * Figure 4.10a--opposition factors, by urban/rural
755 . clear

756 . use revolutionaryeps.dta

757 . quietly: logit success lnparticnum i.urbandum##c.deathtile10 demonstrations strikes civilwar democrat antimonarc
    > h if startyear>1899, or nolog

758 . generate sample=e(sample)

759 . * Accuracy of model
760 . predict xbsucc if sample==1, xb
    (41 missing values generated)

761 . roccomp success xbsucc if sample==1, by(urbandum) graph summary legend(position(6) order (1 2) cols(2)) ysize(6)
    >  xsize(6) plotregion(lcolor(black)) ylabel(, nogrid labsize(small)) xlabel(, nogrid labsize(small)) ytick(0(.1)1
    > ) xtick(0(.1)1) ylabel(0(.1)1) xlabel(0(.1)1) title({bf: 4.10a: Complete case sample} , size(medlarge)) ytitle({
    > bf: True positive rate} , size(medsmall)) xtitle({bf: False positive rate} , size(medsmall)) rlopts(lpattern(das
    > h)) plot1opts(msize(medlarge)) plot2opts(msize(medlarge))

                                ROC                    -Asymptotic Normal--
    urbandum           Obs       Area     Std. Err.      [95% Conf. Interval]
    -------------------------------------------------------------------------
    0                  148     0.7332       0.0467        0.64171     0.82467
    1                  156     0.7525       0.0383        0.67752     0.82747
    -------------------------------------------------------------------------
    Ho: area(0) = area(1)
        chi2(1) =     0.10       Prob>chi2 =   0.7491

762 . graph export Logfiles\figure4 10a.pdf, replace
    (file Logfiles\figure4_10a.pdf written in PDF format)

763 . * Figure manipulated in Stata graph editor
764 .
765 . * Imputed sample
766 . * Figure 4.10b--regime factors, by urban/rural
767 . clear

768 . use revolutionaryepsmiopp.dta

769 . mi estimate, post dots eform saving(miest, replace): logit success lnparticnum urbandum deathtile10 urbxdeathtil
    > e10 demonstrations strikes civilwar democrat antimonarch if startyear>1899

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

    Multiple-imputation estimates                   Imputations       =         20
    Logistic regression                             Number of obs     =        343
                                                    Average RVI       =     0.0066
                                                    Largest FMI       =     0.0297
    DF adjustment:   Large sample                   DF:     min       =  21,620.97
                                                            avg       = 928,988.54
                                                            max       = 4050922.39
    Model F test:       Equal FMI                   F(   9, 3.3e+06)  =       7.11
    Within VCE type:          OIM                   Prob > F          =     0.0000

    ------------------------------------------------------------------------------
            success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    ----------------+-------------------------------------------------------------
        lnparticnum |   1.321696   .1285057     2.87   0.004     1.092362    1.599178
           urbandum |   18.71207   21.23897     2.58   0.010     2.022881    173.0905
        deathtile10 |   1.287879   .1595311     2.04   0.041     1.010263    1.641783
    urbxdeathtile10 |   .5632313    .080623    -4.01   0.000      .425444    .7456432
     demonstrations |   3.643785    1.62417     2.90   0.004     1.52104    8.729009
            strikes |     2.0082   .7017091     2.00   0.046     1.012461    3.983231
           civilwar |   4.083492   2.312382     2.48   0.013     1.345906    12.38935
           democrat |   2.536406   .9275022     2.55   0.011     1.238667    5.193776
        antimonarch |   2.746739   1.365315     2.03   0.042     1.036838    7.276523
              _cons |   .0007041   .0008909    -5.74   0.000      .000059    .0084059
    ------------------------------------------------------------------------------

770 . mi predict xbsuccmi using miest if startyear>1899, xb
    (2 missing values generated)

771 . roccomp success xbsuccmi, by(urbandum) graph summary legend(position(6) order (1 2) cols(2)) ysize(6) xsize(6) p
    > lotregion(lcolor(black)) ylabel(, nogrid labsize(small)) xlabel(, nogrid labsize(small)) ytick(0(.1)1) xtick(0(.
    > 1)1) ylabel(0(.1)1) xlabel(0(.1)1) title({bf: 4.10b: Multiple imputation (20 samples)} , size(medlarge)) ytitle(
    > {it: True positive rate} , size(medsmall)) xtitle({it: False positive rate} , size(medsmall)) rlopts(lpattern(da
    > sh)) plot1opts(msize(medlarge)) plot2opts(msize(medlarge))

                                ROC                    -Asymptotic Normal--
    urbandum           Obs       Area     Std. Err.      [95% Conf. Interval]
    -------------------------------------------------------------------------
    0                  163     0.7460       0.0456        0.65655     0.83545
    1                  180     0.7928       0.0330        0.72820     0.85742
    -------------------------------------------------------------------------
    Ho: area(0) = area(1)
        chi2(1) =     0.69       Prob>chi2 =   0.4058
```

```
772 . graph export Logfiles\figure4_10b.pdf, replace
    (file Logfiles\figure4_10b.pdf written in PDF format)

773 . * Figures manipulated in Stata graph editor
774 . * Figures combined in Stata graph editor and edited
775 .
776 .
777 . * ============================================
778 . * TABLE 4.3--combined models; regression table
779 . * ============================================
780 . * create comparison sample for information criteria using complete case model
781 . clear

782 . use revolutionaryepsmicomb.dta

783 . set seed 1234

784 . quietly: logit success lnparticnum urbandum deathtile10 urbxdeathtile10 demonstrations strikes democrat antimona
    > rch newpolitymin1 newpolitymin1sq newincumbpowerdur newgdppcthl newlnoill newmilexpsold10tile civilwar newcivxmi
    > lexp if startyear>1899, or nolog

785 . generate sample=e(sample)

786 .
787 . * Opposition model
788 . * Complete case sample
789 . logit success lnparticnum urbandum deathtile10 urbxdeathtile10 demonstrations strikes civilwar democrat antimona
    > rch if startyear>1899, or nolog

Logistic regression                             Number of obs     =        255
                                                LR chi2(9)        =      64.70
                                                Prob > chi2       =     0.0000
Log likelihood = -137.03282                     Pseudo R2         =     0.1910

