```
  ___  ____  ____  ____  ____ (R)
 /__    /   ____/   /   ____/
___/   /   /___/   /   /___/   14.2   Copyright 1985-2015 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.

. use "C:\Users\User\Desktop\Base de dados\Journal_RBGN\Fase 3 -
Aprovação\Supplementary data\Supplementary Data 2 - Stata output VALUE.dta",
clear

. do "C:\Users\User\AppData\Local\Temp\STD00000000.tmp"

. **VALUE**
.
. **DESCRIPTIVE ANALYSIS**
. summarize value_w age_w ad_w rd_w sg_w ss_w prof_w lnsi_w gdp_w wgi_w

    Variable |        Obs        Mean    Std. Dev.       Min        Max
-------------+---------------------------------------------------------
     value_w |     55,085    18.28254    30.97764         .1     120.09
       age_w |     28,587    7.773813    6.312861          2         25
        ad_w |     47,763    .0110945    .0155698      .0001      .0626
        rd_w |     33,738     .030576    .0388616      .0004      .1353
        sg_w |     52,769    .1369338    .3108732     -.4037       .989
-------------+---------------------------------------------------------
        ss_w |     54,506    68.69891    102.3865        .13     382.36
      prof_w |     52,523    .0642562    .0471199      .0107      .1897
      lnsi_w |     55,085    8.731114    1.185874     7.6312     11.014
       gdp_w |     55,085    .0552803    .0221148      .0052      .0835
       wgi_w |     55,085   -.3262771    .1336852     -.5655     -.0675

.
. **NUMBER OF FINANCING ROUNDS**
. tab country, summarize (value_w)

           |          Summary of Value
   country |        Mean   Std. Dev.       Freq.
-----------+------------------------------------
         1 |   8.0455993   19.983124         584
         2 |    10.41243   24.339253      11,934
         3 |   13.590832   26.508256       1,635
         4 |   13.067185   29.484834       3,183
         5 |   21.571943   32.678949      37,749
-----------+------------------------------------
     Total |    18.28254    30.97764      55,085

. tab stage,summarize (value_w)

           |          Summary of Value
     Stage |        Mean   Std. Dev.       Freq.
-----------+------------------------------------
         1 |   1.5612635   5.6889052      13,930
         2 |   18.135599   28.341248      29,136
         3 |   36.120062   39.131123       6,425
```

```
          4 |    40.19934   43.417116       5,594
------------+------------------------------------
      Total |    18.28254    30.97764      55,085

. tab year,summarize (value_w)

            |          Summary of Value
       year |        Mean   Std. Dev.       Freq.
------------+------------------------------------
       2010 |   20.552658   31.751814       1,704
       2011 |   21.268164   30.986402       2,114
       2012 |    18.02506   29.948782       1,982
       2013 |   16.689417   29.680964       2,126
       2014 |   15.619677   28.510906       3,317
       2015 |   14.994759   28.682944       5,146
       2016 |   16.355049   30.402601       5,009
       2017 |   18.931389   32.696323       5,011
       2018 |   18.722206    31.96733       5,230
       2019 |   17.585608   30.901868       5,130
       2020 |   20.802744   33.379967       4,909
       2021 |   21.271246   32.581235       7,182
       2022 |   17.208116   28.285462       6,225
------------+------------------------------------
      Total |    18.28254    30.97764      55,085

.
. **SETUP PAINEL**
. xtset id date
       panel variable:  id (unbalanced)
        time variable:  date, 01/01/2010 to 31/12/2022, but with gaps
                delta:  1 day

.
. **CREATION OF THE DEPENDENT VARIABLE WITH 1 TIME LAG**
.
. gen lnvalue_w1 = lnvalue_w[_n-1]
(1 missing value generated)

.
. **TESTING THE BEST REGRESSION TYPE**
.
. quietly xtreg lnvalue_w lnage_w stage ad_w rd_w sg_w lnss_w prof_w lnsi_w
gdp_w wgi_w, re

.
. estimates store aleatorio

.
