```
  ___  ____  ____  ____  ____ (R)
 /__    /   ____/   /   ____/
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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\STDcfc_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\STDcfc_000000.tmp"

. gen lnrob = ln(rob)

.
end of do-file

. do "C:\Users\PCG180~1\AppData\Local\Temp\16\STDcfc_000000.tmp"

. gen lnmur = ln(mur)

.
end of do-file
```

```
. do "C:\Users\PCG180~1\AppData\Local\Temp\16\STDcfc_000000.tmp"

. xtreg lnvio 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  = 0.4180                                         min =          23
     between = 0.0419                                         avg =        23.0
     overall = 0.0009                                         max =          23

                                                F(30,50)           =       56.86
corr(u_i, Xb)  = -0.2929                        Prob > F           =      0.0000

                                 (Std. Err. adjusted for 51 clusters in stateid)
```

lnvio	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
1.shall	-.0279935	.0407168	-0.69	0.495	-.1097757	.0537886
incarc_rate	.000076	.0002079	0.37	0.716	-.0003416	.0004935
avginc	.0009587	.0164931	0.06	0.954	-.0321688	.0340861
density	-.091555	.1238622	-0.74	0.463	-.3403396	.1572296
pop	-.0047544	.0152294	-0.31	0.756	-.0353436	.0258347
pb1064	.0291862	.0495407	0.59	0.558	-.0703192	.1286916
pw1064	.0092501	.0237564	0.39	0.699	-.0384659	.0569662
pm1029	.0733254	.0524733	1.40	0.168	-.0320704	.1787211
year						
78	.0585261	.0161556	3.62	0.001	.0260767	.0909755
79	.1639486	.0244579	6.70	0.000	.1148233	.2130738
80	.2170759	.0334184	6.50	0.000	.1499531	.2841987
81	.2172551	.0391956	5.54	0.000	.1385284	.2959819
82	.1946328	.0465743	4.18	0.000	.1010856	.28818
83	.158645	.0593845	2.67	0.010	.0393676	.2779223
84	.1929883	.0770021	2.51	0.015	.0383251	.3476515
85	.2444764	.0922217	2.65	0.011	.0592438	.4297091
86	.3240904	.1089181	2.98	0.004	.1053219	.5428589
87	.324365	.1249881	2.60	0.012	.073319	.5754111
88	.3867412	.1397074	2.77	0.008	.1061305	.6673518
89	.4422143	.1535358	2.88	0.006	.1338286	.7505999
90	.5430478	.1960859	2.77	0.008	.1491976	.936898
91	.5959456	.2040685	2.92	0.005	.1860618	1.005829
92	.6275171	.2170306	2.89	0.006	.1915982	1.063436
93	.6497414	.2246177	2.89	0.006	.1985834	1.100899
94	.6354187	.2332437	2.72	0.009	.1669349	1.103903
95	.6276831	.2423607	2.59	0.013	.1408874	1.114479
96	.5713423	.2534067	2.25	0.029	.06236	1.080325
97	.5501153	.2613516	2.10	0.040	.0251751	1.075055
98	.4932904	.2746546	1.80	0.079	-.0583697	1.04495
99	.4328776	.2862197	1.51	0.137	-.1420117	1.007767
_cons	3.765525	1.152108	3.27	0.002	1.451448	6.079603
sigma_u	.6663043					
sigma_e	.1400264					
rho	.95770338	(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) =   21.62
            Prob > F =    0.0000

.
end of do-file

.
```