------------------------------------------------------------------------------
     success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
  lnparticnum |   1.291565   .1411906     2.34   0.019     1.042473    1.600175
     urbandum |   15.40874   20.32619     2.07   0.038     1.161231    204.4635
  deathtile10 |   1.341449   .1921708     2.05   0.040     1.013058     1.77629
urbxdeathtile10 |   .5758363   .0945276    -3.36   0.001     .4174153    .7943827
 demonstrations |   4.133264   2.057656     2.85   0.004     1.557905    10.96593
      strikes |   1.716285   .6668366     1.39   0.164     .8014345    3.675453
     civilwar |   2.526567   1.588155     1.47   0.140     .7370228    8.661255
     democrat |   2.038674   .8097245     1.79   0.073     .9359789    4.440478
  antimonarch |   2.555116   1.475921     1.62   0.104     .8236219    7.926716
        _cons |   .0010093   .0014671    -4.75   0.000     .0000584    .0174324
------------------------------------------------------------------------------

790 . estat classification

Logistic model for success

              -------- True --------
Classified |         D            ~D  |      Total
-----------+--------------------------+-----------
     +     |        53            29  |         82
     -     |        44           129  |        173
-----------+--------------------------+-----------
   Total   |        97           158  |        255

Classified + if predicted Pr(D) >= .5
True D defined as success != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)   54.64%
Specificity                     Pr( -|~D)   81.65%
Positive predictive value       Pr( D| +)   64.63%
Negative predictive value       Pr(~D| -)   74.57%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)   18.35%
False - rate for true D         Pr( -| D)   45.36%
False + rate for classified +   Pr(~D| +)   35.37%
False - rate for classified -   Pr( D| -)   25.43%
--------------------------------------------------
Correctly classified                        71.37%
--------------------------------------------------

791 . lroc , nograph

Logistic model for success

number of observations =      255
area under ROC curve   =   0.7871

792 . * Leave-one-out cross-validated AUC
793 . looclass success lnparticnum urbandum deathtile10 urbxdeathtile10 demonstrations strikes civilwar democrat antim
    > onarch if startyear>1899, model (logit)


Iterating across (255) observations
----+--- 1 ---+--- 2 ---+--- 3 ---+--- 4 ---+--- 5
..................................................    50
..................................................   100
..................................................   150
..................................................   200
..................................................   250
.....


Classification Table for Full Data:
```

```
             -------- True --------
Classified |         D            ~D  |      Total
-----------+--------------------------+-----------
     +     |        53            29  |         82
     -     |        44           129  |        173
-----------+--------------------------+-----------
   Total   |        97           158  |        255


Classification Table for Test Data:

             -------- True --------
Classified |         D            ~D  |      Total
-----------+--------------------------+-----------
     +     |        53            32  |         85
     -     |        44           126  |        170
-----------+--------------------------+-----------
   Total   |        97           158  |        255


Classified + if predicted Pr(D) >= .5
True D defined as  != 0
                                          Full         Test
-------------------------------------------------------------------
Sensitivity                     Pr( +| D)   54.64%       54.64%
Specificity                     Pr( -|~D)   81.65%       79.75%
Positive predictive value       Pr( D| +)   64.63%       62.35%
Negative predictive value       Pr(~D| -)   74.57%       74.12%
-------------------------------------------------------------------
False + rate for true ~D        Pr( +|~D)   18.35%       20.25%
False - rate for true D         Pr( -| D)   45.36%       45.36%
False + rate for classified +   Pr(~D| +)   35.37%       37.65%
False - rate for classified -   Pr( D| -)   25.43%       25.88%
-------------------------------------------------------------------
Correctly classified                        71.37%       70.20%
-------------------------------------------------------------------
ROC area                                    0.7871       0.7438
-------------------------------------------------------------------
p-value for Full vs Test ROC areas                       0.0000
-------------------------------------------------------------------

794 . * AIC and BIC on common sample
795 . quietly: logit success lnparticnum urbandum deathtile10 urbxdeathtile10 demonstrations strikes civilwar democrat
    >  antimonarch if startyear>1899 & sample==1, or nolog

796 . estat ic

Akaike's information criterion and Bayesian information criterion

------------------------------------------------------------------------------
       Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
-------------+----------------------------------------------------------------
           . |        212 -141.9167  -110.0443      10    240.0886   273.6545
------------------------------------------------------------------------------
               Note: N=Obs used in calculating BIC; see [R] BIC note.

797 . * Multiple imputation
798 . mi estimate, post dots eform saving(miest, replace): logit success lnparticnum urbandum deathtile10 urbxdeathtil
    > e10 demonstrations strikes civilwar democrat antimonarch if startyear>1899

Imputations (30):
  .........10.........20.........30 done

Multiple-imputation estimates                   Imputations       =         30
Logistic regression                             Number of obs     =        288
                                                Average RVI       =     0.0064
                                                Largest FMI       =     0.0377
DF adjustment:   Large sample                   DF:     min       =  20,541.74
                                                        avg       = 1308987.30
                                                        max       = 2321197.11
Model F test:       Equal FMI                   F(   9, 5.6e+06)  =       6.61
Within VCE type:          OIM                   Prob > F          =     0.0000

------------------------------------------------------------------------------
     success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
  lnparticnum |   1.299088    .140254     2.42   0.015     1.051319     1.60525
     urbandum |   20.26103   26.75569     2.28   0.023     1.522675    269.5976
  deathtile10 |    1.40259   .2057777     2.31   0.021     1.052079    1.869877
urbxdeathtile10 |   .5431514   .0892318    -3.72   0.000     .3936234    .7494814
 demonstrations |   5.139998   2.481967     3.39   0.001     1.994988    13.24298
      strikes |   1.973251   .7338373     1.83   0.068     .9519772    4.090138
     civilwar |    2.43905   1.472687     1.48   0.140     .7469113    7.964757
     democrat |    2.21631   .8455729     2.09   0.037     1.049246    4.681484
  antimonarch |   2.708074    1.46155     1.85   0.065     .9402987    7.799293
         cons |   .0006082   .0008819    -5.11   0.000     .0000355    .0104304
------------------------------------------------------------------------------
```

```
799 . mi predict xbsuccmi using miest if startyear>1899, xb

800 . roctab success xbsuccmi

                        ROC                    -Asymptotic Normal--
         Obs       Area     Std. Err.      [95% Conf. Interval]
       -------------------------------------------------------------
         288     0.8168       0.0252        0.76739     0.86620

801 . drop xbsuccmi

802 .
803 . * Regime model
804 . * Complete-case sample
805 . logit success newpolitymin1 newpolitymin1sq newincumbpowerdur newgdppcthl newlnoill newmilexpsold10tile civilwar
    >  newcivxmilexp if startyear>1899, or nolog

Logistic regression                               Number of obs     =        234
                                                  LR chi2(8)        =      73.79
                                                  Prob > chi2       =     0.0000
Log likelihood =  -118.0399                       Pseudo R2         =     0.2381