. xttest0

Breusch and Pagan Lagrangian multiplier test for random effects

        lnvalue_w[id,t] = Xb + u[id] + e[id,t]

        Estimated results:
                         |       Var     sd = sqrt(Var)
                 ---------+-----------------------------
                lnvalue_w |   1.900307       1.378516
                        e |   .5446112       .7379778
                        u |    .854592       .9244415

        Test:   Var(u) = 0
                                chibar2(01) =  3352.80
                             Prob > chibar2 =   0.0000

.
. **EFFECT TYPE TEST**
.
```

```
. quietly xtreg lnvalue_w lnage_w stage ad_w rd_w sg_w lnss_w prof_w lnsi_w
gdp_w wgi_w, fe

.
. estimate store FE

.
. quietly xtreg lnvalue_w lnage_w stage ad_w rd_w sg_w lnss_w prof_w lnsi_w
gdp_w wgi_w, re

.
. estimate store RE

.
. hausman FE RE

                ---- Coefficients ----
             |      (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
             |       FE           RE         Difference          S.E.
-------------+----------------------------------------------------------------
     lnage_w |    .4061983     .0667177        .3394806        .0536449
       stage |    .2613584     .5212652       -.2599068        .0185474
        ad_w |   -.4366733     1.130429       -1.567102        2.329455
        rd_w |    2.875758    -.2712187        3.146976        1.324141
        sg_w |   -.0363976     .0166322       -.0530298        .0330542
      lnss_w |    .0488182     .0314232         .017395        .0388871
      prof_w |   -.7143885    -1.283527        .5691382        .4997153
      lnsi_w |    .3540062     -.342399        .6964052        .0724795
       gdp_w |   -1.281455    -1.931673        .6502188        .7880789
       wgi_w |      1.3717     1.130083        .2416173        .2648011
------------------------------------------------------------------------------
                           b = consistent under Ho and Ha; obtained from xtreg
            B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

                chi2(10) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                         =      358.54
              Prob>chi2 =      0.0000

.
. **HOMOCESDASTICITY TEST**
.
. quietly xtreg lnvalue_w lnage_w stage ad_w rd_w sg_w lnss_w prof_w lnsi_w
gdp_w wgi_w, fe

.
. xttest3

Modified Wald test for groupwise heteroskedasticity
in fixed effect regression model

H0: sigma(i)^2 = sigma^2 for all i

chi2 (10845)  = 3.5e+33
Prob>chi2 =      0.0000


.
. **REGRESSION TESTS**
.
. **MODEL 1**
.
. xtreg lnvalue_w lnsi_w gdp_w wgi_w i.sector, fe robust

Fixed-effects (within) regression               Number of obs     =     55,085
Group variable: id                              Number of groups  =     37,878
```

```
R-sq:                                           Obs per group:
     within  = 0.1733                                        min =          1
     between = 0.0745                                        avg =        1.5
     overall = 0.0534                                        max =         24

                                                F(6,37877)        =          .
corr(u_i, Xb)  = -0.8502                        Prob > F          =          .

                                (Std. Err. adjusted for 37,878 clusters in id)
------------------------------------------------------------------------------
             |               Robust
   lnvalue_w |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      lnsi_w |   .9483736   .0458952    20.66   0.000     .8584178    1.038329
       gdp_w |  -.1725311   .3466519    -0.50   0.619    -.8519781    .5069159
       wgi_w |   4.312393   .1449913    29.74   0.000     4.028206    4.596579
       _cons |  -4.809919   .4537514   -10.60   0.000    -5.699284   -3.920554
-------------+----------------------------------------------------------------
     sigma_u |  2.4685572
     sigma_e |  .79439953
         rho |  .90615834   (fraction of variance due to u_i)
------------------------------------------------------------------------------

.
. **MODEL 2**
.
. xtreg lnvalue_w lnage_w stage lnsi_w gdp_w wgi_w i.sector, fe robust

Fixed-effects (within) regression               Number of obs     =     28,587
Group variable: id                              Number of groups  =     19,459

R-sq:                                           Obs per group:
     within  = 0.2270                                        min =          1
     between = 0.0030                                        avg =        1.5
     overall = 0.0073                                        max =         16

                                                F(5,19458)        =          .
corr(u_i, Xb)  = -0.4765                        Prob > F          =          .

