```
      name:  <unnamed>
       log:  /Users/bsog0621/Desktop/osm_replication2_log.smcl
  log type:  smcl
 opened on:  15 Jul 2025, 12:39:23

 1 . do "/var/folders/k8/xhk6z0pj57d_x13d_jtd4hwc93p28v/T//SD11077.000000"

 2 . ***Full-Power Cabinets and Caretaker Administrations in Parliamentary Democra
   > cies, 1945-2024***
 3 . ***Francesco Bromo and José A. Cheibub***
 4 . ***15 July 2025***
 5 .
 6 . **Table A6: Survival Analysis of Caretaker Periods
 7 .
 8 . *Load dataset
 9 . use "formation_data.dta", clear

10 .
11 . xtset country_number event_date

   Panel variable: country_number (unbalanced)
    Time variable: event_date, 23jan1946 to 23dec2020, but with gaps
            Delta: 1 day

12 .
13 . replace country_number=31 if country=="Australia"
   (38 real changes made)

14 . replace country_number=1 if country=="Slovenia"
   (13 real changes made)

15 .
16 . gen formation_days_surv=formation_days+1
   (3 missing values generated)

17 .
18 . egen id_year=group(event_year)
   (3 missing values generated)

19 .
20 . mkspline year_spline = id_year, cubic

21 .
22 . stset formation_days_surv, failure(form_died)

   Survival-time data settings

            Failure event: form_died!=0 & form_died<.
   Observed time interval: (0, formation_days_surv]
        Exit on or before: failure
```

```
------------------------------------------------------------------------------
        920  total observations
          3  event time missing (formation_days_surv>=.)    PROBABLE ERROR
------------------------------------------------------------------------------

        917  observations remaining, representing
        917  failures in single-record/single-failure data
     56,366  total analysis time at risk and under observation
                                             At risk from t =         0
                                  Earliest observed entry t =         0
                                       Last observed exit t =       594

. 
. *Column 1, column 4 (Whole Sample)
. stcox i.investiture i.post_elec c.enp c.sd_rile c.enp#i.post_elec c.sd_rile#i
> .post_elec year_spline* i.country_number

        Failure _d: form_died
  Analysis time _t: formation_days_surv

Iteration 0:  Log likelihood =  -5121.693
Iteration 1:  Log likelihood = -4746.7188
Iteration 2:  Log likelihood = -4662.5571
Iteration 3:  Log likelihood = -4660.6547
Iteration 4:  Log likelihood = -4660.6517
Iteration 5:  Log likelihood = -4660.6517
Refining estimates:
Iteration 0:  Log likelihood = -4660.6517

Cox regression with Breslow method for ties

No. of subjects =    883                         Number of obs =    883
No. of failures =    883
Time at risk    = 54,842
                                                 LR chi2(43)   = 922.08
Log likelihood = -4660.6517                      Prob > chi2   = 0.0000

------------------------------------------------------------------------------
> ------
          _t | Haz. ratio   Std. err.      z    P>|z|     [95% conf. int
> erval]
-------------+----------------------------------------------------------------
> ------
1.investiture |   .6101621   .1143817    -2.64   0.008     .4225499    .8
> 810742
  1.post_elec |    .137584   .0417559    -6.54   0.000     .0758986    .2
> 494034
          enp |   .8402917   .0466159    -3.14   0.002      .753718    .9
> 368093
      sd_rile |   1.002671   .0083295     0.32   0.748     .9864777     1
> .01913
```

```
                    |
    post_elec#c.enp |
                  1 |   .9574509    .059886    -0.70   0.487     .8469859    1.
> 082323
                    |
post_elec#c.sd_rile |
                  1 |   .9846924   .0089203    -1.70   0.089     .9673632    1.
> 002332
                    |
       year_spline1 |    1.01071   .0110522     0.97   0.330     .9892788    1.
> 032606
       year_spline2 |   .9877607   .0469444    -0.26   0.796     .8999066    1.
> 084192
       year_spline3 |   1.112916    .189845     0.63   0.531     .7966391     1
> .55476
       year_spline4 |   .6056609    .190432    -1.59   0.111     .3270352    1.
> 121668
                    |
     country_number |
                  2 |   .3171479   .1199152    -3.04   0.002     .1511535    .6
> 654344
                  3 |    1.28585   .4322508     0.75   0.455     .6653507     2
> .48502
                  4 |    .654583   .2718434    -1.02   0.308     .2900461    1.
> 477279
                  5 |   .3414404   .1321938    -2.78   0.006     .1598672    .7
> 292397
                  6 |   1.563042   .6060883     1.15   0.249     .7309826    3.
> 342214
                  7 |   .2502289    .104853    -3.31   0.001     .1100677    .5
> 688724
                  8 |   3.727582    1.41874     3.46   0.001     1.767888    7.
> 859583
                  9 |   1.645181   .6417972     1.28   0.202     .7658672    3.
> 534058
                 10 |    1.55846   .5781444     1.20   0.232      .753224    3.