------------------------------------------------------------------------------
     success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
 newpolitymin1 |   .9043827   .0312222    -2.91   0.004     .8452127     .967695
newpolitymin1sq |    .973352   .0069052    -3.81   0.000     .9599117    .9869805
newincumbpowerdur |   1.063515   .0212121     3.09   0.002     1.022743    1.105914
newgdppcthl |   .8621668   .0705696    -1.81   0.070     .7343772    1.012193
newlnoill |   .8692383    .034219    -3.56   0.000     .8046924    .9389615
newmilexpsold10tile |    1.49645   .1405138     4.29   0.000     1.244905    1.798823
civilwar |   1.028174   .7779181     0.04   0.971     .2333705    4.529884
newcivxmilexp |   .8080672   .1021405    -1.69   0.092     .6307463    1.035238
_cons |   .3343246   .1664207    -2.20   0.028     .1260248    .8869127
------------------------------------------------------------------------------

806 . estat classification

Logistic model for success

              -------- True --------
Classified |         D             ~D  |      Total
-----------+--------------------------+-----------
     +     |        57             20  |         77
     -     |        31            126  |        157
-----------+--------------------------+-----------
   Total   |        88            146  |        234

Classified + if predicted Pr(D) >= .5
True D defined as success != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)   64.77%
Specificity                     Pr( -|~D)   86.30%
Positive predictive value       Pr( D| +)   74.03%
Negative predictive value       Pr(~D| -)   80.25%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)   13.70%
False - rate for true D         Pr( -| D)   35.23%
False + rate for classified +   Pr(~D| +)   25.97%
False - rate for classified -   Pr( D| -)   19.75%
--------------------------------------------------
Correctly classified                        78.21%
--------------------------------------------------

807 . lroc , nograph

Logistic model for success

number of observations =      234
area under ROC curve   =   0.8150

808 . * Leave-one-out cross-validated AUC
809 . looclass success newpolitymin1 newpolitymin1sq newincumbpowerdur newgdppcthl newlnoill newmilexpsold10tile civil
    > war newcivxmilexp if startyear>1899, model (logit)


Iterating across (234) observations
----+--- 1 ---+--- 2 ---+--- 3 ---+--- 4 ---+--- 5
..................................................    50
..................................................   100
..................................................   150
..................................................   200
................................


Classification Table for Full Data:

              -------- True --------
Classified |         D             ~D  |      Total
-----------+--------------------------+-----------
     +     |        57             20  |         77
     -     |        31            126  |        157
-----------+--------------------------+-----------
   Total   |        88            146  |        234



Classification Table for Test Data:
```

```
             -------- True --------
Classified |         D            ~D  |      Total
-----------+--------------------------+-----------
     +     |        55            27  |         82
     -     |        33           119  |        152
-----------+--------------------------+-----------
   Total   |        88           146  |        234


Classified + if predicted Pr(D) >= .5
True D defined as  != 0
                                                Full         Test
-------------------------------------------------------------------
Sensitivity                     Pr( +| D)   64.77%       62.50%
Specificity                     Pr( -|~D)   86.30%       81.51%
Positive predictive value       Pr( D| +)   74.03%       67.07%
Negative predictive value       Pr(~D| -)   80.25%       78.29%
-------------------------------------------------------------------
False + rate for true ~D        Pr( +|~D)   13.70%       18.49%
False - rate for true D         Pr( -| D)   35.23%       37.50%
False + rate for classified +   Pr(~D| +)   25.97%       32.93%
False - rate for classified -   Pr( D| -)   19.75%       21.71%
-------------------------------------------------------------------
Correctly classified                        78.21%       74.36%
-------------------------------------------------------------------
ROC area                                    0.8150       0.7799
-------------------------------------------------------------------
p-value for Full vs Test ROC areas                       0.0000
-------------------------------------------------------------------
```

```
810 . * AIC and BIC on common sample
811 . quietly: logit success newpolitymin1 newpolitymin1sq newincumbpowerdur newgdppcthl newlnoill newmilexpsold10tile
    >  civilwar newcivxmilexp if startyear>1899 & sample, or nolog

812 . estat ic

    Akaike's information criterion and Bayesian information criterion

    ------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
    -------------+----------------------------------------------------------------
               . |        212 -141.9167  -110.0145       9     238.029   268.2382
    ------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

813 . * Multiple imputation
814 . mi estimate, post dots eform saving(miest, replace): logit success newpolitymin1 newpolitymin1sq newincumbpowerd
    > ur newgdppcthl newlnoill newmilexpsold10tile civilwar newcivxmilexp if startyear>1899

    Imputations (30):
      .........10.........20.........30 done

    Multiple-imputation estimates                   Imputations       =         30
    Logistic regression                             Number of obs     =        288
                                                    Average RVI       =     0.0751
                                                    Largest FMI       =     0.1406
    DF adjustment:   Large sample                   DF:     min       =   1,491.11
                                                            avg       =  14,124.69
                                                            max       =  65,086.52
    Model F test:       Equal FMI                   F(   8,38459.5)   =       6.05
    Within VCE type:          OIM                   Prob > F          =     0.0000

    ------------------------------------------------------------------------------
                success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    --------------------+---------------------------------------------------------
          newpolitymin1 |   .8967495   .0284745    -3.43   0.001     .8426236    .9543522
        newpolitymin1sq |    .979785   .0062023    -3.23   0.001      .967694     .992027
      newincumbpowerdur |   1.043162   .0179879     2.45   0.014     1.008495    1.079021
            newgdppcthl |   .8565314    .065796    -2.02   0.044        .7368    .9957194
              newlnoill |     .89191   .0315894    -3.23   0.001     .8320937    .9560263
    newmilexpsold10tile |   1.414153   .1229452     3.99   0.000     1.192491    1.677016
                civilwar |   .6287469   .4283794    -0.68   0.496     .1652976    2.391582
          newcivxmilexp |   .8732891    .100892    -1.17   0.241     .6962264    1.095382
                  _cons |   .4007653   .1811156    -2.02   0.043     .1652556    .9719054
    ------------------------------------------------------------------------------

815 . mi predict xbsuccmi using miest if startyear>1899, xb

816 . roctab success xbsuccmi

                         ROC                    -Asymptotic Normal--
                Obs       Area     Std. Err.      [95% Conf. Interval]
            -------------------------------------------------------------
                288     0.8029       0.0267        0.75055     0.85532