                                (Std. Err. adjusted for 19,459 clusters in id)
------------------------------------------------------------------------------
             |               Robust
   lnvalue_w |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     lnage_w |   .6522028   .0370121    17.62   0.000      .579656    .7247496
       stage |   .2593403    .019078    13.59   0.000     .2219459    .2967347
      lnsi_w |   .4506096   .0590028     7.64   0.000     .3349591    .5662601
       gdp_w |   2.468355   .4309768     5.73   0.000     1.623604    3.313107
       wgi_w |   .9735637   .2133044     4.56   0.000     .5554688    1.391659
       _cons |  -3.211218   .5235415    -6.13   0.000    -4.237404   -2.185032
-------------+----------------------------------------------------------------
     sigma_u |  1.5146947
     sigma_e |  .77223964
         rho |   .7936958   (fraction of variance due to u_i)
------------------------------------------------------------------------------

.
. **MODEL 3**
.
. xtreg lnvalue_w lnage_w stage ad_w rd_w sg_w lnss_w prof_w lnsi_w gdp_w
wgi_w i.sector, fe robust


Fixed-effects (within) regression               Number of obs     =     15,235
Group variable: id                              Number of groups  =     10,845

R-sq:                                           Obs per group:
     within  = 0.1980                                        min =          1
```

```
     between = 0.0123                                        avg =        1.4
     overall = 0.0180                                        max =         13

                                             F(10,10844)       =          .
corr(u_i, Xb)  = -0.3109                     Prob > F          =          .

                               (Std. Err. adjusted for 10,845 clusters in id)
------------------------------------------------------------------------------
             |               Robust
   lnvalue_w |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     lnage_w |   .4062977    .059877     6.79   0.000     .2889279    .5236675
       stage |   .2613107   .0247599    10.55   0.000     .2127768    .3098447
        ad_w |  -.4365042   2.403618    -0.18   0.856    -5.148035    4.275026
        rd_w |   2.866665   1.321254     2.17   0.030     .2767658    5.456564
        sg_w |  -.0364333   .0518823    -0.70   0.483     -.138132    .0652655
      lnss_w |   .0494195    .042759     1.16   0.248    -.0343959    .1332349
      prof_w |  -.7178306   .5806002    -1.24   0.216    -1.855913    .4202518
      lnsi_w |   .3540034   .0736163     4.81   0.000     .2097019    .4983048
       gdp_w |  -1.278077   1.039715    -1.23   0.219    -3.316107    .7599539
       wgi_w |    1.37039   .3102753     4.42   0.000     .7621941    1.978587
       _cons |  -2.385384   .9845702    -2.42   0.015    -4.315322   -.4554465
-------------+----------------------------------------------------------------
     sigma_u |  1.3839015
     sigma_e |  .73806038
         rho |  .77855626   (fraction of variance due to u_i)
------------------------------------------------------------------------------

.
. **MODEL 4**
.
. xtreg lnvalue_w lnvalue_w1 lnsi_w gdp_w wgi_w i.sector, fe robust

Fixed-effects (within) regression               Number of obs     =     55,084
Group variable: id                              Number of groups  =     37,877

R-sq:                                           Obs per group:
     within  = 0.1762                                         min =          1
     between = 0.0801                                         avg =        1.5
     overall = 0.0592                                         max =         24

                                             F(7,37876)        =          .
corr(u_i, Xb)  = -0.8558                     Prob > F          =          .

                               (Std. Err. adjusted for 37,877 clusters in id)
------------------------------------------------------------------------------
             |               Robust
   lnvalue_w |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
  lnvalue_w1 |   -.039984   .0058643    -6.82   0.000    -.0514782   -.0284899
      lnsi_w |   .9576253   .0461857    20.73   0.000     .8671001    1.048151
       gdp_w |  -.2557415   .3480949    -0.73   0.463    -.9380167    .4265338
       wgi_w |   4.361022   .1461045    29.85   0.000     4.074653    4.647391
       _cons |   -4.81039   .4586579   -10.49   0.000    -5.709372   -3.911409
-------------+----------------------------------------------------------------
     sigma_u |  2.5009465
     sigma_e |  .79298875
         rho |  .90864745   (fraction of variance due to u_i)
------------------------------------------------------------------------------

.