> 224536
                 11 |   3.323887   1.105256     3.61   0.000      1.73223    6.
> 378039
                 12 |   2.206893   .8033984     2.17   0.030     1.081209    4.
> 504567
                 13 |   2.443253   .9558475     2.28   0.022     1.134911    5.
> 259868
                 14 |   1.093043   .4787788     0.20   0.839     .4632238    2.
> 579192
                 15 |   .3610372   .1382969    -2.66   0.008     .1704102    .7
> 649068
                 16 |   2.653784   .9334558     2.77   0.006     1.331863    5.
> 287759
                 17 |   .5460597     .19725    -1.67   0.094     .2690082    1.
> 108446
```

```
                18 |   .7203471   .2297675    -1.03   0.304     .3855103    1.
> 346008
                19 |    1.76964   .6051919     1.67   0.095     .9052866    3.
> 459265
                20 |   .8640747   .3120805    -0.40   0.686     .4257163    1.
> 753809
                21 |   .9366532   .3673217    -0.17   0.867     .4342784    2.
> 020177
                22 |    1.43309     .57221     0.90   0.367      .655243     3
> .13433
                23 |   .4200266   .3312166    -1.10   0.271     .0895473    1.
> 970158
                24 |   .4308659   .1680141    -2.16   0.031     .2006413    .9
> 252606
                25 |   .3195897   .1227533    -2.97   0.003      .150539     .
> 678479
                26 |   .5959613   .2235277    -1.38   0.168     .2857309    1.
> 243022
                27 |   1.160404   .4436048     0.39   0.697     .5485395    2.
> 454769
                28 |    .461422   .1712516    -2.08   0.037     .2229381    .9
> 550195
                29 |   1.574201   .5519582     1.29   0.196     .7917821    3.
> 129788
                30 |   .8318988   .3683729    -0.42   0.678      .349261    1.
> 981485
                31 |    .638798   .2350902    -1.22   0.223     .3105308    1.
> 314082
                32 |   .5016353   .2034627    -1.70   0.089     .2265384    1.
> 110796
                33 |   .7529318   .2707577    -0.79   0.430        .3721    1.
> 523532
                34 |   2.551601   .9761808     2.45   0.014      1.20549    5.
> 400847
-------------------+----------------------------------------------------------
> ------

26 . xtstreg i.investiture i.post_elec c.enp c.sd_rile c.enp#i.post_elec c.sd_rile
> #i.post_elec year_spline* i.country_number, d(weibull) time tratio

        Failure _d: form_died
  Analysis time _t: formation_days_surv

Fitting comparison model:

Iteration 0:  Log likelihood = -4223.6595
Iteration 1:  Log likelihood = -4087.8924
Iteration 2:  Log likelihood = -4084.2977
Iteration 3:  Log likelihood = -4084.2666
Iteration 4:  Log likelihood = -4084.2666
```

```
Refining starting values:

Grid node 0:  Log likelihood = -4147.7686

Fitting full model:

Iteration 0:  Log likelihood = -4147.7686  (not concave)
Iteration 1:  Log likelihood = -4131.7589  (not concave)
Iteration 2:  Log likelihood = -4115.7644  (not concave)
Iteration 3:  Log likelihood = -4091.0891  (not concave)
Iteration 4:  Log likelihood =  -4085.088  (not concave)
Iteration 5:  Log likelihood = -4084.4748  (not concave)
Iteration 6:  Log likelihood = -4084.3515  (not concave)
Iteration 7:  Log likelihood = -4084.3022  (not concave)
Iteration 8:  Log likelihood = -4084.2972  (not concave)
Iteration 9:  Log likelihood = -4084.2967  (not concave)
Iteration 10: Log likelihood = -4084.2963  (not concave)
Iteration 11: Log likelihood = -4084.2963  (not concave)
Iteration 12: Log likelihood = -4084.2963  (not concave)
Iteration 13: Log likelihood = -4084.2963  (not concave)
Iteration 14: Log likelihood = -4084.2963  (not concave)
Iteration 15: Log likelihood = -4084.2963  (not concave)
Iteration 16: Log likelihood = -4084.2963  (not concave)
Iteration 17: Log likelihood = -4084.2963  (not concave)
Iteration 18: Log likelihood = -4084.2963  (not concave)
Iteration 19: Log likelihood = -4084.2963  (not concave)
Iteration 20: Log likelihood = -4084.2963  (not concave)
Iteration 21: Log likelihood = -4084.2963  (not concave)
Iteration 22: Log likelihood = -4084.2963  (backed up)
Iteration 23: Log likelihood = -4084.2963  (not concave)
Iteration 24: Log likelihood = -4084.2963  (backed up)
Iteration 25: Log likelihood = -4084.2963  (not concave)
Iteration 26: Log likelihood = -4084.2963  (backed up)
Iteration 27: Log likelihood = -4084.2963  (not concave)
Iteration 28: Log likelihood = -4084.2963  (not concave)
Iteration 29: Log likelihood = -4084.2963  (not concave)
Iteration 30: Log likelihood = -4084.2963  (backed up)
Iteration 31: Log likelihood = -4084.2963  (not concave)
Iteration 32: Log likelihood = -4084.2963  (not concave)
Iteration 33: Log likelihood = -4084.2963  (backed up)
Iteration 34: Log likelihood = -4084.2963  (not concave)