817 . drop xbsuccmi

818 .
```

```
819 . * Combined model 1
820 . * Complete-case sample
821 . logit success lnparticnum urbandum deathtile10 urbxdeathtile10 demonstrations strikes democrat antimonarch newpo
    > litymin1 newpolitymin1sq newincumbpowerdur newgdppcthl newlnoill newmilexpsold10tile civilwar newcivxmilexp if s
    > tartyear>1899, or nolog

Logistic regression                             Number of obs     =        212
                                                LR chi2(16)       =     109.94
                                                Prob > chi2       =     0.0000
Log likelihood = -86.948341                     Pseudo R2         =     0.3873

------------------------------------------------------------------------------
             success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
---------------------+--------------------------------------------------------------
        lnparticnum |    1.64979   .2673858     3.09   0.002     1.200804    2.266653
           urbandum |   77.06884   138.3682     2.42   0.016     2.283732    2600.834
         deathtile10 |   1.333583   .2487816     1.54   0.123     .9251824    1.922263
    urbxdeathtile10 |   .4747546   .1087124    -3.25   0.001     .3030788    .7436743
     demonstrations |   10.37929   7.392216     3.29   0.001     2.570013    41.91798
            strikes |   .7501341   .4026525    -0.54   0.592     .2619607    2.148037
           democrat |   .5853858   .3276911    -0.96   0.339     .1954119    1.753612
         antimonarch |   .7228298   .5841976    -0.40   0.688     .1482816    3.523586
       newpolitymin1 |   .9086163   .0372741    -2.34   0.019     .8384202    .9846895
    newpolitymin1sq |   .9738398   .0083576    -3.09   0.002     .9575962     .990359
  newincumbpowerdur |   1.069717   .0299261     2.41   0.016     1.012642    1.130009
        newgdppcthl |   .7307502    .076511    -3.00   0.003     .5951774    .8972045
          newlnoill |   .8541233   .0442561    -3.04   0.002      .771642    .9454211
newmilexpsold10tile |   1.148007   .1435045     1.10   0.270     .8985488    1.466721
           civilwar |   1.109363   1.299528     0.09   0.929      .111676    11.02014
       newcivxmilexp |   1.186407   .1972009     1.03   0.304     .8565437    1.643303
               _cons |   .0001359   .0002704    -4.48   0.000     2.75e-06     .006709
------------------------------------------------------------------------------

822 . estat classification

Logistic model for success

              -------- True --------
Classified |         D            ~D  |      Total
-----------+--------------------------+-----------
     +     |        64            15  |         79
     -     |        19           114  |        133
-----------+--------------------------+-----------
   Total   |        83           129  |        212

Classified + if predicted Pr(D) >= .5
True D defined as success != 0
--------------------------------------------------
Sensitivity                     Pr( +| D)   77.11%
Specificity                     Pr( -|~D)   88.37%
Positive predictive value       Pr( D| +)   81.01%
Negative predictive value       Pr(~D| -)   85.71%
--------------------------------------------------
False + rate for true ~D        Pr( +|~D)   11.63%
False - rate for true D         Pr( -| D)   22.89%
False + rate for classified +   Pr(~D| +)   18.99%
False - rate for classified -   Pr( D| -)   14.29%
--------------------------------------------------
Correctly classified                        83.96%
--------------------------------------------------

823 . lroc , nograph

Logistic model for success

number of observations =      212
area under ROC curve   =   0.8906

824 . * Leave-one-out cross-validated AUC--overfitting evident
825 . looclass success lnparticnum urbandum deathtile10 urbxdeathtile10 demonstrations strikes democrat antimonarch ne
    > wpolitymin1 newpolitymin1sq newincumbpowerdur newgdppcthl newlnoill newmilexpsold10tile civilwar newcivxmilexp i
    > f startyear>1899, model (logit)


Iterating across (212) observations
----+--- 1 ---+--- 2 ---+--- 3 ---+--- 4 ---+--- 5
..................................................    50
..................................................   100
..................................................   150
..................................................   200
............


Classification Table for Full Data:

              -------- True --------
Classified |         D            ~D  |      Total
-----------+--------------------------+-----------
     +     |        64            15  |         79
     -     |        19           114  |        133
-----------+--------------------------+-----------
   Total   |        83           129  |        212



Classification Table for Test Data:
```

```
             -------- True --------
Classified |         D            ~D  |      Total
-----------+--------------------------+-----------
     +     |        55            19  |         74
     -     |        28           110  |        138
-----------+--------------------------+-----------
   Total   |        83           129  |        212


Classified + if predicted Pr(D) >= .5
True D defined as  != 0
                                                Full         Test
-------------------------------------------------------------------
Sensitivity                     Pr( +| D)   77.11%       66.27%
Specificity                     Pr( -|~D)   88.37%       85.27%
Positive predictive value       Pr( D| +)   81.01%       74.32%
Negative predictive value       Pr(~D| -)   85.71%       79.71%
-------------------------------------------------------------------
False + rate for true ~D        Pr( +|~D)   11.63%       14.73%
False - rate for true D         Pr( -| D)   22.89%       33.73%
False + rate for classified +   Pr(~D| +)   18.99%       25.68%
False - rate for classified -   Pr( D| -)   14.29%       20.29%
-------------------------------------------------------------------
Correctly classified                        83.96%       77.83%
-------------------------------------------------------------------
ROC area                                    0.8906       0.8352
-------------------------------------------------------------------
p-value for Full vs Test ROC areas                       0.0000
-------------------------------------------------------------------
```

```
826 . * AIC and BIC on common sample
827 . quietly: logit success lnparticnum urbandum deathtile10 urbxdeathtile10 demonstrations strikes democrat antimona
    > rch newpolitymin1 newpolitymin1sq newincumbpowerdur newgdppcthl newlnoill newmilexpsold10tile civilwar newcivxmi
    > lexp if startyear>1899 & sample, or nolog

828 . estat ic

    Akaike's information criterion and Bayesian information criterion

    ------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df          AIC         BIC
    -------------+----------------------------------------------------------------
                 |        212 -141.9167  -86.94834      17     207.8967    264.9586
    ------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

829 . * Multiple imputation
830 . mi estimate, post dots eform saving(miest, replace): logit success lnparticnum urbandum deathtile10 urbxdeathtil
    > e10 demonstrations strikes democrat antimonarch newpolitymin1 newpolitymin1sq newincumbpowerdur newgdppcthl newl
    > noill newmilexpsold10tile civilwar newcivxmilexp if startyear>1899

    Imputations (30):
      .........10.........20.........30 done

    Multiple-imputation estimates                   Imputations       =         30
    Logistic regression                             Number of obs     =        288
                                                    Average RVI       =     0.0645
                                                    Largest FMI       =     0.1598
    DF adjustment:   Large sample                   DF:     min       =   1,156.04
                                                            avg       =  19,491.05
                                                            max       =  99,809.79
    Model F test:       Equal FMI                   F(  16,118195.3)  =       4.13
    Within VCE type:          OIM                   Prob > F          =     0.0000