. **MODEL 5**
.
. xtreg lnvalue_w lnvalue_w1 lnage_w stage lnsi_w gdp_w wgi_w i.sector, fe
robust

Fixed-effects (within) regression               Number of obs     =     28,587
Group variable: id                              Number of groups  =     19,459
```

```
R-sq:                                           Obs per group:
     within  = 0.2345                                         min =          1
     between = 0.0009                                         avg =        1.5
     overall = 0.0026                                         max =         16

                                                F(6,19458)        =          .
corr(u_i, Xb)  = -0.5171                        Prob > F          =          .

                                (Std. Err. adjusted for 19,459 clusters in id)
------------------------------------------------------------------------------
             |               Robust
   lnvalue_w |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
  lnvalue_w1 |  -.0664783   .0075658    -8.79   0.000     -.081308   -.0516486
     lnage_w |   .6919911   .0377749    18.32   0.000      .617949    .7660332
       stage |   .2632805   .0190915    13.79   0.000     .2258596    .3007015
      lnsi_w |   .4591751   .0595846     7.71   0.000     .3423841    .5759661
       gdp_w |   2.399648   .4343521     5.52   0.000     1.548281    3.251015
       wgi_w |   1.004267   .2170362     4.63   0.000      .578857    1.429676
       _cons |  -3.199953   .5305291    -6.03   0.000    -4.239835    -2.16007
-------------+----------------------------------------------------------------
     sigma_u |  1.5524589
     sigma_e |  .76852522
         rho |  .80317284   (fraction of variance due to u_i)
------------------------------------------------------------------------------

.
. **MODEL 6**
.
. xtreg lnvalue_w lnvalue_w1 lnage_w stage ad_w rd_w sg_w lnss_w prof_w lnsi_w
gdp_w wgi_w i.sector, fe robust

Fixed-effects (within) regression               Number of obs     =     15,235
Group variable: id                              Number of groups  =     10,845

R-sq:                                           Obs per group:
     within  = 0.2106                                         min =          1
     between = 0.0041                                         avg =        1.4
     overall = 0.0056                                         max =         13

                                                F(11,10844)       =          .
corr(u_i, Xb)  = -0.3760                        Prob > F          =          .

                                (Std. Err. adjusted for 10,845 clusters in id)
------------------------------------------------------------------------------
             |               Robust
   lnvalue_w |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
  lnvalue_w1 |  -.0811343   .0103737    -7.82   0.000    -.1014688   -.0607999
     lnage_w |   .4512083   .0613913     7.35   0.000     .3308701    .5715466
       stage |   .2564468   .0246987    10.38   0.000     .2080329    .3048608
        ad_w |  -.8677712   2.456959    -0.35   0.724    -5.683859    3.948317
        rd_w |   2.792739   1.330553     2.10   0.036      .184611    5.400866
        sg_w |  -.0331071   .0523868    -0.63   0.527    -.1357947    .0695805
      lnss_w |   .0491467   .0430733     1.14   0.254    -.0352848    .1335782
      prof_w |  -.7058352   .5821589    -1.21   0.225    -1.846973    .4353026
      lnsi_w |   .3402002    .073931     4.60   0.000      .195282    .4851184
       gdp_w |  -1.778002   1.063291    -1.67   0.095    -3.862246    .3062422
       wgi_w |   1.409316   .3131293     4.50   0.000     .7955256    2.023107
       _cons |  -2.114557   .9928764    -2.13   0.033    -4.060776   -.1683375
-------------+----------------------------------------------------------------
     sigma_u |  1.4208097
     sigma_e |  .73232337
         rho |  .79009862   (fraction of variance due to u_i)
------------------------------------------------------------------------------
.
end of do-file
```