Iteration 35: Log likelihood = -4084.2963  (not concave)
Iteration 36: Log likelihood = -4084.2963  (backed up)
Iteration 37: Log likelihood = -4084.2963  (not concave)
Iteration 38: Log likelihood = -4084.2963  (not concave)
Iteration 39: Log likelihood = -4084.2963  (not concave)
Iteration 40: Log likelihood = -4084.2963  (not concave)
Iteration 41: Log likelihood = -4084.2963  (backed up)
Iteration 42: Log likelihood = -4084.2963  (backed up)
Iteration 43: Log likelihood = -4084.2963  (not concave)
Iteration 44: Log likelihood = -4084.2963
```

```
Iteration 45: Log likelihood = -4084.2962  (not concave)
Iteration 46: Log likelihood = -4084.2962
Iteration 47: Log likelihood = -4084.2953  (not concave)
Iteration 48: Log likelihood = -4084.2951
Iteration 49: Log likelihood = -4084.2942  (backed up)
Iteration 50: Log likelihood = -4084.2909
Iteration 51: Log likelihood = -4084.2666
Iteration 52: Log likelihood = -4084.2666

Random-effects Weibull AFT regression           Number of obs     =        883
Group variable: country_number                  Number of groups  =         34

                                                Obs per group:
                                                              min =          2
                                                              avg =       26.0
                                                              max =         62

Integration method: mvaghermite                 Integration pts.  =         12

                                                Wald chi2(43)     =    1512.46
Log likelihood = -4084.2666                     Prob > chi2       =     0.0000
------------------------------------------------------------------------------
> ------
                  _t | Time ratio   Std. err.      z    P>|z|     [95% conf. int
> erval]
---------------------+--------------------------------------------------------
> ------
      1.investiture |   1.711565   .2274754     4.04   0.000      1.31906    2.
> 220866
       1.post_elec |   5.345304   1.179863     7.59   0.000     3.468069     8
> .23867
               enp |   1.188681   .0496239     4.14   0.000     1.095293    1.
> 290032
           sd_rile |   .9953964   .0062621    -0.73   0.463     .9831983    1.
> 007746
                   |
    post_elec#c.enp |
                 1 |   .9400494   .0438146    -1.33   0.185     .8579799    1.
> 029969
                   |
post_elec#c.sd_rile |
                 1 |   1.014548   .0067782     2.16   0.031     1.001349     1
> .02792
                   |
       year_spline1 |   .9846474   .0078588    -1.94   0.053     .9693642    1.
> 000171
       year_spline2 |   1.043008   .0361227     1.22   0.224     .9745585    1.
> 116266
       year_spline3 |   .8280551    .103091    -1.52   0.130     .6487637    1.
> 056895
       year_spline4 |    1.66552   .3823848     2.22   0.026     1.061997    2.
```

```
> 612018
                 |
     country_number |
                 2 |     2.0614    .558162     2.67   0.008     1.212506    3.
> 504619
                 3 |   .8526895   .2095569    -0.65   0.517     .5267441    1.
> 380328
                 4 |   1.315988   .3987124     0.91   0.365     .7267057    2.
> 383117
                 5 |   2.044544   .5693831     2.57   0.010      1.18453     3
> .52896
                 6 |   .7694654   .2174675    -0.93   0.354     .4422026    1.
> 338927
                 7 |   2.418749   .7383502     2.89   0.004     1.329694    4.
> 399766
                 8 |   .5293275   .1454329    -2.32   0.021     .3089275    .9
> 069689
                 9 |   .8588297   .2436171    -0.54   0.592     .4925538    1.
> 497478
                10 |   .9098397   .2467676    -0.35   0.728     .5346889    1.
> 548205
                11 |   .4060639   .0967828    -3.78   0.000     .2545164    .6
> 478478
                12 |   .5493352   .1461522    -2.25   0.024     .3261165    .9
> 253416
                13 |   .5888132   .1673998    -1.86   0.062     .3372723    1.
> 027956
                14 |   1.134299   .3638273     0.39   0.694     .6049287     2
> .12692
                15 |   1.936029   .5327581     2.40   0.016     1.128957    3.
> 320062
                16 |   .5618069   .1434689    -2.26   0.024      .340577    .9
> 267419
                17 |   1.385276    .364694     1.24   0.216     .8268855    2.
> 320746
                18 |   1.360812   .3182987     1.32   0.188     .8603972    2.
> 152272
                19 |   .7851807   .1961647    -0.97   0.333     .4811835    1.
> 281234
                20 |   1.189514   .3136506     0.66   0.510     .7094557    1.
> 994409
                21 |   1.248379   .3576158     0.77   0.439     .7120457    2.
> 188695
                22 |   .9197031   .2665405    -0.29   0.773     .5211463    1.