    ------------------------------------------------------------------------------
                success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    --------------------+---------------------------------------------------------
            lnparticnum |   1.651743   .2345072     3.53   0.000     1.250425    2.181862
               urbandum |   24.58328   37.29409     2.11   0.035     1.256648    480.9123
            deathtile10 |   1.326261    .220387     1.70   0.089      .957569     1.83691
        urbxdeathtile10 |    .529353   .1019618    -3.30   0.001     .3628901    .7721749
         demonstrations |   7.784168   4.532957     3.52   0.000     2.486113    24.37269
                strikes |    1.30953   .5833312     0.61   0.545     .5469355    3.135411
               democrat |   .7897611   .3794189    -0.49   0.623     .3079704    2.025268
            antimonarch |   1.752913   1.188873     0.83   0.408     .4639223    6.623312
          newpolitymin1 |   .8923718   .0334595    -3.04   0.002     .8291253    .9604429
        newpolitymin1sq |    .978567   .0071915    -2.95   0.003     .9645641    .9927731
      newincumbpowerdur |   1.030479   .0227696     1.36   0.174      .986802    1.076088
            newgdppcthl |   .7703404    .070035    -2.87   0.004     .6446027    .9206049
              newlnoill |   .8721528   .0406125    -2.94   0.003     .7960525    .9555282
    newmilexpsold10tile |   1.210308   .1333261     1.73   0.083     .9752099    1.502083
               civilwar |   .9185577   .9023964    -0.09   0.931     .1338031    6.305894
          newcivxmilexp |   1.152809   .1718847     0.95   0.340     .8604184    1.544562
                  _cons |   .0001262   .0002215    -5.11   0.000     4.04e-06    .0039435
    ------------------------------------------------------------------------------

831 . mi predict xbsuccmi using miest if startyear>1899, xb
```

```
832 . roctab success xbsuccmi

                        ROC                    -Asymptotic Normal--
             Obs       Area     Std. Err.      [95% Conf. Interval]
        -------------------------------------------------------------
             288     0.8903       0.0189        0.85332     0.92731

833 . drop xbsuccmi

834 .
835 . * Combined model 2 (reduced)
836 . * Complete-case sample
837 . logit success lnparticnum urbandum deathtile10 urbxdeathtile10 demonstrations newpolitymin1 newpolitymin1sq newi
    > ncumbpowerdur newgdppcthl newlnoill newmilexpsold10tile if startyear>1899, or nolog

    Logistic regression                             Number of obs     =        212
                                                    LR chi2(11)       =     107.05
                                                    Prob > chi2       =     0.0000
    Log likelihood = -88.389837                     Pseudo R2         =     0.3772

    ------------------------------------------------------------------------------
                 success | Odds Ratio   Std. Err.      z    P>|z|     [95% Conf. Interval]
    ---------------------+--------------------------------------------------------
            lnparticnum |   1.494632   .2182067     2.75   0.006     1.122702    1.989776
               urbandum |   23.99171     37.495     2.03   0.042     1.121441    513.2699
            deathtile10 |   1.386254   .2406274     1.88   0.060     .9864845    1.948028
        urbxdeathtile10 |   .5291342   .1105543    -3.05   0.002     .3513344    .7969134
         demonstrations |   7.200039   4.665434     3.05   0.002     2.021989    25.63839
          newpolitymin1 |   .9223947    .036431    -2.05   0.041     .8536849    .9966346
        newpolitymin1sq |   .9746817   .0080553    -3.10   0.002     .9590207    .9905985
      newincumbpowerdur |    1.05959   .0255015     2.40   0.016     1.010768    1.110769
            newgdppcthl |    .735349    .073386    -3.08   0.002      .604708    .8942136
              newlnoill |   .8570414   .0411406    -3.21   0.001     .7800842    .9415905
    newmilexpsold10tile |   1.278636   .1084534     2.90   0.004       1.0828    1.509891
                  _cons |   .0004135   .0007174    -4.49   0.000     .0000138    .0123908
    ------------------------------------------------------------------------------

838 . estat classification

    Logistic model for success

                 -------- True --------
    Classified |         D             ~D  |      Total
    -----------+--------------------------+-----------
         +     |        60             14  |         74
         -     |        23            115  |        138
    -----------+--------------------------+-----------
       Total   |        83            129  |        212

    Classified + if predicted Pr(D) >= .5
    True D defined as success != 0
    -------------------------------------------------
    Sensitivity                     Pr( +| D)   72.29%
    Specificity                     Pr( -|~D)   89.15%
    Positive predictive value       Pr( D| +)   81.08%
    Negative predictive value       Pr(~D| -)   83.33%
    -------------------------------------------------
    False + rate for true ~D        Pr( +|~D)   10.85%
    False - rate for true D         Pr( -| D)   27.71%
    False + rate for classified +   Pr(~D| +)   18.92%
    False - rate for classified -   Pr( D| -)   16.67%
    -------------------------------------------------
    Correctly classified                        82.55%
    -------------------------------------------------

839 . lroc , nograph

    Logistic model for success

    number of observations =      212
    area under ROC curve   =   0.8852

840 . * Leave-one-out cross-validated AUC
841 . looclass success lnparticnum urbandum deathtile10 urbxdeathtile10 demonstrations  newpolitymin1 newpolitymin1sq
    > newincumbpowerdur newgdppcthl newlnoill newmilexpsold10tile if startyear>1899, model (logit)


    Iterating across (212) observations
    ----+--- 1 ---+--- 2 ---+--- 3 ---+--- 4 ---+--- 5
    ..................................................    50
    ..................................................   100
    ..................................................   150
    ..................................................   200
    ............


