```
                                                      ___  ____  ____  ____  ____tm
                                                     /__    /   ____/   /   ____/
                                                    ___/   /   /___/   /   /___/
                                                      Statistics/Data Analysis


  ___  ____  ____  ____  ____ tm
 /__    /   ____/   /   ____/
___/   /   /___/   /   /___/   10.1   Copyright 1984-2009
  Statistics/Data Analysis             StataCorp
                                       4905 Lakeway Drive
      Special Edition                  College Station, Texas 77845 USA
                                       800-STATA-PC        http://www.stata.com
                                       979-696-4600        stata@stata.com
                                       979-696-4601 (fax)

  4-user Stata for Windows (network) perpetual license:
         Serial number:  81910546040
           Licensed to:  Dept. of Ag & App Econ
                         UW-Madison

  Notes:
        1.  (/m# option or -set memory-) 10.00 MB allocated to data
        2.  (/v# option or -set maxvar-) 5000 maximum variables

  running C:\Program Files (x86)\Stata10\profile.do ...

1 . (7 vars, 1674 obs pasted into editor)
  - preserve
  xtset c_id y_id
         panel variable:  c_id (strongly balanced)
          time variable:  y_id, 1 to 18
                  delta:  1 unit

2 . xtreg fps gdpg gdppc

  Random-effects GLS regression                   Number of obs      =      1401
  Group variable: c_id                            Number of groups   =        91

  R-sq:  within  = 0.1598                         Obs per group: min =         6
         between = 0.0391                                        avg =      15.4
         overall = 0.0483                                        max =        16

  Random effects u_i ~ Gaussian                   Wald chi2(2)       =     93.49
  corr(u_i, X)       = 0 (assumed)                Prob > chi2        =    0.0000

------------------------------------------------------------------------------
         fps |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        gdpg |   4.000803   1.672144     2.39   0.017     .7234604    7.278145
       gdppc |   .0071525    .000757     9.45   0.000     .0056688    .0086362
       _cons |   311.5611   15.37409    20.27   0.000     281.4284    341.6938
-------------+----------------------------------------------------------------
     sigma_u |  67.627775
     sigma_e |  282.97672
         rho |  .05402896   (fraction of variance due to u_i)
------------------------------------------------------------------------------

3 . xtreg fps gdpg gdppc, fe

  Fixed-effects (within) regression               Number of obs      =      1401
  Group variable: c_id                            Number of groups   =        91

  R-sq:  within  = 0.1757                         Obs per group: min =         6
         between = 0.0433                                        avg =      15.4
         overall = 0.0469                                        max =        16

                                                  F(2,1308)          =    139.40
  corr(u_i, Xb)  = -0.8715                        Prob > F           =    0.0000
```

fps	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
gdpg	**3.934792**	**1.661175**	**2.37**	**0.018**	**.6759339**	**7.19365**
gdppc	**.0238942**	**.0014539**	**16.43**	**0.000**	**.021042**	**.0267464**
_cons	**125.7951**	**18.69009**	**6.73**	**0.000**	**89.12927**	**162.4609**
sigma_u	**301.31981**					
sigma_e	**282.97672**					
rho	**.53136256**	(fraction of variance due to u_i)				

F test that all u_i=0: F(**90, 1308**) = **4.08** Prob > F = **0.0000**

4 .