> 623064
                23 |   2.102103   1.206689     1.29   0.196     .6823881     6
> .47555
                24 |   1.892459   .5329116     2.27   0.023     1.089759    3.
> 286417
                25 |   1.938666   .5279242     2.43   0.015     1.136867    3.
> 305951
```

```
                26 |   1.466057   .3967186     1.41   0.157     .8626078    2.
> 491656
                27 |   .9680699   .2708015    -0.12   0.908     .5594963    1.
> 675006
                28 |   1.581386   .4256085     1.70   0.089     .9331438    2.
> 679953
                29 |   .8053052   .2068826    -0.84   0.399     .4867289    1.
> 332398
                30 |   1.085571   .3486436     0.26   0.798     .5784761    2.
> 037189
                31 |   1.414523   .3755615     1.31   0.191      .840645    2.
> 380167
                32 |   1.442735   .4217959     1.25   0.210     .8134493    2.
> 558837
                33 |   1.145345   .2999908     0.52   0.604     .6854694    1.
> 913747
                34 |   .7219897   .1993963    -1.18   0.238     .4201937    1.
> 240545
                   |
             _cons |   9.468454    3.07858     6.91   0.000     5.006322    17
> .90768
-------------------+----------------------------------------------------------
> ------
            /ln_p |    .312443   .0267026                      .2601069     .
> 364779
-------------------+----------------------------------------------------------
> ------
         /sigma2_u |   3.06e-33   2.79e-18                           .
>      .
-------------------+----------------------------------------------------------
> ------
Note: Estimates are transformed only in the first equation to time ratios.
Note: _cons estimates baseline time (conditional on zero random effects).
LR test vs. Weibull model: chi2(0) = 0.00                 Prob > chi2 =      .

Note: LR test is conservative and provided only for reference.

27 .
28 . *Column 2, column 5 (Established Democracies)
29 . preserve

30 . keep if europe!=2
(164 observations deleted)

31 . stcox i.investiture i.post_elec c.enp c.sd_rile c.enp#i.post_elec c.sd_rile#i
> .post_elec year_spline* i.country_number

        Failure _d: form_died
  Analysis time _t: formation_days_surv

Iteration 0:  Log likelihood = -4056.6289
```

```
Iteration 1:  Log likelihood = -3702.8274
Iteration 2:  Log likelihood = -3639.5426
Iteration 3:  Log likelihood =   -3638.27
Iteration 4:  Log likelihood = -3638.2675
Iteration 5:  Log likelihood = -3638.2675
Refining estimates:
Iteration 0:  Log likelihood = -3638.2675

Cox regression with Breslow method for ties

No. of subjects =    724                                 Number of obs =    724
No. of failures =    724
Time at risk    = 46,877
                                                         LR chi2(32)   = 836.72
Log likelihood = -3638.2675                              Prob > chi2   = 0.0000

------------------------------------------------------------------------------
> ------
                  _t | Haz. ratio   Std. err.      z    P>|z|     [95% conf. int
> erval]
---------------------+--------------------------------------------------------
> ------
      1.investiture |   .5884949   .1242475    -2.51   0.012     .3890725    .8
> 901328
       1.post_elec |    .069034   .0242973    -7.60   0.000     .0346316    .1
> 376111
               enp |   .8260825   .0535643    -2.95   0.003     .7274956    .9
> 380294
           sd_rile |   .9814287   .0092046    -2.00   0.046     .9635527    .9
> 996363
                   |
    post_elec#c.enp |
                 1 |   .9068334   .0635861    -1.39   0.163     .7903916     1
> .04043
                   |
post_elec#c.sd_rile |
                 1 |    1.01013   .0103568     0.98   0.326     .9900339    1.
> 030635
                   |
       year_spline1 |   1.012687   .0112972     1.13   0.258     .9907855    1.
> 035073
       year_spline2 |    .981107   .0485966    -0.39   0.700     .8903367    1.
> 081131
       year_spline3 |   1.180749   .2140674     0.92   0.359     .8276304     1
> .68453
       year_spline4 |   .4824658   .1667746    -2.11   0.035     .2450363    .9
> 499539
                   |
     country_number |
                 3 |   4.578783   1.388988     5.02   0.000     2.526594    8.
> 297834
```

```
                5 |   1.077341   .2960816     0.27   0.786     .6286666    1.
> 846229
                8 |   13.63153   4.041421     8.81   0.000     7.624019     2
> 4.3728
               10 |   5.440084   1.565681     5.89   0.000     3.094753    9.
> 562804
               11 |    10.2731   2.751619     8.70   0.000     6.077289    17
> .36574
               12 |   7.826053   2.781721     5.79   0.000     3.899318    15
> .70713
               13 |   7.918754   3.117821     5.26   0.000     3.660298    17
> .13157
               15 |   1.240815   .3396062     0.79   0.430     .7256657    2.
> 121669
               16 |   8.607234   2.983094     6.21   0.000     4.363694    16
> .97747
               17 |   2.030305   .7228971     1.99   0.047     1.010388    4.
> 079759
               18 |   2.068954   .6402718     2.35   0.019     1.128061    3.