    Classification Table for Full Data:

                 -------- True --------
    Classified |         D             ~D  |      Total
    -----------+--------------------------+-----------
         +     |        60             14  |         74
         -     |        23            115  |        138
    -----------+--------------------------+-----------
       Total   |        83            129  |        212



    Classification Table for Test Data:
```

```
             -------- True --------
Classified |         D            ~D  |      Total
-----------+--------------------------+-----------
     +     |        57            17  |         74
     -     |        26           112  |        138
-----------+--------------------------+-----------
   Total   |        83           129  |        212


Classified + if predicted Pr(D) >= .5
True D defined as  != 0
                                              Full         Test
-------------------------------------------------------------------
Sensitivity                     Pr( +| D)   72.29%       68.67%
Specificity                     Pr( -|~D)   89.15%       86.82%
Positive predictive value       Pr( D| +)   81.08%       77.03%
Negative predictive value       Pr(~D| -)   83.33%       81.16%
-------------------------------------------------------------------
False + rate for true ~D        Pr( +|~D)   10.85%       13.18%
False - rate for true D         Pr( -| D)   27.71%       31.33%
False + rate for classified +   Pr(~D| +)   18.92%       22.97%
False - rate for classified -   Pr( D| -)   16.67%       18.84%
-------------------------------------------------------------------
Correctly classified                        82.55%       79.72%
-------------------------------------------------------------------
ROC area                                    0.8852       0.8456
-------------------------------------------------------------------
p-value for Full vs Test ROC areas                       0.0000
-------------------------------------------------------------------

842 . * AIC and BIC on common sample
843 . quietly: logit success lnparticnum urbandum deathtile10 urbxdeathtile10 demonstrations  newpolitymin1 newpolitym
    > in1sq newincumbpowerdur newgdppcthl newlnoill newmilexpsold10tile if startyear>1899 & sample, or nolog

844 . estat ic

    Akaike's information criterion and Bayesian information criterion

    ------------------------------------------------------------------------------
           Model |        Obs  ll(null)  ll(model)      df         AIC        BIC
    -------------+----------------------------------------------------------------
               . |        212 -141.9167  -88.38984      12    200.7797   241.0587
    ------------------------------------------------------------------------------
                   Note: N=Obs used in calculating BIC; see [R] BIC note.

845 . * Multiple imputation
846 . mi estimate, post dots eform saving(miest, replace): logit success lnparticnum urbandum deathtile10 urbxdeathtil
    > e10 demonstrations newpolitymin1 newpolitymin1sq newincumbpowerdur newgdppcthl newlnoill newmilexpsold10tile if
    > startyear>1899

    Imputations (30):
      .........10.........20.........30 done

    Multiple-imputation estimates                   Imputations       =         30
    Logistic regression                             Number of obs     =        288
                                                    Average RVI       =     0.0621
                                                    Largest FMI       =     0.2000
    DF adjustment:   Large sample                   DF:     min       =     740.78
                                                            avg       =  23,570.12
                                                            max       = 120,162.55
    Model F test:       Equal FMI                   F(  11,83124.7)   =       6.07
    Within VCE type:          OIM                   Prob > F          =     0.0000

    ------------------------------------------------------------------------------
                success |     exp(b)   Std. Err.      t    P>|t|     [95% Conf. Interval]
    --------------------+---------------------------------------------------------
           lnparticnum |   1.581065   .2037005     3.56   0.000     1.228162    2.035371
              urbandum |   12.60645   16.88394     1.89   0.058     .9131075    174.0459
           deathtile10 |   1.328048   .2010269     1.87   0.061     .9871062     1.78675
        urbxdeathtile10 |   .5793285   .1006433    -3.14   0.002     .4121365    .8143455
         demonstrations |   6.710806   3.687124     3.46   0.001     2.286091    19.69953
          newpolitymin1 |   .9015132   .0327494    -2.85   0.004       .83954    .9680611
        newpolitymin1sq |   .9782702    .007012    -3.07   0.002     .9646146    .9921191
      newincumbpowerdur |   1.035659   .0208414     1.74   0.082     .9956042    1.077326
            newgdppcthl |   .7499697   .0661697    -3.26   0.001     .6308648    .8915611
              newlnoill |   .8724513   .0375008    -3.17   0.002     .8019514    .9491488
    newmilexpsold10tile |   1.281502   .1008954     3.15   0.002     1.097975    1.495704
                  _cons |   .0002964   .0004595    -5.24   0.000     .0000142    .0061916
    ------------------------------------------------------------------------------

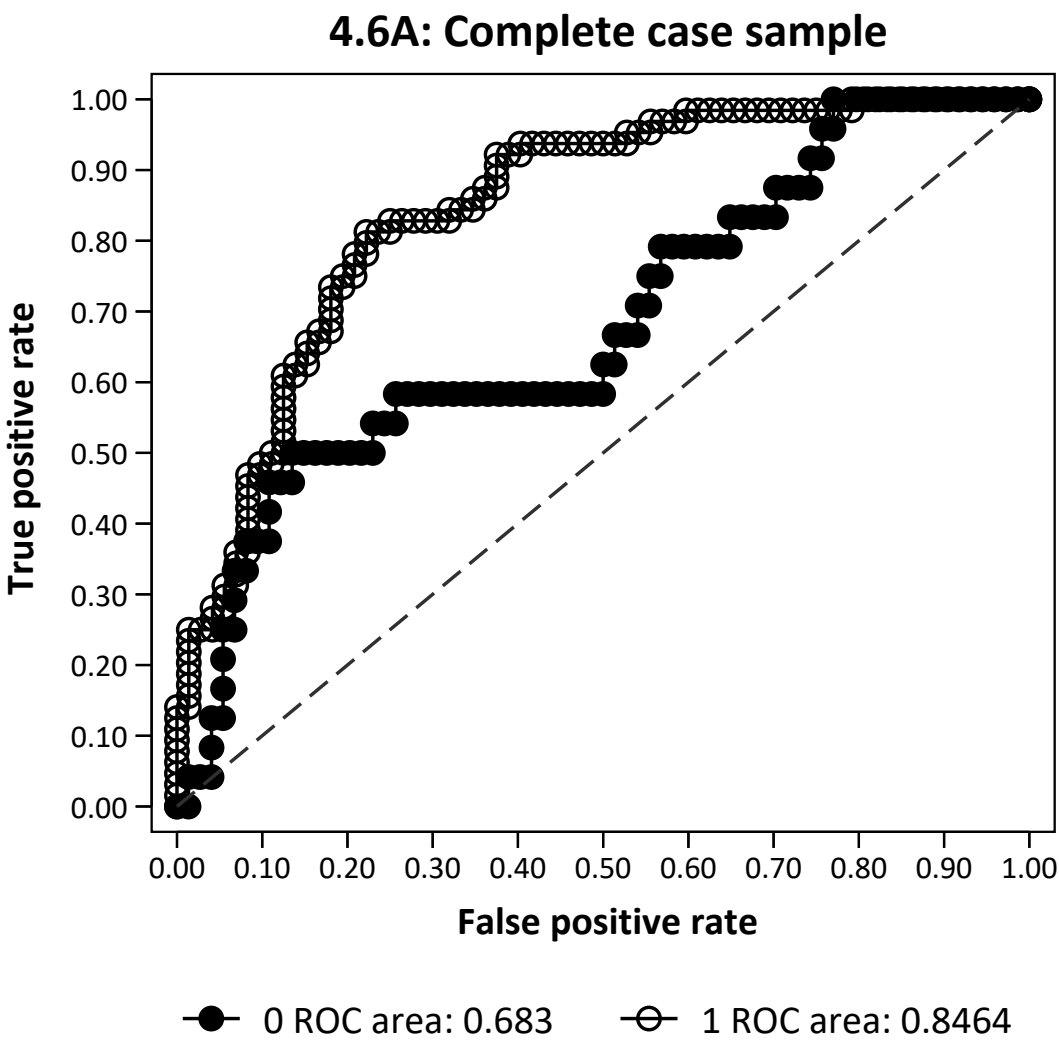
847 . mi predict xbsuccmi using miest if startyear>1899, xb

