```
  ___  ____  ____  ____  ____ (R)
 /__    /   ____/   /   ____/
___/   /   /___/   /   /___/   15.1   Copyright 1985-2017 StataCorp LLC
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Notes:
      1.  Unicode is supported; see help unicode_advice.
      2.  Maximum number of variables is set to 5000; see help set_maxvar.

. doedit "C:\Users\pcg180000\Documents\BUAN 6312.004\Project\Project-Guns.do"

. do "C:\Users\PCG180~1\AppData\Local\Temp\16\STD1a8c_000000.tmp"

. clear all

. set more off

. use "C:\Users\pcg180000\Documents\BUAN 6312.004\Project\guns.dta",clear

. xtset stateid year
       panel variable:  stateid (strongly balanced)
        time variable:  year, 77 to 99
                delta:  1 unit

.
. gen lnvio = ln(vio)

.
end of do-file

. do "C:\Users\PCG180~1\AppData\Local\Temp\16\STD1a8c_000000.tmp"

. gen lnrob = ln(rob)

.
end of do-file

. do "C:\Users\PCG180~1\AppData\Local\Temp\16\STD1a8c_000000.tmp"

. gen lnmur = ln(mur)

.
end of do-file
```

```
. do "C:\Users\PCG180~1\AppData\Local\Temp\16\STD1a8c_000000.tmp"

. xtreg lnmur i.shall incarc_rate avginc density pop pb1064 pw1064 pm1029 i.year, fe cluster(state

Fixed-effects (within) regression               Number of obs      =       1,173
Group variable: stateid                         Number of groups   =          51

R-sq:                                           Obs per group:
     within  = 0.2905                                         min =          23
     between = 0.1945                                         avg =        23.0
     overall = 0.1413                                         max =          23

                                                F(30,50)           =       81.49
corr(u_i, Xb)  = -0.8336                        Prob > F           =      0.0000

                                 (Std. Err. adjusted for 51 clusters in stateid)
------------------------------------------------------------------------------
             |               Robust
      lnmur |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    1.shall |  -.0149524   .0382403    -0.39   0.697    -.0917603    .0618556
incarc_rate |  -.0001164   .0003631    -0.32   0.750    -.0008457    .0006129
     avginc |   .0566492   .0165554     3.42   0.001     .0233967    .0899017
    density |  -.5442635   .3192203    -1.70   0.094    -1.185436    .0969093
        pop |  -.0320769   .0209819    -1.53   0.133    -.0742202    .0100664
     pb1064 |   .0219833   .0758151     0.29   0.773    -.1302958    .1742624
     pw1064 |  -.0004893   .0201044    -0.02   0.981    -.0408701    .0398915
     pm1029 |   .0691941   .0417945     1.66   0.104    -.0147526    .1531408
            |
       year |
         78 |  -.0007195   .0322722    -0.02   0.982    -.0655401    .0641011
         79 |   .0592481   .0311141     1.90   0.063    -.0032465    .1217427
         80 |   .0901814    .041058     2.20   0.033     .0077139    .1726489
         81 |   .1021543   .0510636     2.00   0.051      -.00041    .2047186
         82 |   .0224098   .0581861     0.39   0.702    -.0944604    .1392799
         83 |  -.0314385   .0640621    -0.49   0.626    -.1601111    .0972341
         84 |  -.1359192    .071662    -1.90   0.064    -.2798565    .0080181
         85 |  -.0866144   .0856965    -1.01   0.317    -.2587409    .0855122
         86 |  -.0122752   .0927286    -0.13   0.895    -.1985262    .1739758
         87 |  -.0290338   .0999408    -0.29   0.773    -.2297707    .1717032
         88 |  -.0174594   .1196893    -0.15   0.885    -.2578626    .2229437
         89 |  -.0145617   .1321034    -0.11   0.913    -.2798993    .2507759
         90 |    .059998   .1649718     0.36   0.718    -.2713577    .3913537
         91 |   .1053071   .1754909     0.60   0.551    -.2471767    .4577909
         92 |   .0681002   .1828352     0.37   0.711    -.2991352    .4353355
         93 |   .1544297   .1898113     0.81   0.420    -.2268176     .535677
         94 |   .0442648   .1971908     0.22   0.823    -.3518047    .4403342
         95 |   .0556601   .1989082     0.28   0.781    -.3438588     .455179
         96 |   -.015709   .2125365    -0.07   0.941    -.4426011    .4111831
         97 |  -.1221824   .2186706    -0.56   0.579    -.5613952    .3170304
         98 |  -.1863381   .2332966    -0.80   0.428    -.6549281    .2822519
         99 |  -.2554286   .2420434    -1.06   0.296     -.741587    .2307298
            |
      _cons |   .1882653   1.056771     0.18   0.859    -1.934322    2.310853
-------------+----------------------------------------------------------------
    sigma_u |  1.1362086
    sigma_e |  .20281999
        rho |  .96911961   (fraction of variance due to u_i)
------------------------------------------------------------------------------
```

```
. testparm i.year

 ( 1)  78.year = 0
 ( 2)  79.year = 0
 ( 3)  80.year = 0
 ( 4)  81.year = 0
 ( 5)  82.year = 0
 ( 6)  83.year = 0
 ( 7)  84.year = 0
 ( 8)  85.year = 0
 ( 9)  86.year = 0
 (10)  87.year = 0
 (11)  88.year = 0
 (12)  89.year = 0
 (13)  90.year = 0
 (14)  91.year = 0
 (15)  92.year = 0
 (16)  93.year = 0
 (17)  94.year = 0
 (18)  95.year = 0
 (19)  96.year = 0
 (20)  97.year = 0
 (21)  98.year = 0
 (22)  99.year = 0

       F( 22,    50) =   19.61
            Prob > F =    0.0000

.
end of do-file

.
```