> 794627
               19 |   4.515056   1.557257     4.37   0.000     2.296577    8.
> 876572
               22 |   4.935748   1.495906     5.27   0.000     2.725049    8.
> 939879
               23 |   1.358955   1.007311     0.41   0.679     .3178785    5.
> 809636
               24 |   1.476117    .432616     1.33   0.184     .8310996    2.
> 621732
               25 |   .9935153   .2594351    -0.02   0.980     .5955273    1.
> 657477
               26 |   1.975182   .5269628     2.55   0.011     1.170883    3.
> 331969
               28 |   1.346989   .4861377     0.83   0.409     .6639866    2.
> 732553
               31 |   2.052375   .5244363     2.81   0.005     1.243804     3
> .38658
               32 |   1.780125    .694872     1.48   0.140     .8282925    3.
> 825754
               33 |   2.569489   .7878626     3.08   0.002       1.4088    4.
> 686452
               34 |   7.878335    2.27775     7.14   0.000     4.470321     1
> 3.8845
------------------+---------------------------------------------------------
> ------

32 . xtstreg i.investiture i.post_elec c.enp c.sd_rile c.enp#i.post_elec c.sd_rile
   > #i.post_elec year_spline* i.country_number, d(weibull) time tratio

        Failure _d: form_died
  Analysis time _t: formation_days_surv
```

```
Fitting comparison model:

Iteration 0:  Log likelihood = -3456.0307
Iteration 1:  Log likelihood = -3334.1213
Iteration 2:  Log likelihood = -3323.5455
Iteration 3:  Log likelihood = -3323.3149
Iteration 4:  Log likelihood = -3323.3149

Refining starting values:

Grid node 0:  Log likelihood = -3369.3923

Fitting full model:

Iteration 0:  Log likelihood = -3369.3923  (not concave)
Iteration 1:  Log likelihood = -3354.1922  (not concave)
Iteration 2:  Log likelihood = -3338.8978  (not concave)
Iteration 3:  Log likelihood = -3329.9982  (not concave)
Iteration 4:  Log likelihood = -3325.6555  (not concave)
Iteration 5:  Log likelihood = -3323.7479  (not concave)
Iteration 6:  Log likelihood = -3323.3588  (not concave)
Iteration 7:  Log likelihood = -3323.3393  (not concave)
Iteration 8:  Log likelihood = -3323.3315  (not concave)
Iteration 9:  Log likelihood = -3323.3284  (not concave)
Iteration 10: Log likelihood = -3323.3271  (not concave)
Iteration 11: Log likelihood = -3323.3266  (not concave)
Iteration 12: Log likelihood = -3323.3265  (not concave)
Iteration 13: Log likelihood = -3323.3265  (not concave)
Iteration 14: Log likelihood = -3323.3265  (not concave)
Iteration 15: Log likelihood = -3323.3265  (not concave)
Iteration 16: Log likelihood = -3323.3265  (not concave)
Iteration 17: Log likelihood = -3323.3265  (not concave)
Iteration 18: Log likelihood = -3323.3265  (not concave)
Iteration 19: Log likelihood = -3323.3265  (not concave)
Iteration 20: Log likelihood = -3323.3265  (not concave)
Iteration 21: Log likelihood = -3323.3265  (not concave)
Iteration 22: Log likelihood = -3323.3265  (not concave)
Iteration 23: Log likelihood = -3323.3265  (not concave)
Iteration 24: Log likelihood = -3323.3265  (not concave)
Iteration 25: Log likelihood = -3323.3265  (not concave)
Iteration 26: Log likelihood = -3323.3265  (not concave)
Iteration 27: Log likelihood = -3323.3265  (not concave)
Iteration 28: Log likelihood = -3323.3265  (backed up)
Iteration 29: Log likelihood = -3323.3265  (backed up)
Iteration 30: Log likelihood = -3323.3265  (backed up)
Iteration 31: Log likelihood = -3323.3265  (not concave)
Iteration 32: Log likelihood = -3323.3265  (backed up)
Iteration 33: Log likelihood = -3323.3265  (not concave)
Iteration 34: Log likelihood = -3323.3265  (backed up)
Iteration 35: Log likelihood = -3323.3265  (backed up)
Iteration 36: Log likelihood = -3323.3265  (backed up)
```

```
Iteration 37: Log likelihood = -3323.3265  (backed up)
Iteration 38: Log likelihood = -3323.3265  (backed up)
Iteration 39: Log likelihood = -3323.3265  (not concave)
Iteration 40: Log likelihood = -3323.3265  (not concave)
Iteration 41: Log likelihood = -3323.3265  (backed up)
Iteration 42: Log likelihood = -3323.3265  (backed up)
Iteration 43: Log likelihood = -3323.3265  (not concave)
Iteration 44: Log likelihood = -3323.3265  (not concave)
Iteration 45: Log likelihood = -3323.3265  (backed up)
Iteration 46: Log likelihood = -3323.3264  (backed up)
Iteration 47: Log likelihood = -3323.3264  (not concave)
Iteration 48: Log likelihood = -3323.3264  (not concave)
Iteration 49: Log likelihood = -3323.3264  (not concave)
Iteration 50: Log likelihood = -3323.3264
Iteration 51: Log likelihood = -3323.3263  (backed up)
Iteration 52: Log likelihood = -3323.3237
Iteration 53: Log likelihood = -3323.3149
Iteration 54: Log likelihood = -3323.3149

Random-effects Weibull AFT regression           Number of obs     =        724
Group variable: country_number                  Number of groups  =         23

                                                Obs per group:
                                                              min =          2
                                                              avg =       31.5
                                                              max =         62

Integration method: mvaghermite                 Integration pts.  =         12

                                                Wald chi2(32)     =    1565.67
Log likelihood = -3323.3149                     Prob > chi2       =     0.0000
------------------------------------------------------------------------------
> ------
                  _t | Time ratio   Std. err.      z    P>|z|     [95% conf. int
> erval]
---------------------+--------------------------------------------------------
> ------
      1.investiture |   1.762064    .259771     3.84   0.000     1.319879    2.