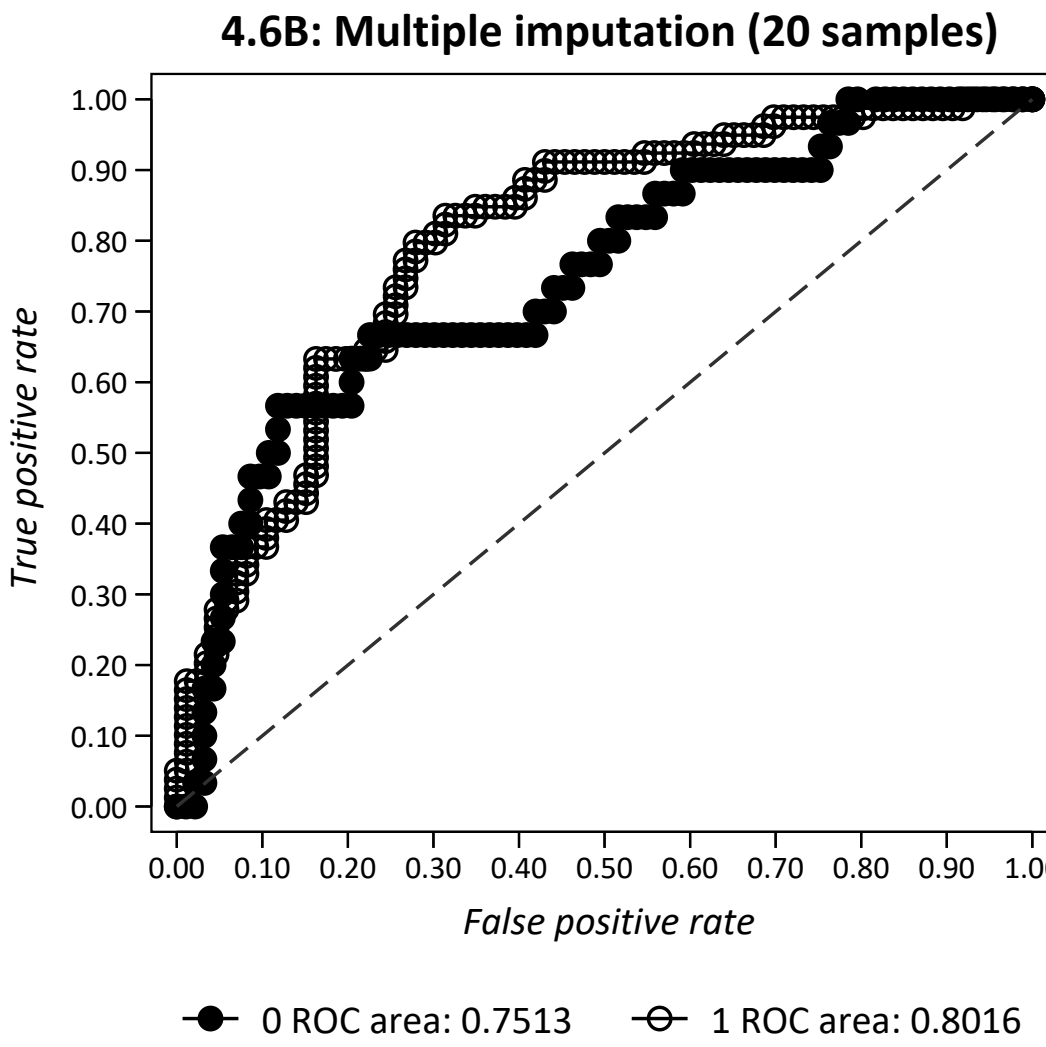
848 . roctab success xbsuccmi

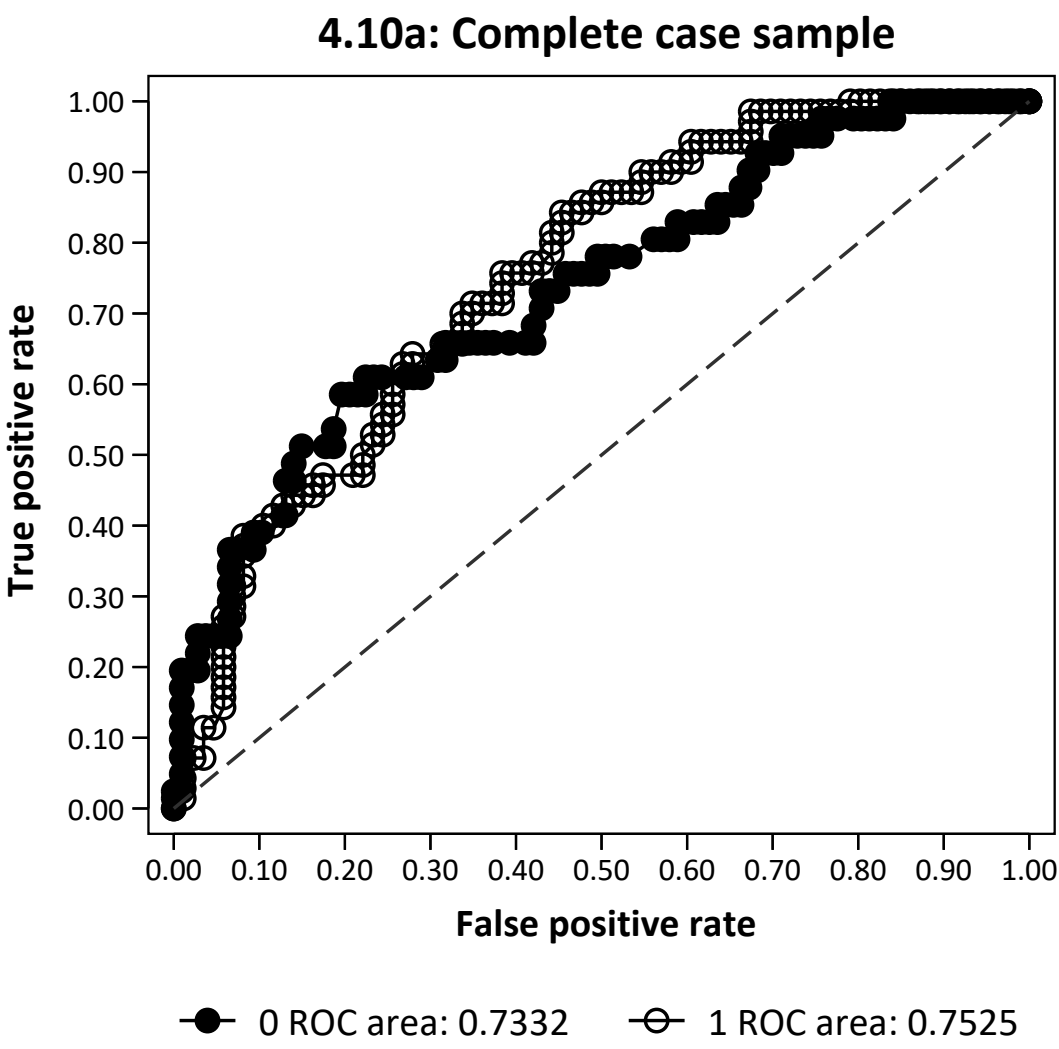
                            ROC                    -Asymptotic Normal--
                Obs       Area     Std. Err.      [95% Conf. Interval]
           ---------------------------------------------------------------
                288     0.8837       0.0199        0.84475     0.92267