> 352391
        1.post_elec |   9.554972   2.359416     9.14   0.000     5.889002    15
> .50305
                enp |   1.217154   .0580568     4.12   0.000     1.108521    1.
> 336431
           sd_rile |   1.012653    .007023     1.81   0.070     .9989814    1.
> 026512
                   |
    post_elec#c.enp |
                1  |   .9579781   .0489994    -0.84   0.401     .8665979    1.
> 058994
                   |
post_elec#c.sd_rile |
```

```
                1 |   .9937601   .0073817    -0.84   0.399      .979397    1.
> 008334
                  |
      year_spline1 |   .9840052   .0077388    -2.05   0.040     .9689537    .9
> 992904
      year_spline2 |   1.044105   .0364753     1.24   0.217     .9750077
> 1.1181
      year_spline3 |   .8059764   .1034142    -1.68   0.093     .6267658    1.
> 036428
      year_spline4 |   1.906428   .4681877     2.63   0.009     1.178092    3.
> 085046
                  |
    country_number |
                3 |   .3952659   .0811843    -4.52   0.000     .2642772    .5
> 911789
                5 |   1.001932   .1950157     0.01   0.992     .6841649     1
> .46729
                8 |   .2450412   .0484667    -7.11   0.000     .1662952    .3
> 610757
               10 |    .424357   .0847486    -4.29   0.000     .2869045    .6
> 276612
               11 |   .2121808    .038185    -8.61   0.000     .1491145    .3
> 019202
               12 |   .2535161   .0625305    -5.56   0.000     .1563343    .4
> 111088
               13 |   .2973999   .0810208    -4.45   0.000     .1743603    .5
> 072642
               15 |   .8924195   .1721335    -0.59   0.555     .6114851    1.
> 302424
               16 |   .2873399   .0681731    -5.26   0.000      .180486    .4
> 574551
               17 |   .5974935   .1492483    -2.06   0.039     .3661938    .9
> 748896
               18 |   .7572144   .1632248    -1.29   0.197     .4962886    1.
> 155323
               19 |   .4859335   .1168233    -3.00   0.003     .3033468    .7
> 784204
               22 |   .4375948   .0920462    -3.93   0.000     .2897513    .6
> 608742
               23 |    1.05032   .5516496     0.09   0.926     .3751918     2
> .94029
               24 |   .8991764   .1860522    -0.51   0.608     .5994036    1.
> 348871
               25 |   .9523425   .1751906    -0.27   0.791     .6640614    1.
> 365772
               26 |   .7086286   .1327432    -1.84   0.066     .4908718    1.
> 022985
               28 |     .83924   .2118539    -0.69   0.488     .5116969    1.
> 376447
               31 |    .702999   .1256313    -1.97   0.049     .4952659    .9
> 978632
```

```
                32 |   .6772676    .185332    -1.42   0.154     .3961246    1.
> 157947
                33 |   .5404379    .114823    -2.90   0.004     .3563666    .8
> 195862
                34 |   .3801122   .0748376    -4.91   0.000     .2584192    .5
> 591122
                   |
             _cons |   10.96653   3.089085     8.50   0.000      6.31394    19
> .04751
-------------------+------------------------------------------------------------
> -------
             /ln_p |   .3401817   .0292784                      .282797    .3
> 975663
-------------------+------------------------------------------------------------
> -------
       /sigma2_u |   9.13e-34   1.56e-18                           .
>      .
-------------------+------------------------------------------------------------
> -------
Note: Estimates are transformed only in the first equation to time ratios.
Note: _cons estimates baseline time (conditional on zero random effects).
LR test vs. Weibull model: chi2(0) = 6.2e-11              Prob > chi2 =      .

Note: LR test is conservative and provided only for reference.

33 . restore

34 .
35 . *Column 3, column 6 (Eastern Europe)
36 . preserve

37 . keep if europe==2
(756 observations deleted)

38 . stcox i.investiture i.post_elec c.enp c.sd_rile c.enp#i.post_elec c.sd_rile#i
> .post_elec year_spline* i.country_number

        Failure _d: form_died
  Analysis time _t: formation_days_surv

note: year_spline4 omitted because of collinearity.
Iteration 0:  Log likelihood = -652.59264
Iteration 1:  Log likelihood = -612.17442
Iteration 2:  Log likelihood = -598.28316
Iteration 3:  Log likelihood = -598.05473
Iteration 4:  Log likelihood = -598.05451
Refining estimates:
Iteration 0:  Log likelihood = -598.05451

Cox regression with Breslow method for ties
```

No. of subjects = **159** Number of obs = **159**
No. of failures = **159**
Time at risk = **7,965**

LR chi2(**19**) = **109.08**
Log likelihood = **-598.05451** Prob > chi2 = **0.0000**

_t	Haz. ratio	Std. err.	z	P>|z|	[95% conf. interval]
1.investiture	**.4844776**	**.299795**	**-1.17**	**0.242**	**.1440621**	**1.629287**
1.post_elec	**.2256971**	**.1579671**	**-2.13**	**0.033**	**.0572485**	**.8897914**
enp	**.9598842**	**.0983805**	**-0.40**	**0.690**	**.7851948**	**1.173438**
sd_rile	**1.012265**	**.0271024**	**0.46**	**0.649**	**.9605148**	**1.066803**
post_elec#c.enp						
1	**.9721214**	**.1299727**	**-0.21**	**0.833**	**.7480227**	**1.263357**
post_elec#c.sd_rile						
1	**1.023009**	**.0373579**	**0.62**	**0.533**	**.9523476**	**1.098913**
year_spline1	**.123859**	**.3932023**	**-0.66**	**0.511**	**.0002459**	**62.39485**
year_spline2	**24.06345**	**111.1752**	**0.69**	**0.491**	**.0028102**	**206054.4**
year_spline3	**.0044544**	**.0341247**	**-0.71**	**0.480**	**1.34e-09**	**14780.73**
year_spline4	**1**	(omitted)				
country_number						
4	**.8624374**	**.3954695**	**-0.32**	**0.747**	**.3510834**	**2.11858**
6	**1.041475**	**.4696205**	**0.09**	**0.928**	**.430354**	**2.520412**
7	**.2790692**	**.1357501**	**-2.62**	**0.009**	**.1075609**	**.7240516**
9	**2.485403**	**1.027751**	**2.20**	**0.028**	**1.105127**	**5.589608**
14	**1.566121**	**.7705903**	**0.91**	**0.362**	**.5970386**	**4.10817**
20	**1.118261**	**.4203889**	**0.30**	**0.766**	**.5352421**	**2.336341**
21	**1.463802**	**.59506**	**0.94**	**0.349**	**.6598647**	**3.**

```
> 247208
                27 |    1.59869   .6434269     1.17   0.244     .7264074    3.
> 518427
                29 |   2.882603   1.112241     2.74   0.006     1.353169    6.
> 140696
                30 |   .9481247   .4377282    -0.12   0.908     .3836052
> 2.3434
-------------------+----------------------------------------------------------
> ------

39 . xtstreg i.investiture i.post_elec c.enp c.sd_rile c.enp#i.post_elec c.sd_rile
   > #i.post_elec year_spline* i.country_number, d(weibull) time tratio

         Failure _d: form_died
   Analysis time _t: formation_days_surv
note: year_spline4 omitted because of collinearity.

Fitting comparison model:

Iteration 0:  Log likelihood = -751.12164
Iteration 1:  Log likelihood = -734.25716
Iteration 2:  Log likelihood = -730.24587
Iteration 3:  Log likelihood = -730.09365
Iteration 4:  Log likelihood = -730.09354
Iteration 5:  Log likelihood = -730.09354

Refining starting values:

Grid node 0:  Log likelihood = -748.80425

Fitting full model:

Iteration 0:  Log likelihood = -748.80425  (not concave)
Iteration 1:  Log likelihood = -742.54562  (not concave)
Iteration 2:  Log likelihood = -736.33872  (not concave)
Iteration 3:  Log likelihood = -733.03163  (not concave)
Iteration 4:  Log likelihood = -731.50825  (not concave)
Iteration 5:  Log likelihood = -730.11121  (not concave)
Iteration 6:  Log likelihood = -730.10685  (not concave)
Iteration 7:  Log likelihood = -730.10598  (not concave)
Iteration 8:  Log likelihood = -730.10563  (not concave)
Iteration 9:  Log likelihood = -730.10535  (not concave)
Iteration 10: Log likelihood = -730.10534  (not concave)
Iteration 11: Log likelihood = -730.10534  (not concave)
Iteration 12: Log likelihood = -730.10534  (not concave)
Iteration 13: Log likelihood = -730.10534  (not concave)
Iteration 14: Log likelihood = -730.10534  (not concave)
Iteration 15: Log likelihood = -730.10534  (not concave)
Iteration 16: Log likelihood = -730.10534  (not concave)
Iteration 17: Log likelihood = -730.10534  (not concave)
Iteration 18: Log likelihood = -730.10534  (not concave)
```

```
Iteration 19: Log likelihood = -730.10534  (backed up)
Iteration 20: Log likelihood = -730.10534  (backed up)
Iteration 21: Log likelihood = -730.10534  (not concave)
Iteration 22: Log likelihood = -730.10534  (not concave)
Iteration 23: Log likelihood = -730.10534  (not concave)
Iteration 24: Log likelihood = -730.10534  (not concave)
Iteration 25: Log likelihood = -730.10534  (not concave)
Iteration 26: Log likelihood = -730.10534  (not concave)
Iteration 27: Log likelihood = -730.10534  (backed up)
Iteration 28: Log likelihood = -730.10534  (not concave)
Iteration 29: Log likelihood = -730.10534  (not concave)