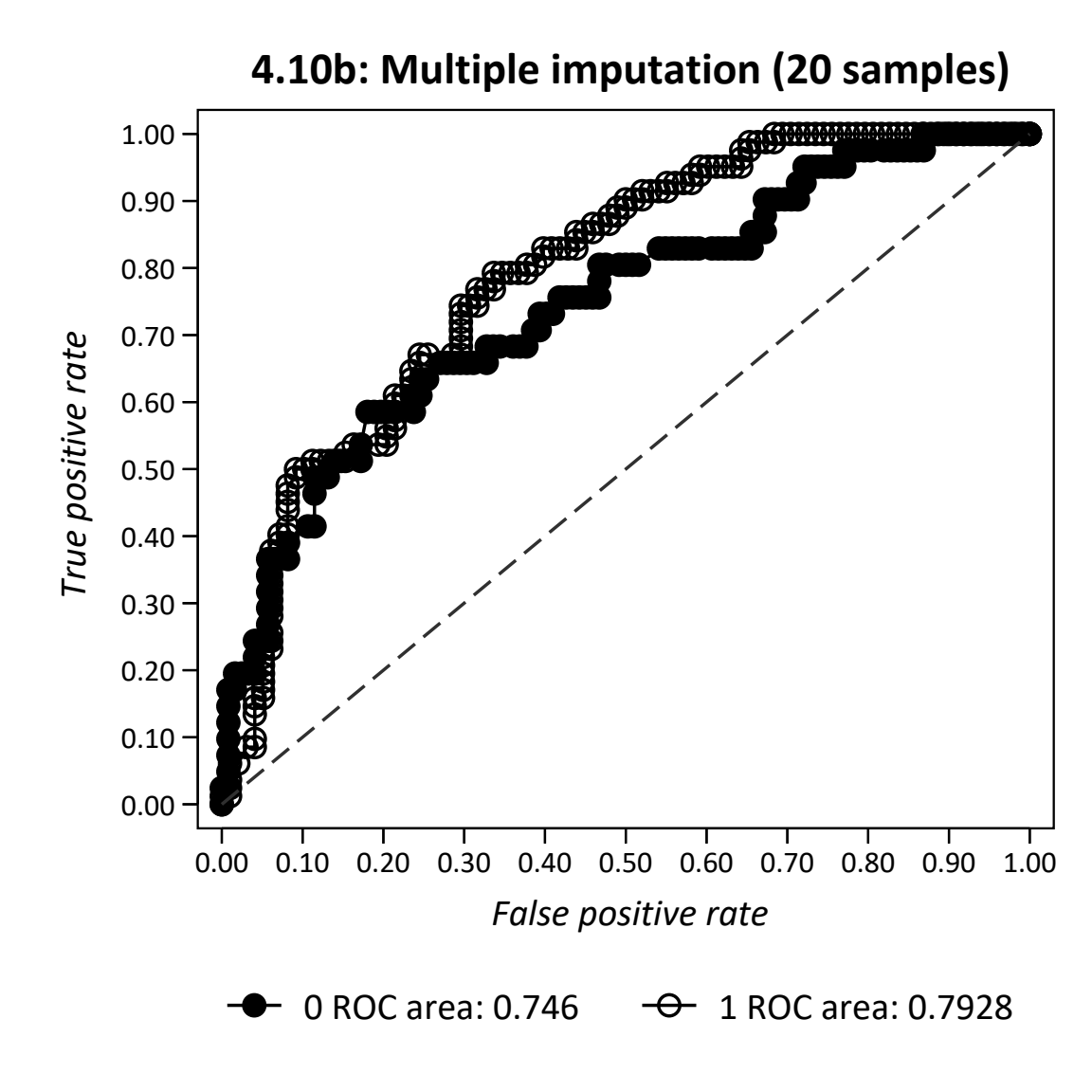
849 . drop xbsuccmi

850 .
851 . log close
          name:  <unnamed>
           log:  C:\Users\mbeissin\Desktop\Stata files for book\Logfiles\chapter4.log
      log type:  text
     closed on:  25 Jan 2022, 22:09:17
    ----------------------------------------------------------------------------------------------------------------------------------
```


4.6A: Complete case sample
True positive rate
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0.00 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 1.00
False positive rate
0 ROC area: 0.683
1 ROC area: 0.8464


4.6B: Multiple imputation (20 samples)
True positive rate
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0.00 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 1.00
False positive rate
0 ROC area: 0.7513
1 ROC area: 0.8016


4.10a: Complete case sample
True positive rate
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0.00 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 1.00
False positive rate
0 ROC area: 0.7332
1 ROC area: 0.7525


4.10b: Multiple imputation (20 samples)
True positive rate
False positive rate
0.00
0.10
0.20
0.30
0.40
0.50
0.60
0.70
0.80
0.90
1.00
0 ROC area: 0.746
1 ROC area: 0.7928