Iteration 30: Log likelihood = -730.10534  (not concave)
Iteration 31: Log likelihood = -730.10534  (backed up)
Iteration 32: Log likelihood = -730.10534  (backed up)
Iteration 33: Log likelihood = -730.10533  (not concave)
Iteration 34: Log likelihood = -730.10533  (not concave)
Iteration 35: Log likelihood = -730.10533  (backed up)
Iteration 36: Log likelihood = -730.10533  (backed up)
Iteration 37: Log likelihood = -730.10528  (backed up)
Iteration 38: Log likelihood = -730.10524  (not concave)
Iteration 39: Log likelihood = -730.10522  (not concave)
Iteration 40: Log likelihood = -730.10521
Iteration 41: Log likelihood =  -730.1045  (not concave)
Iteration 42: Log likelihood = -730.10446  (not concave)
Iteration 43: Log likelihood = -730.10443
Iteration 44: Log likelihood = -730.09354
Iteration 45: Log likelihood = -730.09354

Random-effects Weibull AFT regression           Number of obs     =        159
Group variable: country_number                  Number of groups  =         11

                                                Obs per group:
                                                              min =          9
                                                              avg =       14.5
                                                              max =         26

Integration method: mvaghermite                 Integration pts.  =         12

                                                Wald chi2(19)     =     140.91
Log likelihood = -730.09354                     Prob > chi2       =     0.0000
------------------------------------------------------------------------------
> ------
                  _t | Time ratio   Std. err.      z    P>|z|     [95% conf. int
> erval]
-------------------------------------------------------------------------------
> ------
      1.investiture |   1.532059   .6238101     1.05   0.295     .6897488    3.
> 402986
        1.post_elec |   2.858208   1.360153     2.21   0.027     1.124675    7.
> 263743
                enp |   1.025974   .0679653     0.39   0.699     .9010494    1.
```

```
> 168218
           sd_rile |   .9977681   .0181798    -0.12   0.902      .962765    1.
> 034044
                   |
    post_elec#c.enp |
                 1 |   .9945759   .0889489    -0.06   0.952     .8346638    1.
> 185125
                   |
post_elec#c.sd_rile |
                 1 |   .9866906   .0241712    -0.55   0.584     .9404353    1.
> 035221
                   |
       year_spline1 |   5.172449   10.88469     0.78   0.435     .0836494   31
> 9.8378
       year_spline2 |   .0839892   .2572409    -0.81   0.419     .0002076   33
> .98374
       year_spline3 |   65.96576   335.0104     0.82   0.409     .0031365    1
> 387358
       year_spline4 |          1  (omitted)
                   |
     country_number |
                 4 |   1.105474   .3450806     0.32   0.748     .5995715    2.
> 038245
                 6 |   .8540111   .2564804    -0.53   0.599      .474053    1.
> 538509
                 7 |   1.992114   .5915685     2.32   0.020     1.113129    3.
> 565191
                 9 |   .6253616   .1719674    -1.71   0.088     .3648047    1.
> 072018
                14 |   .7695744   .2546937    -0.79   0.429     .4022927    1.
> 472174
                20 |   .9538824   .2421455    -0.19   0.852     .5799828    1.
> 568825
                21 |   .8564293   .2344303    -0.57   0.571     .5008322    1.
> 464505
                27 |   .7811198   .2133962    -0.90   0.366     .4572731    1.
> 334319
                29 |   .4886203   .1259866    -2.78   0.005     .2947789    .8
> 099284
                30 |   1.092831   .3385663     0.29   0.774     .5954494    2.
> 005676
                   |
             _cons |   8.09e-20   4.95e-18    -0.72   0.473     6.29e-72    1.
> 04e+33
-------------------+------------------------------------------------------------
> -------
             /ln_p |   .3753867   .0636804                      .2505754    .5
> 001981
-------------------+------------------------------------------------------------
> -------
         /sigma2_u |   1.13e-33   3.63e-18                             .
```

```
>      .
_____________________|_____________________________________________________
> ______
Note: Estimates are transformed only in the first equation to time ratios.
Note: _cons estimates baseline time (conditional on zero random effects).
LR test vs. Weibull model: chi2(0) = 0.00                 Prob > chi2 =      .

Note: LR test is conservative and provided only for reference.

40 . restore

41 .
end of do-file

42 .
```